

**EFFECTIVENESS OF SALES PLANNING IN  
NEPAL TELECOM COMPANY**

**A Thesis Submitted to  
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Faculty of Management  
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## **DECLARATION**

I here by declare the thesis entitled  
“EFFECTIVENESS OF SALES PLANNING IN NEPAL TELECOM”  
submitted to the office of the Dean, Faculty of Management, and Tribhuvan  
University is my original work, which is prepared as partial fulfillment of the  
requirement for Master’s Degree of Business Studies (MBS) under the  
supervision of Mr. Na Krishna Bhattarai, Lecturer of Lumbini Banijya  
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# **Recommendation**

This is certify that the Thesis

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Has been prepared as approved by this department in the prescribed format of Faculty of Management. This thesis I forward for examination.

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## **Viva- Voce Sheet**

We have conducted the viva voce examination of the thesis presented by

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Entitled

“EFFECTIVENESS OF SALES PLANNING IN NEPAL TELECOM”

And found the thesis to be the original work of the student written according to the prescribed format. We recommended the thesis to be accepted as partial fulfillment of the requirement for the Master’s Degree in Business Studies (MBS)

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## ABBREVIATIONS

A/C	ACCOUNT
&	AND
B.S	BIRKRAM SAMWAT
BEP	BREAK EVEN POINT
CDMA	CODE DIVISION MULTIPLE ACCESS
C.V	COEFFICIENT OF VARIATION
CO	COMPANY
ETC	ETCETERA
FY	FISCAL YEAR
F.C	FISCAL COST
GDP	GROSS DEMESTIC
ISTD	INTRENAATIONAL SUBDCRIBE TRUNK DAILING
KM	KILOMITERS
LTD	LIMITED
MIS	MANAGEMENT INFORMATION SYSTEM
MOS	MARGIN OF SEFTY
MBA	MASTER IN BUNIESS ADIMINISTRATION
MBS	MASTER IN BUSINESS STUDIES
NTC	NEPAL TELECOMMUNICATION CORPORATION
%	PERCENTAGE
P.A.	PER ANNUM
PVT	PRIVATE
P.E	PROBABLE ERROR
PCO	PUBILIC CALL OFFICE
PCC	PROFIT PALANNING & CONTROL
P/V	PROFIT VOLUME
RS.	RUPEES
S.D	STANDARD DEVIATION
SWOT	STRENGTH, WEAKENESS, OPPERTINITY AND THREAT
STD	SUBSCRIBE TRUNK DIALING

# CHAPTER I

## INTRODUCTION

### 1.1 General Background

Nepal is a small developing country situated in South East Asia. It covers the total area. of 147181 sq k.m. Which is 0.03% of the world and 0.3% of the Asia. It is a small land locked country, surrounded by tow big economic giant China and India. It has a rapid population growth rate of 2.25% p.a. compared to the least developed countries. Geographically Nepal is divided in to three regions, in which the Himalayan region covers 15% (22077.15 sq.kin.), the Hilly region covers 68% ('100083.08 sq.km.), the Terai region covers 17% (25020.77 sq.km.) of total area of the country. Nearly 40% of the total population still lies below absolute poverty line. It has only 5260 per capital income,( Nepal Year Book; 2006: 24).

Nepal has dual (Market as well as substance) economy. It is dominated by agricultural sector. More then 80% of the people are depending upon agriculture and near 41% of GDP are covered by agriculture sectors. Private -sectors are not influenced to invest in the sectors where most public concern are but they seek for higher return on their investment. Due to this government has to take imitative of public concern and balanced development of the country. Even in such a system the private sector has to play a predominant role in market oriented and competitive economic activities in order to increase production through efficiency enhancement in resource use. However, the government involvement in some of specific services, development, pre-requisites services and industries assisting in the improvement of economic condition of the rural poor and down trodden and relating to important defenses matter is still inevitable. For economic growth and prosperity industrialization is a key factor. To cope the challenges of the globalization in the competitive environment industrialization is essential for developing country like Nepal.

Public enterprises play the major roles in achieving the twin objectives of social and economic development in envisaged in the national policy. Public enterprises are

enterprise set by the government. It has to be efficient and at the same time accountable to the government and the public are autonomous bodies which are, owned and managed by the government and which provides goods and services for a price. The ownership with the government should be 51 or more to make an entity public enterprise, (Narayan, L. 1972:42). They have been established in many sectors for the overall development of the country with different goals and objectives. In Nepal, some public enterprises have been set up under various legal entities such as special characters (i) Manufacturing PEs Le. Janakpur cigarette factory, Hetaunda cement factory, Udayapur cement factory etc. (ii) Commercial PEs (iii) Financial PEs (iv) Public utilities PEs (v) Social service PEs.

## **1.2 Brief Overview of Nepal Telecom Company Ltd.**

### **1.2.1 Historical Background of NTC.**

Telecommunication is a system which facilitates conveying information quickly over a distance with a cheap cost. In this globalization and scientific era, telecommunication is one of the important, useful and necessary media of information. In developing country like Nepal the role, importance and contribution of telecommunication in the economic development of country cannot be exaggerated as there is no sector where telecommunication has not play role.

The history of telecommunication development is not long. The first telecommunication services were started in Nepal during the regime of Maharaj Chandra shamsheer in the year 1970 B.S It was the first time and a good opportunity for Nepalese people to transmit message from Katmandu to Birgung. This telephone line attributed as magnet contacted Birgung with Katmandu under the name of "Shree Chandra Telephone." Through no remarkable development has been found at the time of Shree Chandra shamsheer. In 1971 B.S. open wire Trunk Link Line from Katmandu to Raxaul (India was established), another telephone line connecting at. Katmandu, Hargamani Gaur has been installed in the year 1980 B.S. In the year 1992 B.S. 25 lines automatic exchange in palace were installed. In 1993 B.S telephone line Katmandu to Dhankuta (518km) was started. The telecommunication office was first established near- Ranipokhari, Katmandu, (Nepal Doorshanchar Sasthan, 2056:48). Nepal

Telecom was established to provide the telecommunication services all over the country on 1st of Ashad 2032 B.S as government statutory corporation. The Nepal Telecommunication Corporation was dissolved and converted to Nepal Doorsanchar Company Limited (Nepal Telecom ) from 1st of Baisakh 2061 B.S (13th April 2004). The new company (Nepal Doorsanchar Company Limited) was registered with the Company Registrar Office on 2060-10-11 under Company Act 2053, and the motive to this effect was published in Nepal Gazette dated 26th Chaitra 2060. However the company shall also know to general public by the name Nepal Telecom as registered trade mark" (Annual Report, NTC 2002/2003:3). The main objective of NTC is to provide national wide, low cost, reliable and readily available telecommunication service to general public.

Increasing demand of telecom service in general and mobile service in particular all over the country including rural areas is a clear indication of the fact that telecom sector has become one of the most vibrant and dominant service industries in the country. Recent entry of private operators in the sector should, therefore, we have considered as governments, initiative to make the sector grow at faster pace both in terms of quantity and quality. But the fact remains that in spite of new liberal Telecom Act 2053, due to various reasons the market share achieved by private sector is still less than 10% of the total telecom business volume. Hence the incumbent Nepal Telecom shall have to make the responsibility of expanding infrastructure at faster pace covering nooks and corners of the country, not only as competitive strategy but also to cater ever-increasing demand from general public for both voice as well as data services, (Annual Report: NTC,2005:3).

### **1.2.2 Role of NTC**

In Nepal, there are other means of communication also a number of transportation, postal service etc. But there are slower expensive and less convenient. There fore, telecommunication is one of the quickest, cheapest and scientific means of communication. It brings coordination among different government entities which ultimately promotes administrative efficiency. The effects of telecommunication on the rural areas and their contribution to rural



development are potentially extremely important, Yet rather difficult to measure. NT has played a crucial role to promote agriculture sector, which is a main source of national income. Telecommunication has significant impact on agriculture production by providing information on prices and market condition.

In developing country like Nepal, the role of importance and contribution of telecommunication in the developing country cannot be explained. The international telecommunication system contributors to link the overseas countries the field of economy as well as politics. It also contributes in the development of tourist industry. Thus the telecommunication system plays vital role to strengthen the national economy and bring national unity among the national and international people creating a brotherhood relationship among the people.

### **1.2.3 The Mission, Vision and Goal of NTC.**

#### **The Mission Statement**

"Nepal Telecom as a progressive, customer spirited and responsive entity, is committed to provide national-wide reliable telecommunication services to serve as an impetus to the social, political and economic development of the country."

#### **Nepal Telecom Vision**

"Vision of Nepal Telecom is to remain a dominant player in telecommunication sector in the country while also extending reliable and cost effective services to all."

#### **Nepal Telecom goal**

Goal of Nepal Telecom is to provide cost effective telecommunication services to every nook and corner of the country, NT Annual Report;

### **1.2.4 Objectives and Duties of NTC**

Since its establishments, NT is dedicated towards providing reliable and affordable telecommunication services through out the country is a

sole national telecommunications operator of local, mobile, long distance and international telecom services. The main objective of Nepal Telecom is to provide essential national wide low cost, reliable and readily available and economic development. The duty of the corporation will be to provide telecommunication services throughout the country that is as far as practicable, very reliable and cost effective. As per the Communication Corporation Act 2025, Nepal Telecom shall undertake the following duties:

- I. To improve the work implementation procedures for maintaining a high grade of telecommunication services.
- II. To promote the business activities of the corporation.
- III. To establish necessary telecommunication media for linking different parts of the kingdom of Nepal.
- IV. To try to establish necessary telecommunication link with foreign telecommunications administration.
- V. To produce the middle level technical manpower necessary for the installation, operation and maintenance of the different telecommunication systems.

#### **1.2.5 Capital formation of NTC:**

Authorized capital of NTC is Rs.2500,00,00,000, divided in to 2500,00,000 shares of Rs.100 each. Issued and subscribed capital is Rs.1500,00,00,000, divided in to 15,00,00,000 shares of Rs. 100 per share.

Following table shows the distribution of shares:

#### **S.N Name of Subscriber: No. of shares:**

- I. Ministry of Information and Communication 7,50, 00,000
- II. Ministry of Finance 7,49, 46, 000
- III. Ministry of Industry, commerce and Supply 1000
- IV. Ministry of Law, Justice and Parliamentary 1000
- V. Department of Information 1000
- VI. Citizen Investment Trust 50.000

#### **1.2.6. Services Provided by NTC**

The main services provided by NT are as follows.

- I. Local calls
- II. National Trunk Calls
- III. International Trunk Calls
- IV. International Telegram
- V. Domestic Telex
- VI. International Telex
- VII. Leased Lines
- VIII. Operator-Assisted Intl Telephone
- IX. Packet Switching Data Telephone
- X. ISDN (Integrated Services Digital Network)
- XI. Pay Phone
- XII. Intelligent Network Services
- XIII. PCC Easy Call Services
- XIV. HCD Services
- XV. AFS Advanced Free phone Services
- XVI. Universal Access Number Services
- XVII. PSTN Credit Limit Services
- XVIII. Mobile
  - ) Postpaid
  - ) Prepaid
  - ) Roaming (incoming and outgoing
  - ) SMS
  - ) 3G Service
  - ) Vas service
- XIX. CDMA
- XX. Internet and E-mail

### **1.3 Statement of Problem**

Since its establishment, Nepal Telecom company has enjoyed monopoly in the field of telecommunication. But, at present telecommunication sector is kept

open for private sector. So, it has to compete with private sector also further more. Government has plan to privatize this organization and primary studies are being undertaken. At present among PEs of Nepal, NTC is regarded as one of the few successful corporations. But how long can this prosperity be continued? This question is hunting and daunting to each and every conscious person. The monopoly of NTC in telecom sector has ended. In this competitive and complex situation it should focus more towards customer.

This study will focus on following question to find out the budgeting study of NTC.

- I. What are the reasons for poor performance being unrealistic and improper uses of budgeting in NTC?
- II. Whether NTC has prepared sales budget with theoretical prescription or not?
- III. Is there any fluctuation of sales in unit (lines) in different months, quarters and years?
- IV. Is there any close relationship between actual sales and budgeted sales or not?
- V. Is the sales plan of NTC is effective or not?

#### **1.4 Objectives of the study**

The basic objective of the study is to analyze the present sales budgeting and planning system of NTC, review the relationship of sales plan with other and evaluate the effectiveness of such plan followed by NTC. The major specific objectives of this study are highlighted as below.

- I. To analyze the existing sales planning system of Nepal Telecom, with seasonal demand.
- II. To study the relationship between sales plan with other expenses.
- III. To analyze the relation between sales and profit
- IV. To identify BEP of Nepal Telecom.

#### **1.5. Significance of the study**

This research work is based mainly on effectiveness of sales planning in Nepal Telecom. Profit does not just happen, it needs to be managed. Profit is the main aim of every organization and profit is made through sales. Profit planning is the heart of management and sales planning is primal planning in

overall budgeting, therefore to achieve organizational objectives, sales planning should be made in a careful way. This study is needed because the planning process will significantly contribute to improve the profitability as well as the overall financial performance of an organization with the help of the best utilization of resources. Sales also act as an instrument for minimizing future risk, maximizing the output from scarce resources, predicting the future uncertainty and making managerial decisions because of this planning. The need of the study is to examine whether NTC is applying theoretical tools of sales planning in relation with profit planning of sales. Besides this, this study is designed to describe the relationship of sales with other budgets and how they support the sales budget.

As this is one of the public enterprises, the findings can be equally important to other public enterprises too. Many other organizations taking care of profit planning and control in management can also be benefited from it. Sales planning and other information of the study can be useful for further research to university students and others too. Lastly, the suggestions and recommendations will serve the concerned people while making sales plans.

### **1.6 Limitation of the study**

This study is based solely on Nepal Telecom. A research is a full-blown and vast investigation study for the settlement of a problem. So it needs full time, finance and authentic information. The main focus of this study is on sales planning of fixed line telephone and cellular mobile. Following factors have limited the scope of this study.

- I. This study covers only the last five years (i.e. from fiscal year 2062/63 to 2066/67 or 2005/06 to 2009/10) trend and data are analyzed.
- II. The comprehensibility and the accuracy of this study is based on the data provided by NTC management and published financial documents, planning documents, annual report of NTC and budget book of NTC.
- III. The analysis is concentrated in accounting and financial aspects of the organization. It does not cover all the areas of the enterprise.

Since, Dissertation is submitted in partial fulfillment of required of MBS

Degree, so due to constraints of time and it was not possible to carry out a detailed research in the subjective area.

## **I.7. Organization of the Study**

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

### **Chapter One: Introduction:**

This chapter contains will be the brief introduction of the subject matter i.e. General Background of this study, Brief Overview. of Nepal Telecom, Statement of problem, Objectives of the study, Significance of the Study, Limitations of the Study, and Organization of the Study.

### **Chapter Two: Review of Literature:**

This chapter will be describes towards the review of literature of related studies. It contains conceptual review and major studies related with this research

### **Chapter Three: Research Methodology:**

This chapter acknowledges the research methodology will be used in this study. It includes Research Design, Nature and Sources of Data, Period Covered, Data Processing Procedure, Financial and Statistical tools used for the Study

### **Chapter Four: Presentation and Analysis of Data:**

Various data are gathered from the application of the different methods and presented and decorated as required by the research objectives. In this chapter data are interpreted and analyzed with the help of various analytical tools and techniques and findings are drawn.

### **Chapter Five: Summary, Conclusions and Recommendations:**

This chapter will states Summary, Conclusions and Recommendations of this Study.

# **CHAPTER-11**

## **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, 2003:25). 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 the lacuna in the earlier research work and to stop duplication of the previous work. Literature here means the related printing materials about the subject matter of the research work. It may be various forms like book, booklet, thesis reports etc.

Planning is the primary function of business. A business can't succeed or grow in today's global competitive environment without previous planning of activities. In most cases, preparation of sales plan is considered the most important sales plan provides basic management decision about marketing.

This chapter has divided into two sections:-

- Review of Conceptual Framework
- Review of Previous Related Studies.

### **2.1 Review of Conceptual Framework**

It is a part of review of literature. In this framework of decision about theoretical review from text books, reference books and practice in profit planning and control are considered.

#### **2.1.1 General Concept of Profit Planning and Control Profit:**

Profit is the primary measure of business in any economy. Profit means a peculiar gain, excess of return over the outlays. It is reward of business. Profit is obtained by subtracting the total cost from total revenue. Profit does not just happen, properly managed (Lynch and Williamson) 1989: 100). There are several interpretations of the term "Profit". An economist may say that profit is the reward for entrepreneurship, for risk taking. A labor leader might say that, it is a measure which can be used to examine the efficiency of labor

because profit is produced by the labors and it provides a base for negotiation a wage increase. An investor will view it is a gauge of the return on his / her money. 'File accountant will define it simply as the excess firm revenue over the expenses of producing revenue in a given fiscal year. Profit may be considered for making innovation, a reward and for accepting risks and uncertainty and the result of imperfection in the market structure (Grayson, 1990:102).

Profit as the residual payment that is left. to the producer's income after all other payment has been met (Honsen, 1991:105).

The surplus of current income over past cost is profit.

Management thinks profit as (Lynch and Williamson; 1989: 100).

- A tangible expression of the goals it has set for the firm.
- A measure of maintaining the health, growth and continuity of the company.

The accounting concept of company profit is a concept of net business income. The sales transaction of a period are regarded as bringing new assets into the business and a profit results if there are in excess of the assets leaving the business in the same period. Profit is thus the surplus income that remains after paying expenses and providing for that part of capital that has been consumed in producing revenue. (Williamson, 1986:28).

It is quit clear that there is not exact definition of profit.whether the definition may be profits are residual income left the payment of the cost factor of production .The success business depends largely of management is reflected upon the volume of profit/surplus of business. Profit is the ultimate measure of its effectiveness, and in a capitalist society, there is no future for private enterprise which always incurs losses.

"The survival measure of how Well a business performs economically. Profit is a signal for the allocation of resources and yardstick for managerial efficiency (Munankarmi, 1985:245').

Finally, it can be concluded that profit is the excess of revenue over the costs of doing business. Without obtaining sufficient profit, no firm can operate for long-term Period.



## **Planning:**

Planning is the future oriented activity, which is the first essence of management, also all other functions are preformed with in the framework of planning. It is the sole concept of any business organization. Without the proper and efficient planning, no firm can accomplish its predetermined goals and objectives. Hence it is the life blood of any organization, which makes them efficiently run toward competent environment. (Welsch, et. al., 1992:3)

Planning is the continuous process, selecting and developing the course of action to accomplish an objective. It is the basis from which future management actions spring. "Planning is the process of developing organizational objectives and selecting a future course of action to accomplish them (Welsch, et. al., 1992:3).

- Establishing enterprise objectives.
- Developing premises about the environment in which they are to be accomplished.
- Selecting a course of action for accomplishing the objectives.
- Initiating activities necessary to translate plans into action.
- On-vent re-planning to correct deficiencies.

To plan is to look ahead and chalk out future course of operations. It is the determination of a course of action to achieve a desired result (Kulkarni, 1985:187). Planning is a method or technique of looking ahead a constructive reviewing of future needs so that present actions can be adjusted in view, of the established goals, Planning is done for the specified period i.e. planning covers a period. As per period covered by planning it is divided into two types: (G. R. Terry1985:188)

### **a) Strategic Long-Range Planning**

Long range planning covers the time horizon of 5 to 10 years. It is a top management function in which organization's purpose, mission and overall objectives and policies are developed to position the organization advantageously in its operating environment. It is an important for present competitive and industrial age; long range planning is closely related with the concept of the corporation as a long institution. The main purpose of long range planning is:

- To implement capital plan.
- To keep enterprise in strong position.
- To be alert toward new techniques.
- For focusing long-term opportunities.

### **b) Tactical Short-Range planning**

Generally short term planning is used for short period. It is for the period of one year. The short term planning is selected to conform to fiscal quarter or year. Because of the practical need for comforting plans to accounting, periods and some what arbitrary limitations of the long range it is usually based on the prevailing benefits that the degree of uncertainty over long period makes planning of questionable value. Short term planning is used by management for short period

The main purpose of tactical planning is:

- To acquire and facilitate resource, personnel, and raw- material.
- To control cost through planned acquisition and avoid higher cost purchasing.
- To create new opportunities through assessing the environment and evaluating resources.
- To avoid problems related to red tape.

### **Control**

Control refers to measurement and correction of performance to achieve the goals of a new venture. It is based on feedback.

**Financial Control:** Entrepreneurs must ensure proper allocation and utilization of financial resources. This is needed to control costs and minimize wastage.

**Production Control:** Entrepreneurs must achieve proper combination of inputs for production. Quality control should be ensured. Supervision should be effective. Efficiency should be improved.

**Management Control:** Entrepreneurs must ensure management control in the new venture. They should make key decision themselves (Agrawal, 2002:27).

### **Profit planning**

Profit planning is the heart of management. Without proper planning of profit it will not just happen. So every enterprise should systematically plan for profits in proper way. Various function budgets are the basic tools for proper planning of profit and control over them, profit planning in fact is a managerial techniques and profit plan is such written plan, in which all aspects of business operations with respect to a definite future period are included. It is a formal statement of policy, plan, objective and goal established by the top management in respect of some future period. It is a predetermined detailed plan of action developed and distributed as an audit to current operations and as a partial basis for the subsequent evaluation of performance. Thus, we can say that profit planning is a total which may be used by the management in planning the future course of action and controlling the actual performance (Gupta, 1992:521).

When the management plans for profit for a certain period of time, it is called profit plan. Profit plan is, define as, an estimation and predetermination of revenue and expressed that estimates how much income sill be generated and how it would be spent in order to meet investment and profit requirement. In the case of institutional operations it presents a plan for spending income in a manner that does not result in loss. It represents an overall plan of operations, covers a definite period of time and formulates the planning decision of management. Profit planning is a detailed plan of action during a period of one year or less. Profit planning helps a firm's financial manager to regulate flow of funds which is primary concern. (Pandey, 2002:27)

Generally two types of profit plans are generated, for long term objectives strategic plans and short term objectives tactical plans are developed. The type of Profit plan depended upon the nature of business entity.

In summary profit planning means the developing of objectives, goals, and moving and organizaing efficiently to achieve the objectives and goals.

### **2.1.2 Planning Vs Forecasting**

The distinction between forecasting and planning is not an easy one. According to Webster, "To plan ahead as the leading definition for forecast". Forecasting is our best thinking about what will happen to us in the future. In forecasting we define situations and recognize problems and opportunities. In planning we develop our objectives in practical, detail and we correspondingly develop schemes of action to achieve these objectives.

Forecasting is the pre-requisite for planning; a forecast is not a plan. It is statements of expected future conditions about a particular subject based on one or more assumptions. Management may change the forecast. It is only an input of a comprehensive plan. Decisions that are based on the forecast, other inputs of a comprehensive plan. Decisions that are based on the forecast, other inputs and management judgments about such related items as sales volume, price, sales efforts, production and financing. A forecast is conditional but planning is not conditional. Forecasts are the statements of expected future conditions; definitive statements of what actually happens are potentially impossible. Expectation depends upon the assumptions made. If the assumptions are plausible the forecast has a better chance of being useful (Gupta. 1992:81).

Forecasting is the pre-requisite of planning. Forecasts are the statements of expected future conditions. It is an attempt to find the most probable course of events or at best a range of probabilities (Gupta. 1992:81).

Therefore, a forecast is not a plan; rather it is a statement and or a quantified assessment of future conditions about a particular subject based on one or more explicit assumptions. A forecast should always state the assumption, which it is based on. A forecast should be viewed as only one input into development of a plan.

### **2.1.3 Budgeting: As a Tool of Profit Planning**

Profits do not emerge of their own accord. They have to be influenced by

Management. The quality of management is often judged by the size of profit figures at the end of the financial year. For its own protection in the interests of the business, management must plan to make profit and the accepted basis for this is the annual budget properly supported by the long term planning and operational planning. Budgeting is an expression of a firm's plan in financial form for a period of time in fixture; it is an estimate of future needs calculated for a definition period. It anticipates income for a given period and costs as well as expresses of obtaining this income are set. or limited within the ideas of earning a desired profit. Or an aid in controlling losses. A business budget is a plan covering all phases of policies, covering plans, objectives and goals laid down in advance by top management for the undertaking as a whole and every subdivision thereof. (Pandey, 1997:25)

Budget, as a tool of planning and control is closely related to the broader system of planning and control in an organization. Planning involves the specification of the basic objectives that will guide it. In operational terms, it involves the step of setting objectives, specifying goals, formulating strategies and expressing budgets. A budget is a comprehensive and coordinated plan expressed in financial terms for the operations and resources of an enterprise for a specified period in future" (Narayan and Jain, 1993:158).

A budget is a written plan for the future. The managers of firms, who use budgets, are forced to plan ahead. Thus, these firms tend to do well because they anticipate problems before they occur. Firms without financial goals may find it difficult to make proper decisions. A budget helps a firm to control its cost by setting guidelines for spending money for unneeded items because they know at all costs will be compared to the budget. If costs exceed the budgeted cost and explanation will be required. Frequently exceeding the budget may even be ground for dismissal. One of the primary purposes of an annual budget is to measure the profit expectation for the next financial year with due regard to all circumstances that can influence the trading prospects. A budget helps to motivate employees help in setting up budget. The master budget consists of many functional budgets. These budgets include a sales budget, a production

budget, a purchase budget, an expenses budget, an equipment purchase budget, and a cash budget. Once all of those budgets are complete, the master budget for the entire firm is prepared. A budget is a quantitative expression of a plan of action and an aid to coordination and implementation. Budgets may be formulated for the organization as a whole or for any sub units. Budgeting includes sales, production, distribution and financial aspect of an organization. Budget programs are designed to carry out a variety of functions planning, performance evaluation, coordinating activities, implementing plans, communicating, motivating and authorizing actions (Horn Green, 1976:123).

#### **2.1.4 Sales Budget or Sales Plan:**

Preparation of sales budget is the starting point of profit plan. All the budget planning begins with the forecast of sales. Using the information supplied by the sales person, Lynch. Sales plan is the starting point in the preparation of the comprehensive profit planning and control. All the other plans and budget is dependent both in units and amounts of the sales revenue or sales volume. The preparation of sales plan is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period. (Welsch, et.al, 1992:172)

The sales planning process is necessary part of PPC because (a) It provide the basic management decisions about marketing, and (b) based on these decisions, it is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic, most if not all of the other parts of the overall profit plan also are not realistic. Therefore, if the management believes that a realistic sales plan cannot be developed; there is little justification for PPC (Welsch, et.al, 1992:172).

A comprehensive sales plan includes two separate, but related, plans the strategic and the tactical sales plan. A comprehensive sales plan incorporates such management decisions as objectives, goals, strategies and premises. These translate

in to planning decisions about planned volume (units or jobs) of goods and services, prices, promotion and selling efforts (Welsch, et.al, 1992:172).

The primary purposes of a sales plan are:

- To reduce uncertainty about future revenues.
- To incorporate management judgments and decisions into the planning process (e.g. in the marketing plans).
- To provide necessary information for developing other elements of comprehensive profit plan.
- To facilitate management's control of sales activities.

### **Sales Planning Vs Sales Forecasting**

Sales planning and forecasting often are confused, Although related, they have distinctly different purposes. A forecast is not a plan; rather it is a statement and a quantified assessment of future conditions about a particular subject based on one or more explicit assumptions. A forecast should be viewed as only one input into the development of a sales plan. The management company may accept, modify, or reject the forecast. In contrast, a sales plan incorporates management decisions that are based on the forecast, other inputs and management judgments about such related items as sales volume, prices, sales efforts, production and financing. (Welsch, et.al, 1992:172).

A sales forecast is converted to a sales plan when management has brought to bear rougher management judgment, planned strategies, commitments of resources and the managerial commitment to aggressive actions to attain the sale goals. In contrast, sales forecasting is a technical staff function. For example, Tennessee Gas Transmission in its 1986 brochure, Tradition and Tomorrow, stated. It is important to make distinction between sales planning and forecasting because they are often confused. The preparation of sales plan is based upon the sales forecast. Sales forecasting is known as prediction, estimation and expectation for future related to sales. Sales planning and forecasting often are confused. Although related, they have distinctly different

purposes. A forecast is not a plan; rather it is a statement and a quantified assessment of future conditions about particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should always state the assumptions upon which it is based. A forecast should be viewed as only one input into the development of a sales plan. The management of a company may accept, modify, or reject the forecast contrast, a sales plan incorporates management decisions that are based on the forecast, other inputs, and management judgments about such related items as sales volume, prices, sales efforts, production, and financing.

A sales forecast is converted to a sales plan when management has brought to bear management judgment, planned strategies, commitments of resources, and the managerial commitment to aggressive actions to attain the sale goals. In contrast, sales forecasting is a technical staff function (Welsch et al., 1992:172).

### **Strategic and Tactical Sales Plan**

A comprehensive sales plan, includes both strategic long-term and tactical short-term sales plan. Both sales plans must be prepared in comprehensive profit plan. The usual case is a five or ten year strategic sales plan and one year- tactical sales plan. Many sales and product decisions commit a large amount of resources involving a life span of many years.

Sometimes it may be helpful to view the development of the long-range and short-range sales plan as separate activities. However, they must, be integrated because the short-range sales plan dovetail with the strategic long-range plan in all major respects.

Strategic sales plan is also known as long-range sales plan. It covers 5 to 10 years. A company may schedule completion of the strategic long-term sales plan as one of the first steps in the overall planning process. Long-term sales plans usually involve in depth analyses of future market potentials, which may be built up from a basic foundation such as population changes, state of the



economy. Industry projections and finally company electives. Long-term managerial strategies would affect such areas as long-term pricing policy, development of new products and innovations of present. Products, new directions in marketing efforts, expansion or changes in distribution channels, and cost patterns. The influence of managerial strategy decisions is explicitly brought to bear on the long-teen sales plan primarily on a judgmental basis.

### **Tactical Sales plan**

Tactical sales plan is also called short-range sales plan. It is prepared for one year or less than one year. Short-range sales plan or tactical sales plan is prepared to plan sales for twelve-months, into the Riture detailing the plan initially by quarters and by months for first quarter. At the end of each months or quarter throughout the year, the sales plan is restudied and revised by adding a period in the future and by dropping the period just ended. Thus, tactical sales plan are usually subject to review and revision on a quarterly basis. The short-term sales plan includes a detail plan for each major product and for groupings of minor products.

A Short-range sale plan should include considerable detail. To establish policy about detail in the short-rage sales plan, the main question is use of the results. First, the major consideration is to provide detail by responsibility for planning and control purposes. Second, the short-range sales plan must provide detail needed for

Completing the profit plan components by other functional managers. Third, the amount of detail also depends on the type of industry, size of the firm, availability of resources and use of the results by management (Welsch et.al., 1992:173).

Table 2.1

### Components of Comprehensive Sales Plan

Component	Strategic Plan	Tactical Plan
1. Management Policies	Broad and general	Detailed and Specific for the year
2. Marketing Plan (Sales and Services revenues)	Annual amounts; major groups groups.	Detailed; by product and responsibility
3. Advertising and promotion	General; by year	Detailed and specific for the year.
4. Distribution (Selling expense) Plan)	Total fixed and total variable expense, by year.	Fixed and variable expenses; by month and by responsibility.

Source: (Welsch et.al., 1992:173).

#### **Developing a Comprehensive sales Plan:**

Welsch, Hilton and Gordon have mentioned the following steps in developing a comprehensive sales plan (Welsch, et al., 1992:177-186).

#### **Step 1- Develop management Guidelines for sales planning**

All management participants in the sales planning process should be provided with specific management guidelines to be followed in sales planning. Fundamentally, these guidelines should specify sales planning responsibilities. The purpose of these guidelines is to attain coordination and uniformity in the sales planning process. The guidelines should emphasize enterprise objectives, goals, and strategies. The guidelines also should direct attention to such areas, as product emphasis, general pricing policies, major market thrusts, marketing strategies, and competitive position. (Welsch, et.al, 1992:172).

#### **Step 2- Prepare Sales Forecasts**

One or more sales forecasts should be prepared. Each separate forecast should use different assumptions, which should be clearly explained in the forecast. The management guidelines (step 1 above) should provide the broad assumptions. The forecast should include strategic and tactical forecasts that are consistent with

the time dimensions used in the comprehensive profit plans.

Forecasting methods are broadly classified as (a) quantitative, (b) technological, and (c) judgmental. These forecasting methods include time-series smoothing, decomposition for time series, advanced time series, simple regression, multiple regression, and modeling. (Welsch, et.al, 1992:172).

### **Step 3- Assemble Other Relevant Data**

In addition to steps 1 and 2, all other information relevant to developing a realistic sales plan should be collected and evaluated. This information should relate to both constraints and opportunities. The primary constraints that should be evaluated are:

- Manufacturing capacity.
- Sources of raw materials and supplies, or goods for resale.
- Availability of key people and a labor force.
- Capital availability.
- Availability of alternative distribution channels

Opportunities are seldom given adequate attention during the sales planning process. Sales planning opportunities include redesign of old products and introduction of new products, changes in sales territories, pricing innovations (e.g. customer bonuses), attractive packaging, advertising innovation, and new marketing strategies. In all instances, the effects of expected competitors should be evaluated.

### **Step 4- Develop the Strategic and Tactical Sales Plans**

Using the information provided in steps 1, 2, and 3-, the management develops a comprehensive sales plan. To do this, the planning process must be structured to maximize (a) motivation of sales force and (b) realism in the sales plan. This process should recognize the importance of management goals-both strategic and tactical. For both the behavioral motivation and judgmental imperatives, the process should involve participation by the

sales managers from the bottom up to the fullest extent possible. When it is feasible, salespersons who deal directly with customers should participate because they are often able to obtain relevant information from the customers about their future purchasing plans and competitive pressures. This means that all participants should be provided information relevant to their participative role that was generated in steps 1,2and 3. Extensive participation by middle and lower Level managers is more appropriate and useful in developing the tactical (short-term') sales plan than in developing the strategic (Log-term) term sales plan. The latter should primarily involve top-management participation. (Welsch, et.al, 1992:172).

An important pail of a participative approach to develop a tactical sales plan is the opportunity to present, explain, defend and respond to questions about a proposed sales plan for each major practicing group. One scenario would be for the manager of each sales region, in conformity with a preplanning schedule, to present a recommended regional sales plan to a sales planning group headed by the top sales executives. The given and take in such sessions, if unbiased and depersonalized, is invaluable in making sound managerial judgments. Later, the top sales executive would make a similar presentation of the proposed company sales plan to the top executive committee. The latter committee would then, after any changes, recommend it to the president for approval. The process of developing a realistic sales plan should be unique to Company of the company's characteristics- its products, its distribution channels, and the competence of its marketing group. Four different participative approaches widely used are characterized as follows:

- a. Sales force composite (maximum participation)
- b. Sales division managers composite (participation limited to managers only)
- c. Executive decision (participation limited to top management)
- d. Statistical approaches (technical specialists plus limited participation)

**Sales Force Composite:** This approach emphasis the judgments and expertise of

the sales force because it provides for a series of evaluations and approvals. A high level of participation, from the bottom up, is emphasized. The approach is limited primarily to tactical short-term sales planning. This approach has many variations. It is used more frequently by small companies and by those having, a small number of products. (Welsch, et.al, 1992:172).

**Sales division Managers Composite:** This approach emphasizes the responsibilities of the district. or product sales managers rather than the individual sales persons. This approach is commonly used for short-term sales planning. It operates in a manner almost except identical with that outlined above for the sales force composite approach except that the initial sales estimates are prepared by the sales managers rather than by the sales persons.

**Executive Decision:** Some companies find it inappropriate to send representatives into the field or to ask the sales force to make initial sales estimates. This is especially so when sales persons are not trained to perform this function or when the market situation is complex. Therefore, it is not uncommon for sales planning to be essentially completed by the higher managers. This approach has numerous procedural variations.

**Statistical Approaches:** A forecasting method is sometimes adapted for direct use as the initial step in developing a sales plan. Use of any statistical method for this narrow purpose requires a technically trained person. Each plant manager may decide to use one or more of them in developing the profit plans for the plant. Starting, with the statistical forecast of sales, the plant managers develop their own profit plan.

### **Step 5- Secure Managerial Commitment to Attain the Goals in the Comprehensive Sales Plan**

Top management must be fully committed to attaining the sales goals that are specified in the approved sales plan. This commitment requires full communication to the sales manager of the goals, approved marketing plan, and strategies by sales responsibilities. The commitment must be strong, and ever present in day-to-day operations.

### **2.1.5 Production Budget or Plan**

When the sales plan is completed the next step in building the profit plan is to develop a production plan. The production plan involves determining the number of units of each product that must be manufactured to meet planned sales and maintain the planned inventory levels of finished goods. Planning production requirements necessitates another decision about input that is the management decision about inventory levels of finished goods that are to be planned (Welsch, et.all., 1992-:136).

Production plan is based on estimated sales. Production must be planned follow sufficient time to manufacture the products before the estimated date of sales. It is prepared in the basis of

- (i) Sales budget
- (ii) plant capacity
- (iii) opening inventory of finished goods and
- (iv) Policy of the management. Production budget is divided into monthly budget for the purpose of production planning,

In production planning the following factors are determined

- (i) economic batch quality
- (ii) delivery schedules
- (iii) seasonal conditions
- (iv) optimum utilization of plant capacity
- (v) optimum utilization of labor with out much overtime and idle time
- (vi) reduction of bottlenecks such as shortage of man, material, etc
- (vii) Work- in progress.

### **2.1.6. Material Purchase Budget**

The purchase budget specific the estimated quantities to be purchased and the estimated cost for each raw material and the required delivery dates. The material and part budget provides the purchasing manager with the data responsibility for preparing a detail plan of purpose. It is direct responsibility of purchasing manager to be knowledge about the market for items that must be

purchased, and to plan the unit cost for use in the purchased and amount to purchase materials. The purchase budget is directly concerned with the timing of actual receipt of raw material rather than with the timing of usage or purchase orders. The purchase manager orderly maintains the time of purchase materials and inventory requirement by material. (Welsch, et.al, 1992:174).

### **2.1.7. Labour Budget**

Planning labour cost involves major complex problem areas.

- (a,) Personal needs,
- (b) Recruitment,
- (c) Training.
- (d) Job description and evaluation,
- (e) Performance measurement,
- (f) Union negotiations, and
- (g) Wage and salary administration.

A comprehensive profit-planning program would incorporate appropriate approaches application to each problem, but it direct. Careful consideration to them and aids in placing them in perspective. Effective planning of long and short labor cost will benefit both the company and it's complies.

### **2.1.9. Cash Budget.**

Cash budget generally indicates the cash outflow and inflow. The key point. In investment analysis is to focus. Exclusively on difference in expected future cash flows are treated the same whether they arise from operations, purchase or sale of equipment or investment in or recovery of working capital. The opportunity cost and the time value of money-v are tied to cash flowing in or out of the organization not to the source of the cash (Khan and Jain 1993:175).

Cash budgets are necessary in business operation. Payments must be made in cash, and receipts are deposited in the case amount. Cash is a "none earning assets in the sense that, although it is needed to pay for labour and materials, to

buy fixed assets, to pay taxes, to service department, and so on. Cash itself earns no interest. Thus, the Val of cash budget is to reduce cash holdings to the minimum necessary to conduct business.

## **2.1.9. Accounting policy of Nepal Telecom Company**

### **2.1.9.1 Basis of preparation of financial statement**

The financial statements are prepared on the historical cost convention and in accordance with international accounting standard.

The company follows accrual system of accounting in the preparation of account except where otherwise stated (Dahal & Mishra., 2007:145').

### **2.1.9.2 Revenue Accounting**

#### **Revenue**

- Revenue is recognized on accrual basis.
- Operating revenue represents the value of services rendered, sale of terminal equipment & its accessories and other income directly related to the telecommunication business.
- Total revenue of the organization is inclusive of telephone calls made through service lines, within limit, and minimum rental charges on non-service lines provided as employee benefit, as the case may be, depending upon the facility provided to various service and non-service lines as per the rules of the company.
- Penal interest is accounted on cash basis and shown under operating income.
- Non-operating revenue includes interest, dividend, proceed from sale of assets and scrape and other income which are not directly related to telecommunication business.
- Dividends from investment in shares are recognized when right to receive payment is established and classified as non-operating income.
- Liquidated damage charged by the company on account of delay in execution of contracts and delay for short supply of materials and services by the contractors and suppliers including contracts for capital assets are taken



as revenue income as and when admitted by the concerned party and show under non-operating income.

### **Accounting**

- Revenue from service provided shall be accounted on accrual basis and accounted under separate head according to the nature of service provided.
- Revenue collected against the connection charges shall also be accounted on accrual basis and account for on separate account head 'Telephone connection charges account'. Any connection charges received in advance shall be separately shown and cannot be treated as income for the period. Such amount come under the suitable account head in balance sheet. And shown as income in the year the telephone is connected.
- Collection on deposit shall be accounted for in separate head. Such deposit shall be shown Current Liabilities in Balance Sheet.
- Collection of panel interest and fine shall be accounted for in cash basis. Such recovery shall be shown under separate account head Tenal Interest. & Fine Account.'
- Provision shall be made for all debts (except inter-administration and government dues) outstanding for more than one year. Specific provision shall be made wherever doubtful debts are identified.
- In case of debtor whose services are permanently disconnected, dues shall be shown after adjusting the deposit.
- In case the line temporarily disconnected, minimum rent for three months shall be recognized and after three months rental shall not taken income. If the line is not reconnected such revenue booked for three months shall be reversed.
- Bad Debt shall be written off with the approval of the competent authority and after security of proper case.
- Revenue from sale of Telephone sets shall be shown under separate account head `Sale of Telephone Set Account'
- Revenue from sale of fixed assets shall be shown under separate head 'Loss/Gain on Sale of Fixed Assets'.
- Interest from bank deposit shall be shown under head in gross amount before `TDS. Such amount is debited to separate account head 'TDS Receivable'

and the amounts lying under this head are adjusted on payment of income tax after final assessment.

- Deposit (of Rs.75000.00) collected from PCO operators shall be shown under separate account head 'Deposit from PCO Operators'.
- Excess amount collected under OYT scheme shall be shown as income under separate account head.
- Other charges collected against transfer of telephone, transfer of name shall be shown under Miscellaneous Income head.

Operating Income consists of: (Khan and Jain 1993:175)

- ) Income from local calls, STD, International calls
- ) Income from Inter-administration
- ) Income from Telegraph
- ) Income from Telex
- ) Income from Leased Circuits
- ) Income from Tele-Fax
- ) Income from sale of telephone sets of other terminal equipment and accessories.
- ) Income from other services, which are directly linked to the business of company.
- ) Penal Interest collected from customer.

Non-Operating Income consists of: (Khan and Jain 1993:175)

- ) Interest income from other Investment
- ) Income from Intelsat
- ) Gain in foreign exchange
- ) Miscellaneous Income
- ) Liquidated damage charged to the suppliers
- ) Insurance claim received

### **2.1.9.3 Foreign Currency Transactions**

- Transactions denominated in Foreign Currency are recorded in the exchange rate prevailing at the time of the transaction.
- Any income or expenses on account of exchange difference between the date of transaction and settlement, or on translation is recognized in the profit and account as income or expenses except in case where relate to the acquisition of fixed assets in case they are adjusted to the cost of asset.
- Monetary items denominated in foreign currency at the year-end translated at the rate prevailing on the balance sheet date.
- Nepal Telecom has foreign currency transaction on regular basis on day to day of its operation. Difficulties are being experienced on recording these transactions due to frequent fluctuation in exchange rate.
- All the transaction in foreign currency should be recorded by applying exchange rate prevailing on the date of transaction. Any difference arising on exchange rate between exchange rates should be debited / credited to 'Exchange Fluctuation Account'.
- Since the exchange rate keeps on fluctuating each and every day it will be difficult to record the exchange rate of all days. So for convenience, exchange rate for first working day shall be applied to record all the transactions falling within that month. However, such difficulty would not arise in case of exchange rate for settlement date as same is recorded at exchange rate prevailing on the date of payments/receipt.
  - In case of purchase of goods, transaction date should be the date on which goods are cleared from custom. In practice, such date will be date on which goods receipt report was prepared. Such transactions are recorded by applying the exchange rate prevailing on the first working day of the month in which the receipt report was prepared. These transactions should be recorded in both foreign currency and Nepalese currency in separate column. In such case settlement date will be the date on which payment was made to the creditors.
- In case of income, transaction date should be the date for which invoice was raised. In practice, such transactions are recorded at exchange rate prevailing on

the first working day of the same in which invoice was raised. Settlement date for such cases will be the date on which the amount was realized. In all the cases transactions should be recorded in both Nepalese and foreign currency in separate column.

- All assets denominated in foreign currency shall be valued at buying rate prevailing on balance sheet date. All liabilities denominated in foreign currency shall be valued at selling rate of balance sheet (late (*Dahal and Mishra*, 2007: 159).

## **2.2 Review of Previous Research Work:**

This part is a descriptive presentation of the literature work done by the various authors and previous researcher. The main objective of this part is to be analyze the previous research study. The purpose of literature review is thus, to 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 for 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 effectiveness of sales planning and budgeting are very few. Numerous studies have been made in the area of profit planning and control in manufacturing enterprises but to explain the detail study on sales budgeting has not been conducted by most of them. 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 below:

Prasad (2006) has conducted a research on Profit. Planning in Nepal Telecommunication Corporation.. His major Objectives of his research to analyses functional budget with variance that shows between bugted and actual achievement of the NTC. His says that when we use the capacity of the plan the profit and some remedies of improving profit planning system. NTC has no estimate of how much find is needed for immediate use and all the unused funds should be invested in marketable securities to generate some income. If idle fund of working capital is not invested, NTC will sacrifice some amount.His Major Findings,The sales of NTC are increasing every year , but the increasing rate is not fixed Actual sales lines are

always below than budgeted sales but actual sales revenue are always high than budgeted .but in FY2 063/64 actual sales revenue is low than budgeted sales revenue.The balance sheet of NTC shows huge amount of cash bank balance (requiring) idle and this indicates some deficiency to utilize its liquid assets.Actual production lines are of the nature of high variability than budgeted production line.NTC prepares both long – range and short-range sales budget,but these are not prepares in detail. Also there is a system of keeping management information system(MIS) report in this corporation.The cost –value profit analysis in NTC shows that BEP(Break even point) is satisfactory.Working capital ratios are going in increasing trend and net working capital ratios are going increasing trend which shows that NTC has earned more profit. Also the assets turn over ratio are moving to increasing trend, which is good sign for NTC.

Mishra (2007) has carried out an investigation topic "Profit planning and control in manufacturing company' the basic objective of his research is to examine the present comprehensive profit planning system applied by Nepal Lever Limited. Overall objective is to guide and provide future direction and prospectus to the organization. He finds that effectiveness of actual budget and production budget for the use of capacity utilization. When we use the different system of profit planning to know the profit planning of system of the company.His major findings are Specific goals and strategy for the organization are set up by the top-level executives and the management is totally governed by the Hindusthan Lever Limited.The organization is licensed to produce 10 varieties of product but it is only producing and products at present The company has no proper practice of segregation of costs into fixed, variable and controllable and uncontrollable costs. Even though F&L is produced at separate plant but it is not separately in record.Authorities and responsibilities are not clearly defined among various departmental working managers. Role conflict and lack of co-ordination among theme is paramount.In teen of capacity utilization only 36% of installed capacity is utilized by fair and lovely.Application of profit plan is not realistic. Everything is prepared on ad-hoc manner.Nepal Lever Limited faces a major problem in utilization of raw material. A major portion of raw material is imported from other countries-. very less portion of Nepalese raw material

is consumed by the organization

Shah (2008) has conducted a research on the topic Impact of Budgeting on Profitability (A Case Study Of Nepal Telecom Ltd.). He finds that when we use the variance to know the actual sales and target sales then achieved total overhead and profit. To use BEP and ratio analysis finds out the financial performance which shows public services contribution to the economic development. His major findings Specific goals and strategy for the organization are set up by the top-level executive and the management is totally governed by HMG. Application of profit planning is not realistic or systematic. Plans are prepared on "ad hoc basis". NT has the practice of preparing short-range sales budget but long range sales budget is not prepared in detail. The actual sales achievement in units is below than budgeted sales an average it is about 84.18%. But the achievement in Rs. is above than budgeted sales. On an average it is 104.77%. The correlation between target and sales is positive. It reveals that the corporation is able to meet its goal as specified in annual program. Although the company has set the sales target, it has no practice of preparing production budget. Sales budget is treated as production budget. The correlation between target and production is positive. That means the actual production's relationship with budgeted production is positive. The regression equation shows the increasing trend of actual production and the straight line trend shows the positive figure for future. The corporation has no proper practice of segregation of cost into fixed and variable and uncontrollable cost. There is no practice of identifying semi variable cost. It creates a problem to analyze its expenses properly. etc.

Bhatt (2009) has conducted a research on Revenue planning and cash management of Public Utility in Nepal (A case study of Nepal Telecom). To know the trend of budgeted and actual revenue which provided the cash flows from operating financial activities? To have information, control and security over cash balances and payment System. His major findings, The lack of accurate and proper sales forecast is one of the important factors that affect the financial performance of the company. In Nepal Telecom, there is consistency between planned sales line and actual sales. The analysis of distributed

sales line and revenue shows that the achievement is highly consistent. So, if the company forecasts the expected sales accurately, it can manage the various activities accordingly. Sales budget shows ISD sector's sales revenue is main sources of Nepal Telecom, which contributes more than 40% in average. Because of high demand of telephone line there exist small gap between actual production and actual sales in lines. The local calls are increasing at this stage but the revenue per line is decreasing. It is due to bad governance and slow economic growth. Correlation and coefficient value shows that there are positive correlations between budgeted and actual sales units and Rs, by the regression line, it is clear that future revenue will increase with compare to budgeted if other-things remaining same. Etc.

Pokherel (2010) has conducted a research on Sales Planning in Nepalese Public Enterprise (A case study of Dairy Development Corporation), The basic objective of his research is to raise the practice of sales planning system and its effectiveness, applied by DDC. He finds sales planning, formulation and implementing procurers of sales plan that improve of planning. His Major findings, In Nepalese manufacturing PEs goal and objectives are written but not adequate and are not properly follow up the development of the enterprise. DDC has not been clearly defining its main objectives in annual goals or target for achieving the basic objectives. There is no defined such operational as expansion and contraction of product line, geographic areas, share of market growth of trends etc all the departmental goals and target are fixed in paper but not in action. DDC has not followed participatory management, even middle level of management are not participated in policy making. Only top level of management is directly involved in policy making. Like in other PEs in Nepal, there is only annual target is supplied by the top management for the major department. There is no details and formal guidelines to the lower level management or departmental manager for the purpose of developing profit plan which also seen in DDC. There is neck to neck competition between other emerging dairy product industries and DDC, in the valley and other parts of country as well. So for better sales, advertising should be effective DDC should invest on more advertising strategies.

### **2.3 Reviews from Books**

. Pandey (2008) a profit plan or Budget is the formal expression of the enterprises plans and objective state in financial term for a specific future period of time. He finds that Development and application of broad and long range objective for the enterprise. Specification of the tactical short rang profit planning details by assign responsibilities. To assign Developing a system of periodic performance report details for a company responsibility

Ojha (2009) complete set of financial plan for a business firm is often calling the master budget. The master budget consists of many functional budgets including sales budget, production budget purchase budget and expenses, budget an equipment purchase budget and cash budget. Sales forecast and including the account receivable schedule. Direct labor budget including the man hour man power and labour cot schedule

Gautm (2009) Capital expenditure budget is an important part of compressive profit plan. It is directly related to a company operating assets, especially land, equipment and other operational assets. Captial expenditure budget is characteristics by following feature. Major capital additional projects usually require large commitment for operational assets with lives extending over long period of time. They tend to be unique, non recurring projects. They represent new direction and major step and technological improvement. Each major project carries special destination Minor/small capital expenditure small, low cost recurring and ordinary capital expenditure such “recurring “replacement and maintenance of professional assets purchase of special tools etc. They re usually group together single monthly amount of capital budgeting purpose. They should not include the usual ordinary and ongoing repair and maintained which include in expense budget.

### **2.4 Research gap**



A brief review of the mentioned dissertation, it is seen that most of the enterprises are not operating effectively. The previous researchers have not applied details concept of budgeting application of profit planning and control system and also implementation of profit planning system of Nepal Telecommunication Corporation. Their findings and recommendations are almost the same. All of them have pointed out that there is no proper planning and control system in NTC. This research is emphasizing the budget's role in the comprehensive profit planning system which incorporates the revenue as well as expenses planning of NTC.

### **CHAPTER – III**

## **RESEARCH METHODOLOGY**

### **3.1 Indrouction**

Research refers to looking for something more out of systematic investigation. Research is a systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities of gathering recording analyzing and interpreting the data with the purpose of finding answers to the problem. Thus, the entire process by which we attempt to solve problem or search the answers to questions is called research, (wolf and Panta, 2005:89.).

### **3.2 Research Design**

Research design is a framework for the researcher in a particular task. The research design of this study is analytical as well as a descriptive approach. The main objectives of study are an examination and evaluation of sales planning procedure of Nepal Telecom Company. The study is closely related with the various functional budgets and other proposed accounting statements as well as actual result over the budget.

### **3.3 Nature and source of data**

The significance of the research depends upon the nature, availability and accuracy of information. To fulfill the objectives of this study, mainly secondary data have been used. Data have been taken from published anti articles, financial statement of NTC, magazine, newspapers and booklets, MIS report of NTC, budget bank of NTC, similar previous dissertations, financial report of financial ministry etc.

### **3.4 Data Analysis Tools.**

The data were collected in raw and crude form from various sources are arranged, analyzed and presented in proper tables formats and graphs such tables and formats are interpreted and explained wherever necessary. To analyze the collected data, basically two types of tools are used:

### **3.5 Statistical Tools**

1. Mean

$$\text{Mean}(\bar{X}) = \frac{1}{n} \sum_{i=1}^n x$$

2. Standard Deviation and Coefficient of Variance

$$\sigma = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_i - \bar{X})^2}$$

Where  $(\bar{X})$  is the arithmetic mean of the distribution and  $F_i = N$

3. Correlation

$$y - \bar{y} = r_{xy} \frac{\sigma_y}{\sigma_x} (x - \bar{X})$$

4. Regression

$$r = \frac{N\phi XY - \phi X \cdot \phi Y}{\sqrt{N\phi X^2 - (\phi X)^2} \sqrt{N\phi Y^2 - (\phi Y)^2}}$$

Where,

r = Correlation coefficient

n= Number of years

x = Sum of X series

y = Sum of Y series

$\sum x^2$  = Sum of Square of Series X

$\sum y^2$  = Sum of Square of Series Y

$\sum xy$  = Sum of Square of series Y

X & y ^Financial variable of ntc

$$P.E. = 0.6745 \frac{1 - r^2}{\sqrt{n}}$$

5. Trend Analysis

$$Y = a + bX$$

Where  $a = \frac{\sum y}{N}$  and  $b = \frac{\sum XY}{\sum x^2}$

6. Time Series analysis

7. Percentage, graphs, diagrams etc.

**3.6 Financials & Budgetary Tools:**

1. Ratio Analysis

R.A was included the following techniques

$$\text{Operating profit Ratio} = \frac{\text{Operating profit}}{\text{Net sales}} \times 100$$

$$\text{Net Profit Ratio} = \frac{\text{Net profit}}{\text{Net sales}} \times 100$$

$$\text{Adm. Cost Ratio} = \frac{\text{Adm. cost}}{\text{Sale}} \times 100$$

$$\text{Capital Turnover Ratio} = \frac{\text{sales}}{\text{Total capital}}$$

$$\text{Current Assets Turnover ratio (in times)} = \frac{\text{sales}}{\text{Current assets}}$$

## 2. CVP Analysis

CVP analysis was included the following techniques

$$\text{V.C Ratio} = \frac{\text{Variable cost}}{\text{Sales Revenue}}$$

$$\text{P.V Ratio} = 1 - \frac{\text{Variable cost}}{\text{Sales Revenue}}$$

$$\text{BEP in Rs} = \frac{\text{Fixed cost}}{\text{P.V Ratio}}$$

$$\text{MOS} = \text{Actual Sales} - \text{B.E. Sales}$$

## 3. Variance Analysis

### 4. Flexible Budget etc.

## 3.7 Research Variables

The basic research variables of this study are mainly related with the budget practiced by NTC. Such budgets are sales budget, production budget, income statement, call revenue, balance sheet etc of NTC.

# **CHAPTER –IV**

## **PRESENTATION AND ANALYSIS OF DATA**

### **4.1 Introduction**

Presentation and analysis of data is an important stage of the research study. The main purpose of analyzing the data is to change it from an unprocessed form in an understandable presentation. The analysis of data consists of organizing data by tabulating and then placing that data in presentable form by using figures and tables. The main purpose of this study is to examine the current practice of sales planning and its effectiveness in non-manufacturing public enterprise. Nepal Telecom Company has been selected form and case study to accomplish these objectives. This chapter of the paper analyzes and presents sales planning of the NTC. It has compare actual and target sales figure and identify related sales variance of the company and other sales related analysis also done such as production planning of NTC and its effect on sales planning, C-V-P analysis, financial ratios related to sales, variance analysis, performance report etc. The sale production and other related figure of previous year are presented and analyzed to know the overall economic and financial trend and to estimate the possible future trend of NTC. This study cover the period of 5 years from 2062/063 to 2066/67 (2005/06 to 2009/10)

### **4.2 Sales Plan and Achievement of NTC.**

Formulation of sales budget is the first and important step in developing the overall budget procedure. It is the foundation for effective planning in business organization and it is the primary source of cash and all other functional budgets are prepared on the basis of sales budget. The sales plan is that step which opens the door for future which is not certain, when actual sales is not far from the planned sales then it is known as good plan.

For this, sales budget preparation should be done in realistic ground. If sales budget is not realistic all other budgets will not be realistic. So, it is also referred as a market penetration plan. A sales plan is a comprehensive statement of broad objectives; specific goals, basis strategies and planning premises. It is developed for a certain future period le. It can be prepared quarterly, monthly or yearly. Sales plan is prepared on the basis of sales forecast but

sales forecast in itself is not a sales plan. The preparation of sales plan involves the following four interrelated steps:

- a)The sales forecast
- b)The Marketing Plan
- c)The advertising and Promotion expenses budget
- d)Selling & Distribution expenses budget.

Sale budget is prepared by product, by interim time periods and by sales territory. The overall responsibility of preparing sales budget is upon the sales manager although chief executives should also be involved in such activities. The objectives of the Nepalese public enterprises the objectives are mainly social welfare and commercial, in the case of fulfilling the social obligation.

Nepal Telecom company has a practice of preparing sales budge. It has practice of preparing sales budget for the coming year. NTC prepares sales budget according to the nature of its consumers. And consumers are categorized like government, business organization, residential, special, service, non-service, and others. The overall responsibility of preparing sales budget is upon planning directorate of NTC. Maintaining coordination with revenue section, the sales budget is prepared by planning directorate. Now, the attempt begins to present the corporation previous sales performance anti achievement to know about the sales trend of past and to forecast the possible future trend of the NTC. For this purpose we have to analyze the past sales data of corporation.

The following table presents the sales budget and actual sales achievement in lines and in Rs. from the fiscal year 2005/06 to 2009/10

**Table 4.1**  
**sales Target and Sales Achievement of NTC.**

Fiscal year	in lines		Achievement %	(Rs in million)		
	Budgeted	Actual		Budgeted	Actual	Achievement %
2005/06	116171	164885	141.93	7316.55	8318.97	113.7
2006/07	189433	115531	60.99	8819.06	8584.144	97.34
2007/08	186895	430868	230.54	8696.68	10391.65	119.48
2008/09	198767	532391	267.85	15739	16788.36	106.67
2009/10	204657	562162	274.68	18708.05	20646.62	110.36

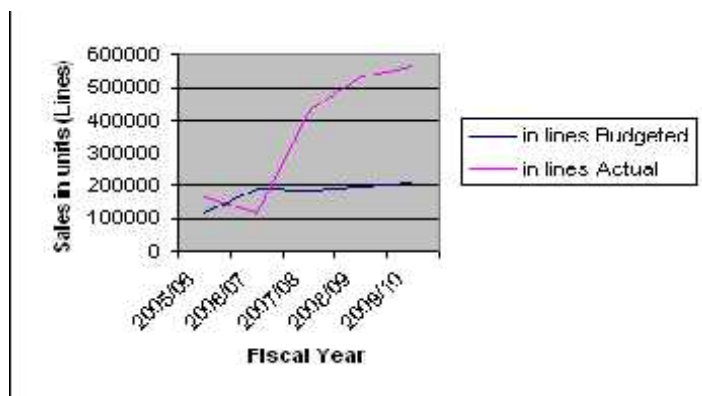
Sources: MIS Report of-NTC Ashad, 2067,17 Issues

The above table show the target and achievement of sales lines and sales revenue (operating revenue) of NTC from F.Y. 2005/06 to 2009/10. From the above table, we can see that, there is not consistency in target as well as actual sales in lines. Sales target in units till 2009/10 is in increasing trend but in 2006/07 it has decreased. At the same time, the actual sale in lines till 2006/07 is decreased and after that it is increasing trend. Again it has increased in 2007/08 but increasing rate is slower after that till 2009/10. The actual distribution exceed target because of network expansion and high distribution of Pre-Paid Mobile.

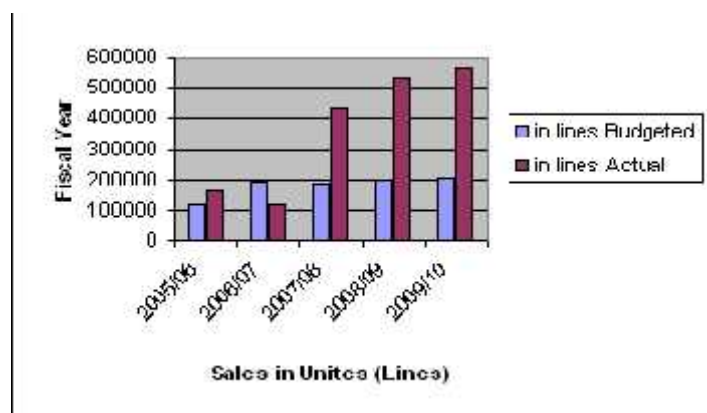
When we analyze the budgeted and actual sales revenue, we can say that actual sales achievement of NTC is highly consistent with target sales. Actual sales revenue in every year exceed target except in F.Y. 2006/07. In F.Y. 2006/07 revenue collection has decreased due to close of server some period of time. Actual revenue exceeds budgeted revenue because distribution and revenue collection from Mobile Service and value added service (SMS, VAS) is very high. Effective presentation of the above data in graph and Bar Diagram is as follows

**Graph 4.1**

**Budget and Actual Sales Lines of NTC**



**Diagram 4.1  
Budget and Actual Sales Lines of NTC**



These above graph and bar diagram show that there is huge gap between budgeted and actual sales F.Y 2007/08

The following table represents the budgeted and actual sales lines of PSTN tel. service of NTC.

**Table 4.2  
Sales Target and Sales Achievement of PSTN Tel. Service of NTC in Lines**

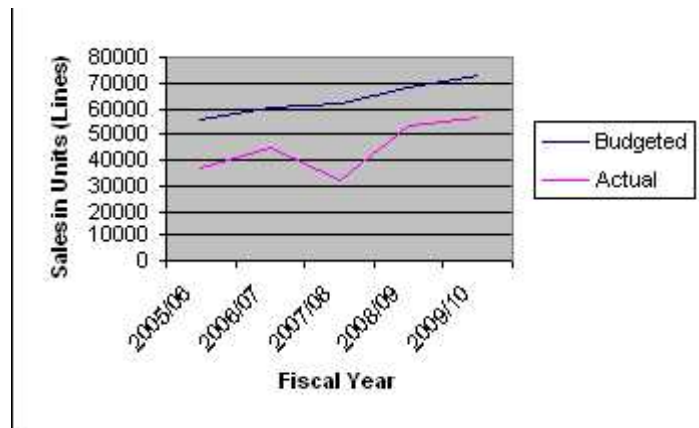
Fiscal Year	Budgeted	Actual	Achievement in %
2005/06	55696	36601	65.72
2006/07	60083	45058	74.99
2007/08	61895	32522	52.54
2008/09	68494	53239	77.73
2009/10	72698	56216	77.32

Source: MIS Report of NTC, Ashadh, 2011.

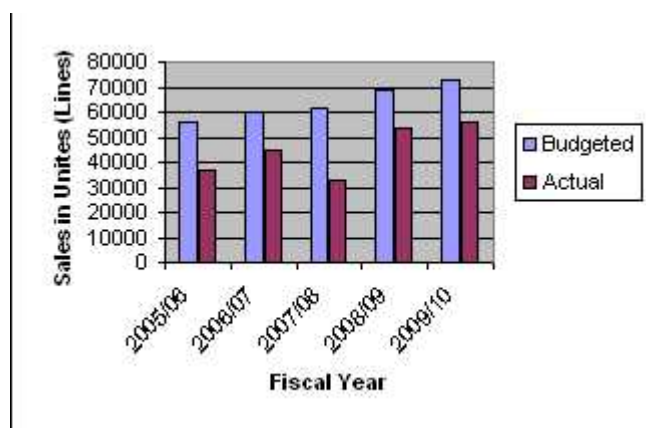
The above table shows the target and achievement of sales units of PSTN Tel. from F.Y.2005/06 to 2009/10. From the above table, we can see that, there is not consistency in target as well as actual sales in units. Actual sales units has not meet target in each year, it was due to the lack of sufficient network, cables, exchange center and availability of alternative services like, Pre-Paid Mobile, Post-Paid Mobile, CDMA, UTL's Phones etc. Presentation of above data in graph and bar diagram is as follows.



**Graph 4.2**  
**Budgeted and Actual Sales Lines of PSTN TEL. Service of NTC**



**Diagram 4.2**  
**Budgeted and Actual Sales Lines of PSTN TEL. Service of NTC**



These above graph and bar diagram show that there is huge gap between budgeted and actual sales F.Y 2009/10

In order to find out the nature of variability of sales budget and actual sales of different years we have to calculate the arithmetic mean, standard deviation and coefficient of variation of the budgeted and actual figures of NTC for 5 years from FY 2005/06 to 2009/10

**Table 4.3**  
**Statistical Information Table of Target and Actual Sales in Lines**

statistical Tools	Target Sales in Lines	Actual Sales in Lines
Mean	179185	361167
statistical Deviation ( )	32148	186246
Coefficient of Variation (C.V)	17.94%	51.56%
$r_{xy} = .6300$ PE (r)= .25		

As stated on statistical information table no. 4.3 mean and S.D and coefficient of variation of actual sales is greater than budgeted sales. It shows that actual sales in lines is more variable and less consistent than budget. For the calculation of correlation (r) Budgeted sales figure is assumed as independent variable (X) and actual sales figure is assumed as dependent variable (Y).from the above figure, there is positive correlation between budgeted and actual sales units.It indicates that actual sales increase as target sales increase. The significant of r is tested with probable error. Vaule of  $r_{xy}$  is more than PE(r) so it may conclude that vaule of  $r_{xy}$  is significant. So the actual sales will go in same direction that of budgeted sales.

Regression analysis is used as a tool of determining the strength of relationship between two variables. It is a statistical device, with the help of which we can estimate or predict the value of on variable when the value of other variable is known. Here, a regression line also can be fitted to show the degree of relationship between the budgeted and actual sales and to estimate the possible actual sales for up coming year with given budgeted sales for the year .we may assume actual sales as Y and budgeted sales as X, the regression equation of actual ssales (Y) on budgeted sales (X) is as follows.

$$y - \bar{y} = r_{xy} \frac{\sigma_y}{\sigma_x} (x - \bar{X}) \dots\dots\dots (i)$$

	Budget(X)	Actual(Y)
Mean (in'000'lines) ( $\bar{X}$ )	=179.185	(Y) = 361.167
S.D (in'000'lines) ( $\sigma_x$ )	=32.18	( $\sigma_y$ ) =186.246

Then ,substituting the corresponding vaule in equation (i), we can get

$$Y - 361.67 = .6300 \times \frac{186.24}{32.118} (X - 179.185)$$

$$\text{Or, } Y = 3.6478(x - 179.185) + 361.167$$

$$\text{Or, } Y = 3.6478x - 65.3645 + 361.167$$

$$\text{Or, } Y = 3.6478x - 292.4780 \dots \dots \dots (ii)$$

Thus the regression equation shows that there is negative relationship between target and actual sales achievement. With this regression equation, we can ascertain the expected sales achievement with given value of target sales, say x, if we use this equation to ascertain the expected sales achievement for fiscal year 2009/10, the following result is achieved .

For example ,the budgeted sales lines for lines for F.Y2009/10 are 225568 lines from this we can achieve the expected sales as follows.i.e,

$$\begin{aligned} Y &= 3.6478x - 292.4780 \\ &= 822.8269 - 292.4780 \\ &= 530.3489 \text{ lines} \end{aligned}$$

If the relationship between budgeted and actual sales remains in same direction as previous year, the actual sales for the F.Y 2009/10 will be 530348 lines.

The following table represents the statistical information of target and actual sales lines of PSTN tel service of NTC.

**Table 4.4**

**Statistical Information Table of Target and Actual Sales in Lines of PSTN Tel. Service**

statistical Tools	Target Sales in Units	Actual Sales in units
Mean	63773	44727
statistical Deviation	6072	9160
Coefficient of Variation (C.V)	9.52%	20.48%
$r_{xy} = .0827$ $PE (r) = .2995$		

As stated on statistical information table no. 4.4 mean and S.D. of target sales is greater than actual sales of PSTN Tel. Service. But the coefficient of variation (C.V.) of actual sales is more than budgeted sales. It shows the higher variability and less uniformity, consistency in actual sales than budgeted sales. For the calculation of correlation

Coefficient(r), budgeted sales figure of PSTN Tel. Lines are assumed as independent variable (X) and actual sales figure of PSTN Tel. Lines is assumed as dependent variable (Y). From above table there is positive correlation between budgeted and actual sales in units. It indicates that actual sales increase as target sales increase. The significant of r is tested with probable error.  $r_{xy}$  is more than  $PE(r)$  so it may conclude that value  $r_{xy}$  of is significant. So the actual sales will go on same direction that of budgeted sales.

To find regression equation, actual sales units of PSTN Tel. Lines are assumed as Y and budgeted sales units of PSTN Tel. Lines are assumed as X, the regression equation of actual sales (X) of PSTN Tel. Service is as follows:

$$y - \bar{y} = r_{xy} \frac{\partial y}{\partial x} (x - \bar{X}) \dots \dots \dots (i)$$

	Budget(X)	Actual(Y)
Mean (in'000'lines) ( $\bar{X}$ )	=63.773	(Y) = 44.727
S.D (in'000'lines) ( $\sigma_x$ )	=6.072	( $\sigma_y$ ) =9.16
$R_{xy}$	=.827	

Then, substituting the corresponding value in equation (i), we can get

$$Y - 44.427 = .0827 \times \frac{9.16}{6.072} (X - 63.773)$$

or  $Y = 1.2467(x - 63.773) + 44.27$

or  $Y = 1.2476x - 35.2932 \dots \dots \dots (ii)$

This regression equation shows positive relationship between target and actual sales achievement. It shows that actual sales are in increasing trend and the actual sales will be increased by 1.2476 units (lines) as per units (lines) increase in budgeted sales. By the help of the regression equation (ii) we can estimate the expected sales achievement with given value of budgeted sales (X) for F./Y 2066/067. If we use the equation (ii) the expected sales achievement (Y) will be as follows:

Let, the budgeted sales units (lines) for F/Y 2066/067 = 79670

Then substituting the value of X (in '000' lines) = 79670

Expected sales achievement

$$Y = 1.2476x - 35.2932$$

$$1.2476 \times 79670 - 35.2932$$

$$64103.092 \text{ lines}$$

Thus, if relationship between actual sales and budgeted sales of PSTN Tel. Service remain same as previous year, then sales for FY 2009/10 will be (64104 lines as stated

by above regression equation (ii)

Statistical tool "Time Series analysis" can be used to analyze the trend of actual sales. It helps in understanding the past behavior of a variable in the time series and helps in future forecasting and planning with the help of past and present data. It also helps in evaluating the present accomplishment. The actual performance can be compared with the expected performance and analyze the causes of such variation. Some methods will be used for measurement of trend. They are:

semi –average method

Moving - Average Method and,

Least Square Method

To find out the long term actual sales trend semi-average method is used. Data from FY 2061/062 to 2066/067 is used for study purpose.

**Table 4.5**  
**Calculation of Trend Line of Sales Lines by Semi-average Method of**

**NTC**

Fiscal Year	Sales in Unit(Lines)	Semi-total	Semi-average
2004/05	72629		
2005/06	164885	353045	11768
2006/07	115531		
2007/08	430868		
2008/09	532390	1525421	508473
2009/10	562163		

Source: MIS Report of NTC, 2061 to 2067

Here,

$N=6$ , so the data are divided into two equal parts i.e.

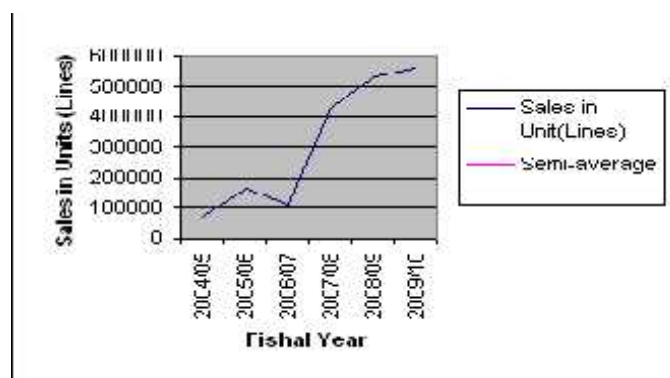
First part = from 2061/2062 to 2063/064

Second part = from 2064/065 to 2066/067

Now the actual sales figure from FY 2061/062 to 2066/067 and semi-average trended figure is plotted with the help of following graph.

**Graph 4.3**

**Sales Trend of NTC By Semi – Average Method**



As constructed semi-average trend line, graph 4.3 shows the sales made by NTC Till F.Y 2009/10 is in increasing trend. But it has decreased in F.Y 2006/07 and again it has increased in F.Y 2007/08. sales of F.Y 2007/08 are above semi-average and peak point. And sales of F.y 2005/06 are below semi-average and also trough point.

Semi- average trend line of PSTN Lines is computed as follows. Data from F.Y2061/062 to 2009/10 is used for study purpose

**Table 4.6**

**Calculation of Trend Line of Actual Sales Lines for PSTN Tel. Service by Semi-average Method**

Fiscal Year	Sales in Lines	3 Years Semi-total	Semi-average
2004/05	44157		
2005/06	36601	125816	41939
2006/07	45058		
2007/08	32522		
2008/09	53239	141977	47326
2009/10	56216		

Source: MIS Report of NTC, 2067 Ashadh

Here, n= 6, So the data are divided into two equal parts First Part = From 2004/05 to 2006/07

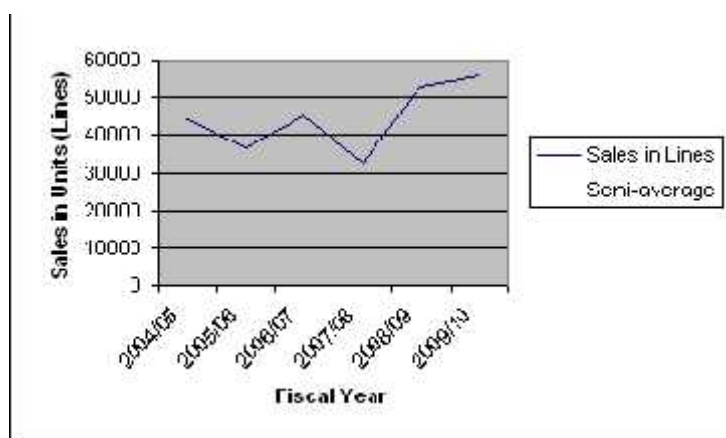
Second part =From 2007/08 to 2009/10

Now, the actual sales figure from FY 2004/05 to 2009/10

and semi-average figure is plotted with the help of following graph

**Graph 4.4**

**Sales Trend of NTC By 3-Years Semi Average Method**



As constructed semi-average trend line graph 4.4 shows the sales made by NTC in different years is much fluctuated. Sales of FY 2006/07 are above Semi - average and peak point. And sales of FY 2004/05 are below semi-average and also through point.

To find the long term actual sales trend moving average method is also be used under this method the trend is found by smoothing out the fluctuations of the data by means of moving averages (arithmetic averages) of successive overlapping groups of time. The effect of averaging is to give another curve and to lessen the fluctuations that pull the actual figure from the general trend.

Table 4.7

**Calculation of Trend Line of Sales Lines by 3-yearly Moving Average Method of NTC**

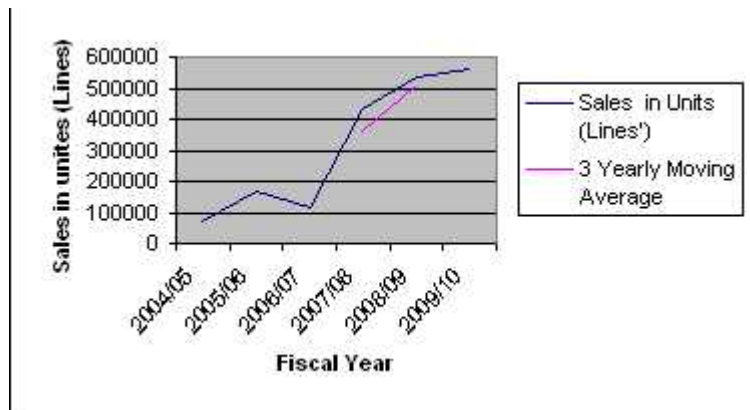
F.Y. (B.S.)	Sales in Units (Lines)	3 Yearly	3 Yearly Moving	Short-term Fluctuation
2004/05	72629			
2005/06	164885	353045		4720
2006/07	115531	711284		-121564
2007/08	430868	1078790	359597	71274
2008/09	532391	152.5421	508474	-23917
2009/10	562162			

Source: MIS Report of NTC, Ashadh 2062 to Ashadh 2067

Now, the actual sales values and trend values are plotted in the graph as follows:

**Graph 4.5**

**Sales Lines by 3 –years moving Average Method of NTC**



As per constructed 3-yearly moving average trend line, graph-5 shows the sales made by NTC are in increasing trend.

Now, trend line of PSTN tel. service is calculated as follows

**Table no 4.8**

**Calculation of Trend Line of PSTN Lines by 3 yearly Moving Average Method:**

Fiscal Years	Sales (Y) in units (Lines)	3 Yearly Moving Total	3 Yearly Moving Average	Short term fluctuation (Y-Yc)
2004/05	44157			
2005/06	36601	125816	41939	-5338
2006/07	45058	114181	38060	6998
2007/08	32522	130819	43606	11084
2008/09	53239	141977	47326	5913
2009/10	56216			

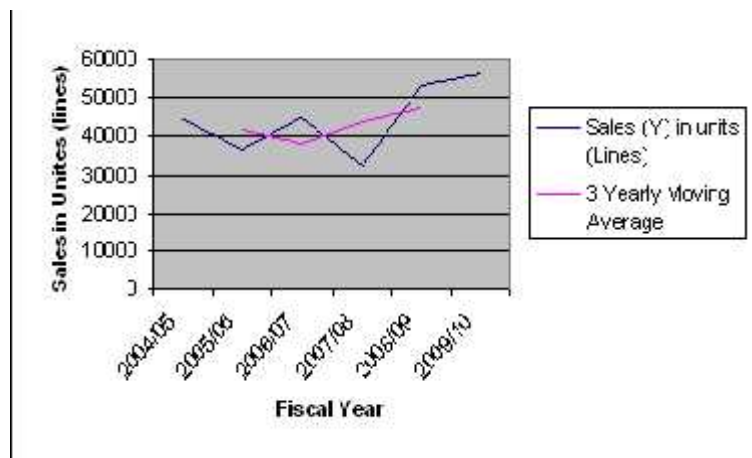
Source: MIS Report of NTC. Ashadh 2067

Now, the actual sales values and trend values are plotted in the graph as follows



### Graph 4.6

Sales Trend of NTC by 3- Years Moving Average Method of PSTN Tel .Survive



As per constructed 3-yearly moving average trend line, graph -6 shows the sales (PSTN Lines) made by NTC in different year is very fluctuated.

A widely and most commonly used method to described the trend is the method of least square. The trend line obtained from this method gives the line of best fit and with this method prediction of the values for the future is possible. This method show the relationship between time (Years) and actual sales of the relevant years. In this method, it is assumed that sales are consistently changing in time and such change can be expressed by competent of time series. To fit the straight line, the time factor is considered as independent factor (X) and actual sales is considered as dependent variable (Y) upon time.

Let the trend line between the dependent variable Y (ie Actual sales) and the independent variable X (i.e. Time) be represent by

$$Y = a + bX \dots \dots (i)$$

Where, Y = Actual Sales

$$X = \text{Time (year)}$$

Then for any given value of independent variable x, the estimate value of Y denoted by

$Y_c$  given by above equation is

$$Y_c = a + bx \dots \dots (iii)$$

a= Y intercept or value of Y when X = 0

b = slope of the trend line or amount of change that comes in Y for a unit change in X. Calculation of straight line trend by least square method of total actual sales in units (lines) is as follows:

**Table 4.9**  
**Calculation of Straight Line Trend of Total Actual Sales by Least Square Method (Lines in '000')**

F.Y. (X)	Total Actual(Y)	x=X- 2064/065	x <sup>2</sup>	xy	Trend Value Y <sub>c</sub> =a+bx
2005/06	164.885	-2	4	-329.77	118.89
2006/07	115.531	-1	1	-115.531	240
2007/08	430.868	0	0	0	361.16
2008/09	532.391	1	1	532.391	452.31
2009/10	562.162	2	4	1124.324	603.45
	Y=1805.837	X=0	x <sup>2</sup> =10	XY=1211.41	

Source: MIS Report of NT, Ashadh 2062 to Ashadh 2067.

Note: F.Y. 2007/08 is assumed as based year, therefore the value of x is zero. Here, EX = 0, EY = 1805.837, EX<sup>2</sup> = 10, EXY = 1211.44, n = 5 Since, EX = 0

$$A = \frac{\sum Y}{N} = \frac{1805.837}{5} = 361.1674$$

$$B = \frac{\sum XY}{\sum x^2} = \frac{1211.44}{10} = 121.144$$

We, have,

$$y_c = a + bx \dots\dots\dots (ii)$$

Substituting the value in equation (ii)

$$y_c = 361.1674 + 121.144x$$

The required trend line is,

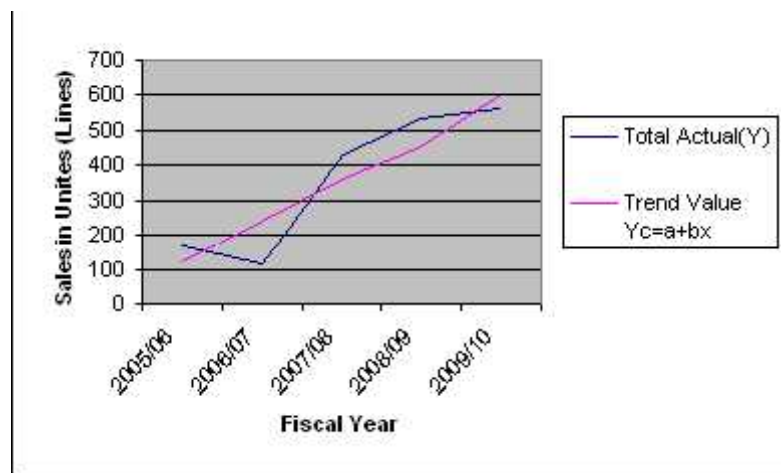
$$y_c = 361.1674 + 121.144x \dots\dots (iii)$$

this trend line shows the positive figure. The sales will be increased by 121.144 units or 121144 lines ever} year if the sales trend of past years continues for fixture. For trend values: When,

$$\begin{aligned}
X = -2, \quad Y_c &= 361.1674 + 121.44 \times (-2) = 118.89 \\
X = -1, \quad Y_c &= 361.1674 + 121.44 \times (-1) = 240 \\
X = 0, \quad Y_c &= 361.1674 + 121.44 \times (0) = 361.16 \\
X = 1, \quad Y_c &= 361.1674 + 121.44 \times (1) = 482.31 \\
X = 2, \quad Y_c &= 361.1674 + 121.44 \times (2) = 603.45
\end{aligned}$$

Now, the actual sales and trend values are plotted in the graph as follows:

**Graph 4.7**  
**Total Actual in Lines and Trend Line of NTC**



The graph shows the trend line of total actual sales is in increasing trend. By using this trend equation, we can estimate the actual sales for F.Y. 2009/10. The value of x for the F.Y. 2009/10 is equal to 3 for base F.Y. 2007/08

$$\begin{aligned}
\text{Where, } X &= 2009/10 \\
X &= X - 2007/08 \\
&= 2009/10 - 2007/08 \\
&= 3
\end{aligned}$$

$$\begin{aligned}
\text{Then, sales for F.Y. 2009/10 are; } Y &= 361.1674 + 121.44 \times 3 \\
&= 725.487
\end{aligned}$$

or, 725487 lines.

If the trend does not change, the possible total sales for F.Y. 2009/10 will be 725487 lines.

Again, calculation of straight line trend of PSTN tel. service by least square method is as follows;

**Table 4. 10**  
**Calculation of Straight Line Trend of PSTN Tel. Service by Least Square Method**

F/Y (X)	Actual Sales in Units(Y)'000'	X=(X-2064/065)	X <sup>2</sup>	Xy	Trend Value = Y <sub>c</sub> =a+bx
2005/06	36.601	-2	4	-73.22	35.24 4
2006/07	45.058	-1	1	-45.058	39.98
2007/08	32.522	0	0	0	44.72
2008/09	53.239	1	1	53.239	49.46
2009/10	56.216	2	4	112.432	54.20
	Y = 223.636	X = 0	X <sup>2</sup> =10	EXY=47.393	

Source: MIS Report, NTC.

FY 2007/08 is assumed as base year, therefore the value of x is zero.

Here,  $\sum X = 0$ ,  $\sum Y = 198.012$ ,  $\sum X^2 = 10$ ,  $\sum XY = 47.393$ ,  $n=5$  Since,  $\sum X = 0$

So,

$$A = \frac{\sum Y}{n} = \frac{223.636}{5} = 44.7 \quad B = \frac{\sum XY}{\sum X^2} = \frac{47.393}{10} = 4.74$$

We have,

$$Y_c = a + bx \quad (i)$$

Substituting the value in equation (ii)

$$Y_c = 44.72 + 4.74x \quad \text{or, } YC = 44.72 + 4.74x$$

The required trend line is

$$Y_c = 44.72 + 4.74x \quad \dots\dots\dots (iii)$$

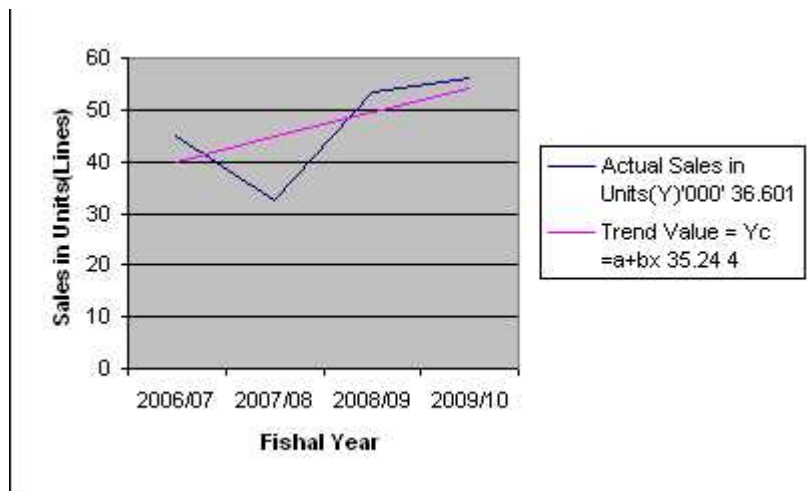
This trend line shows the positive figure 4.74 for future. The sales will be increase by 4.74 units or 474 lines every year if the trend of past years continuous for future.

For trend values:

- When  $x = -2$                        $Y_c = 44.72 + 4.74 \times (-2) = 35.24$
- $x = -1$                        $Y_c = 44.72 + 4.74 \times (-1) = 39.98$
- $x = 0$                          $Y_c = 44.72 + 4.74 \times (0) = 44.72$
- $x = 1$                          $Y_c = 44.72 + 4.74 \times (1) = 49.46$
- $x = 2$                          $Y_c = 44.72 + 4.74 \times (2) = 54.20$

**Graph 4.8**

**Actual Sales of PSTN Tel.Service in Lines and Trend Lines of NTC**



This graph shows the actual sales are fluctuating every year and trend of actual sales is in decreasing trend. By using this trend equation, we can estimate the actual sales for F.Y. 2009/10

The value of x for the F.Y. 2009/10 is equal to 3 from base F.Y. 2007/08 where,

$$x = 2009/10$$

$$x = x - 2007/08$$

$$x = x - 2009/10 - 2007/08$$

$$= 3$$

$$\text{Then, sales for Year 2009/10 is } Y = 44.72 + 4.74 \times 3$$

$$= 58.94$$

Or 58940 lines

If the trend does not change, the possible sales for F.Y. 2009/10 will be 58940 lines.

After analyzing the past trend of NTC in respect of sales, now we are going to analyze the annual sales budget for the fiscal year 2009/10. NTC has practice of preparing short range budget for coming year. The following table shows the summary of short range (tactical) sales budget and achievement of NTC.

**Table 4.11**  
**Summary of sales budget and achievement of NTC Ending F.Y. 2066/067**

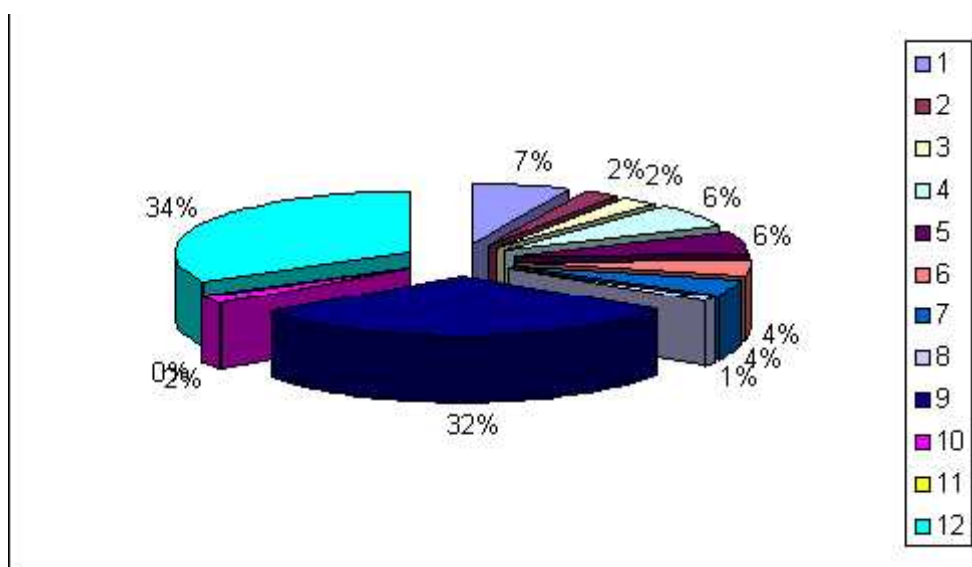
Particulars	Budget		Actual	
	Sales	%	Sales	%
Sales in lines	204657	-	5622162	-
sales Revenue (Rs million)	18708.25	-	20646.62	-
1 Local Calls	3749.6	20.04	4450.23	21.55
2 Domestic Truck calls (STD)	2173.89	11.62	1439.36	6.97
3 International Truck Calls (ISD)	1686.54	9.02	1563.52	7.57
4 Leased Circuit, PCC & Other service	277.32	1.48	4060.25	19.66
5 Mobile, Internet & E-Mail	2806.3	15	3852.45	18.66
6 CDMA	2969.33	15.87	2642.33	12.8
7 Inter administration Sharing	2250	12.03	2627	12.93
8 Other Operating Income	750.32	4.01	924.62	4.48
9 Total Operating Revenue (1 -8)	17681	94.41	19375	93.84
10 Total Non-Operating Revenue (Interest investment & others)		5.49	1271.3	6.16
	1027.606			
11 Total Revenue (9+10)	18708.05	100%	20646.62	100%

Source. MIS Report of NTC, Ashadh, 2067

The actual sales data of the above table can be presented with the help of following diagram

**Diagram 4.3**

**Total Actual Revenue collection of NTC**



The above table and diagram shows that NTCs sales forecasting system is not based realistic

facts because there is substantial gap and variability between forecasting and Achievement of different sources of revenue collection. Actual revenue collection from most of sources is higher than budgeted but actual collection from STD sector is less than budgeted revenue. From above table we can observed that some old services are replaced by new services too. Lick, SAT, WLL are replaced by Post-paid./Pre-paid Mobile, CDMA etc.

Now, to analyze the sales budget of NT only in IDS sector. This budget also covers five years sales trend of budgeted and actual sales in Rs. ISD sector.

**Table 4.12**

**Sales Budget and Achievement of NT in ISD Sector (Rs. in Million)**

F.Y	Budget	Actual	Achievement %	Total Actual Revenue	% of total Revenue
2005/06	1153	1172.15	101.66	6156	10.67
2006/07	1174.09	1235.76	105.25	7208.087	12.5
2007/08	1377.52	1469.36	104.49	8318.97	14.42
2008/09	1480.56	1590.55	107.43	16624.25	28.82
2009/10	1686.54	1563.52	92.7	19375.37	33.59

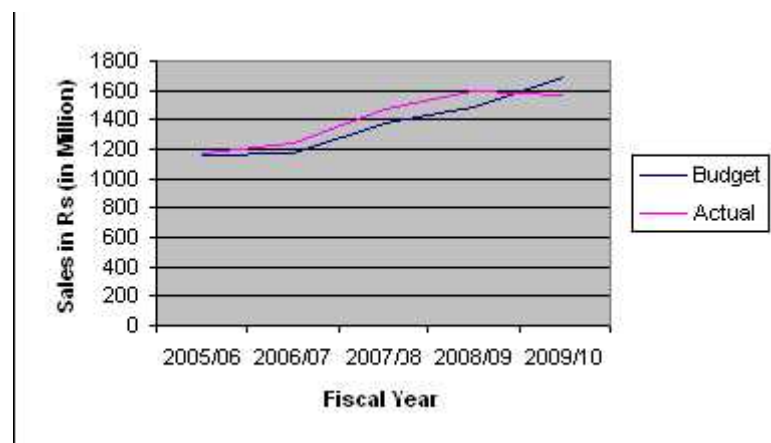
Source: Budget Book, NTC, 2010.

The above table shows great achievement of revenue collection in ISD sector every year but in compression to the total operating revenue it seems in decreasing trend this is due to internet phone which has low rate in ISD phone call.

The above figure of budgeted and actual sales revenue resented in graphical from as follows

**Graph 4.9**

**Budgeted and Actual sales Revenue of NTC in ISD sector**



This graph shows higher actual sales than budgeted sales in every year. This graph shows higher actual sales than budgeted sales in every year.

**Table 4.13**  
**Budgeted and Actual Sales Units (Lines) of NT Detailed by Services (Tel. Lines),**  
**Total of 4 Months & by Year.**

Year & service	Total			1 st 4 month			2nd 4 month			3rd 4 month		
	Traget	Actual	Ach%	Traget	Actual	Ach%	Traget	Actual	Ach%	Traget	Actual	Ach%
2062/063												
PSTN	65253	39674	61	21692	8153	38	21456	17335	81	22107	14186	64
V-SAT	200											
WLL	102											
Cellular mobile	6360	7846	123	1781	2656	149	2036	2732	134	2543	4215	166
Total	71915	47520	66	23473	10809	46	23490	20067	85	24650	18401	75
2063/064												
PSTN	75363	44143	59	25122	14366	57	24629	14299	58	25612	15478	60
V-SAT	200											
WLL	99											
Cellular mobile	20000	28486	142	5600	3805	68	6400	4737	74	8000	19978	250
Total	95662	72629	76	30722	18171	59	31029	19036	61	23612	35456	105
2064/065												
PSTN	55696	36601	66	18659	12388	66	18201	10438	57	18836	13775	73
V-SAT	275	82	30	78	16	21	78	35	40	109	31	18
WLL	200	25	13	56	4	7	64	16	25	80	5	6
post-paid Mobile	20000	16833	84	56000	9041	161	6400	3927	61	8000	3865	48
per-paid mobile	40000	113444	278	13322	37873	284	13332	15570	117	1336	57901	434
Total	116171	164885	142	59322	59322	157	38085	29986	79	40301	75577	187
2065/066												
PSTN	60083	45058	75	19673	11435	58	19378	13777	71	21102	19846	94
V-SAT	250	193	77	68	3	4	81	120	148	101	70	69
WLL	100	4	4	27	4	15	32	0	0	41	0	0
post-paid Mobile	20000	8445	42	5400	3193	59	6400	5252	82	8200	0	0
per-paid mobile	109000	61831	57	29430	61125	208	34880	706	2	4690	0	0
Total		115531	61	54528	75760	139	60771	19855	33	74134	19916	27
2066/067												
PSTN	72698	56216	77	28175	23738	8	23267	15236	65	21256	17242	81
CDMA(C-Phone)	721318	666045	92	215439	195015	11	220303	215515	97	20500	18919	92
post-paid Mobile	90237	108785	120	24079	27263	11	28067	31621	14	34907	49901	142
per-paid mobile	233652	290049	124	45550	66683	14	72053	92365	12	116047	131000	113
Total	3220777	3731539	115	747280	912847	122	922174	1186029	128	1237142	1396067	112.8

Source : MIS Report of-NTC Ashadh 2062 to Ashadh 2067

Table 4.13 shows target and Achievement of NTC, detailed by services in lines, total of 4 months and by year. From the above table, in F.Y. 2062/063 the tel. services V-SAT and WLL his not distributed due to lack of network and other infra<sup>s</sup>tructure. Sales achievement of PSTN, V-SAT, and LVLL is less than target due to insufficient network and other infrastructure for distribution of these services. But sales of achievement of Post-paid and Pre-paid Mobile exceed target, it is because expansion of mobile network and high demand of these



services. 4 months wise sales target and achievement in lines is presented in table 4.14

**Table 4.14**

**4 Months wise Sales and Achievement in Lines of NTC.**

Table of 4 Months	Fiscal Year	Target Sales in Units	Actual Sales in Units (Lines)	%Achievement of Sales
1st 4 Months	2005/06	23473	10809	46.05
	2006/07	30422	18171	59.15
	2007/08	37725	59322	122.15
	2008/09	54528	75760	138.94
	2009/10	53925	50702	94.02
2nd 4 Months	2005/06	23490	20067	85.43
	2006/07	31029	19036	61.35
	2007/08	38085	29986	78.73
	2008/09	60771	19855	32.67
	2009/10	60025	78486	134.76
3rd 4 Months	2005/06	24650	18401	74.65
	2006/07	33612	35456	105.49
	2007/08	40361	75577	112.84
	2008/09	74134	115162	26.84
	2009/10	72945	301680	413.57

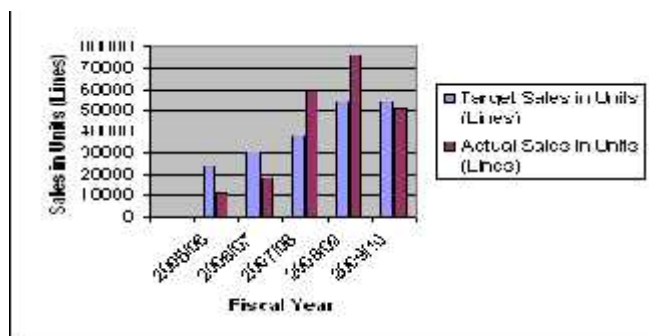
Source: MIS Report \_ 2062 to Ashadh 2067

Average Achievement of 1st 4 Month 97.76% Average Achievement of 2nd 4 Months=77.35% Average Achievement of 3rd 4 Months= 86.53%

From the above table we can see that actual sales achievement of last 4 months of five fiscal year i.e.86.53% is higher than 2nd month's average. It is because the pressure if installation of remaining lines of the end of fiscal year and it maybe due to the extended capacity utilization maximized during the last four months. For effective presentation of above data, following diagram can be used.

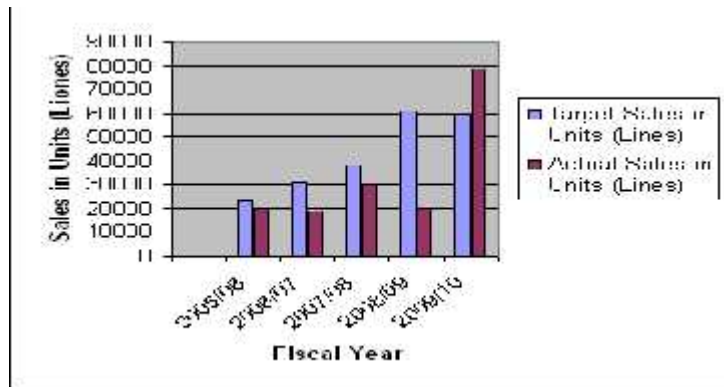
**Diagram 4.4**

**Target and Actual Sales for 1<sup>st</sup> 4 Month**



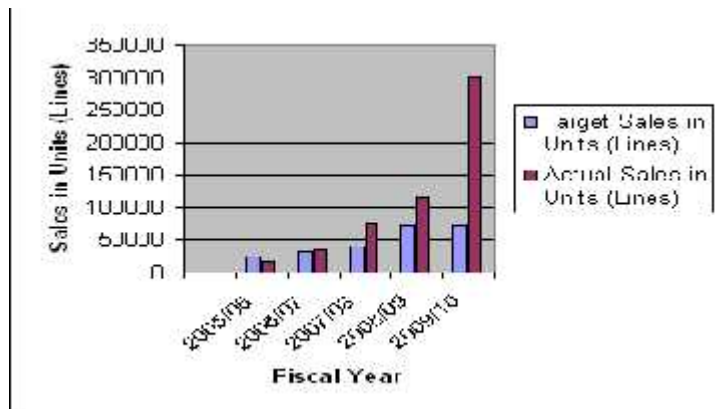
**Diagram 4.5**

**Target and Actual Sales for 2<sup>nd</sup> 4 Months**



**Diagram 4.6**

**Target and Actual Sales for 3<sup>rd</sup> 4 Months**



Above diagram shows fluctuated sales target and achievement of NTC. Short term sales plan and achievement of NTC detailed by months, 4 months, and by year for PSTN Tel. Service is presented below on table 4.15.

**Table 4.15**  
**Budgeted an( Actual Sales in lines for PSTN Telephone Service of NTC Detailed**  
**by Months, 4 Months,and by Year.**

Sales units & year	Sales Target units (Lines)						Actual sales units (Distributed lines)					
	2005/06	2006/07	2007/08	2008/09	2009/10	Average	2005/06	2006/07	2007/08	2008/09	2009/10	Average
Month, 4 Monthly total												
shrawan	7051	8208	6089	6590	6868	6961	2819	4252	4349	3482	5577	4095
Bhadra	7209	8339	6214	6713	7891	7273	1584	3226	3070	2645	6731	3451
Ashwin	4169	3768	2785	3896	5702	4064	2488	4400	1788	2882	4191	3149
Kartik	3263	4807	3571	2404	7714	4351	1225	2474	3181	1966	7239	3217
Total of 1 st 4 month	21692	25122	18659	19603	28175	22649	8116	14352	12388	11435	23738	13912
Mansir	4661	5370	3944	4208	4366	4509	1910	2765	2063	2604	4307	2729
Pouch	5385	6147	4621	4988	5993	5426	4049	4097	2988	3635	3770	3707
Mansir	5336	6105	4492	4666	7924	5704	6467	3646	2306	3068	4885	4490
Fagun	6072	7027	5144	5516	4984	5748	4909	3790	3081	4472	2274	3705
Total of 2st 4 month	21454	24692	18201	19378	23267	21398	17335	14298	10438	13779	15236	14217
Chaitra	5266	7000	4489	4888	5060	5340	4116	3105	3021	5843	4282	4073
Baishak	6217	7205	5309	5795	5937	6092	2667	2925	2554	4355	4044	3309
Jestha	5495	6376	4690	5135	5250	5389	3594	4514	3506	4810	4152	4115
Ashadh	5129	5924	4348	5284	5009	5138	3809	4949	4584	4836	4764	4588
Total of 3rd 4 months	22107	25612	18836	21102	21256	21782	14186	15493	13775	19844	17242	16108
Total of the year	65253	75363	55696	60083	72698	65818	39637	44143	36601	45058	56216	52249

. Source: Mis Report of NTC

Table 4.15 shows sales target and achievement. of NTC for PSTN Tel. Service, detailed by months, total of 4 months and by year. Monthly average for F.Y. 2005/06 average for F.Y 2009/10 is shown to make it very informative and it will help to understand this study on different stage. According to the table, we can see that the average high sales month's wise sales target and achievement in units (Lines) of NTC for PSTN Tel. lines is in the month of Shrawan and Bhadra i.e.6961 units and 7273 units respectively. It may be due to begging months of a new financial year and the undistributed lines in stock of last year. And the average high sales achievement is in the month of Ashad i.e.4588 units. It may be pressure of selling remaining lines of the year in the closing-, months of those fiscal years.

There is six regional head of NT. Biratnagar, Kathmandu, Birtin, Bhairahaba, Nepalguili, and Dhangadhi. The region wise sales in Units (lines) for PSTN telephone service is presented below oil table 4.16.

**Table 4.16**  
**The Region Anise Sales Target and Actual Sales of NTC in Lines for PSTN Telephone Service.**

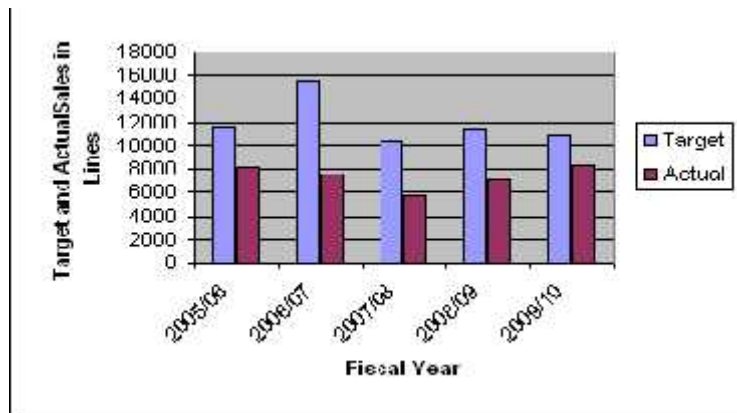
Year/sales/Region	Target &Actual	2005/06	2006/07	2007/08	2008/09	2009/10	Average
Biratnagar	Target	11605	15545	10500	11285	10876	
	Actual	8185	7517	5690	7137	8279	
	Achievement%	70.53	48.36	54.19	6	76.12	62.44
Kathmandu	Target	25313	28350	22880	29150	38072	
	Actual	16061	18127	17579	21082	29825	
	Achievement%	63.44	63.94	76.83	7	78.33	70.91
Birgunj	Target	8750	10400	7440	8440	8243	
	Actual	4757	5032	5084	4301	6308	
	Achievement%	54.36	48.38	68.33	50.96	76.52	59.71
Bhairahaba	Target	12748	13228	8796	5041	9616	
	Actual	6023	9374	4343	9263	7406	
	Achievement%	47.25	71.62	49.37	183.75	77.01	81.56
Nepalgunj	Target	3460	3845	4428	4945	3536	
	Actual	1882	2702	2304	1415	2538	
	Achievement%	67.02	48.43	61.02	4	71.77	85.8
Dhangadhi	Target	3375	3995	1652	1222	2351	
	Actual	2329	2131	1203	97	1858	
	Achievement%	69.01	53.34	72.82	7	79.03	70.64

Source: Mis Report of NTC

Regional sales target and achievement is presented in the following diagrams.

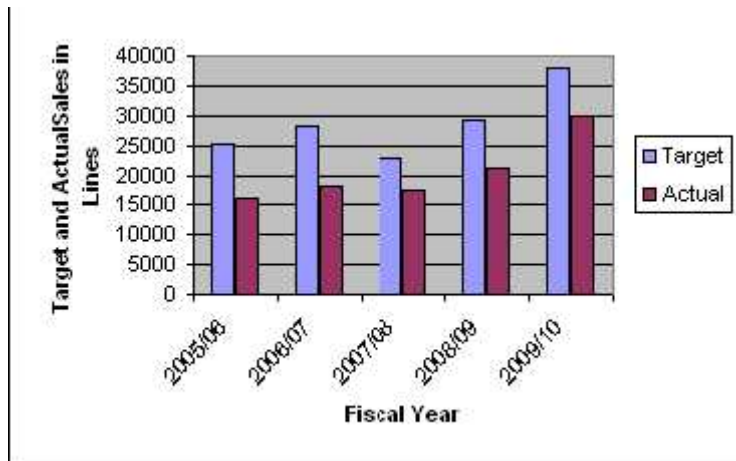
**Diagram 4.7**

**Target and Actual sales of PSTN Telephone Service in Lines on Biratnagar**



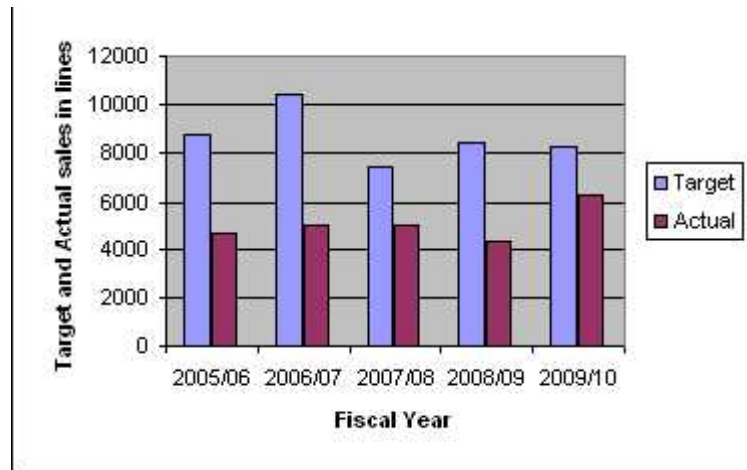
**Diagram 4.8**

**Target and Actual sales of PSTN Telephone Service in Lines on Kathmandu**



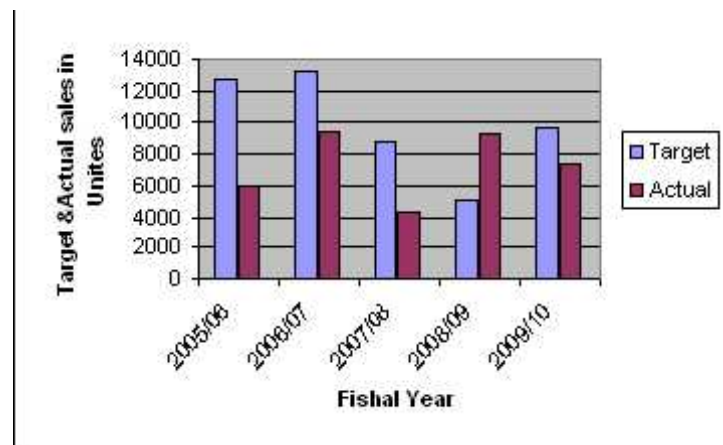
**Diagram 4.9**

**Target and Actual sales of PSTN Telephone Service in Lines on Birgunj**



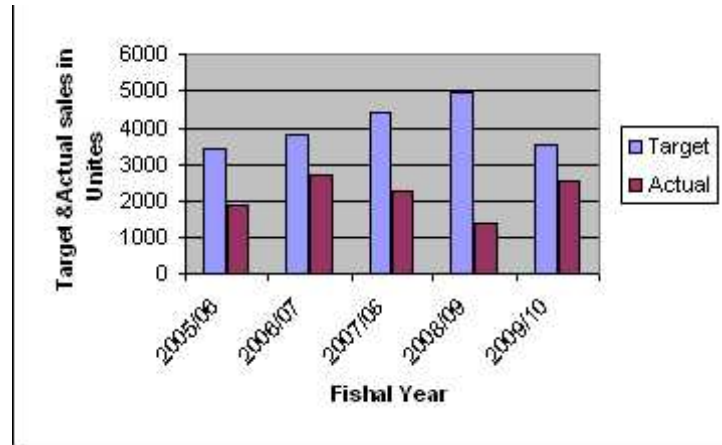
**Diagram 4.10**

**Target and Actual sales of PSTN Telephone Service in Lines on Bhairahaba**



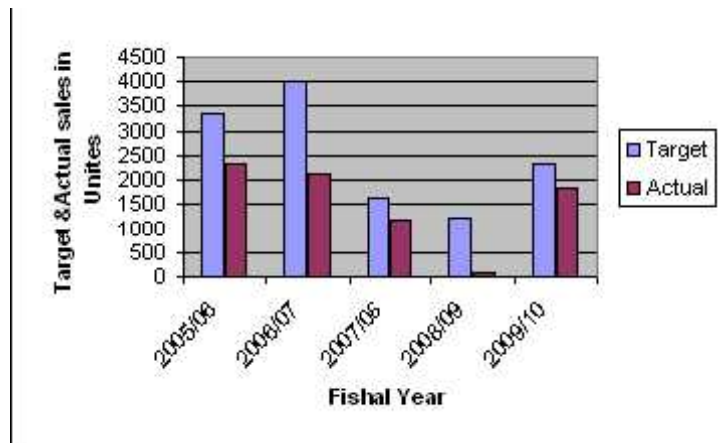
**Diagram 4.11**

**Target and Actual sales of PSTN Telephone Service in Lines on Nepalgunj**



**Diagram 4.12**

**Target and Actual sales of PSTN Telephone Service in Lines on Dhangadhi**



Average Percentage Achievement of Biratnager =  $\frac{311.20}{5} = 62.44$

Average Percentage Achievement of Kathmandu =  $\frac{334.34}{5} = 70.91$

Average Percentage Achievement of Birjung =  $\frac{298.53}{5} = 59.71$

Average Percentage Achievement of Bhairawa =  $\frac{407.77}{5} = 81.56$

$$\text{Average Percentage Achievement of Nepaljung} = \frac{429}{5} = 85.80$$

$$\text{Average Percentage Achievement of Dhangadi} = \frac{353.20}{5} = 70.64$$

We can see that, the highest achievement is 183.750 in FY 2008/09 in Bhairawa region and the lowest percentage achievement is 47% in FY 2008/09 in Nepalgunj region. Average high percentage for the 5 fiscal year is 85.80% in Bhairahawa region. And average percentage achievement for the 5 fiscal year is 59.71% in Birgunj region.

From the above table we can see that actual sales man achievement of PSTN telephone service in Kathmandu region is more than 62% in every year and more PSTN lines were distributed in this region because population density and demand of telephone lines as well as infrastructure development of Kathmandu region is more than other regions. We can conclude that NTC should utilize the full capacity of all regions and it should make proper target setting which is suitable to all regions.

#### 4.3 Average revenue per line

Average revenue per line from PSTN Exchange Billing in Rs. of NTC is as follows for FY 2005/06 to 2009/10

**Table 4.17**

**Average Revenue Collection per Line From PSTN Billing System of NTC.**

Fiscal Year	Average Revenue Per lien in	increased/decreased
2005/06	1157	-5.32%
2006/07	1039	-10.20%
2007/08	1026	-1.25%
2008/09	997	2.18%
2009/10	1025	-0.025%

Source: MIS Report, NTC, Ashad, 2067 p. 81/82

From the above table, we can see that the average revenue is in decreasing trend till F.Y.

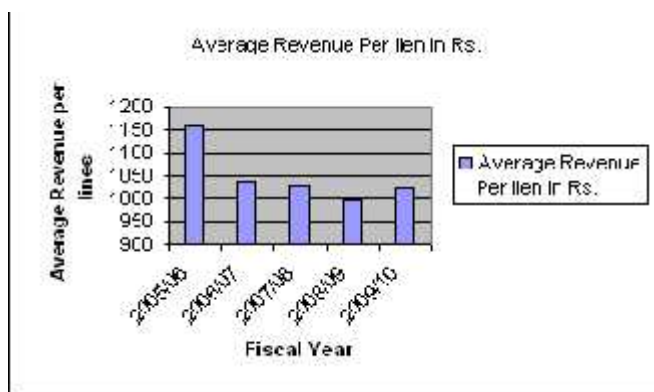
2005/06 to 2006/07 but it has increased in F.Y. 2008/09 by 2.18%. In between the five fiscal years, we can say that the average revenue per line from PSTN telephone service has decreased by 11.41% [i.e.(1157-1025/1157=11.41%]. From the above information, we can conclude that average revenue has decreased due to modern



technology and reduced in calling rate. The reduced in calling rates affected the revenue collection per line. So we can say that, it will certainly beneficial for customers and helps to increase sales (lines).

**Diagram 4.13**

**Average Revenue Collection Per Line From PSTN Billing system of NTC.**



From the above diagram the average revenue per line of NT is in the decreasing trend.

#### 4.4 Sales and Waiters

For connection of telephone lines of NTC, a customer first fill the firm stating that he wants a line of telephone with the rule and regulation the after certain year of waiting he finally gets a line from NTC who have fill the firm, are stargazed as no. of waiters. In NTC, there is huge number of waiters waiting for a telephone line. The following table no.25 shows the accumulated number of waiters for fives years.

**Table 4.18**  
**Number of waiters of NTC**

Fiscal Year	Average Revenue Per line in	increased/decreased %
2005/06	317293.	10.93
2006/07	319514	.67
2007/08	317690	-.37
2008/09	314406	-1.03
2009/10	316546	-.58

Source: MIS Report, NTC Ashad 2067 P. 39/82

We can see on the above table that the number of waiters has increased in FY 2005/06 and 2006/07 but it has decrease in fiscal year 2007/08 to 2009/10 and From this we can say that the possible customer might have to take the telephone line from the private company.

If NTC wants to retain them competitors will make then the future sales of telephone line will be decreased after year. Therefore NTC should make them then as consumer as far as possible. For this it will give them line on demand immediately.

#### 4.5 Sales Per Employee

Sales revenue per employee of NT is as follows in the table.

**Table 4.19**  
**Sales Revenue Per Employee**

Fiscal Year	Total sales Revenue (in Rs '000'	No of Employees	Sales per Employee( in Rs '000'	% 'Increase / Decrease
2005/06	882308	4850	1819.239	13.20
2006/07	9194296	5709	1610.492	-11.47
2007/08	11058914	5717	1934.391	20.11
2008/09	14751624	7030	2098.381	8.47
2009/10	17889310	7088	2523.887	20.27

Source: Budget books of NT (FY 2061/062 to 2066/067) MIS Report of NTC.

Note: Total Actual sales revenue includes both operating as well as non-operating income.

We can see in the above table that the sales revenue per employ is in increasing trend fill FY 2005/06 to and it has decreased in FY 2006/07 and in 2008/09 But overall sales revenue per employee has increased by 38.295% [i.e. (2523.887-1610.492)/ 1610.492) =56.715

#### 4.6 Profit on Sales Achievement of NTC

Profit is considered as one of the major element of each and every business endeavor for survival further development and full filling social expectation. In modern business, efficiency and effectiveness of any business organization or management are measured from earning power of profit. In cases of PES in Nepal, the basic establishment objectives are to mobilize the resource and generate revenue or surplus for substantial economic development, so that PES

have to get some profit too. NTC prepare a projected profit and loss. Account in advance and the end of each financial year. NTC as a PE is also required to generate surpluses for its severity of the unforeseeable adverse circumstances. Following table shows the profit patter of NTC.

**Table 4.20**  
**profit pattern of NTC**

Fiscal Year	Net Profit After Tax (Rs. in '000')	% Increase /Decrease
2005/06	2622591	-16.40
2006/07	3700557	41.10
2007/08	4936647	33.40
2008/09	5652688	14.50
2009/10	7942902	40.51

Source: Budget book of NT (FY 2005/06 to 2009/10)

The above table shows the much fluctuated net profit trend of NT. Net profit after tax of NTC has increased by 41.10% it is good performance but it has decreased in FY 2007/08 by 8%. It is because increase oil tax rate and increase of interest. expenses oil borrowings. Again it has shown high performance in FY 2009/10 Net profit after tax has increased due to increase in total sales revenue. Overall profit achievement of NTC is remarkable.

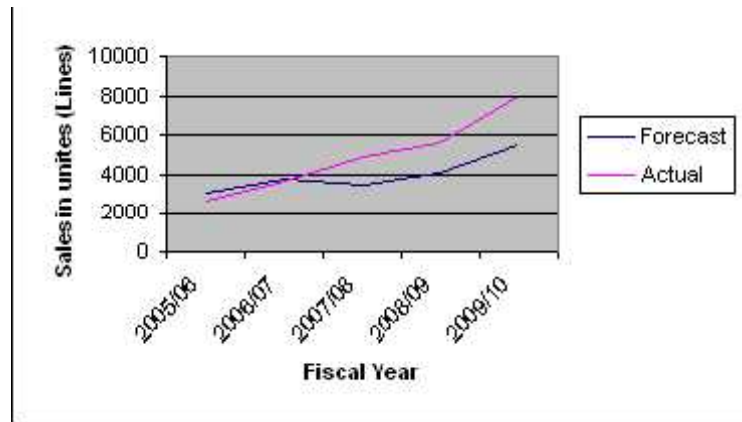
Forecasted and actual net profit of N Cfor FY 2005/06 to 2009/10 has shown in the table, graph diagram as follows.

**Table 4.21**  
**Forecasted and Actual Net Profit after Tax of NTC (Rs. in Million)**

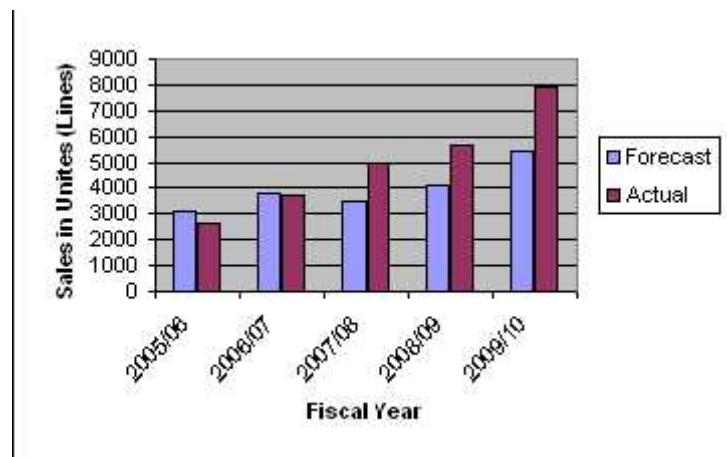
Fiscal Year	Forecast	Actual	Achievement % in
2005/06	3073.59	2622.591	85.33
2006/07	3794.93	3700.557	97.51
2007/08	3479.56	4936.647	141.8
2008/09	4132.25	5652.688	136-7
2009/10	5462.68	7942.902	145.40

Source Budget book of NTC (FY 2005/06 to 2009/10)

**Graph 4.10**  
**Forecasted and Actual Net profit after tax of NTC**



**Diagram 4.14**  
**Forecasted and Actual Net profit after tax of NTC**



From the above table graph and diagram we see that the forecast of NP after tax is not realistic. Most of the year achievement of NP after tax is higher than forecasted. Another way to see the net profit of NTC is to compare it with sales revenue. So, table no 4.22 shows the net profit on sales revenue of NTC

**Table 4.22**  
**Net profit on sales Revenue of NTC (in Million)**

Fiscal Year	Net Profit after Tax	Total Sales Revenue	% of NP onSales
2005/06	3073.59	8823.308	36.30
2006/07	3794.93	9194.297	40.91
2007/08	3479.56	11058.914	29.72
2008/09	4132.25	14751.624	28.01
2009/10	5462.68	17889.310	30.53

Source: Budget Books of NTC

Note: Total sales Revenue include both operating revenue as well as non operating revenue.

In general business ethics, at least 10% profit on sales is necessary to move organization well but table no. 29 shows very high percentage of net profit on sales. It means NTC could able to fulfill the general business objective company but which shows that the NTC has imposed high call rate to general public and exercising in monopoly market.

The following table shows mean, standard deviation, correlation coefficient and probable en-or of total sales revenue and net profit after tax.

**Table 4.23**  
**statistical information**

Statistical Tools	Total sales Revenue	Net profit After Tax
Mean (Rs in Billion)	8.6604	3.3554
Standard Deviation ( $\alpha$ ) (Rs in Billion)	1.7306	.9116
Coefficient of variation (C.V)	19.98%	27.17%
Correlation Coefficient (r <sub>xy</sub> ) = .89		
Probable Error P.E(r) = .0627		

The above analysis shows that S.D. of total sales revenue is higher than S.D. of net profit after tax, but coefficient of variation shows higher C.V. of net profit after tax than C.V. of total sales revenue. This indicated that net profit after tax is nature of high variability than total actual sales.

To analyze the relationship between total sales revenue and net profit after tax, a statistical tool correlation coefficient ( $r_{xy}$ ) is used. Here total sales revenue is denoted by X which is assumed as dependent variable and net profit after tax is denoted by Y which is assumed as dependent variable. There is high degree of positive correlation between total sales rev and profit alter tax. This indicates that. net profit after tax increase as total sales revenue increase. Value of  $r_{xy}$  is more than 6 P.E (r), so it is concluded that calculated value of  $r_{xy}$  is significant.

#### **4.7 Ratios: Related With Sales**

The term "Ratio" referees to the numerical or quantitative relationship between two variables. A ratio is calculated by dividing one item of the relationship with the other based. In other word, ratio is in dictated quotient of two mathematical expression and relationship between or more things.

Financial analysis is the most essential factor to know the performance of organization which presents dual situation of the organization. It is a helpful tool which helps to measure the financial efficiency to achieve the goal of any enterprises. It is necessary to maintain financial strength and reduce financial weakness of any enterprise to encourage financial efficiency. Since financial soundness is vital demand to achieve the goal, the management. of the organization should know in which condition the organization on is running. If the present condition in which the corporation is running is assessed then the management can predict the future financial position and can take so each enterprise need to analyze its financial position to acquire knowledge of the financial position of the corporation whether it's running effectively or not.

Here as per research requirement sum ratios related with sales are analyzed and presented in table 4. 24.

Table 4.24  
Financial Ratio Related with sales of NTC

	Type of Ratio	Formula	2005/06	2006/07	2007/08	2008/09	2009/10	Average
1	Operating profit Ratio	$\frac{\text{Operating profit}}{\text{Net sales}} \times 100$	43.96	53.99	49.57	50.90	57.16	51.27
2	Net Profit Ratio	$\frac{\text{Net profit}}{\text{Net sales}} \times 100$	36.30	40.91	29.72	40.44	55.96	38.92
3	Adm. Cost Ratio	$\frac{\text{Adm. cost}}{\text{Sale}} \times 100$	14.41	10.62	15.49	13.01	4.90	11.67
4	Capital Turnover Ratio	$\frac{\text{sales}}{\text{Total capital}}$	.38	.39	.41	.44	.44	.41
5	Current Assets Turnover ratio (in times)	$\frac{\text{sales}}{\text{Current assets}}$	.43	.42	.38	.45	.46	.43
6	Fixed Assets Turnover ratio (in times)	$\frac{\text{Sales}}{\text{Fixed Assets}}$	.75	.80	.95	.80	.83	.83
7	Total Assets Turnover ratio (in times)	$\frac{\text{Sales}}{\text{Total Assets}}$	.26	.26	.26	.29	.65	.28
8	Debtors Turnover Ratio (in times)	$\frac{\text{Sales}}{\text{Debtors}}$	2.66	2.38	2.99	3.04	3.36	2.89
9	Average collection period (in days)	$\frac{\text{Days in a year}}{\text{Sales}} \times \text{Debtors}$	1037	153	122	120	109	128
10	Interest Expenses Ratio	$\frac{\text{Interest}}{\text{Sales}} \times 100$	1.63	1.28	1.02	.63	.62	1.04
11	Working Capital Turnover Ratio (in times)	$\frac{\text{Sales}}{\text{Net Working Capital}}$	.90	.93	.84	1.56	1.52	1.15
12	sales Growth Ratio (in times)	$\frac{\text{Current Year's Net Sale}}{\text{Previous year's Net sale}}$	1.11	1.17	1.15	1.04	1.21	1.14

Source : MIS report of NTC

### **1. Operating Profit Ratio:**

Operating profit ratio shows the relationship between operating profit and sales. It measures the profitability of the firm. Higher the operating ratio indicates higher the operating profit. The above table 4.31 shows the operating profit ratio for the fiscal 2005/06 to 2009/10. The average operating profit ratios of NTC is 51.27 Year which high achievement of NTC among the PES.

### **2. Net Profit Ratio:**

Net profit ratio measure the overall profitability of the firm by establishing relationship between net profit and sales. Net profit margin of indicates margin of commensuration left to the owners for providing their capital after all expenses have been met. A high net profit. margin would enable the firm to withstand adverse economic conditions and a low margin will have opposite implications.

From the above table 4.24, the net profit ratio of NTC shows higher ratio, which is better than lower ratio, high net profit is a sign of good financial position and higher ratio shows better efficiency of the company.

### **3. Administrative Cost Ratio**

Administrative cost ratio shows that the relationship between administrative costa indicates sales. Lower the administrative cost ratio in ca.tes the sign of efficient management. Hence lower percentage is preferable of the company. It is the highest in FY 2008/09 and lowest in the FY 2009/10.

### **4. Capital Turnover Ratio**

Capital employment is the amount entrusted by the owners and long term loan financiers to the firm. Capital employed turnover ratio is calculated to know the effectiveness in utilization of owner's and long term creditors' fund. The above table shows the capital turnover ratio of NTC is very low. This indicates that the inefficient utilization of long term debt and fund. Therefore NTC should increase the actual sales toincrease the profitability.

### **5. Current Assets Turnover Ratio**

A ratio between sales anti assets is known as current assets turnover ratio. It measures the activity of the organization. The higher the value of



current assets turnover ratio. The higher the value of current assets turnover the efficient is the Management on utilization of current assets anti versa. From the above table, this ratio is also not good. Which indicates that the management inefficiency on utilization of current assets.

#### **6. Fixed Assets Turnover Ratio**

A ratio between sales and fixed assets is known as fixed assets turnover ratio. The fixed assets turnover ratio indicates the extent to which the investment in fixed assets contribution toward sales. This ratio measures the efficiency with which the firm is utilizing its investment in fixed assets. Higher the fixed assets turnover ratio indicates better business performance. The above table no.31 shows the degree of utilization of fixed assets in NTC is quite satisfactory. We can say that NTC is not able to utilize of its existing plant capacity of fixed assets effectively.

#### **7. Total Assets Turnover Ratio**

A ratio between sales and total assets is known as total assets turnover ratio. Higher total assets turnover ratio, in general, indicates the proper utilization of assets of the firm and vice versa. It helps to show the firm's ability of generating sales from the resources available to the firm. Idle assets lead to lower ads turnover. The above table no.31 shows that this ratio in constant position during the five fiscal year. We can predict that the total assets turnover ratio of NTC is not so good but quite satisfactory.

#### **8. Debtor's Turnover Ratio**

This ratio indicates the velocity of debt collection of a firm. In other words, it. indicates the number of times average debtors are turnover during a year. It is calculated by dividing sales by the trade debtors. The higher the value of its turnover the more efficient the management of debtors or more liquid the debtors and vice versa. From the above table, the debtors turnover ratio of NTC is low, which means it requires long time to convert credit sales in to cash.

#### **9. Average Collection Period**

It represents the average no. of days for collecting the cash from debtors. The debt collection period shows on average period for which the credit sales remain outstanding and measures the quality of debtors. The shorter the average collection period the better is the quality of trade debtors as a short collection

period implies the quick collection of cash from debtor and three by lesion the risk of bad debt and vice versa. The above table no.31 shows that the average collection period in days of NT is very high in first two fiscal years. And it is decreasing trend till FY hig and 2008/09. The average of the five fiscal years not good for NTC. This indicates in efficiency in collection of credit sales on time.

#### **10. Interest Expenses Ratio**

The ratio between interest expenses and sales is known is interest expenses ratio. It measures the stability of the firm. The lower the value of interest expenses ratio, the more efficient is the management of utilization of external capital. The table no. 31 shows the decreasing trend of interest expenses ratio of NTC, which indicated that the better and less utilization of external capital or borrowed capital. It shows the strong capability of management oil utilization of external capital.

#### **11. Capital Turnover Ratio**

The ratio between sales and working capital is known as working capital turnover ratio. This ratio shows the number of times the tiff ork-ing capital is turned over i<sub>11</sub> a stated period. The higher capital and the greater are the profits. From the above table, in FY 2008/09. there is the effective utilization of W/C because the W/C ratio is high in this fiscal year.

#### **12. Sales Growth Rate**

A ratio between current years' net sales and previous year's net sales is known as sales growth rate. It is expressed in times. It measures the possibility in growth of organization. Higher the sales growth rate hither the sales performance of organization. The above table shows that the sales growth rate is in the increasing trend which is positive sign for Further growth or organization.

From the above analysis, we can be concluded that the financial performance realizing with sales of NTC gives mixed result. Some of the ratios are quite good and favorable to organization but some of them aren't so good. In average the performance of NTC is satisfactory.

#### **4.8 Cost-Volume-Profit Analysis**

cost-Volume Profit (CVP) analysis is the process of costs and profits for a relevant range of activity and for a particular time frame. It helps to understand the inter relationship between cost, volume and profit in an organization by focusing on interaction between price of products, volume or level of activity, per unit variables costs, total fixed cost and mix product sold. It is one of the most important and powerful analytical tool for short- term planning. It is a study of cost behavior generally cost behaves in two ways with relation with the volume of output is called variable cost and the second is called fixed cost which is inconstant on certain level of production. Thus, CVP is an analytical tool to differentiate these two costs and interpret the requited volume of production and estimated profit.

Cost-volume profit analysis of NT is based on certain assumptions which are as follows:

- i. Cost volume structure is based on the accounting data of FY2009/10
- ii. Activity base is selected in terms of sales
- iii. All costs are classifies into two categories fixed cost and variable cost.
- iv. Selling price, variable cost ratio, fixed cost per annum is assumed to be constant for the whole year
- v. There is no inventory.

**Table 4.25**  
**Classification of cost (Rs in '000')**

S.N	Expenses Items	Cost behavior	Based on FY2009/10
1	Employees Expenses	Fixed	1623.581
2	Operation & maintenance Expenses	Variable	840.580
3	Depreciation Expenses	Fixed	1681.293
4	Administrative Expenses	Fixed	840.580
5	Interest (Borrowing, subscriber Deposits)	Fixed	65.045
6	Royalty & RTDF	Fixed	819.299
	Total		5570.383

Source: MIS report of NTC Ashadh 2067

Budget Book of NTC 2005/06 & 2009/10

Total sales units (lines) = 562162 lines

total sales revenue = Rs 20646628886 total variable cost = Rs 1606563886

Total fixed cost Rs 3840065000

With the help of above data, we can analyze the following relationship of cost, volume and profit.

**(A) variable cost Volume Ratio (V.C.Ratio)**

V.C Ratio shows the proportion of variable cost and sales revenue. The following formula is used to calculate the V.C. ratio.

$$\begin{aligned} \text{V.C Ratio} &= \frac{\text{Variable cost}}{\text{Sales Revenue}} \\ &= \frac{16806563886}{20646628886} \\ &= 0.81 \end{aligned}$$

**(B) profit Volume Ratio (P.V. Ratio ):**

This ratio shows the proportion o margin left for fixed cost and profit per rupee of sales.

$$\text{P.V Ratio} = 1 - \frac{\text{Variable cost}}{\text{Sales Revenue}}$$

$$= 1 - \frac{16806563886}{20646628886}$$

$$= 0.19$$

**( C ) Break Even Point (BEP) :**

BEP may be defined as a point of which the firm's total revenues are exactly equal to total cost, yielding zero income. The no profit no loss point is a break-even point or a point of which loss ceases and profit begins with the help of PV ratio we can calculate the break even point (BEP) of NTC fro F/Y 2009/10

$$\begin{aligned} \text{BEP in Rs} &= \frac{\text{Fixed cost}}{\text{P.V Ratio}} \\ &= \frac{3840065000}{0.19} \\ &= \text{Rs } 20210868421 \end{aligned}$$

Here NTCs sales revenue (i.e. Rs. 20646628886) is higher than BEP sales (i.e. Rs. 20210868421). So, it indicates that C`VP position of NTC is very good. It means NTC is in profit in current year.

Calculation of profit for FY2009/10

Profit = Sales Revenue x P.V. Ratio- Fixed Cost.

$$= 20646628886 * 0.19 - 3840065000$$

$$= \text{Rs. } 482794488$$

**(D) Margin of Safety (MOS)**

Margin of safety is the excess of budgeted (or actual) sales over the break even sales volume. It is the difference between the budgeted or actual sales revenue and the break- even sales revenue. MOS of NTC for the FY 2009/10 is as follows: MOS = Actual Sales - B.E. Sales

$$= 20646628886 - 20210868421$$

$$= \text{Rs } 435760465$$

Margin of safety ratio for F/Y 2009/10 of NTC

$$\begin{aligned} \text{MOS Ratio} &= \frac{\text{MOS}}{\text{Actual sales}} \times 100 \\ &= \frac{435760465}{20646628886} \times 100 = 60.65\% \end{aligned}$$

profit for the year

$$\text{profit} = \text{MOS} \times \text{P/V ratio}$$

$$= 435760465 \times 0.937$$

$$= \text{Rs } 7942901598$$

The above figure shows that the profit for FY 2009/10 will be Rs. 7942901598. From the above calculation of FY 2009/10 it seems that NTC will be break even when sales revenue will be Rs. 435760465. At present cost structure the sales revenue Rs. 20646628886 which is generating surplus. It indicates the good position of NTC in terms of cost-volume-analysis.

#### **4.9 Flexible Budget**

A flexible budget is one which is designed to provide information as to sales, expenses and profit for different level of activity which may be attained. It is complementary to tactical budget. The essence of flexible budget is to present estimated cost data in a number that permits their determination at various level of volume. This means that all the cost must be identified as to show their behavior with a change in volume whether they vary or remain fixed. However, NTC does not prepare its flexible budget.

On the basis of the cost and other data of FY 2009/10 of NTC, the flexible budget has been prepared below. Variable cost changes proportionally with change in level of activity but fixed cost remain constant for reasonable.

**Table 4.26**  
**Flexible Budget of NTC Ending FY 2064/065 (Rs in Million)**

Description	Level of Activity				
	60%	70941	82%	100%	110%
Sales in Units (Lines)	323251	377010	430868	538585	592444
Sales Revenue	7810.24	911.947	10413.653	13017.068	14318.77
Less: V.C.	491.345	573.236	655.127	18.909	900.80
Contribution Margin	7318.895	8538.711	9758.384	12198.159	13417.974
Less: F.C.	3840.065	3840.065	3840.065	3840.065	3840.065
Net Profit before Tax	3478.83	4698.646	5918.319	8358.094	9577.909

Note : Total installed capacity (PSTN lines) = 656070 lines

Total distributed lines up to 2063/064 = 509873 lines

$$\text{Level of Activity} = \frac{509873}{656070} \times 100$$

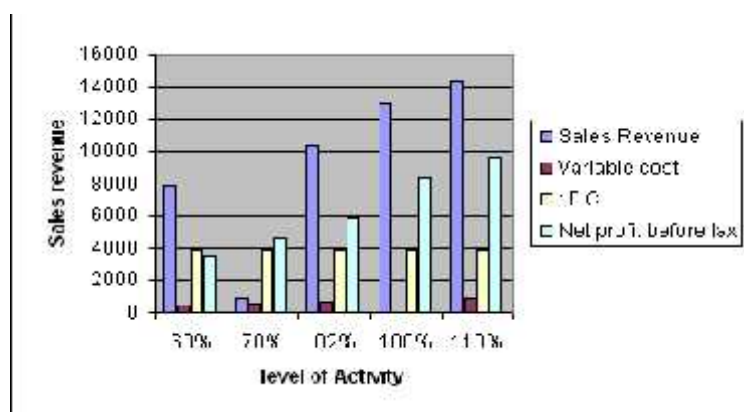
$$= 77.71\% \text{ or } 78\%$$

NTC is operating on the 78% capacity (level of activity) in FY 2008/09

From the above table we can say that NT will able to earn sufficient profit when it runs in full capacity level. The current performance is also good.

The flexible budget can also be presentation in the diagram for the level of activity from 60% to 110% of capacity level.

**Diagram 4.15**  
**sales Revenue ,variable cost, Fixed cost and profit of NTC**



#### **4.10 Variance Analysis**

Variance is the deviation between budgeted or planned goals and actual results. For better performance the next step it is necessary to analyze variances and to determine the underlying causes for managerial planning and control purpose variance are deemed to be favorable and unfavorable, depending on whether they reflect performance above or below standard. It is the basic features or performance report to indicate the variance between actual results and budgeted goals. If a variance is significant, a careful study should be made management to determine the underlying causes. There are numerous ways to study or investigate variance.

- ) Direct observation
- ) Investigation by staff groups
- ) Internal audits
- ) Special studies
- ) On the spot investigation by line management.

Variance analysis is an important tool that can increase the usefulness of period performance report. Rather taking action only on the basis of different between actual and planned or budgeted. Variance analysis has wide application in financial reporting. It is frequently applied in following situations.

- ) Investigation of variance between actual result and standard cost. The standard costs are used as the base.
- ) Investigation of variance between actual of the current period and the actual results of prior period. The prior period is considered as the base.
- ) Investigation of the variances between actual result and planned goals reflected in the profit plan. The planned goals are used as the base.
- ) Generally following steps involve in analyzing variances:
  - ) Setting standards.
  - ) Measurement of performance
  - ) Analyzing variances
  - ) Taking correlative action



### Sales Variance of NTC

I am going to analyze sales variance in units (lines) and Rupees as required for this research paper when actual sales are higher than budgeted sales it is known as favorable variance and such as variance is usually a sign of efficiency of the NTC and vice versa.

The following table shows the sales variance of NTC of last five fiscal year

**Table 4.27**  
**Sales variance. of NT in lines**

Fiscal Year	Budgeted Sales	Actual Sales	Variances	Remarks
2005/06	116171	164885	48714	Favorable
2006/07	189433	115531	73902	Unfavorabl
2007/08	186895	430868	243973	Favorable
2008/09	198767	532391	333624	Favorable
2009/10	204657	562162	357505	Favorable

Source: MIS Report of NT

From the analysis of the above table we find that the actual sales achievement in F.Y 2006/07 is unfavorable and it is Favorable in remaining F.Y. The following table shows the sales variance of PSTN telephone service on NTC for last five fiscal years.

**Table 4.28**  
**sales variance of NTC in lines For PSTN Telephone.**

Fiscal Year	Budgeted sales	Actual Sales	Variance	Remarks
2005/06	55696	36601	19095	Unfavorable
2006/07	60083	45058	15025	Unfavorable
2007/08	61895	32522	2.9373	Unfavorable
2008/09	68494	53239	15255	Unfavorable
2009/10	72698	56216	16482	Unfavorable

From the analysis of the above table we find that the actual sales is low in each fiscal year, which remarks or shows that variance are Unfavorable for every fiscal year.

**Table 4.29**  
**4 Months wise Sales Variance of NTC in lines**

Total 4 Months	Year	Budgeted Sales	Actual Sales	Variiances	Remarks
Total of 1 <sup>st</sup> 4 Months	2005/06	23473	10809	12664	Unfavorable
	2006/07	23490	20067	12251	Unfavorable
	2007/08	24650	18401	21597	Favorable
	2008/09	23473	10809	21232	Favorable
	2009/10	23490	20067	16556	Unfavorable
Total of 2 <sup>nd</sup> 4 Months	2005/06	24650	18401	3423	Favorable
	2006/07	23473	10809	11993	Unfavorable
	2007/08	23490	2006 <sup>7</sup>	8099	Unfavorable
	2008/09	24650	18401	40916	Unfavorable
	2009/10	23473	10809	26388	Favorable
Total of 3 <sup>rd</sup> 4 Months	2005/06	23490	20067	6249	Unfavorable
	2006/07	24650	18401	1844	Favorable
	2007/08	23473	10809	35216	Favorable
	2008/09	23490	20067	41028	Unfavorable
	2009/10	24650	18401	15894	Favorable

Source: MIS Report of NTC

The above table shows unfavorable result most of the quarter of five fiscal years. But it performs high achievement in 3<sup>rd</sup> 4 months of F.Y. 2009/10, which indicates that the overall sales performance is satisfactory

**Table 4.30****4 Months Wise Sales Variances of NTC in Lines for PSTN Telephone Service.**

Total 4 Moths	Year	Budgeted Sales	Actual Sales	variances	Remarks
Total of 1 <sup>st</sup> 4 Month	2005/06	21692	8116	13576	Unfavorable
	2006/07	21454	14352	10770	Unfavorable
	2007/08	72107	12388	6271	Unfavorable
	2008/09	21692	11431	8172	Unfavorable
	2009/10	21454	23 738	4437	Unfavorable
Total of 2 <sup>nd</sup> 4 Month	2005/06	22107	17335	4119	Unfavorable
	2006/07	21692	14298	10331	Unfavorable
	2007/08	21454	10438	7763	Unfavorable
	2008/09	22107	13779	5599	Unfavorable
	2009/10	21692	15236	8031	Unfavorable
	2005/06	21454	14186	7921	Unfavorable
	2006/07	22107	15493	10119	Unfavorable
Total of 3 <sup>rd</sup> 4 Month	2007/08	21692	13775	5061	Unfavorable
	2008/09	21454	19844	1258	Unfavorable
	2009/10	22107	17242	4014	Unfavorable

Source: MIS Report of NTC

The above table shows that the sales variance in all quarter of the five fiscal year has unfavorable result. This indicates about poor sales planning of NTC. The following table shows the sales variance of NTC in units (lines,) in reasons wise for the five fiscal year.

**Table 4.31**  
**Reason wise sales variance of NTC in lines**

Fiscal year	Region	Budgeted sales	Actual sales	Variance	Remarks
2005/06	Biratnagar	11605	8185	2320	Unfavorable
	ktm	25313	16061	9252	Unfavorable
	Birjung	8750	4757	3993	Unfavorable
	Bhairahawa	12748	6023	6725	Unfavorable
	Nepaljung	3460	2319	1141	Unfavorable
	Dhangadi	3375	2329	1046	Unfavorable
2006/07	Biratnagar	15545	7517	8028	Unfavorable
	ktm	28350	18127	10223	Unfavorable
	Birjung	10400	5032	5368	Unfavorable
	Bhairahawa	13228	9474	3754	Unfavorable
	Nepaljung	3845	1862	1983	Unfavorable
	Dhangadi	3995	2131	1864	Unfavorable
2007/08	Biratnagar	10500	5690	4810	Unfavorable
	ktm	22880	17579	5301	Unfavorable
	Birjung	7440	5084	2356	Unfavorable
	Bhairahawa	8796	4343	4453	Unfavorable
	Nepaljung	4428	2702	1726	Unfavorable
	Dhangadi	1652	1203	449	Unfavorable
2008/09	Biratnagar	11285	7137	4128	Unfavorable
	ktm	29150	21082	8068	Unfavorable
	Birjung	8440	4301	4139	Unfavorable
	Bhairahawa	5041	9263	4222	Unfavorable
	Nepaljung	4945	2304	2641	Unfavorable
	Dhangadi	1222	971	251	Unfavorable
2009/10	Biratnagar	10876	8279	6895	Unfavorable
	ktm	38072	29825	8585	Unfavorable
	Birjung	8243	6308	6321	Unfavorable
	Bhairahawa	9616	7405	3432	Unfavorable
	Nepaljung	3536	2538	2935	Unfavorable
	Dhangadi	2351	1856	1205	Unfavorable

Source: MIS report

In the above table only fiscal year 2009/10 in Bhairahawa region there is favorable sales variance but in the entire remaining region the sales variance has unfavorable. It shows that the regional sales budgets are not effective throughout the five fiscal years. This means NTC has poor regional sales planning in units

T able 4.32  
Sales Variance of NT in Amount (Rs. In Million)

Fiscal Year	Budgeted Sales	Actual Sales	Variance(±)	Remarks
2005/06	7316.55	8318.97	427.81	Favorable
2006/07	8819.06	8584.14	926.46	Unfavorable
2007/08	8696.68	13413.65	1423.30	Favorable
2008/09	15739.02	16788.36	60.279	Favorable
2009/10	18708.05	20646.62	1266.97	Favorable

Source: Budget Books of NTC

From the analysis of NTC above table we find that sales revenue variances are positive except in FY 2006/07. So that it is favorable, which means NTC is operating in efficiently.

#### 4.11 Major Finding

From the above analysis of the sales budgeting and financial position using different types of statistical and financial tools, we come to know that there are many problems in formulating and implementing of sales budgeting and planning. On basis of different analysis, observation and informal discussion the following major finding have been drawn.

- ) NTC has the practice of repairing short-range sales budget but long range sales budget is not prepared in detail. Also there is a system of keeping Management Information System (MIS) Report in this company.
- ) The total actual sales units of NTC are in increasing trend. Actual sales revenue is always higher than target except F.Y. 2063/064
- ) The actual sales units of PSTN telephone service of NTC is fluctuated every year.
- ) Total actual sales units are nature of more variability than actual sales units of PSTN telephone service.
- ) There is not clear information about total installed capacity for over all services.
- ) But of PSTN telephone service is given in MIS report so, production budget is prepared only PSTN telephone service.
- ) There is high degree of positive correlation of total sales units, but low degree of positive correlation of PSTN sales units.

- ) The regression equation and straight line of trend shows increasing trend of overall sales.
- ) Number of waiter of telephone line of NTC is in decreasing trend.
- ) Profitability ratios i.e. Net profit ratio, operating profit ratio shows better performance of NTC in generating profits from sales.
- ) Low ratio of administrative cost indicates the better control of cost and efficient management of NTC.
- ) Capital Turnover Ratio of NTC is very low, this indicates that the inefficient utilization of long term debt and fund.
  
- ) The cost volume profit analysis of NTC shows that BEP (Break Even Point) is satisfactory.
  
- ) There is lack of proper coordination between the various responsible departments and only the top level executives are invaded in planning and decision making process.
  
- ) Internal and external variables providing opportunity, threat, strength and weakness are not identified clearly.

## **CHAPTER V SUMMARY, CONCLUSION AND RECOMMENDATION**

### 5.1 Summary

In Nepal PES were established with the objectives of accelerating the rate of economic growth, mobilization of economic growth, mobilization of available resources, generate employment profit necessary for the development of the country. But, creating new Nepal is possible only when the political and economical situation could be favorable for development situation could be favorable for development of country. We can not imagine the concept of new Nepal in a present state of crisis, fundamentally rooted in a failure of productive organization associated with its economic and political under development. Most of the PES ineffectiveness due to lack of managerial efficiency for appropriate planning and control

Sales plan or budget is first and important step in developing the overall budget procedure. Sales planning are the starting point in preparation of corporate profit planning and control. All the plans or budgets depend upon the sales budget. After having the planning premises of the organization the sales plan is developed, sales plan is the first plan or budget of profit plan. Profit planning is closely related with planning the sales, so sales plan plays every importance role in profit plan. Hence it is called and means of profit plan, which is the source of production for periodic planning in the Firm planning practically all other enterprises planning, are built on it the primary source of cash is sales in any enterprises. All the business operations are directly linked with the sales budget and sales budget must be realistic. If the sales plan is not realistic, all the other elements of profit plan will be out of reality Nepal.

Nepal Telecom company is a public utility concern entity, which is a leading corporation in the sector of telecommunication was established under the communication corporation act 2028. To provide essential national wide low cost reliable and readily available telecommunication service to the general public, government offices, business organization and the country as a whole there by supporting for the country. Public enterprises are strong means to develop infrastructure. It helps to provide required goods and service anthem country. But majority of the Nepalese PES has failed to achieve financial capability and work

efficiency and are still the depend on government grants. That is why the comprehensive profit planning is not practiced and implementation of sales plan and control and its effectiveness in Nepalese non manufacturing public enterprises. For this purpose Nepal Telecom company (NTC) is selected as sample PE for the study. The main objective of the study is to evaluate the current practice of sales plan and control and its effectiveness in Nepalese non-manufacturing public enterprises Nepal Telecom company. It has tried to answer the questions stated in the statement of problem.

This study has tried to examine the sales followed by NTC and scope of the study is limited for five years FY 2062/063 to 2066/067 B.S. The study design of this study descriptive and analytical and research data has been collected mainly from secondary source. Related literature has been reviewed from the books, reports, thesis, government publications, journals, bulletin etc. statistical tools like mean, standard deviation, coefficient of variation semi-average trend, 3- years moving average trend, seasonal indices, correlation, regression , least square trend etc. have been used to analyze the data. Similarly, financial tools like ratio analysis, CVP analysis; variance analysis has been also used. The collected data has been also presented with the help of table, chart and diagram. This study has been organized in five main chapters i.e.introduction, literature review, research methodology, presentation and analysis of data and summary, major finding and recommendations.

## **5.2 Conclusions**

After analyzing the practice of sales planning of NTC it is concluded that, NTC prepares both long term and short term plans but the long term profit plan is confined only to top level. Long range sales planning of NTC are not shown according to category of consumer and time wisely. The overall actual sales lines are in increasing trend and it exceed target in All F.Y. Except in F.Y. 2063/064, but actual sales revenue of NTC is always higher than budget. Correlation analysis shows the high degree of positive correlation between actual and budgeted sales in units, but low degree of positive correlation between actual and budgeted sales unit of PSTN telephone service. The correlation between actual and budgeted production also shows low degree of positive correlation. But, there is high degree of positive correlation between actual sales and actual production of PSTN telephone lines. 4 month wise total sales



target and achievement in lines is quite satisfactory. But monthly 4 months wise and regional sales target and achievement in lines of PSTN telephone service is not satisfactory. NT's budget is not realistic to its sales and production achievement. Idle capacity of installed telephone lines is an increasing trend. Which, affects to generate?

revenue. The high degree of positive correlation between total sales revenue and net profit after tax indicates that the net profit after tax increases as the total sales revenue increases. Net profit margin of NTC is in an increasing trend which shows a positive aspect in profit planning. Average of sales related ratios shows satisfactory financial performance of the company. Cost -Volume-profit analysis shows that BEP is satisfactory but C.V relationship is not considered while developing the sales plan. There are not clear cut boundaries to separate cost into fixed and variable. The concept of variance analysis is ignored in the company, it gives negative impacts on the sales planning of the company. NTC fails to analyze its strengths and weaknesses in depth because of the absence of competitors, it has become monopolistic, concerns are not addressed, and hence, it is not alert towards its possible threats and opportunities.

### **5.3 Recommendations**

After analysis of sales planning of NTC, some suggestions have been recommended on the basis of the major findings of the study. It is hoped that these recommendations will be useful to the management of the NTC, other concerned offices, individuals, institutions and other interested parties.

- ) Sales budget should be made on realistic ground because all other functional budgets depend upon sales budget. Basis of setting target for sales and production should be defined carefully. Thus, the realistic long range, medium range and short range forecast should be made. .
- ) Without giving more autonomy, NTC management can not work effectively and the decision out taking government acceptance NTC can not take any vital decision. Due to these causes NTC can not take vital advantage of opportunities. Therefore government should provide more autonomy to the management of a NTC and make them responsible and, accountable according to their work.

- ) The number of waiters of telephone lines are very large. So, NTC should expand its capacity immediately.
- ) Sales variance of NTC are unfavorable most of the time. So, variance should be analyzed variance should be diagnosed and identified timely. Favourable unfavorable variances should be controlled in time and respective officials should be made responsible for any deficiency.
- ) Lower level management participation should be encouraged in profit planning and similarly, there should be proper communication to all level of management about the tactical and strategic plan of the corporation.
- ) Long term objectives should be clearly formed so as to make a clear destination between profit motives and social motives.
- ) The financial position of the company should be timely evaluated through ratio analysis and other relevant financial and statistical tools, models are recommended to evaluate its financial position.
- ) It is strongly suggested to establish a separate costing department as well as a separate costing system so as to segregate cost into fixed, variable, controllable, uncontrollable, direct, indirect etc. This will help to make the control system very effective and dynamic. On the other hand, it will help to reduce unnecessarily increasing cost.
- ) When preparing the sales plan, NTC has practice of CVP analysis, which brings problem in providing services. It is necessary to know that what the less profit at level is. So, NTC should prepare the CVP analysis.
- ) NTC should develop systemic periodic perforce reports in detailed by assigned responsibility for accomplishing the planning objectives.
- ) The huge projects like CDMA should be implemented timely and rapidly according to its policies and programs.
  
- ) If huge competition will be there in future, it should be ready to fulfill the demand of telephone lines. So, NTC should prepare for this task.
  
- ) The sales plan of NT should make on the basis of performance of company ability because maximum plan based on adhoc basis.

) Finally, competition in telecommunication sector had begun. The monopoly of NTC in telecommunication sector has ended. in the environment of big cut throat. competition it should attract many customers by expanding extra capacity and should play leading role in this sector. It should be very well aware of its strength and weakness. It should be aware lead of strategies of its competitor's and should develop its own policy in a systematic way towards comprehensive profit planning.

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**APPENDIX – I**

Particulars	2062/063	2063/064	2064/065	2065/066	2066/067
Capital & providend fund	150	150	150	150	150
Share capital					
providend fund and fund	58.25	86.86	117.94	203.43	266.29
Loan	.24	-	1.91	-	64.78
total	208.50	236.86	279.85	353.43	481.07
Assets:					
Total Assets:	191.68	214.12	242.34	272.41	313.89
Less: Depreciation	(101.27)	(113.23)	(128.73)	(143.44)	(160.24)
Net Assets	90.40	100.88	113.61	128.97	153.65
Capital W.I.P	24.52	24.43	37.64	39.22	33.16
Investment	33.38	41.56	48.83	83.70	111.67
Deferd Tax Assets	-	-	-	9.87	11.73
Current Assets					

Nepal Telecommunication company Ltd.  
Balance of Last five years

Inventory	3.09	3.29	3.27	4.16	1.80
Receivable	28.25	30.99	34.55	34.82	46.51
Bank & Advance	95.74	120.21	147.46	161.34	181.91
Loan & Advance	78.88	70.76	49.90	41.47	56.99
Total current Assets	205.98	225.26	235.19	241.80	287.21
Current Liability	38.58	44.75	57.12	79.15	67.18
Provision	108.64	111.89	99.62	70.98	88.63
Current Liability and Provision	-	-	-	150.14	155.81
Net current Assets	58.75	68.61	78.44	91.66	131.4
Deffered expenses	1.42	1.36	1.31	-	3.33
Total	208.50	236.86	279.85	353.43	481.07

Rs In hundred

million

## APPENDIX – II

Nepal Telecommunication company Ltd .P.L Account of Last Five year

Rs In hundred

million

Particulars	2062/063	2063/064	2064/065	2065/066	2066/067
Income :					
Operating income	85.54	104.12	139.67	167.88	217.08
Non Operating income	6.10	6.45	7.54	11.01	10.17
Total income	91.94	110.58	147.51	178.89	227.25
Expenses:					
Staff Exp.	11.36	11.64	12.80	15.98	35.80
Repair and maintenance Exp.	1.32	5.52	6.55	7.97	15.78
Administration Exp.	4.08	4.42	8.53	9.11	8.40
Pay to rural Development	0	0	2.70	3.35	4.09
Royalty	4.91	5.91	5.40	6.71	8.19
Interest on customer deposit	0	0	0	0	.48
Interest on loan	.0069	.011	0	.10	0
Depreciation	10.68	11.95	13.66	14.86	16.81
Foreign Exchange Gain/Loss	(2.51)	(2.80)	5.26	.026	(4.96)
Liesense and Deferd Exp	.40	.40	.58	.70	.41
Loss on goods sold	.38	.18	5.23	.22	.11
Bonus provision	1.87	1.95	2.40	2.56	3.01
Provision for incentive	.93	1.26	2.43	3.49	3.48
Total expenses	42.72	42.15	67.68	70.17	91.6
Income before tax	49.21	68.43	79.83	108.71	136.30
Tax	(13.79)	(19.07)	(23.30)	(31.30)	(36.42)
Net income after tax	35.42	49.36	56.52	77.41	10.17

Last year profit	53.34	56.65	86.02	83.85	79.42
Last year tax adj.	-	(3.44)	.14	0	0
Last year adjustment	1.58	.012	2.18	0	0
Deferred	0	0	0	2.01	3.33
Profit for allocated	90.35	102.58	132.10	0	265.45
Amt of dividend	(5.55)	(6.88)	(15.0)	0	(30.11)
Last year incomplete dividend	0	0	8.11	0	0
Net profit after dividend	84.80	95.69	117.10	79.42	235.34
Income tax return to retained earning	0	5.69	0	0	0
Capital fund return to retained earning	0	.74	0	0	0
Payment of retain earning to neapl Govt.	29.0	16.11	0	0	0
From sinking fund	.85	0	0	0	0
Retained earning transferred to B/S	56.65	86.65	117.10	79.42	83.65

APPENDIX – III  
Nepal Telecommunication company Ltd.  
Economic Indicators

Particulars	2062/063	2063/064	2064/065	2065/066	2066/067
Total Income (Rs)	9194257	110589148	147512623	17889310	21147582
Staff Exp. (Rs)	1418530	1486851	1764933	1219001	3580212
Repair and maintenance(Rs)	552164	655128	797399	1219002	1638348
Dep Exp. . (Rs)	1048435	1195081	1366504	1486129	1621293
Other Exp. . (Rs)	1253639	878128	2839465	2108427	1673739
Total Exp. . (Rs)	4272768	4215188	676301	7017854	8513592
Income before tax (Rs)	49215289	68437268	79833219	10871456	13633990
income after tax (Rs)	35424613	49366472	56526884	79429015	10178025
Net profit margin (%)	38.35	44.64	38.32	44.4	45.96
Total shareholder 's equity	20825855	26686026	26794280	35343894	41629022
Total capital employed	20850093	23686026	27985960	353443894	46280626
Return on capital employed(%)	17.10	22.17	22.17	25.15	24.94
Return on shareholder 's equity(%)	17.11	22.18	22.4	25.57	26.44
EBIDA margin	65.38	73.07	63.78	69.53	69.33
book vaule per share (Rs)	138.84	157.91	178.63	235.36	277.53
Share number	150000000	150000000	150000000	1500000	150000000
EPS(Rs)	23.62	32.91	37.68	53.95	67.85



**APPENDIX – IV**  
 Telecommunication company Ltd.  
 Company 's Work performan Analysis

S.N	Particulars	2062/063	2063/064	2064/065	2065/066	2066/067
1	Staff					
	Allocated position	5759	6095	6984	7030	7094
	Working staff	5709	5717	5699	5592	5826
	All staff % 100 line	8.38	5.05	3.61	2.05	1.33
2	Technician					
2.1	PSTN telephone service	204	225	231	236	243
		71	72	72	72	73
	Fit PSTNexchange district	552057	552057	656070	684942	726980
		453475	485997	509873	532391	562162
	PSTN line capacity	1.79%	1.88%	1.93%	1.98%	2.04%
	PSTN distributed					
	PSTN density					
2.2	GSM mobile service					
	GSM mobile distributed	227316	622737	909483	1717230	3009962
	GMS density	2.1%	2.4%	3.45%	6.37%	10.92%
2.3	CDMA service					
	CDMA distributed	-	23579	161155	480016	721318
	CDMA density	-	.09%	.61%	1.78%	10.92%
2.4	All telephone distributed (PSTN +GMS+CDMA)	680791	1123313	1580511	2729637	4293442
2.5	All telephone density (PSTN +GMS+CDMA)	2.69%	4.4%	5.99%	10.12%	15.58%
2.6	International circuit Number	2606	3140	3423	4568	4841

**APPENDIX – V**  
Nepal Telecommunication company Ltd.  
Present share structure of company

S.N	Owner	Owners Number	Share Number	Amount (Rs)	%
A.	Institute	7	137290335	13729033500	91.52
1	Ministry Information & Commerce and supply		62290335	6229033500	41.52
2	Finance Ministry		7494600	4794600000	49.96
3	Ministry of Industry ,commerce and supply		1000	100000	.00067
4	Ministry of legal Justice and constitutional assembly		1000	100000	.00067
5	Office of Auditor control		1000	100000	.00067
6	Information department		1000	100000	.00067
7	Citizen investment fund		50000	500000	.0033
B.	People	27260	5299690	529969000	3.53
C.	Staff	5791	7409975	740997500	4.93
	Total	33058	1500000000	15000000000	100

**APPENDIX – VI**  
Free Emergency Telephone service

S.N	Telephone Number	Institute and service
1	100	Police
2	101	Fire controller
3	102	Ambulance
4	103	Traffic police
5	104	Childen search co-ordination center
6	105	Nepal army
7	106	Army center army police Gu lm
8	1098	Child help line

**APPENDIX –VII**  
Mile stone of Nepal Telecom

Year milestone Details

- 1913: Establishment of first telephone lines in Kathmandu
- 1914: Establishment of open wire trunk line from kathmandu to raxaul (India)
- 1935: Installation of 25 lines automatic exchange in royal palace
- 1936: Installation of open wire trunk line from kathmandu to dhunkuta
- 1950: Establishment of Telegram Service
- 1950: Establishment of CB telephone exchange (100lines) in kathmandu
- 1951: : Installation of open wire Turnk line from kathmandu to palpa
- 1955: Distribution of telephone line to general public
- 1963: First Automatic exchange in Nepal (1000 lines in kathmandu
- 1964: Beginning of International Telecommunications Services using HF Radio to India and Pakistan
- 1971: Introduction of Telex Services
- 1983: Establishment of digital telephone exchange
- 1984: Reliable Rural Telecom Service (JICA)
- 1987: Commencement of STD service
- 1995: Installation of Optical Fiber Network
- 1996: Conversion of all Transmission link to Digital transmission link
- 1996: Automation of the entire Telephone Network
- 1996: Independent int. Geteway Exchange established
- 1998: Direct link with Bangladesh
- 1999: Launching of GSM Mobile Service
- 2000: Implementation of SDH Micero wave radio
- 2001: Launching of Payment Services
- 2001: International roaming in G.S.M. Mobile
- 2002: East West high way optical fiber project
- 2003: GSM Prepaid Service
- 2004: Nepa,l Telecome (transformation for corporation to Nepal Doorsanchar Company Limited)
- 2004: Pre paid calling card services (In services )
- 2004: IVR service by 1600 S.L.C. result
- 2005: Soft launch of CDMA
- 2005: Outsourcing of Enquiry Service (197)
- 2005: Tool Free Service
- 2005: Access network service
- 2006: IVR Service by 1061 10+2 result
- 2006: PSTN credit limit service –PCL (IN)
- 2006: Home country Direct service – Nepal Direct (IN)
- 2006: MCC (198) complaint registration via IVR in kathmandu Valey
- 2006: CDMA Limited Services in kathmandu valley
- 2006: PSTN Voice mail service
- 2007: National Roaming for CDMA Mobile (SKY) phone
- 2007: IVR Service by 1888 free VOIP call Complaint
- 2007: In GSM mobile GPRS, 3G/CRBT service
- 2008: ADSL internet service
- 2008: IVR service by 1607 GSM and CDMA
- 2009: SMS Service GSM to CDMA
- 2009: CDMA post paid service

2009: GSM voice mail service  
2010: Sip Easy call (prepaid calling cadr )