CHAPTER- I

INTRODUCTION

1.1 General Background:

Nepal is one of the least developed countries with poorest economic condition of the world, situated in northern hemisphere. It covers an area of 147181 square kilometers and runs all along 885 kilometers from the east to the west and 145 kilometer to 24 kilometers from the north to south**.** Nepal is a landlocked country where 77% of total land is covered by rocks, snow, barren mountains and sloppy hill. Rest of the land is of plain type. Nepal is a mountainous country where highest peak of the world is located. Hence it is popularly known as third pole. With its varying topography and climate, Nepal is rich in biodiversity. It is also the birth place of Lord Buddha. As a developing country it is on the path of economic growth. Nepal mainly consists of two sorts of business enterprises which are actively contributing for the economic growth. The two types of business enterprises are namely public enterprises and private enterprises. Public enterprises are government owned business organizations established with the objectives of providing public service and setting up infrastructure of development. On the other hand private enterprises are established with the primary motive of profit generation at the same time contributing of the national economic development. Hence both enterprises play the vital role for the overall development of the nation by mutual effort.

While reviewing the past trend of business performance, one can easily unfold the bitter truth of deteriorating financial condition of most of the public enterprises ultimately leading to liquidation or restructuring. Thus financial sickness has been a matter of recognition for the public enterprises. On the contrary, Nepal Telecom, unlike from other public enterprise has a relatively good track of profit. Profit is an indicator of how far an organization is capable of contributing to national economy. It also shows the degree of efficient utilization of the resources to achieve primary objectives. In other words profit planning analysis is the critical judgment of information in financial statements. With the help of profit planning different stakeholders make future anticipation of their interest on business. Better profit planning also shows the capability of organization for achieving the business goals by integrating and coordinating the business activities each other. Conclusively, it can be expressed that profit planning and achieving it is the yardstick to measure organizational success.

Revenue planning is the future estimation of revenue which displays the projected sales, income and future cash inflow. The revenue planning estimates only a guide to the level of future revenues, not a guarantee. If the economy remains strong, the planning estimates are likely to underestimate future revenues. But, if the economy fails to perform at the high level anticipated in the control, the planning estimates will overstate future revenues. The revenue planning process is a necessary part of overall profit planning and control (PPC) because (a) it provides for the basic management decision about marketing (b) based on those decisions, it is an organize approach for developing a comprehensive sales plan. If the revenue 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 revenue plan cannot be developed; there is little justification for PPC. Budgeting is the key to financial planning and control. Though profit planning is the essence of management and revenue planning is the starting point of overall planning process. Therefore, every business and non business organization should prepare revenue plan which is prepared on the basis of sales forecast. Systematically and properly prepared revenue planning only plays vital role for effective utilization of resources and control system.

"Revenue is the aggregate exchange value of goods and services provided to the customers. In other words, revenue is any form of income earned by the organization in an accounting period. Revenue results from the sale of goods and rendering of services and measured by the charge made to customers, client or tenants for. It also includes gains from the sale or exchange of assets other than stock in trade, interest and dividends earned on investments and other increases in the owner's equity except those arising from capital contributions and capital adjustments. Revenue from ordinary sales or from other transaction in the ordinary course of business is sometimes described as operating revenue" (Bhattacharya & Dearden, 1980:137)

"Defined in its simplest terms planning is the determination of anything in advance of action, it is essentially a decision making process that provides a basis for economical and effective action in the future. Effective planning sets the stage for integrated action to take places, reduces the number of unforeseeable crises, promotes the use of more efficient methods and provides the basis for the managerial function of control. Thereby assuring focus on organizational objectives" (Edwin, 1969:49)

Cash flow management is the process of monitoring, analyzing, and adjusting business' cash flows. For businesses, the most important aspect of cash flow management is avoiding extended cash shortages, caused by having too great a gap between cash inflows and outflows. Business won't be able to stay in market if it can't pay its bills for any extended length of time. Therefore, business need to perform a cash flow analysis on a regular basis, and use cash flow forecasting so they can take the steps necessary to head off cash flow problems. Many software accounting programs have built-in reporting features that make cash flow analysis easy. One of the most useful strategies that used on small businesses is to shorten its cash flow conversion period so that business can bring in money faster. Planning and controlling are the primary function of business. Businesses cannot success or live a minute in competitive global environment without it. In most cases, revenue planning is not only the most important also the most difficult to prepare. Revenue plan provides basis management decision about marketing and based on those decisions, it is an organized approach for developing in a comprehensive sales plan. Cash management is the key function of controlling. It is the heart of the business. A business can be run without proper planning but within a minute by lack of little than little money. Cash cycle is a ratio used in the financial analysis of a business. Keeping a close eye on business, cash flow make easy to forecast potential cash flow problems and take steps to remedy them. So, the financial manager should observe the easiest ways to monitor business' cash flow is to compare the total unpaid purchases to the total sales due at the end of each month. If the total unpaid purchases are greater than the total sales due, it'll need to spend more cash than it receives in the next month, indicating a potential cash flow problem. In any type of firm the financial manager should not only attain towards the aspect of profitability but he should also turn towards ensuring the liquidity of the corporation. Since, every business is a constant debtor and enterprise borrows funds from financial institutions and purchase merchandise on credit thereby is fewer obligations to the government. Thus, every enterprise owns liabilities unless the payment is made at the maturity of the particular debt the reputation of the firm is tarnished at worst the creditor may force the firm to terminate its business. The cash balance of the firm is influenced by credit position of the firm, status of firm’s receivable, availability of short-term credit etc. Management should make every effort to speed up cash inflow and delay cash outflow. The cash management of corporation is significant enough to have the best use of idle cash balances, and to take advantage from the opportunity interest in cash velocity determined by sales volume and turnover of assets. So, corporate manager must be familiar with the cash cycle to undertake measure for improvement of collection and disbursement.

“Cash management is one of the key areas of working capital management. A part from this fact that is the most liquid current assets, cash is the common denominated to which all current assets can be reduced because the major liquid assets i.e. receivable and inventory get eventually converted in the cash.” (Khan and Jain, 2003: 664 - 700)

“Cash is the basic input needed to keep the business running on continuous basic so the cash should be managed efficiently in order to keep the firm sufficient liquid and to use excess cash in some profitable way. The firm should held sufficient cash neither more nor less. Cash shortage will dispute the firms operation, while excessive cash will simply remain idle, without contributing anything towards the firm’s profitability. Thus, a major function of the financial manager is to maintain a sound cash position.” (Pandey, 1997: 837-841)

1.2 Introduction of the organization:

This dissertation is conducted on Nepal Telecommunication, one of the public utility enterprises in Nepal. At a short glance of the telecommunication history in Nepal, its development began from a very few lines reaching to huge exchanges in Kathmandu valley and other parts of the country. Telecommunication development and urbanization went hand in hand. Though rate of telecommunication growth is a higher than that of urban population in recent years. After a stunning series of development, Nepal telecommunication was finally established in 2031 Ashad 1st under Telecommunication Act 2028 as public enterprises to provide reliable and affordable telecommunications.

The main purpose of establishment of Nepal Telecommunication (NTC) in Nepal was to strengthen the administrative efficiency of the government. It was later expanded to serve the needs of development of various sectors as expansion of foreign trade, tourism development and international integration. NTC was dissolved and converted to Nepal Doorsanchar Company Limited (Nepal Telecom) from 1st Baisakh 2061 (13th April 2004). The new company was registered with the Company Registrar Office on 2060-10-22 under company act 2053. However, the company shall also be known to general public by the name NEPAL TELECOM as registered trademark (NTC, 2002-03:3).

Nepal Telecom, as a progressive, public spirited and consumer responsive entity, is committed to provide nationwide reliable telecommunication services to serve as an impetus to the social, political and economic development of the country. Nepal Telecom's vision is to remain as a dominant player in the telecommunication sector of the country while extending reliable and affordable telecommunication services to all regions including the remotest area of the country and at the same time retaining its present sound financial health even in the coming competitive environment (NTC, 2002-03:3).

Nepal Telecommunication Corporation (NTC), renamed Nepal Telecom now is a partly government owned public sector entity, administered by a government appointed Board of Directors, which includes a chairman and four voting members. The company is an inevitably accountable autonomous and organized institution.

The history of rural telecommunication begins from late 1980's and this service is playing the role of catalyst for the economic development. Many place getting initial services of a single line VHF services were already passed to many phases like VHF-MARTS-CDOT 500 line change within the period of less than 15 years before. The fast urbanization process is creating high demand of telephone lines throughout the country and all small exchanges are running to their fullest capacity within a year of their installation. Globalization has made it compulsory to integrate all domestic market with regional and global markets and the fast growth of telecommunication is essential for such integration (NTC, 2002-03:17).

The study mostly deals with the revenue planning and cash management of Nepal telecom. Also the study takes over the account of various methodologies of the implementation, current technologies used in the telecommunication and its future policy. The study also depicts the future of telecommunication in Nepal. Nepal telecom is one of the most prominent public enterprises that is earning relatively good profit and paying highest taxes to government exchequer. The main purpose of establishment of the company in Nepal was to strengthen the administrative efficiency of the government. Nepal telecom, even with its present status of being a public sector enterprise, has the ambition of becoming a dominant player in the telecommunication sector, giving an affordable and the cheapest possible services to all regions including the remotest areas of country retaining its present financial health even in the coming competitive environment. "Goal of Nepal Telecom is to provide cost effective telecommunication services to every nooks and corner of the country" (NTC, 2007:03). It was later expanded to serve the needs of development of various sectors as expansion of foreign trade tourism development and international integration.

The other objectives adopted by Nepal Telecom are as follows:

a) To provide high quality, reliable and economic services including remotest area of the country.
b) To exchange information for the preparation of fundamentals for development of the nation.
c) To establish telecommunication links among the countries around the world.
d) To participate the public in telecommunication so as to uplift their living standard.
e) To provide prompt services to the places of demand.
f) To introduce new technologies and cope up with time and tradition.

Nepal Telecommunication has operating its activities with its distinct vision and mission. "Vision of Nepal Telecom is to remain a leading player in telecommunication sector in the country while also extending reliable and cost effective services to all" (NTC, 2007:03).

The mission of the company is: "Nepal Telecom, as a progressive, customer spirited and consumer responsive entity, is committed to provide nation-wide reliable telecommunication services to serve as an impetus to the social, political and economic development of the country" (NTC, 2007:03)

Since, telecommunication is informative services, many fields such as agriculture, business, transaction and other socio-economic sectors use these services heavily. Telephony has now plunged into the wide world of informative and competitive age simultaneously establishing itself in the strangest dimension of technology as a heartthrob of general people. Telecommunication has leaded the information world from traditional to modern system. Nepal Telecom is the role institution in the state to provide telephone services. It has offered price and position. Nepal Telecom as far as possible has adopted the new technologies and inventions around the world. Liberalization in telecommunication services is the result of globalization growth of markets, new technological, changes and the emergence of new services.

The growing presence of the private sector in business directly or indirectly related to telecommunication has forced Nepal Telecom to find alternative strategies in taking the emerging competition. Revision of tariff, customer care and introduction of value added services have now become the top priority in this competitive telecommunication market introduced by the policy of Nepal Government. GSM mobile phone capacity has been increased and expanded to the far western region. Recently, the company has introduced low tariff structure in PSTN, prepaid and post-paid mobile has shown growing demand. The ongoing East West Highway Optical Fiber Link Project has established a reliable alternative backbone link in addition to the existing microwave radio network. This will play a major role in support of the development of the information technology in the country, aiding its participation in the global economy and ultimately helping in the poverty alleviation.

Under the ongoing Tenth National Plan, Nepal Telecom has been launching rehabilitation and expansion program in its rural network. The program is aimed at replacing some of its exiting rural telecommunications network, which is now obsolete or damaged due to the recent political insurgency or with exhausted capacities. The company has plans to expand new network. There by will help in modernizing the overall national telecommunication infrastructure of Nepal.

Nepal Telecom generates its revenue by providing different type of services such as basic fixed line services, GSM mobile, internet, lease line etc. Apart from these source, which generates significance revenue for the company, is international settlements from international call. Nepal Telecom, due to its nature of business, has to transact with significant number of customers in addition to dealing with foreign carriers for its international sharing revenue.

Revenue collection is always a much-contemplated topic for companies and enterprises. If we review the following data related to annual revenue and annual cash collection of past few years, it is satisfying considering the defaults of dues in other business in our country (Pokhrel, 1st Anniversary Souvenir, 2005:59-60).

Nepal Telecom has two different ways of revenue collection process.

(I) Collection through Counters

In smaller exchanges collection is being done manually but in almost 50 places collection of cash has been done through online cash collection process, which has for better efficiency than manual cash collection. For the sake of increasing efficiency Nepal Telecom is collecting its revenue online its exchanges having lines more than 1000.

(II) Collection through the Banks

Now, Nepal Telecom has started to collect its revenue through the banks also. Nepal Investment Bank, Bank of Kathmandu, Kumari Bank these banks are collecting revenue through their counters. As a result, subscribers are able to pay their dues at their nearest bank's counters as per their convenience. Similarly also in PSTN's case, here in Kathmandu Valley, already Bank of Kathmandu, Kumari Bank, Nepal Investment Bank, Nepal Industrial and Commercial Bank, Machhapuchare Bank, Laxmi Bank, Rastrya Banijya Bank are collecting the revenues for Nepal Telecom and in near future few other banks will also be participating in PSTN revenue collection process.

Likewise in 50 places, different banks visit Company premises to collect the cash. And these banks are providing interest in the range of 2.50 to 4.25 percent per annum. Now, Nepal Telecom has adopted different strategies which deserve appreciation in revenue collection such as advance payment facility, weekly bill payment facility for high paying subscribers, anywhere payment facility in Kathmandu Valley, introduction of token system at counters. Presently, Nepal Telecom has made a policy for disconnect telephone line for that customer who doesn't pay in time (3.5% fine) that generates excess cash to the company.

Nepal Telecom was fully government owned and government controlled organization in past years. After the restoration of democracy in 2047 B.S, government adopted privatization policy in order to privatize state controlled enterprises. In the same way, "in an attempt to privatize the hundred percent state owned NT, the incumbent and leading telecom operator in Nepal, the government has decided to offload its holding in NT by providing 5 % of total shares to employees of NT and 10 % of total shares to general public. Currently paid up capital of NT is Nepalese Rupees 15 Billion (150,000,000 number of ordinary shares @ Rs. 100 per share). As decided by Nepal Government, 5 % of total share i.e. 7,500,000 number of shares would be distributed to employees at a discounted rate of Rs. 90 per share. Regarding sale of shares to general public, minimum price of each share is fixed at Rs. 600 for public bidding. An individual or organization is allowed to buy minimum 100 shares and maximum 5000 shares. As per Nepal Government decision, these shares will be allotted to applicants who quote the highest price (Higher bidder winning more shares). After these arrangements, NT will have employees as well as general public participation in its ownership structure. Hopefully, participation of employees and general public in company's ownership would strengthen its mission of remaining leading telecom operator in Nepal" (NTC, 2007:14).

In overall, the general objective of Nepal Telecom is to provide essential nationwide low cost, reliable, affordable and readily available telecommunication services to the general public for the overall improvement of integrity and economic development. In the age of information technology, Nepal Telecom's vast communications network plays a vital role in supporting the growth of business in IT field. Nepal Telecom's responsibility is to provide reliable and affordable telecommunications services throughout the country. Nepal Telecom fulfills this responsibility and contributes towards the overall Scio-economic development of the nation. Since, Nepal Telecom is the role device and powerful instrument for the development of information system and has been struggling hard to enter Nepal into modern arena of this changing world.

The prime objective incorporated by Nepal Telecom is to provide reliable and affordable telecommunication services all over the country. This objective is in turn coupled with economic development of country. At present Nepal Telecom has provided national and international trunk services in all 75 district of nation. Services provided by Nepal Telecom are;

- Basic telephone service
- National and international trunk call service
- Rural telecom service
- Pay phone service
- Mobile telephone
- Voice data and telegraph Leased Circuit services
- Email and Internet service
- Intersect Mini-M services
- Home country direct dialing services
- International telegraph services
- Telex services
- V-sat services

1.3 Statement of the problem:

The development of a nation depends upon the proper utilization of the resources available in the country. In Nepal, there are various public utility enterprises established in many sector to utilize the resources for the overall development of the country with effective goal and objectives. But majority of the public enterprises have not been able to operate their activities without loan grant and donation from the foreign government and donor agencies because of their poor financial performance. Many public enterprises have been found preparing long term and short term plans on the Ad-hoc basis. The main causes of the failure of such public enterprises are the lack of integration of activities, less utilization of capacity, ineffective and inappropriate action plan, strategies and control mechanism.

Nepal Telecommunication is one of the largest organizations in the country with its leading capital investment. It is a successful public company functioning in the public utility sector. There is limited market competition for the company as other private enterprises faces and it deserves higher future scope of production and expansion. Thus, it should earn good net profit, which may contribute for the development of the nation. Although its primary objective is to provide telecommunication facility to the people, it must generate profit to satisfy its stakeholders. The success and failure of any enterprises is measured on the basis of profitability or surplus. The profit depends on the systematic planning (budgeting) and its proper implementation.

Most of the enterprises had periodic accumulation of surplus cash and corresponding cash shortage form time to time. Most of the Nepalese public enterprises never thought of the source of current assets i.e. cash and usually depends on Nepal Government for it. This existing problem in the area of finance is mostly directed towards the management of cash rather than in any other area. Nepal Telecom has also suffered from problem of efficient cash management. This study therefore, attempts to have an insight over the problem of revenue planning and cash management. Basically the research intends to explore the following problems;

a) What about the effectiveness of revenue planning in NTC?
b) Role of budget for control mechanism is in proper way or not?
c) What about the consistency of budgeted and actual revenue in NTC?
d) NTC's production (supply) is based on sales (demand) or not?
e) Cash collection and disbursement of NTC is in proper way or not?
f) The company should have maintained optimal cash balance or not?
g) The huge amount of cash and bank balance may cause to lose its profitability or not?
h) Can Nepal Telecom make better utilization of excess cash amount by investing in marketable securities?

i) What else does a cash flow projection do?

j) Are there any shortcoming with planning practice and its implementation?

k) What methods of tools and techniques are adopted for revenue planning?

l) What kinds of practice and effectiveness of sales planning program are made?

1.4 Objective of the study:

The main objective of the study is to analyze revenue planning and cash management of Nepal Telecommunication Ltd. in order to identify problems and recommend possible remedial measures. Therefore, the other objectives are as follows.

1. To examine the pattern of revenue generation of NTC.
2. To analyze the gap between budgeted and actual revenue as well as its demand.
3. To review the cash management aspect of NTC.
4. To make recommendation for revenue planning and cash management of NTC.

1.5 Significance of the study:

Nepal Telecom (NTC) is one of the most prominent public enterprises that is earning relatively good profit and paying highest taxes to government. NTC, even with its present status of being public sector enterprise, has the ambition of becoming a dominant player in the telecommunication sector, giving affordable and the cheapest possible services to all regions including the remotest areas of the nation retaining its present financial health even in the coming competitive environment. Globally, the concept of zero working capital has got more emphasis. The expert, researcher and practitioner are involved in great effort in the management of working capital management through efficient cash management.

Analysis of revenue planning and cash management is a crucial part of overall profit planning of business enterprises. The main importance of the study lies on the role of revenue planning and cash management that considerably contributes to improve profitability and financial performance of NTC. The main purpose of the study is to forecast the future events and to overcome or reduce risk by identifying the strength and weakness of the enterprise. This study will be useful to provide information and to draw attention of NTC management regarding what can be done for future planning and management of revenue.

This study is focused to analyze cash management in Nepal Telecom. It has also focused on sales revenue and how to improve its financial situation in various environments such as the competition in a wide, growing and challenging market. Cash management contributes to improve the profitability as well as the overall financial performance of an organization to help the best utilization of resources. Accomplishment of objectives in every organization depends upon the application of resources. If the cash management process of an organization is effective and result oriented that the pace of development naturally forwards in a usual manner. Profit is the most important indicator for judging managerial efficiency. For this, every organization has to manage its profit. The need of this study is to examine and check whether the Nepal Telecom is applying optimal cash or not. And, the study also shows whether there is consistency between planned sales and actual sales.

This study will be concise, brief, practical data based, usable and valuable to the major parties interested in maximization through revenue planning and cash management. This will also serve as a reference for the further study and data collection. The study will be equally useful and beneficial to Nepal Telecom, Nepal Government, Board of Directors of Nepal Telecom, employees of Nepal Telecom and other stakeholders. Lastly it will provide relevant and pertinent literature for further research on the field of revenue planning and cash management. Thus, the study entitled "Revenue planning and cash management" is rewarding.

1.6 Limitation of the study:

The study is confined only about revenue planning and cash management of Nepal Telecommunication. The following factors have limited the scope of this study;

- The study is based on secondary data from NTC's record.
- The study is only concentrated in the revenue planning and cash management of NTC. It does not cover other area.
- The accuracy of this study depends upon true response and the data available from management of NTC and various published documents of the organization.
- The study covers the analysis of only 9 fiscal years from F/Y 2062/63 to F/Y 2066/67.
- This study may not complete in sense because it does not cover the whole financial area of Nepal Telecom. Study scope could not be due to the unavailability of data.

- Purposefully, this study does not conduct extensive interview with all financial officer and HOD of Nepal Telecom. Only field survey is conducted at the head office on Nepal Telecom.
- Due to limited time and resource constraint, the study couldn't be conducted at its full scale.

1.7 Organization of the Study:

The study has been segregated in to the five chapters, each defining to some aspect of the revenue planning and cash management. The titles of each of this chapter are as follows:-

Chapter I: Introduction

It includes general background of the study, introduction of the organization, statement of the problem, objective of the study, need/significance of the study, limitations of the study and organization of the study.

Chapter II: Review of Literature

This chapter embark conceptual framework like revenue planning and controlling, cash and cash management, cash management models, cash conversion cycle, credit management policy, cash flow statement etc. besides this it includes a theoretical outline and a short review of previous research done in revenue planning and cash management.

Chapter III: Research Methodology

This chapter deals with research methodology to be adopted for the study to satisfy the objectives of the study. It consists of introduction, research design, sample and population, sources of data, data collection procedure, methods and tools of data analysis.

Chapter IV: Data Presentation and Analysis

This chapter is most important and plays vital role in this study. This chapter deals with presentation, analysis and interpretation of data as required by the objectives stated in this study. These collected data have been analyzed and interpreted by the help of various statistical and accounting tools and techniques.

Chapter V: Summary, Conclusion and Recommendation

This chapter contains summary, conclusion and recommendation. This chapter is the sum of the results obtained through the analysis and recommends some suggestions.

Besides this Appendix and Bibliography has been included in this study.

CHAPTER-II

CONCEPTUAL FRAME WORK AND REVIEW OF LITERATURE

2.1 Introduction:

Review of the literature is supported to revise the eminent literature relating to the study various books, articles, journals, bulletins, reports, news, paper and theses etc. which are the bases for preparing it. Some philosophers, writers or researchers have given the contribution on it since many years. There are two parts in the review of literature. They are: Conceptual Review and Review of Related Study.

In this chapter, the researcher aims to shed light on the relevant theoretical background of the study being under taken. It comprises the conceptual framework about the Telecom, its activities, profit-planning concepts, and review of books, previous study. So far, this study is concerned with reviewing the Revenue planning of Nepal Telecom. In this connection, the researcher has reviewed various literatures in the form of books, newspapers, journals, browsing materials from the concerned websites, previous dissertations in the relevant subject matters etc.

Review of literature is a compilation of theoretical review and the review of the thesis/dissertation carried out in the similar field. Review of the literature is supported to revise the eminent literatures relating to the study. This chapter aims to gives a conceptual framework and makes a review of the relevant studies that have already been done in this research topic so that some new contributions could be given to the established body of knowledge. This chapter has been divided into three main sections. First section encompasses the conceptual framework. The second section presents the review of previous research works on the topic. The final section explains the research gap.

2.2 Conceptual Framework:

2.2.1 Planning:

Planning is the basic foundation of profit and control. We should be cleared about the concept of planning. According to "Oxford Dictionary" planning means;

- (To do something) arrangement for doing or using something, considered or workout in advanced.
- Way of arrangement something especially when shown on a drawing scheme.

The panning means thinking and deciding in advance what is to be done in future. It is a method of thinking out acts and purposes before and planning starts with forecast and complete with determination of future events. It is the first essence of management and all other function performed within framework of planning.

"Planning is the process of developing enterprise objective and selecting a future course of action to accomplish them. It includes (a) establishing enterprise objectives, (b) developing premises about the environment in which they are to be accomplished, (c) selecting a course of action for accomplishing the objectives, (d) initiating activities necessary to translate plans into action and (e) current re-planning to correct deficiencies". (Welsch, Hilton and Gordon, 2000:3)

It is sometimes said that planning is the primary managerial function which logically precedes all other functions, since without planning manager would not have activities to organize, would not require a staff, would have no one to direct and would have no need to control. However, the managerial job is actually one in which all the managerial functions take place simultaneously rather than serially.

Planning is a hard task for it involves the ability to think to periodic, to analyze and to come to decide, to control the actions of its personnel and to cope with a complex dynamic fluid environment. They bridge the gap between, which they are and where they want to go. This statement obviously shows planning is a complex and hard job. Planning is a tool of developing and getting organizational objectives.

Planning consists of the following steps:

- Recognizing and making a tentative statement of the problem.
- Collecting and classifying relevant facts.
- Setting forth alternative course of action.
- Evaluating the pros and cons associated with these course and
- Selecting the course of action (the plan).

Planning means setting goals for the firm, considering various ways of meeting those goals, and picking out what appears to be the best way to meet the goals. In planning the management is concerned with lying own objectivities and determining the courses of actions to be followed out of the several alternatives available to meet those objectives.

Planning is fundamentally choosing and a planning problem arises when an alternative course of action is discovered. If there were no alternatives in objectives policy, program or procedure, planning would be so inflexible as hardly to exist. However, in practice, there are probably few, if any, business problems for which some kind of alternative does not exist.

The planning process of an enterprise would generally involve four fundamental steps;

a) Establishing the objectives
b) Determining the short range objectives or goals
c) Developing strategies and
d) Formulating profit plan or budgets

Planning is the basis of controlling and it itself is framed on forecasting in the sense of taking a careful look what is likely to happen. It is of course impossible to forecast the future with complete accuracy. But the business planner identifies range of possibilities as to the future course of events and prepares to meet them. Planning is not however; merely an inevitable fate planning is also aimed at growing shape to the future.

Planning is essential to accomplish goals. It reduces uncertainty and provides directions to the employees by determining the course of action in advance. Formal planning indicates the responsibility of management and provides an alternative of grouping without direction. Planning on the other hand, involves the determination of what should be done, how the goal may be reached and what individuals or units are to assume responsibility and be held accountable.

Thus, planning stands for future activity and formulates to meet the objectives of the management and we can point out the nature of planning as:

- Planning is an intellectual process.
- Planning is a goal-oriented task.
- Planning is a primary function of management.
- Planning pervades all managerial activities.
- Planning is directed towards efficiency.

Generally planning can be divided into two parts, which are as follows:

2.2.1(I) Short - Term Planning or Tactical Planning

Tactical plans have shorter time frames and narrower scopes than strategic plans. Tactical planning provides the specific ideas for implementing the strategic plan. It is the process of making detailed decisions about what to do, who will do, and how to do it. Tactical plans translate broad strategic goals and plans into specific goals and plans. These plans focus on functional areas of the organization. Because strategic plans are fairly broad, these have to be translated into specific plans. Each strategic plan is generally implemented through several tactical plans. Middle managers who are responsible for major divisions or branches in an organization develop tactical plans. The key task for them is to determine the specific details of targets, resource utilization and time frames. Tactical plans focus on the major actions that a unit must take to fulfill its parts of the strategic plan.

The short range planning is selecting to conform to fiscal quarters or years. Because of the practical needed for conforming plans to accounting periods and the somewhat arbitrary limitation of the long range to three or five years is usually based as has been indicated on the prevailing belief that the degree of uncertainty over long period makes planning of questionable value.

2.2.1(II) Long - Term Planning or Strategic Planning

The strategic plans are also known as "grand plans". They have a strong external orientation and cover the total organization. A strategic plan is the actions taken to achieve strategic goals. Such plans are developed at the corporate level. Senior executives are responsible for the development of these plans. These plans involve making decisions about the organization's long-term goals and strategies. The top managers scan the external environment for opportunities and threats to the organization.

Long term planning is used to determine the overall direction of organization. Successful enterprises have always done some long range planning. It is more important for broad and long living enterprises.

Long range planning five to ten years varying with the enterprise, sometimes extended to ten years. Long range planning is one of the most difficult times span involved in planning as many problems in short-range planning can be traced to the absence of a clear sense of direction and the practices which a comprehensive long range plan provides.

Thus, planning process, both short and long term, is the most crucial component of the whole system. It is both the foundation and the bond for the other elements because it is through the planning process that we determine what we are going to do, how we are going to do and who is going to do it. It operates as the brain center of an organization and like the brain, it both reasons and communicates.

2.2.2 Planning and Forecasting:

"Defined in its simplest terms planning is determination of anything in advance of action, it is essentially a decision making process that provides a basis for economical and effective action in the future. Effective planning sets the stage for integrated action to take places, reduces the number of unforeseeable crises, promotes the use of more efficient methods and provides the basis for the managerial function of control. Thereby assuring focus on organization objectives" (Edwin, 1969:49).

"A forecasting is a prediction of future event, condition or situation, whereas plan includes a program of intended future actions and desired results. Forecasting predicts the future events in such a way that the planning process can be performed more accurately. A forecast is not a plan, rather it is a statement and or a quantified assessment of future conditions about a particular subject (e.g. sales revenue) based on one or more explicit assumption. A forecast should always state the assumptions upon which it is based. A forecast should be view as only one input into the development of sales plan. The management of the company may accept, modify or reject the forecast, other inputs and management judgment about such related items as sales volume, prices, sales, efforts, production and financing. It is important to make a distinction between the sales, efforts, production and financing. It is important to make a distinction between the sales forecast and the sales plan primary because the internal technical staff should not be expected or permitted to make fundamental management decision and judgment implicit in ever-sales plan. Moreover, the influences of management actions are on sales potentials in difficult to quality for sales forecasting. Before, the elements of management experience and judgment must hold the sales plan. Another reason for identifying sales forecasting as only one step in sales planning is that sales forecasting is condition" (American Accounting Association).

To make distinction between forecasting and planning is not an easy one. Webster gives-"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 objectives in practical detail and we correspondingly develop schemes of action to achieve these objectives.

2.2.3 Planning and Budgetary Control:

Planning is the process of establishing future objectives and formulating means of meeting those objectives. Control on the other hand, is the means by which management ascertains that the various parts of the business perform efficiently and progress toward the predetermined plans. Budgetary control is the process by which management keeps efficiencies of each part of the company's operation. Determining in advance the expected sales volume, the expected cost of merchandise to be purchased or produced, the number of employees needed, and the expenses to be incurred effects planning. Control, on the other hand, is exercised through budget performance reports prepared for each subdivision of the company reflecting the budget, the actual results of operation, and any differences.

2.2.4 Revenue:

Revenue is the aggregate exchange value of goods and services provided to the customers. In other words, revenue is any form of income earned by the organization in an accounting period. According to "Oxford Business Dictionary" revenue means;

- Any form of income earned by the organization in an accounting period.
- Cost and income items that are either charged or credited to the profit and loss account for an accounting period.

"Revenue results from the sale of good and rendering of services and is measured by the charge made to customers, client or tenants for goods and services furnished to them. It also gains from the sale or exchange of assets other than stock in trade, interest and dividends earned on investments and other increases in the owner's equity except those arising from capital contributions and capital adjustment. Revenue from ordinary sales or from other transaction in the ordinary course of business is sometimes described as operating revenue." (Bhattacharya & Dearden; 1980:137)

2.2.5 Revenue Planning:

Revenue planning is the future estimation of revenue which displays the projected sales, income and future cash inflow. In other word, revenue planning is the projection of future income in advance for a specific period. Revenue plan provides the basis for management decision about marketing and other activities. It can be said that it is an organized approach for developing a comprehensive sales plan.

The revenue planning estimates are only a guide to the level of future revenues, not a guarantee. It the economy remains strong, the planning estimates are likely to underestimate future revenues. But, if the economy fails to perform at the high level anticipated in the control, the planning estimates will overstate future revenues.

"Profit plan is estimation and predetermination of revenues and expenses that estimates how much income will be generated and how it should be spent in order to meet investment and profit requirements. In the case of institutional operations, it presents a plan for spending income in a manner that does not result in a loss". (Ninemeire & Schmidgall, 1984:26)

"The revenue planning process is a necessary part of PPC because (a) it provides for the basic management decisions about marketing, and (b) based on those decisions, it is an organized approach for developing a comprehensive sales plan. If the revenue 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 revenue plan cannot be developed; there is little justification for PPC. Despite the views of a particular management, such a conclusion may be an implicit admission of incompetence. Simply, if it is really impossible to assess the future revenue potential of a business, there would be little incentive for investment in the business initially or for continuation of it except for purely speculation ventures that most managers and investors prefer to avoid". (Welsch, Hilton, Gordon, 2000:171)

"The company earns profit only when it is able to sell its product and not when it produces them. It is no use of producing goods that are not likely to be sold and for which there is a limited demand. In some business, it is necessary to establish that the product will sell even before it is produced. In normal times of keen competition, the sales forecast must be realistic. It is undoubtedly true that past can provide experience and information which will be assistance in estimating present and future revenue but care must be taken in presenting past facts to management so that incorrect conclusions may not be drawn there from." (Mohan, Goyal, 1992:10)

"The revenue plan should be designed to coordinate the efforts of the sales department, production department and all other departments. Many factors must be considered when sales budget is established, including sales trends, limitations on the supply of merchandise or the company's market, competing products, the expected amount of advertising, and general level of the economy. Since most of these unknown companies frequently maintain a specially trained staff to increase them." (Seiler & Robert, 1964:659-660)

"The logical starting point in developing the revenue planning is the estimates of sales. It does not follow, however, that the revenue estimation can be considered in isolation or that once the revenue estimates has been computed, the other elements of revenue and expenses will fall into place. There is circular relationship between sales and some expenses. In fact, the level or amount of certain expenses may have a considerable influence on the revenue. For example: the relationship between advertising and sales." (Finney, Miller, & Herbert 1963:389)

2.2.6 Factor Influencing Revenue Planning

The factors influencing the level of revenues may be classified as internal and external as follows:

1. Internal Factors

These include promotional aids, such as advertising, incentives to sales man, ability of the organization to satisfy demand, quantity of the finished product, changes in price etc.

2. External Factors

These include the fluctuations in the size of population, the general level of prosperity, the extent and severity of completion in the market, government policy and regulation. Changes in fashion and tastes, degree of competition expected from new product etc. Elasticity of demand for the product is of obvious importance if prices are expected to undergo a change.

2.2.7 Preparation of Revenue Planning.

A planner should be completed the following steps for planning the revenue. They are listed below:

Step1. Development of Management Guidelines for Sales Planning:

All the management particularly in the sales planning process should be provided with specific management guidelines to be followed in revenue planning. Fundamentally, these guidelines should specify revenue-planning responsibilities. The purpose of these guidelines is to attain coordination and uniformity in the revenues planning process. The guidelines should emphasize enterprise objective, goals, and sales strategies. The guideline also should direct attention to such areas as product emphasis, general pricing policies, major marketing strategies, and competitive position.

Step2. Prepare Sales Forecast:

One or more sales forecasts should be prepared. Each separate forecast should use different assumption, which should be clearly explained in the forecast. The management guidelines should provide the broad assumptions. Forecasting methods are broadly classified as a) quantitative b) technological c) judgmental. These forecasting methods include time-series smoothing, decomposition for time series, advanced time series, simple & multiple regression, and modeling. The forecasts should include strategic and tactical forecasts that are consistent with the time dimension.

Step3. Assemble Other Relevant Data:

In addition to step1 and step2, all other information relevant to developing a realistic revenue plan should be collected and evaluated. This information should relate to both constraints and opportunities. The primary constraints that should evaluate are: a) manufacturing capacity b) sources of raw materials and supplies, or goods for resale, c) availability of key people and a labor force, d) capital availability and e) availability of alternative distribution channels. These five factors require evaluation and coordination among the heads of the various functional areas in developing a realistic revenue plan.

Step4. Develop the Strategic and Tactical Sales:

Using the information in step 1, 2 &3, the management develops a comprehensive revenue plan to do this the planning process must be structured to maximize a) motivation of the sales force and b) realism in the revenue plan. This process should recognize the importance of management goals both strategic and tactical. The process of developing a realistic revenue plan should be unique to each company because of the company's-its products, its distribution channels, and the competence of its marketing group. Four different participative approach widely used are characterized as follows; a) sales force composite b) sales division manager's composite c) executive decision and d) statistical approaches.

Step5. Securing Managerial Commitment to Attain the Goals in the Comprehensive Revenue Plans:

Top management must be fully committed to attaining the sales goals that are specified in the approve revenue plan. This commitment requires full communication to the sales manager of the goals: approve marketing plan and strategies by sales responsibilities. The commitment must be strong and ever present in day-to-day operations. (Welsch, Hilton, & Gordon, 1999:176-182)

2.2.8 Cash Management:

Before knowing about 'Cash Management' it is better to know about 'Cash'. Cash is the money, which the firm can disburse immediately without any restriction. The term cash includes coins currency and cheques held by the firm and balance in its bank accounts. Sometimes near cash items, such as marketable securities is also included in cash.

The meaning of cash may vary according to the purpose for which it is used and person with different level of knowledge. Cash is an asset constituting the most liquid item among all the assets. But to obtain cash involves cost because company has to rise through issue of share or by borrowing with interest. Cash is the most important form of current assets. It is the basic input and ultimate output. The term cash refers to all the money items and sources that are immediately available to help pay a firm's bills.

So, a corporation must utilize cash efficiently to meet obligation of interest payment, if cash is obtained from borrowing. And if it is received through issue of share, the corporation has responsibility to owners in assuring them to pay favorable rate of return. Since, cash is not easy to obtain, the available cash must be prudently spent without incurring loss. (Shrestha, 1980: 57-58)

Cash is only one constituent of what is essentially a combination of business resources. It is the part of working capital and as such provides the means of earning a profit investment for business. The objective should aim to obtain an optimum level for each component of current assets figure and a smooth and rapid conversion of these assets to cash both of these lead to improve earning power. He again suggested that if cave is taken for crash programmed for improving cash may have unexpected consequences. In the short term it will be possible to cut back expenditure on marketing and other function but future sales will probably suffer and, consequently, there will be further deterioration in cash flow. Further, he defined cash management as the process involved in the effective planning and control of cash requirements of a business.(Betty,1972)

The firm should keep sufficient cash neither more nor less. Cash shortage will disrupt the firm's manufacturing operations while excessive cash will simple remain idle without contributing anything toward the firm's profitability.

According to him, the major function of financial manager is to maintain sound cash position. Some theoretical insights about cash Management has presented by him. He said that cash management is concerned with the managing of; Cash flows into and out of the firm, Cash flows within the firms, and Cash balance hold by the firm at point of time by financing deficit or investing surplus cash.

It can be represented by a cash management cycle. Sales generate cash which has to be disbursed out. The surplus cash has to be invested while deficit has to be borrowed cash management seeks to accomplish this cycle at minimum cost. At the sometime, it also seeks to achieve liquidity and control. Cash management assumes more importance than other current assets because cash is the most significant and the least productive asset that a firm holds. It is significant because it is used to pay the firm's obligation. However, cash is unproductive. Unlike, fixed assets or inventories, it does not produce goods for sale. Therefore, the aim of cash management is to maintain adequate control over cash in some profitable way.

Cash is the important current asset for the operations of the business organization and public organization. Cash is the basic input needed to keep the business running on a countries basis, it is also the ultimate output expected to be realized by selling the service or product manufactured by the firm. The firm should keep sufficient cash, neither more nor less. Cash shortages are disrupting the firm's manufacturing operations while excessive cash is simply remaining idle, without contributing anything towards the firm's profitability. Thus, a major function of the financial manager is to maintain a sound cash position.

The term "Cash Management" is concerned with the management of current assets and current liabilities of the business, which is necessary for day-to-day operation. Cash management is concerned with the decision regarding the short-term funds influencing overall profitability add risk involving in the firm. The management of cash has been regarded as one of the conditioning factors in the decision making issues. It is no doubt, very difficult to point out as to how cash is needed by a particular company, but it is very essential to analyze and fine out the solution to make an efficient use of funds for minimizing the risk of loss to attain profit objectives.

Good cash management means:

- Knowing when, where, and how your cash needs will occur,
- Knowing what the best sources are for meeting additional cash needs and
- Being prepared to meet these needs when they occur, by keeping good relationships with bankers and other creditors.

Cash flow management is the process of monitoring, analyzing, and adjusting business' cash flows. For businesses, the most important aspect of cash flow management is avoiding extended cash shortages, caused by having too great a gap between cash inflows and outflows. We won't be able to stay in business if we can't pay our bills for any extended length of time.

Therefore, we need to perform a cash flow analysis on a regular basis, and use cash flow forecasting so you can take the steps necessary to head off cash flow problems. Many software accounting programs have built in reporting features that make cash flow analysis easy. One of the most useful strategies for business is to shorten cash flow conversion period so that business can bring in money faster.

2.2.9 Functions of Cash Management

There are various functions of cash management. They are as follows:

I) Cash planning: Cash flows (inflows and outflows) should be planned to project cash surplus or deficit for the period. Cash budget is prepared for this purpose.

II) To design and manage cash flows: The cash flows (inflows and outflows) should be properly managed. The inflows of cash should be accelerated and the outflows of cash should be decelerated as possible.

III) To maintain cash and marketable securities in amounts close to optimal level: The firm should try to maintain the appropriate level of cash balances. The cost of excess cash and the danger of cash deficiency should be matched to maintain the optimal level of cash balances.

IV) To place the cash and marketable securities in the proper institutions and in the proper forms: The idle cash or precautionary cash balances should be properly invested to earn profits. The firm should take the appropriate decision about the division of such cash balances between bank deposits and marketable securities.

2.2.10 Importance and Objectives of Cash Management:

'Cash' the most liquid asset, is of vital importance to the daily operations of business firm. “Cash is both the beginning and the end of the working capital cycle- cash, inventories, receivable and cash. Its effective management is the key determinant of efficient working capital management. Cash like the blood stream in the human body gives vitality and strength to a business enterprise. The steady and healthy circulation of cash throughout the entire business operation is the business solvency.” According to J.M. Keynes ‘it is cash, which keeps a business going. Hence, every enterprise has to hold necessary cash for its existence. In a business firm ultimately, a transaction results in either an inflow or an outflow of cash. In an efficient managed business, static cash balance situation generally does not exist. Adequate supply of cash is necessary to meet the requirement of the business. Its shortage may stop the business operations and may degenerate a firm into a state of technical insolvency and even of liquidation. Through idle cash is sterile; its retention is not without costs. Holding of cash balance has an implicit cost in the form of its opportunity costs. ‘The highest the level of idle cash the greater is the cost of holding it in the manner of loss of interest, which could have been earned either by investing it and securities or by reducing the burden of interest charges by paying off the loans taken previously. If the level of cash balance is more than the desired level with the firm, it shows mismanagement of funds. Therefore, for its smooth running and maximum profitability proper and effective cash management in a business is of paramount importance.

Efficient and optimal cash flow management is important to all firms. Cash is a non earning asset in the sense that although it is needed to pay for labor and raw materials to buy fixed assets, to pay taxes, to serve debt, to pay dividends and so on. Cash management is to reduce cash holdings to the minimum necessary level to conduct business.

The main objectives of cash management are to determine the optimal cash balance which is neither excessive nor inadequate, and to ensure that the optimal cash balance is maintained all through; Cash should not remain idle unnecessarily, and simultaneously, it should not fall short of the requirements also. For this, the collections and the disbursements of cash are to be managed properly. In case the flow of cash in not even, the cash is to be arranged by rising short-term loans for meeting the payment bills; and in cash the collections have been made but there is no immediate outlet for payment, the idle funds are invested in temporary securities so as to yield some return. Thus, the problem is to manage the cash affairs in such a manner that gives the least possible cost of maintaining cash. The main objective of financial management-maximizing profitability without sacrificing liquidity-should be borne in mind while attempting to manage cash and bank balances. Optimal cash balance does not mean minimum cash balance since minimum cash may lead to shortage of cash and the day-to-day operations of the business may suffer. The level of cash which meets the requirements appropriately and which gives the minimum cost is known as the optimum level of cash. The basic objective in cash management is to keep the investment in cash as low as possible while still keeping the firm operating efficiency and effectively. This goal uses reduces to the dictum collect early and pay late.

Cash management covers the management of not only cash but near-cash assets also, e.g., marketable securities and time deposits with banks, because these are readily convertible into cash, As a matter of fact, 'near-cash assets' are to be included under' cash' for the purpose of cash management since surplus cash is required to be invested in near-cash assets for the time being.

Business analysts report that poor management is the major reason why most businesses fail. It would probably be more accurate to say that business failure is due to poor cash management. For this, financial manager should take a look at the cash flow process to find out. The starting point for avoiding a crisis is to develop a cash flow projection. Smart business owners know how to develop both short-term (weekly, monthly) cash flow projections to help them manage daily cash, and long-term (annual, 3-5 year) cash flow projections to help them develop the necessary capital strategy to meet their business needs. They also prepare and use historical cash flow statements to gain an understanding about where all the money went.

Therefore, we need to perform a cash flow analysis on a regular basis, and use cash flow forecasting so you can take the steps necessary to head off cash flow problems. Many software accounting programs have built-in reporting features that make cash flow analysis easy. One of the most useful strategies for businesses is to shorten cash flow conversion period so that business can borrow money faster.

2.2.11 Efficiency of cash management:

Cash performs number of functions as it makes payment possible. It serves to meet emergencies. But if cash is kept idle it contributes directly noting to the earning of the corporation. As such corporation must adopt such a policy that makes optimum cash management possible. The financial manager of the corporation should try to minimize the corporations holding of cash wide still maintaining enough to insure payment of obligation. "For improving the efficiency of cash management effective method of collection and disbursement should be adopted. Some methods for efficiency of cash management are briefly described below." (Van Horne, 1974:426)

a) Speedy cash collection:

A firm can conserve cash and reduce its requirement for cash balance if it can speed up its cash collection. Reducing the lag for gap between the times a customer pays his bill can accelerate cash collection and the time the cheque is collected and funds become available for use. Within this time gap, the delay is cause by the mailing time. The amount of cheques sent by customer but not yet collected are called deposit float. The greater the deposit floats, the longer the time taken in converting cheque into usable funds. There are mainly two techniques, which can be used to save mailing and processing time which are concentration banking & lock box system.

b) Concentration Banking:

To speed up collections, collections should be decentralized as far as possible. If, instead of one collection centre, there are a number of collection centers for the purpose, collections would certainly be speeded up. This procedure is named as concentration banking. Through this procedure, the mailing time of the customers is reduced. Customers of a particular region may be directed to deposit/remit their payments to a collection centre will deposit the payments received in the local bank regularly (may be daily), which is generally at the firm's head office. This concentration bank or central bank can get the payments by telegraphic transfer or telex, as per the instructions given by the firm. The collection centers may themselves collect the cheques or the cash payment from the customers, instead of customers remitting the payments to the collection centre. It furthers accelerates the process of collection because of the reduction in the mailing time.

Concentration banking is a system of operating through number of collection centers, instead of a single collection centre centralized at the firm head office. In this system the firm will have a large number of bank account operated in the area where the firm its branches. All branches may not have the collection centers. The collection centers will be required to collect cheque from customers and deposit them in their local bank accounts. The collection centre will transfer funds above some predetermined minimum to a control generally at the firm's head office, each day. A concentration bank is one where the firm has a major bank account from which the firm makes usually the disbursement.

c) Lock box system:

The system is a further improvement over the concentration banking system in the atter of accelerating the cash inflows. Under this system, the time required in collecting the payments, processing them and finally depositing them in the local bank accounts is further reduced. Before determining the collection centers a feasibility study is made of the possibility of cheques that would be deposited under alternative plans. In this regard operations research techniques have proved useful in the location of lock box sites. A post office box is hired by the firm at each collection centre and the customers are instructed to mail through remittance of the box. The remittance is picked up by the local bank directly from the post office box (i.e., lock box) as per the instructions given by the firm. The bank can pick up the mail several times a day and deposit the cheques in the amount of the firm. A record is kept by the bank regarding the cheques deposited and is sent to the firm as and when required.

d) Slowing Disbursement:

Apart from speedy collection of account receivable the operation cash requirement can be reduce by slow disbursement of account payable. It may be recalled that a basic strategy of the cash management is delay payment as a long as possible without impairing the credit rating of the firm. In fact, slow disbursement represents a source of funds requiring no interest payments. There are some technique to delay payment is: avoidance of early payment centralized disbursement, float and accruable. Quick collection and slow disbursement accomplish the corporation with adequate cash in hand for longer periods. Effective control of disbursement can results in a faster turnover of cash. Whereas the underlying objectives of collection are maximum acceleration, the objectives in disbursements are to slow them down as much as possible.

e) Cash velocity:

Efficiency in the use of cash depends upon the cash velocity i.e. level of cash over a period of time.

$$\text{Cash Velocity} = \frac{\text{Annual sales}}{\text{Average sales}}$$

f) Synchronized cash flows:

Situation in which inflow coincides with out flows, thereby permitting a firm to hold transaction balance a minimum.

g) Using Float:

Cheque written by the firm but not deducted from the bank records until they are actually received by the bank, possible a matter of several days Slag between the times, cheques is written until the time the bank receives it is known as float.

h) Transferring Fund:

There are two principal method-wire transfer and electronic Depository Transfer Cheques. With a wire an Electronic Depository Transfer Cheque (EDTC) arrangement in the movement of funds, an electronic cheque image is processed through an automatic clearing house. The funds become available on business day later. From small transfer, a wire transfer may be too costly.

i) Minimum cash balance:

Corporations are required to keep a minimum cash balance requirement of a bank either for the service in record or in consideration of lending arrangement.

j) Overdraft system:

Systems where depositors may write cheques in excess of their balances with their banks automatically extend loans to cover the shortage. Most of the foreign countries are use over draft system.

k) Transferring Fund:

A transferring fund is a system for moving funds among accounts at different bank. The main transfer mechanisms are Depository Transfer Cheques (DTC), Electronic Depository Transfer Cheques (EDTC) and wire transfers.

2.2.12 Different Techniques of Cash management

I. Cash planning:

Cash planning can help to anticipate future cash flows and needs of the firm and reduces the possibility of idle cash balance and cash deficiencies. Cash planning is a technique to plan for and control the use of cash. The forecasts may be based on the present operation or anticipated future operation. Cash plan is very crucial in developing the overall operation plans of the firm. Cash planning may be done on daily, weekly or monthly basis. It depends upon the size of the firm and philosophy of management.

II. Cash budget:

Cash budget is the most significant device to plan and control cash receipt and payment. A cash budget is a summary statement of the firm expected cash inflows and outflows over a projected time period. This information helps the financing of these needs and exercise control the cash and liquidity of the firm.

The time horizon of cash budget may differ in various firms. A firm whose business is affected by seasonal variations may prepare monthly cash budget. Daily or weekly cash budget should be prepared for determining cash requirement. If cash flows shows extreme fluctuation, cash budget for longer interval may be prepared of cash flows are relatively stable.

III. Short term Cash forecasting:

Cash budget is the most significant device to palm for and control cash receipt and payment, a cash budget is a summary statement of the firm's expected cash inflows and outflows over a projected time period. Cash forecast are needed to prepare cash budget. Generally forecasts covering period of one year of less are considered as short term forecast. The important functions of carefully developed short term forecast are too;

- Determine operating cash requirement
- Anticipate short term financing, and Manage investment surplus cash.

There are most two common used methods of short term cash forecasting are as follows.

a. Receipt and disbursement forecast

The prime aim of receipt and disbursement forecasts is to summarize the flows during a predetermined period. In case of those companies where cash items of income and expanses involves this method is favored to keep a close control over cash.

b. Adjusted net income method

This method of cash forecasting involves the tracing of working capital flows. Sometime it is also called the sources and uses approach. Two objectives if the adjusted net income approaches are to project the company's need for cash at some future date and to show whether the company can generate this money internally or not, how much will give to either borrow or rise in the capital market. In preparing the adjusted net income forecasts items such as net income, depreciation, taxes, dividend etc. can easily be determined from the company's annual operating budget.

iv. Long term cash forecasting:

Long term cash forecasting are prepares to give an idle of the company's financial requirement of distant future. Once a company has developed long term cash forecast, it can be used to evaluate the impact of say new product development on the firm financial condition three, five or more years in future. The major uses of the long term cash forecasts are company's future financial needs, especially for it working capital requirement, to evaluate proposed capital projects and it help to improve corporate planning. Long term cash forecasting not only reflects more accurately the impact of any recent acquisitions but also foreshadows financing problems.

2.2.13 Determining the Optimum Cash Balance:

Financial manager responsibilities are to maintain a sound liquidity position of the firm. So that dues may be settled in time. The firms need cash not only to purchase raw materials and pay wages but also for payment of dividend, interest, taxes and countless other purpose. The text of liquidity is really the availability of cash to meet the firm obligations when they become due. Thus the cash balance is maintained for transaction purpose and an additional amount may be maintained as a safety stock. The financial manager should determine the appropriate amounts of cash balance. A tradeoff between risk and return influences such a decision. If the firm maintains small cash balance, its liquidity position becomes weak and suffers from a capacity of cash to make payment. But investing released funds in some profitable opportunities can attain a higher profitability. If the firm maintains a high level of cash balance it will have a sound liquidity position but forego the opportunity to earn interests. Thus the firm should maintain an optimum cash balance to find out the optimum cash balance the transaction costs and risk of too small a balance should be matched with the opportunity costs of too large a balance. The figure shows this trade-off graphically;

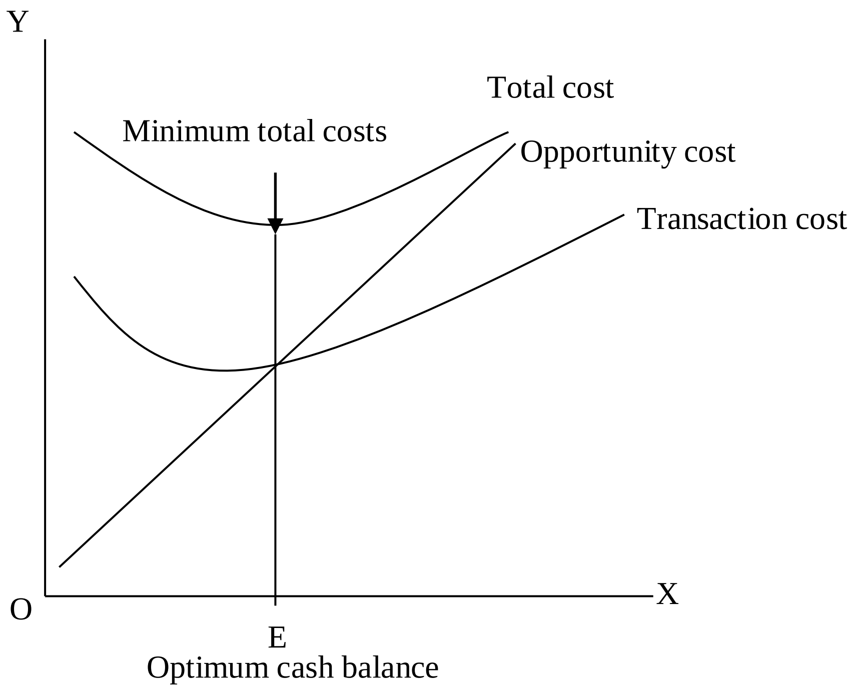


Figure no. 2-1 Determination of optimum cash balance (Baumol, 1952:545)

If the firm maintain larger cash balances its transaction costs would decline, but the opportunity costs would increase. At the point 'E' the sum of the two costs is minimum, so this is the point of optimum cash lance, which a firm should sack to achieve.

2.2.14 Cash Management Models:

Optimal balance of cash is determined by the cost-benefit tradeoff between interests, income, transaction costs if no compensating balance were required. However, with the existence of conversion delays and positive transaction cost, the firm would prefer to hold some cash balance. There are different types of analytical models for cash management.

1. Baumol Model
2. Miller-Orr Model
3. Orgler's Model

Baumol Model

Baumol's Model, also known as Inventory model, is one of the simplest models to determine optimal cash under the condition of certainty. According to this model carrying cost of holding cash is balanced against the fixed costs of transferring marketable securities into cash or cash into marketable securities.

The purpose of this model is to determine the minimum cost amount of cash that a financial manager can obtain by converting securities to cash considering the cost of conversion and the counter-balance cost of keeping idle cash balances which otherwise could have been invested in marketable securities.

The total cash associate with cash management, according to this model, has two elements: (i) Cost of converting marketable securities into cash and (ii) the lost opportunity cost.

The conversion costs are incurred cash times marketable securities are converted into cash symbolically, total conversion cost per period.

=Tb/C... (i)

Where,

b= Cost per conversion assumed to be independent of the size of transaction.

T= Total transaction cash needs for the period.

C= Value of marketable securities sold at cash conversion.

The opportunity cost is derived from the lost/forfeited interest rate that could have been earned on the investment of cash balances. The total opportunity cost is the interest rate times the average cash balance kept by the firm. Symbolically, the average lost opportunity cost

$=I(C/2)$………………….. (ii)

Where,

I= Interest rate that could have been earned

C/2= Average cash balance i.e. the beginning cash plus the ending cash balance of the period divided by 2

The total cost associated with cash management compromising total conversion cost plus opportunity cost of not investing cash until it is needed in interest-bearing instruments can be symbolically expressed as

$I(C/2+ Tb/c)$……………. (iii)

To minimize the cost, therefore the model attempts to determine the optimal conversion amount i.e. the cash withdrawal that costs the least. Symbolically, the optimal conversion (c*) amount

$C^*= \sqrt{2bT/i}$…………………. (iv)

The model in terms of equation (iv) has important implications. First, as the total cash needs for transaction rises because of expansion/diversification etc., the optimal withdrawal increases less than proportionately. This is the result of economy of scale in cash management. Each project does not need its own additional cash balance. It only needs enough added to the general cash balance of the firm to facilitate expanded operations. Secondly, as the opportunity interest rate increases the optimal cash withdrawal decreases. This is to because as increases it is more costly to forfeit the investment opportunity and financial managers want to keep as much cash invested in securities for as long as possible. They can afford to do this as the higher interest rates because at those higher rates any shortfall costs caused by a lower withdrawal are offset.

In sum, the model of cash management is very simplistic. Further, its assumption of certainty and regularity of withdrawal of cash do not realistically reflect the actual situation of any firm. In addition, the model is concerned only with transaction balances and not with precautionary balances. In addition, the assumed fixed nature of the cash withdrawals is also not realistic.

Nevertheless, the model does clearly and concisely demonstrates the economics of scale and the counteracting nature of the conversion and opportunity costs, which are undoubtedly major considerations in any financial manager's cash management strategy (Baumol, 1952:545-556).

The point on minimum cost will be justified by the following figure

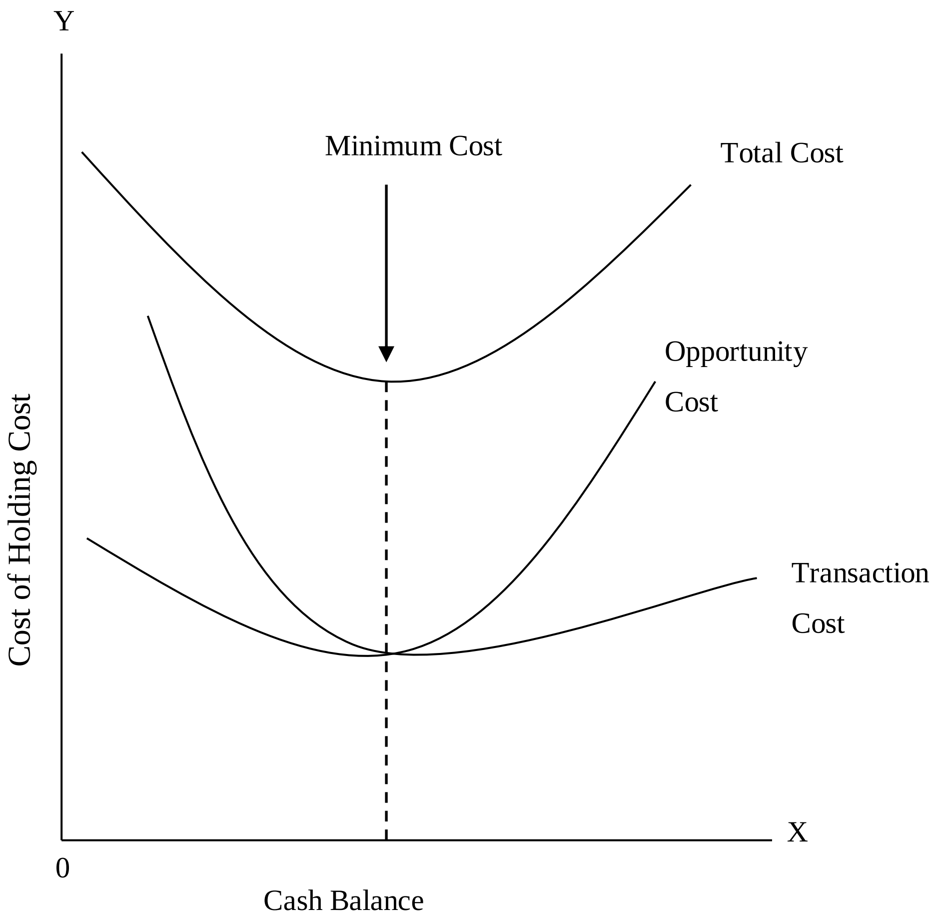


Figure No.2.2 Baumol's Model Showing Minimum Cost of Holding Cash

Total Cost =Holding Cost + Transaction Cost

= (Average Cash Balance *Opportunity Cost) + (Cost per Transaction* No. of Transaction)

Or, Total Cost = b (T/C*) +I(c*/2)

Miller-Orr Model

When cash balance fluctuates unpredictably, we use control theory to determine optimal behavior regarding cash holdings. Stochastic model/ Miller-Orr Model assume that cash flows are uncertain and unknown in advance. Theoretically, there are number of approaches to control theory. Among them, Miller-Orr Model, which specifies two controls limited i.e. upper and lower limit.

The objective of cash management according to Miller-Orr is to determine the optimum cash balance level, which minimizes the cost of cash management.

Symbolically,

$C= bE(N)/t + jE\ (M)$………………..(i)

Where

b= the fixed cost per conversion.

E (M) =the expected average daily cash balances.
E (N) = the expected number of conversions.
t= the number of days in the period.
j= the lost opportunity costs.
C= total cash management costs.

The Miller-Orr model is in fact an attempt to make the Baumol model more realistic as regards the pattern of cash flows. As against the assumption of uniform and certain levels of cash balances randomly fluctuate between an upper bound (h) and a lower bound (o). When the cash balances hit the upper bound (h), the firm has too much cash and should buy enough marketable securities to bring the cash balances back to the optimal bound (z). When the cash balances hit zero, the financial manager must return them to the optimum bound (z) by selling converting securities in to cash. According to the Miller-Orr model, as in Baumol Model, the optimal cash balance (z) can be expressed symbolically as

$Z= {}^{3}\sqrt{}(3b^{2})/4i+L$………………….(ii)

Thus, as in Baumol model, there are economies of scale in cash management and the two basic costs of conversion and the lost interest that have to be minimized. Miller-Orr model also specifies the optimum upper boundary (h) as three times the optimal cash balance level such that

Upper Limit (h) = 3Z – 2L…………………….(iii)

Average Cash balance = (h + Z)/3

Further, the financial manager could consider the use of less liquid, potentially more profitable securities as investments for the cash balances in excess of cash (Miller & Orr, 1966:413-435).

<u>Orgler's Model</u>

According to this model, an optimal cash management strategy can be determined through the use of a multiple linear programming model. The constriction of the model comprises three sections;

a) Selection of the appropriate planning horizon
b) Selection of the appropriate decision variables
c) Formulating of the cash management strategy itself

The advantage of linear programming model is that it enables co-ordination of the optimal cash management strategy with the other operations of the firm such as production with less restriction on working capital balances. The model basically uses one-year planning horizon with twelve month periods because of its simplicity. It has four basis sets of decisions variables which influence cash management of a firm and which must be incorporated into the linear programming model of the firm. These are: (i) payment schedule, (ii) short term financing, (iii) purchase and sale of marketable securities and (iv) cash balance itself.

The formulation of the model requires that the financial manage first specify an objective function and then specify a set of constraints. Orgler's objective function is to minimize the horizon value of the net revenues from the cash budget over the entire planning period using the assumption that all revenue generated is immediately re-invested and that any cost is immediately financed. The objective function recognizes each operation of the firm that generates cash inflow or cash outflows as adding or subtracting profit opportunities for the firm is cash management operations. In the objective function decision variables which cause inflows such as payments on receivables have positive co-efficient, while decision variables which generate cash inflows, such as interest on short-term borrowings have negative co-efficient. The purchase of marketable securities would for example produce revenue and they have a positive co-efficient while the sale of those securities would incur conversion costs and have a negative co-efficient. A very important feature of this model is that it allows the financial managers to generate cash management with production and other aspects of the firm (Orgler: 1970:305).

2.2.15 Cash Conversion Cycle

Cash conversion cycle, also known as asset conversion cycle, net operating cycle or just cash cycle, is a ratio used in the financial analysis of a business. The higher the number, the longer a firm's money is tied up in operations of the business and unavailable for other activities such as investing. The cash conversion cycle is the number of days between purchasing raw materials and receiving the cash from the sale of the goods made from that raw material.

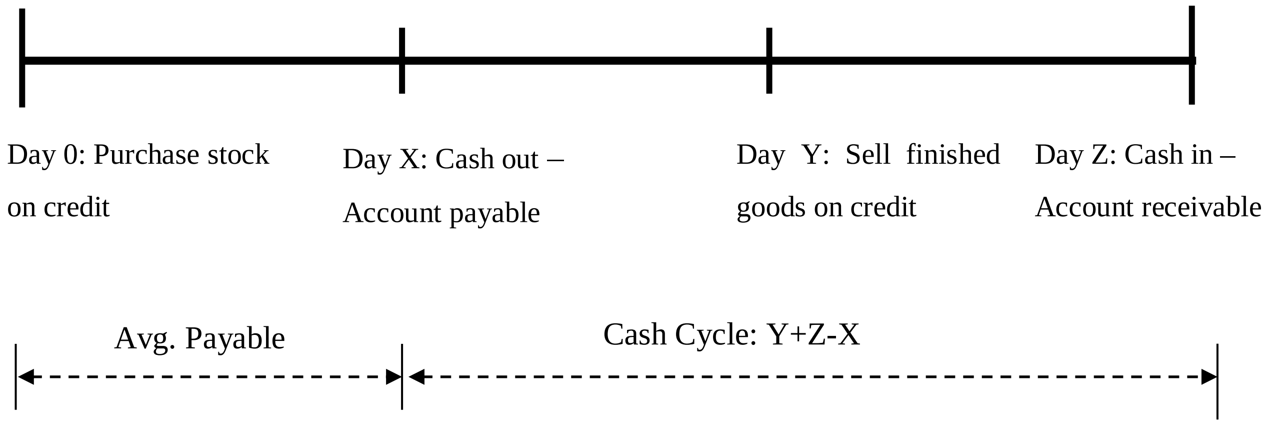
Cash conversion cycle = Average stockholding period (in days) + Average receivables processing period (in days) –Average payable period (in days)

Where,

Average stockholding period (in days) = closing stock / average daily purchases.

Average receivables processing period (in days) = accounts receivables / average daily credit sales.

Average payable processing period (in days) = accounts payable / average daily credit purchases.



The duration between the purchase of a firm's inventory and the collection of accounts receivable for the sale of that inventory also known as cash cycle

Cash Conversion Cycle = Inventory Processing Period + Days to Collect Receivables.

2.2.16 Credit Management:

Credit policy can have significant influences on sales. In theory, the firm should lower its quality standard for accounts accepted as long as the profitability of sales generated exceeds the added costs of receivable is determined by the volume of credit sales and the average period between sales and collection.

Firm's objective of credit management is not only to collect receivable promptly, but also to give an outlook to the benefit cost trade off involve in various aspects of accounts receivable management. The important criteria to maintain benefit cost trade off the firm's receivable management are to set up credit policies. A firm's policy provides guidelines for determining whether to expand credit to a customer and how much credit should be given to the customer. Collection policies decision includes three dimensions.

I) Credit standards

a) Sales revenue
b) Investment in accounts receivable
c) Bad debt expenses

II) Credit terms

a) Cash discounts
b) Cash discount period
c) Credit period

III) Collection policies

a) Correspondence
b) Telephone calls
c) Personal visits
d) Legal action

2.2.17 Cash Flow:

Cash flow simply refers to the flow of cash into and out of a business over a period of time. Watching the cash inflows and outflows is one of the major management tasks of an owner. The outflow of cash is measured by those cheques of transactions that will write every month to pay salaries, suppliers, and creditors. The inflows are the cash, which receive from customers, lenders and investors. Positive cash flow means the cash coming "in" to the business is more than the cash going "out" of the business; the company has a positive cash flow. A positive cash flow is very good and the only worry here is what to do with the excess cash. Negative cash flow means the cash going "out" of the business is more than the cash coming "in" to the business; the company has a negative cash flow. A negative cash flow can be caused by a number of reasons. For example: too much or obsolete inventory or poor collections of accounts receivable can be the cause of short of cash. If the company can't borrow additional cash at this point, the company may be in serious trouble.

A Cash Flow Statement is typically divided into three components. These components are stated below:

Operating Cash Flow:-

Operating cash flow, often referred to as working capital, is the cash flow generated from internal operations. It is the cash generated from sales of the product or service of business. It is the real lifeblood of business, and because it is generated internally, it is under our control.

Investing Cash Flow:-

Investing cash flow is generated internally from non-operating activities. This component would include investments in plant and equipment or other fixed assets, nonrecurring gains or losses or other sources and uses of cash outside of normal operations.

Financing Cash Flow:-

Financing cash flow is the cash that flows to and from external sources; such as lenders, investors and shareholders. A new loan, the repayment of a loan, the issuance of stock and the payment of dividend are some of the activities that would be included in this section of the cash flow statement.

2.2.18 Cash Flow Projection

A cash flow projection is a forecast of the difference between cash coming "in' the business and cash going "out" of the business. The estimation or projection of cash flow is a powerful management tool for business. If we were to choose one financial management tool that we use on a routine basis, the cash flow projection and cash flow analysis would be the one to choose.

By knowing your cash position now and in the future, you can:

a) Make sure business have enough cash to purchase sufficient inventory for seasonal cycles;
b) Take advantage of discounts and special purchases;
c) Properly plan equipment purchases for replacement or expansion;
d) Prepare for adequate future financing and determine the types of financing (short-term credit line, permanent working capital, or long-term debt).

e) Impress lenders with ability to plan and repay financing.

Moreover, it just makes good business sense to know where you are and where you are going with your company. A cash flow projection can help to do this. For a new or growing business, the cash flow projection can make the difference between success and failure. For an ongoing business, it can make the difference between growth and stagnation.

The cash flow projection shows how cash will flow in and out of the business and enables firms to budget the cash needs of the business over a period of time. The ability to predict and plan cash outlays means that firms won't be forced to resort to unexpected borrowing to meet your cash needs. The lack of liquidity can be a killer- even for profitable business. Lack of profits won't kill a business nearly as quickly as the lack of cash to pay your trade creditors. Remember, non-cash expenses such as depreciation can make your profits look negative, while your cash flow is positive. And you could also be showing a profit but have negative cash flow. That's why it is essential that we understand how to use a cash flow statement, and use it on a regular basis.

Preparing a cash flow projection is a something like preparing budget and balancing checkbook at the same time. Unlike the income statement, a cash flow statement deals only with actual cash transactions. Depreciation, a non-cash transaction, does not appear on a cash flow statement. Loan payments (both principal and interest) will appear on your cash flow statement since they require the outlay of cash.

Cash is generated primarily by sales. In most of the businesses, not all sales are cash sales. Even if firm's have a retail business and a large percentage of sales are cash, it is likely that firm offer credit (charge accounts, term payments, lay-a-way, and trade credit) to customers. Thus, we need to have a means of estimating when those credit sales will turn into cash-in-hand. Cash flow projections should be prepared for short-term (weekly, monthly), and long-term (annual, 3-5 years) planning purposes. They are used for deficient purposes and thus are generally prepared differently.

2.2.19 Cash Flow Statement (CFS)

The Cash Flow Statement attempts to analyze the transactions of the firm in terms of cash i.e., the transactions generating cash and using cash. The focus in the cash flow statement is on cash rather than on working capital. So, the CFS provides a summary of sources of cash and uses of cash in the firm. The sources of cash may be the cash profits earned by the firm, issue of capital for cash, issue of other securities for cash, borrowings, sale of assets or investments etc. The uses of cash may be purchase of assets, investment, and redemption of debenture or preference share, repayment of loan, payment of tax, dividend distribution etc. The excess of sources of cash over the uses of cash would be the increase in cash during the year and vice-a-versa. Thus, the CFS summarizes the cash inflows and outflows. (Rustagi, 2001:155)

2.3 Review of Books and Literatures:

Revenue planning and cash management seems to be a new subject for research and study. The researcher could find limited researches made in the revenue planning and cash management for the partial fulfillment of the requirement for the Degree of Master in Business Studies. But many researchers have been made in the area of profit planning and control of Nepal Telecom. As profit planning and control covers some aspects of revenue planning, researches made on this area are taken in to consideration for the sake of review to examine how efficiently they apply profit planning and control tools. An attempt is made here to review some of the researches which have been submitted in the area of revenue planning and cash management in the context of Nepal Telecom.

2.3.1 Review of Books:

Keynes (1936) said that the demand for money and other liquid assets held by firms are based on transactions, wealth and portfolio balance. In this approach cash balance should increase less then proportionately with transaction. The wealth model relies on the assumption that business firm will distribute their total assets among various categories by equating their marginal rates of return. The portfolio balance view explicitly adds the risk factors as firm should balance risk and rate of return. In practice the firm must compare the interest rate earned by the government securities with the risk of not holding money that that is the possibility of forced liquidation of some assets with sure capital losses.

Weston and Brigham (1978) have poured some views about cash management after their various studies on it. The bond conceptual finding of their studies proved sound knowledge and guide lines for the future studies in the field of cash management. They explained in the beginning the motives for holding cash, specific advantage of adequate cash, synchronization of cash flows, expanding collection and cheque clearing, using float, cost of cash management, determining minimum cash balance, compensating balance, marketable securities, substituting for cash criteria for setting securities investment opportunities.

Van Horn (2002) has prescribed the knowledge about cash management. He said that cash management involves managing the monies of the firm to maximize the cash availability and interest income to any idle funds. At one end the function starts when a supplier, an employee of government realizes collected fund from the firm as an amount payable of accruals. All activities between these two points fail within the realm of cash management the firm's effort to get customer to pay their bills at a certain time fall within account receivable management on other hand, the firm's decision about when to pay its bills involves account payable and accrual management. He again described an idea of effective collection and disbursement of cash, we should attempt to accelerate collection and handle disbursement so that maximum cash is available. Collection can be accelerated by me and of concentration banking, a lock box system and certain other procedure. Disbursement should be handled to give maximum transfer flexibility and the optimum timing of payment, heeding meaningful however, of supplier relation. Method of controlling disbursement i.e. electronic fund transfer is becoming increasingly important and most corporation use such transfer in one way of another.

Pradhan (2004) explained about cash and it management. He told that cash include coins, currencies, cheque hold by a firm and balances in its bank account. This money is immediately useable to pay its bills. Some times "hear cash items" are also includes in cash, i.e. marketable securities. If the firm has excess cash, it may decide to convert it to short term investments. The financial manager will purchase low risk, high liquidity money market instruments that can he converted aback to cash without delay if it has been arise. The securities provide a small profit on cash that may not be needed immediately for the firm's operation. These securities are widely used as short term investment by the firm in developed countries. Each security offers different characteristics that make it suitable for different firms. He said cash management is also called management of money position because cash includes not only the cash or currency in hand but also the easily convertible securities or other neat cash items, e.g. time and demand deposits, readily available credit and so on. According to him concerning area of cash management is;

1. Management of cash flows in to and out of the firms
2. Management of cash flow within the firm
3. Management of cash balance held by the firm at a point of time

2.3.2 Review of Articles:

Miller and Orr (1996), in their article *"A Model of the Demand for Money in firms"* on quarterly journal of economic, (Vol. LXV) have develop a model known as Miller-Orr model, that takes into account the realistic pattern of cash flow and prescribed when and how much to transfer from cash to investment account and vice-versa.

Boumol (1952), at his article *"The Transaction Demand for Cash: An Inventory Theoretic Approach"* on quarterly journal of economic (Vol. LXV) identifies the cash maintenance as analogues to inventory and demonstrates that the model of economic order quantities that is applicable to inventory management is perfectly applicable in cash management too. He has presented model in view of minimizing the opportunity cost of holding cash and maximizing the return on available funds not required from immediate use be invested in the marketable securities.

Saksena (1974), at his article *"Towards More Efficient Cash Management"* on quarterly journal of management quality (Vol. No. 5) identified that the term cash management has a meaning according to the purpose for which it is used and persons with varying branches of knowledge implies various meaning of cash. Economic considered cash as the means to satisfy human want, the lawyer the view that cash is legal tender money issued by a determinate authority. However our concern of the meaning of cash is an asset constituting the most liquid item among all the assets. But to cash involves cost because corporation has to rise through issue to share or by borrowing with interest. In through generation money market procurement is liability and wasted opportunity unless it is not put to its optimal use.

2.3.3 Review of Thesis:

Bhatta (2006) has conducted a research on the topic of *" Revenue Planning and Cash management of Public Utility in Nepal: A case study of Nepal Telecom,"* using secondary sources to collect the data and other necessary information. Mr. Bhatt has pointed out the following objectives and major findings.

Major Objectives:

1) To analyze the gap between budgeted and actual revenue and its demand.
2) To examine cash collection and disbursement.
3) To review cash flow from operating, investing and financing activities.

4) To have information, control and security over cash balances and payment systems.

Major Findings:

1) Sales budget shows ISD sector's sales revenue is main revenue sources of Nepal Telecom, which contributes more than 40% in average.
2) Because of high demand of Telephone line there exist small gap between actual production and actual sales in lines.
3) Correlation and coefficient value shows that there are positive correlation 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.
4) Revenue per employee is increasing trend but Nepal Telecom has not incentive or motivation planning to promote employees.

The collection of receivable from the customers in the company is very small, decreasing year by year. It denotes efficiency of Nepal Telecom to collect its revenue in time. But A/R is low increasing in F/Y 2059/60. The decreasing trend of average collection period has shown the improvement of credit management and strict credit policy of the company.

Karki (2007) has made a study entitled, *"Revenue Planning in Service oriented Company : A case study of Nepal Telecom Limited.*" The main objectives of the study are to search and highlight the role of revenue planning in the performance of NTC.

Major Objectives:

1) To sketch out the use of revenue planning tools and techniques.
2) To examine the use of planning in managerial short run and long run decision making.
3) To point out short Cumming in sales budgeting and planning.

Major Findings:

1) No plans and programmed has been made about possible consumption of telephone industries.
2) NTC has not adopted of practice of preparing monthly revenue earning reports.
3) The revenue plan prepared by the branches and sub branches were not taken as reference for preparing of central revenue plan.
4) There are consistency between planned sales and actual sales, their correlation was high.

5) Planned sales revenue was highly and positively correlated. The correlation of actual sales revenue is also positive and high.
6) The analysis of category wise revenue plan shows that achievement in domestic, noncommercial industrial categories are highly consistent. But the achievements in remaining categories are fluctuating.
7) NTC has been making efforts to bring operating loss down to 10% since 1990/00 but actual loss crossed about 2% in the analysis period.

Chataut, Bhuwan Raj (2008) has made a study entitled, *"A Study on Cash Management in NTC."* Mr. Chataut has pointed out the following objectives and major findings.

Major Objectives:

1. To observe devices of planning and control of cash in NTC.
2. To examine the existing internal control policy in NTC regarding cash control practices.
3. To identify the shortage or excess of cash in the company and the procedures of financing for the shortage and investment of excess cash.
4. To study the liquidity position of the company.

Major Findings:

1. The actual cash balances were higher than approved budgeted amounts. It shows that there was no effective implication of budgeted amount.
2. Nepal Telecom prepared and approved deficit budget each year from 2056/2057 to 2061/2062. When opening balance was not included in source side of budget, total budgeted cash uses was always higher.
3. The goal of approved budget, which was designed by the company, was not accomplished by company. There was great difference between actual uses of cash in various head than as planned in approved budget.
4. An attempt was made to diagnose the financial health of the company with regards to analysis of various ratios.

Shrestha, Kiran (2009) has made a thesis on the topic of *"Profit Planning and Control in Public Utilities Sector, A Comparative Study on Nepal Water Supply Corporation (NWSC) and Nepal Telecom(NTC)."* The study has been focused to draw a vital conclusion about both Organization regarding their economic capability, operating efficiency and the financial positions. Both Organizations are large scale public enterprise and have purposeful operation.

Major Objectives:

The primary objective of this study is to assess the application of comprehensive profit planning and control or budgeting system in communication and water sector comparatively with the following specific objectives:

1) To analysis the various budget activities adopted by both organization. (NTC and NWSC)
2) To assess the financial performance of both organizations. (NTC and NWSC)
3) To see NTC and NWSC's Profit planning on the basis of overall managerial budgeting. (profit Planning)
4) To examine the practice and effectiveness of profit planning in NTC and NWSC.

Major Findings:

Analyzing in details the present practice of profit planning process in NWSC and NTC, this study concludes the following findings:

1) NWSC and NTC have not adequately considered controllable and non controllable variables affecting the company. Furthermore, they have no in depth analysis of the company's strengths and weakness.
2) Nepalese public enterprises lack budgeting experts and skilled planners. Plans are formulated on traditional ad- hoc basis.
3) Cost volume profit relationship has not been considered while developing the sales plans; fixed assets purchase plan and pricing strategy.
4) All the expenses such as manufacturing, administrative, selling and distribution expenses, employee expenses and non administrative expenses are not kept separately and systematically, but in NTC to some extent. All these expenses are combined together.
5) Capital expenditure plans are not adequately prepared in advance.
6) NWSC and NTC have not formulated the policy about financing the cash deficit that may arise in course of operation. Likewise, these companies have no any advance program of utilizing the excess funds that is likely to generate in course of operation.

   Liquidity position of NTC as current ratio show is satisfactory. NWSC is not in position to pay the current liabilities at the time requirement.

Neupane (2010) has conducted a research on the topic *"A Study on Profit planning Mechanism and Progress Status of Nepal Telecom"* using secondary sources to collect the data and other necessary information. Mr. Neupane has pointed out the following objectives and major findings.

Major objectives:

1) To examine the practices and effectiveness of profit planning in NTC.
2) To examine the present comprehensive profit planning system applied by NTC.
3) To analyze the various function plan formulated and implemented in NTC.
4) To evaluate the targeted variable and actual variable of NTC.
5) To analyze the financial position of NTC with the help of ratio analysis.

Major findings:

1) There seems to be lack of systematic profit planning and control. Plans are prepared on 'ad-hoc' basis.
2) The sales revenue of NTC is increasing year by year but the unit price of the increase is not stable.
3) Actual production lines are more variable than budgeted production line.
4) Profit pattern of NTC is on increasing trend.
5) Variable analysis is completely ignored in the corporation.

Kunwar (2010) conducted a research on the topic of *"A study on Revenue Planning of Nepal Telecom"* using secondary sources to collect the data and other necessary information. Mr. Kunwar has pointed out the following objectives and major findings.

Major Objectives:

1) To analyze the existing revenue planning practices of Nepal Telecom.
2) To evaluate the revenue planning system and its impact on profitability of NTC.
3) To make comparison between revenue and cost expenses planning of NTC.
4) To provide recommendation for improvement of Nepal telecom revenue planning process on the basis of study findings.

Major Findings:

1) Variable cost of NTC is very less compared to its fixed cost. Contribution margin ratio of NTC is very high.
2) Mobile phone has contributed 18.39% in revenue in 2007/08.

3) NTC has launched various services to its customer to increase but in rural area it is not able to fulfill the demands of customer for communication services.
4) Segregation of fixed, variable cost is ignored by this enterprise CVP analysis is not practicing by NTC. No any method has been adopted to segregate cost into fixed and variable.

The government of Nepal has focusing on the development of telecommunications by giving high priority in each development plans. However, the telecommunication development of Nepal is lacking financial resources, technical knowhow and problem between management and administration. In the process of development of telecommunication sector, foreign aid has contributed to the establishment of a training institution to train the telecommunication technician of Nepal.

2.4 Research Gap:

The topic is also called the difference between the previous researches and the current research. Most of the past research studies are about profit planning system of public enterprise. The previous researches did not disclose which of the profit planning and control tools are in practices and which are not and why? The researcher could find only one research study so far that was related to the revenue planning and cash management of Nepal Telecom. But the research studies were not analyzed the cash management in general of NTC. So, there exists a research gap between the present and past researches. This research is conducted to fill up this research gap.

This research is a case study research. It is mainly based in secondary data. This study has tried to indicate the role of revenue planning and cash management and how effectively NTC is practicing the revenue planning and cash management system. This study has analyzed the overall aspect of revenue planning and cash management by applying the different mathematical & statistical tools. Finally it concludes the various findings of research and recommendations for NTC.

Technology has been changing very fast and scope of NTC is now becoming very wide. The services are not only related with voice or low speed data but also cover the triple play: voice, high speed data and video. Hence, the research with old and obsolete data cannot draw the relevant information. This study is specifically based on the recent data to produce useful findings.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction:

Research methodology is the guideline of research. Data and information are lifeblood of any research. Research methodology is a plan to obtain the answer of research question through analysis of data. The main objective of the study is to examine the revenue planning and cash management of Nepal Telecommunication. So, this chapter "Research Methodology" is of extremely important. This chapter consists of Research design, Coverage of period and data, Nature and sources of data, Research variables, Tools and techniques of data analysis and Research procedure, which are explained below;

3.2 Research Design:

In order to make any type of research it is necessary to set research design which fulfills the objectives of the study. Generally, research design means well-define procedure and techniques which guide to study and profound ways for research variability. It is the planned structure and strategy of investigation conceived so as to obtain answers to research questions. The research study attempts to analyze the revenue planning and cash management of NTC. Hence, descriptive as well as analytical research design has been employed. Descriptive research is essentially a fact finding approach and abstracting generalization by the cross- sectional study of the current situation. Analytical approach is followed to parametric and non- parametric test of data. It is the process of microanalysis and appraisal of the data.

"Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. The plan is the overall scheme of program me of the research. it includes an outline of what the investigator will do from writing the hypothesis and their operational implication to the financial analysis of data"(Kothari. C.R 1990:390)

The research design is an outline, the scheme, the paradigm of the operation of the variables. The paradigm relates the structural relationship of variables and their juxtaposition. To get the answers to research problems and control variance, in the present research work, the researcher has followed descriptive research design. The descriptive research studies involve the systematic collection and presentation of data to give a clear picture of a particular situation or event. It is also called a fact finding approach of research study. For this research work, most of the secondary source data has been used except some interviewed answers. Some of the financial tools along with statistical tools have been applied to examine facts and descriptive technique has been adopted. Research variables are the important portions for research design and research study which are used for analysis of all the available information and data. For this research study; sales, different revenue budgets, expense budgets, profit & Loss A/c, items of balance sheet and compilation of capital budget are the main research variables. These are the variables of a complete budgeting or comprehensive budgeting. The study is closely related with the various functional budgets and other accounting statements as well as the actual result of the budgets.

3.3 Coverage of Period and Data:

The study covers two time dimension, long range and short range. The time period of five years for the purpose of trend analysis for long range planning and the time period of one year for the purpose of short rang planning. Data are collected from fiscal year 2062/63 to 2066/067 for long range planning and for short range planning data are collected from the year 2066/67.

3.4 Nature and Sources of Data:

This study is mostly based on secondary data. However, primary data and information have been obtained through informal discussions with executives and other related staffs of the NTC. Secondary data have been collected from Nepal Telecom's publication (Nepal Telecom Anniversary Souvenirs, Shramik Spandhan, Monthly MIS Report, Budget Book, Monthly Bulletin, Strategic plan for Nepal Telecom, Annual reports, balance sheet, profit and loss accounts, cost detail sheet), previous thesis and other relevant published and unpublished documents and other related publications. The required data were also collected from the website of Nepal Telecom (i.e. www.ntc.nt.np).

3.5 Research Variables:

Sales revenue, production (telephone line capacity installation) capacity utilization, profit & loss, total assets, profit margin, total capital employed, account receivable (debtor), cash flows, capital expenditures relating to long term and short period of Nepal Telecom are the research variables of this present study.

3.6 Tools and Techniques Employed:

This research is confined to examine the revenue planning and cash management of NTC. Therefore, the collected data have been presented and demonstrated in suitable tables, formats, diagrams, graph and charts. Such presentations have been interpreted and explained whenever necessary. To analyze the secondary data collected from various sources different financial, statistical and mathematical tools are used.

The financial tools used are - net fixed to total assets turnover ratio, debtor turnover ratio, average collection period, operating profit ratio, net profit ratio, cash flows analysis, optimal cash models, cash budget, revenue budget, analysis of cash turnover, account receivable to cash and bank balance, etc.

The statistical and mathematical tools used are - average, standard deviation, coefficient of variation, correlation coefficient regression analysis, percentage and mean, trend analysis etc. All the data and information are collected from secondary sources which have been properly synthesized, arranged, tabulated and calculated to serve the objectives of the study.

3.7 Research Procedure:

The research procedure includes the following steps for the present study:

- Collection of various books and other publications relevant for the study.
- Assimilation of useful secondary data.
- Description and analysis of collected data in light of theoretical basis.
- Tabulation and presentation of data through the tables, charts, graphs etc.
- Analysis of data by using approved financial, statistical and mathematical tools.
- Extraction of valuable conclusions and recommendations.

CHAPTER- IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction:

The main purpose of this research study is to examine the revenue planning and cash managements in public utility sector and Nepal Telecom has been selected for this purpose. Efficient and optimum cash flow management is important to all firms. Mostly, revenue planning and cash management depends upon the objectives of the organization. Plan should achieve the goals of the organization. It embarks on forecasting the environment in which objectives must be achieved.

Revenue is an inherent part of the management process. Revenue planning helps the organization for the development and acceptance of objectives and goals and moving an organization efficiently to achieve the objectives and goals. Revenue planning and cash management is an important technique of management, which can be used in private public as well as government organization. Each and every public enterprises or firm or government corporation is established with an objective of public service.

Hence, protection of genuine interest becomes the vital factor in revenue planning and control system. To evaluate the performance of public enterprises, profit as well as social well is considered as crucial factor in Nepalese public enterprises. In case of fulfilling the social obligation: in this case, the company should earn certain profit also.

Although, the PES in Nepal have achieved the objectives of creating opportunities to some extent, increasing production in the country and providing basic service, they are not functioning in an efficient manner. Despite the long-term protection given to these public enterprises, they have not been able to achieve financial capability and work efficiency and are still dependent upon governmental grants & assistance. Almost all PES are suffering from high loss and their financial condition is in very poor shape.

Nepal Telecom is partially government owned public sector entity, administrated by a government appointed Board of Directors (BOD). However, more autonomy has been offered to the entity from 1st Baishak 2061 by the government as a part of deregulation and liberalization policy in telecommunication sector. Now, Nepal Telecom has functioning under the company act 2053 utilizing its full autonomy.

Revenue planning in Nepal Telecom is most important for the best utilization of its exchange capacity and effective accomplishment of the goals and objectives in sales planning, production planning, overhead expenses, capital budgeting, cash flow and manpower planning. Thus, in this part, effort has been made to analyze how far the target and objective has been achieved. Various functional budget, cash flow, statistical procedures are analyzed and examined in the context of Nepal Telecom.

To accomplish the above mentioned objectives of the study, this chapter will analyze the various aspect of revenue planning, cash flow from operating, financing and investing activities, their achievement, their related variance in units and revenue separately of the company. The study also presents and analyzes the overall economic and financial trend and estimate the future possible trend of Nepal Telecom.

4.2 Revenue Trend of Nepal Telecom:

Revenue plan is the key factor in profit planning and control. Unless there is a realistic and practical revenue plan one cannot be sure of accuracy and practicability of other elements of profit plan.

4.2.1 Revenue Budget of Nepal Telecom:

Revenue plan is prepared on the basis of sales forecast. Revenue plan formulation is the primary step in developing the overall plan procedure. Revenue is the primary source of cash and all other functional plans are prepared on the basis of revenue budget.

Revenue budget is the primary and important steps as well as the primary source of information which can be used in preparing functional budget. The production, additional capital, manpower requirement, material requirement cash requirement are based on the sales revenue budget. The sales plan is the basic steps which opens the door of financial plan. Efficiency of planner or planning expert can be evaluated from the comparison between actual of planned sales.

The sales unit determines the volume or quantity of final products to be produced. Labour, production and other expenses budgets are prepared on the basis of production volume. So, it can be said that the sales plan is the backbone of the profit plan and cash management. Sales are the major source of revenue and profit is the amount that all business operation is directly linked with the sales budget. The revenue budget should be as realistic as possible. If the revenue plans are unrealistic then all other elements of profit plans will be out of reality.

Revenue plan will be prepared on the basis of revenue forecast. Revenue forecast have to be translated into a revenue plan after adjustment of various factors associated with sales. Revenue plan preparation involves the following four interrelated step (I) the sales forecast (II) the marketing plan (III) the promotional expenses budget and (IV) the selling expenses budget. The overall responsibility of preparing sales budget lies in the sales manager, although chief executives should also be involved in such activities.

Revenue plan is prepared on the basis of sales forecast. NTC has practice of preparing sales forecast and the demand for long term which is known as long term forecast. NTC prepares revenue budget for every fiscal year and it also forecast the strategic plan for coming national plan. NTC prepares its revenue budget by line capacity and service. NTC has no any problem in selling its line but it has facing problem in line generation.

The financial planning department and revenue department of Nepal Telecom has the overall responsibility of preparing the revenue budget. Revenue budget is prepared by co-ordination among revenue section, billing section and business management section. Like other organizations, it does not have distribution channels. Consumer contacts themselves to get telephone services. There is no strong competition in the market except UTL and Spice Nepal. NTC is enjoying absolute monopoly in communication sector.

The beginning point for the evaluation of existing revenue planning practices is to analyze past trends of planned sales revenue and its achievement. The following table 4.1 presents the sales budget and actual sales in unit and Rupees respectively from the fiscal year 2062/063 to 2066/067.

Table: 4.1

Revenue Trend of NTC

Fiscal Year	In Units (Lines)				In Rupees (In '000')			
	Budgeted Sales	Actual Sales	Increase/Decrease over previous year		Budgeted Sales	Actual Sales	Increase/Decrease over previous year	
			Budgeted %	Actual %			Budgeted %	Actual %
2062/63	602252	485997	-	-	12107812	11058915	-	-
2063/64	656070	509873	8.94	4.91	15348921	13967318	26.77	26.30
2064/65	684942	532391	4.40	4.42	17272992	16788359	12.54	20.20
2065/66	726980	562162	6.14	5.59	21708429	20646629	25.68	22.98
2066/67	749205	583542	3.06	3.8	26963913	25114462	24.21	21.64

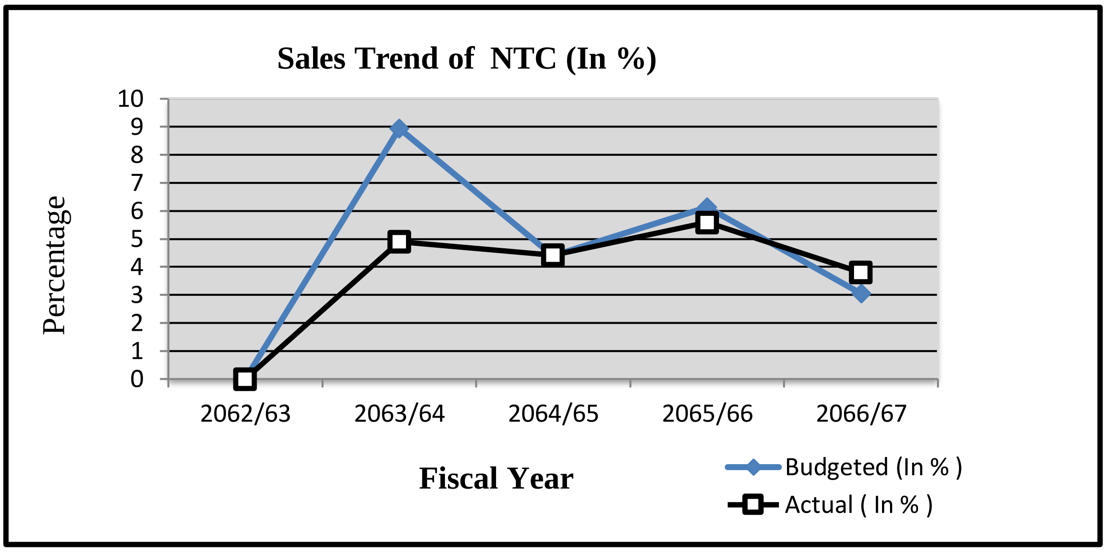
Source: Annual Report and Budget Book of NTC

The table 4.1 shows that in all the fiscal year (F/Y) budget and actual sales units are increased. It shows that the budgeted sales units increased over previous year by 8.94%, 4.40%, 6.14% and 3.06 % for F/Y 2063/64, 2064/65, 2065/66 and 2066/67 respectively. Similarly the table shows that the actual sales unit increased over previous year by 4.91%, 4.42%, 5.59% and 3.80% for F/Y 2063/64, 2064/65, 2065/66 and 2066/67 respectively. It shows that there is no consistent increment in budgeted and actual sales unit. After analyzing this increment, it can easily be found that the demand of telephone is too high in Nepal due to the increment in population and customer awareness. Therefore, Nepal Telecom objectives must be targeted to fulfill the customer demand.

In the same way, the table 4.1 also shows that in all the fiscal year budgeted and actual sales revenue are increased. The table shows that in F/Y 2063/64 budgeted and actual sales revenue increased by 26.77% and 26.30% respectively. Similarly, in F/Y 2064/65 it increased by 12.54% and 20.20% respectively. In the same way in F/Y 2065/66 increased by 25.68% and 22.98% respectively. And similarly, in the F/Y 2066/67 budgeted sales revenue and actual sales revenue are increased by 24.21% and 21.64%. This increment in budgeted and actual revenue was the result of large number of lines distribution of PSTN and mobile phone. Increase/decrease over previous year in budgeted and actual sales units and revenue can be shown by the help of the following graph 4.1 and 4.2.

Graph 4.1

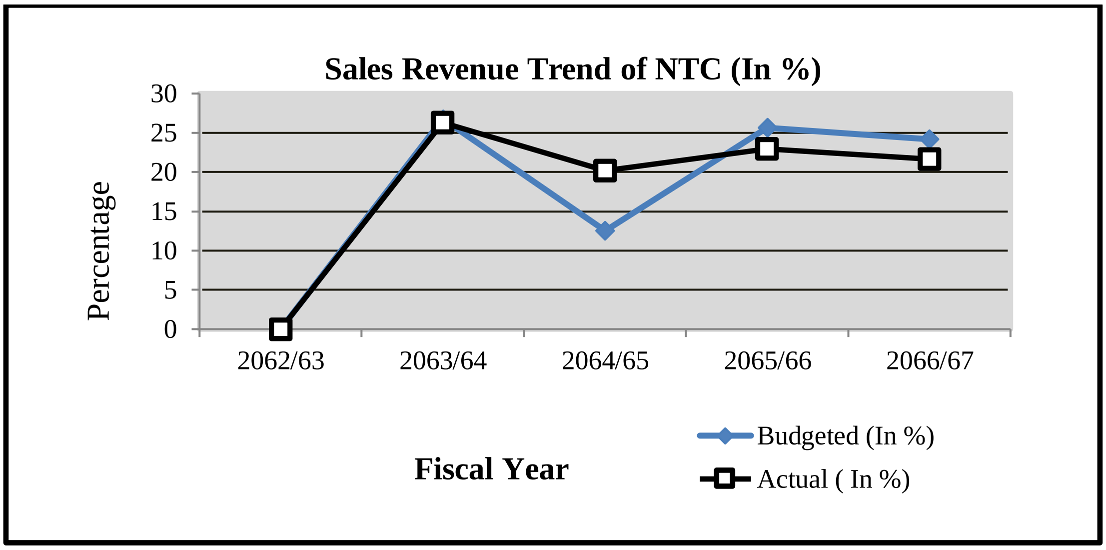
Percentage Increase/Decrease in Budgeted and Actual Sales Units



The above graph 4.1 shows that the percentage increase/decrease in budgeted and actual sales units/no. of lines assuming F/Y 2062/63 as base year. The graph presents that at first budgeted and actual sales units is in increased in the F/Y 2063/64 then it is decreased in the F/Y 2064/65. And in the F/Y 2065/66 the budgeted sales and actual sales is slightly increased, and then decreased in the F/Y 2066/67. From the analysis of sales trend it can be concluded that the demand of telephone line is very high in Nepal due to the increment of awareness and earning capacity of the people and due to competitive market.

Graph 4.2

Percentages Increase/Decrease in Budgeted & Actual Sales Revenue

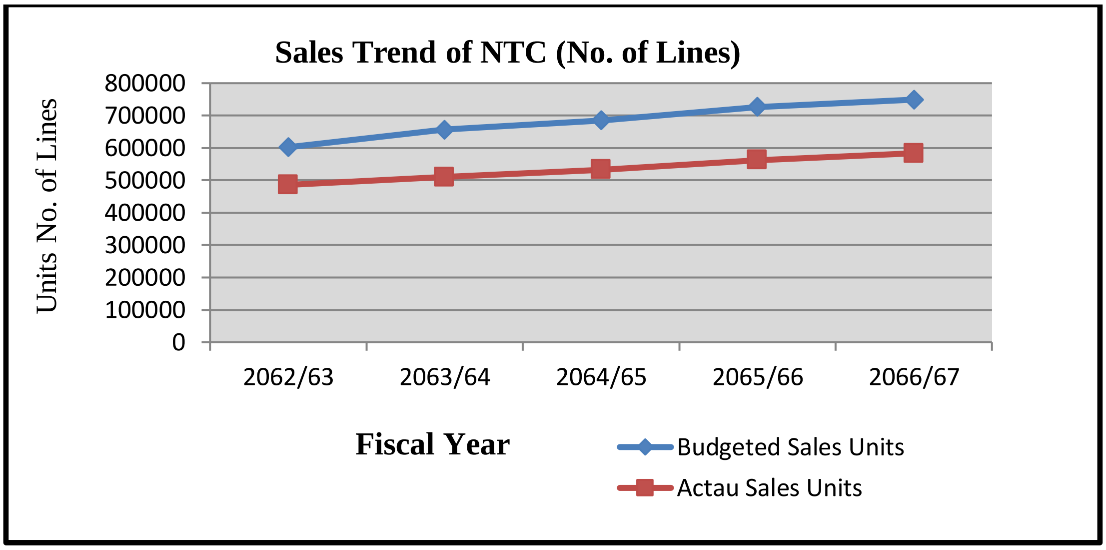


The above graph 4.2 shows that the percentages increase/decrease in budgeted & actual sales revenue assuming F/Y 2062/63 as base year. The graph depicts that the budgeted sales revenue increased in F/Y 206/64 and it decreased in F/Y 2064/65 and then slightly increased in F/Y 2065/66 and 2066/67.

The sales trend of units or no. of line case is also presented by the help of the following graph 4.3.

Graph: 4.3

Budgeted and Actual Sales Trend of NTC in Units or No. of Lines

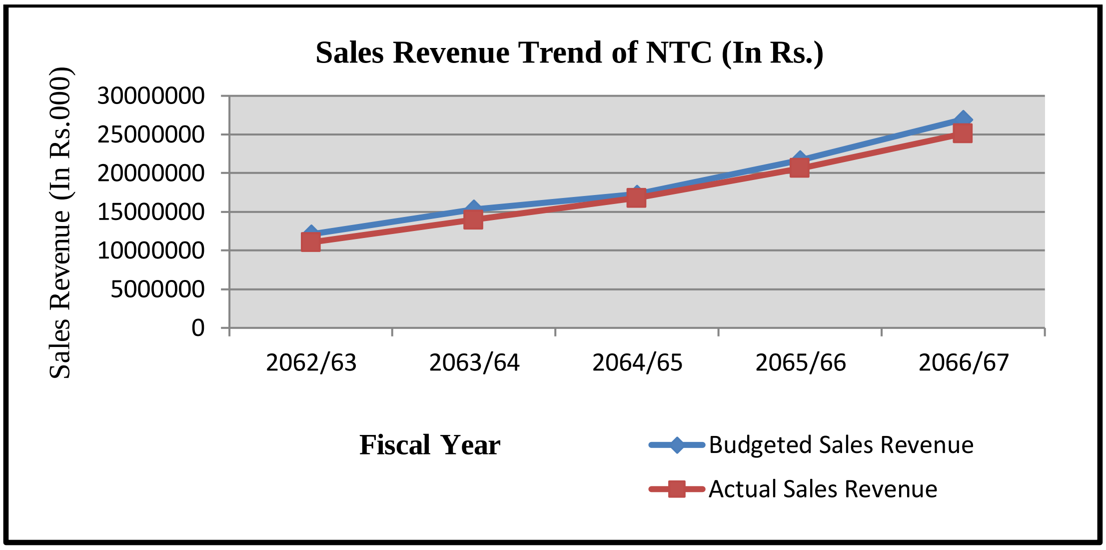


The above graph 4.3 shows that the budgeted sales units are always higher than the actual sales unit during the research period that means the target has not been met in the entire research period.

In the same way, the sales revenue trend of NTC is shown below by the help of graph.

Graph 4.4

Budgeted and Actual Sales Revenue Trend of NTC in Rs.



The above graph 4.4 shows a gap between budgeted sales revenue and actual sales revenue. The actual sales revenues are higher than budgeted revenue in F/Y 2062/63, 2063/64, 2065/66 and 2066/67. But in F/Y 2064/65 the actual sales revenue is slightly meet with budgeted sales revenue. This trend of sales revenue shows a positive signal to the company. The overall sales performance of the NTC is satisfactory.

It can be notified that the actual sales revenue was in increasing trend if compare to previous year. But actual sales revenue was not increased in same ration to number of line increased. It shows that the collection policy of Nepal Telecom is not effectively implemented and the NTC is not able to forecast its sales accurately. There is no consistency between budgeted and actual sales units and revenue due to lack of proper planning and management.

4.2.2 Revenue Achievement of Nepal Telecom:

The beginning point for the evaluation of existing revenue planning is to analyze the past trends of planned sales revenue and actual sales revenue. Based upon the data available from Nepal Telecom following table shows the budgeted and actual sales revenue with their respective achievement from the fiscal year 2062/63 to 2066/67.

Table: 4.2

Budgeted and Actual Sales Achievement

In Units (No of Lines)				**In Rupees (In '000')**		
Fiscal Year	Budgeted Sales	Actual Sales	Achieved (In %)	Budgeted Sales	Actual Sales	Achieved (In %)
2062/63	602252	485997	80.70%	12107812	11058915	91.34%
2063/64	656070	509873	77.72%	15348921	13967318	91.00%
2064/65	684942	532391	77.73%	17272992	16788359	97.19%
2065/66	726980	562162	77.33%	21708429	20646629	95.11%
2066/67	749205	583542	77.89%	26963913	25114462	93.14%
Average			**78.27%**			**93.56%**

Source: Annual Report and Budget Book of NTC

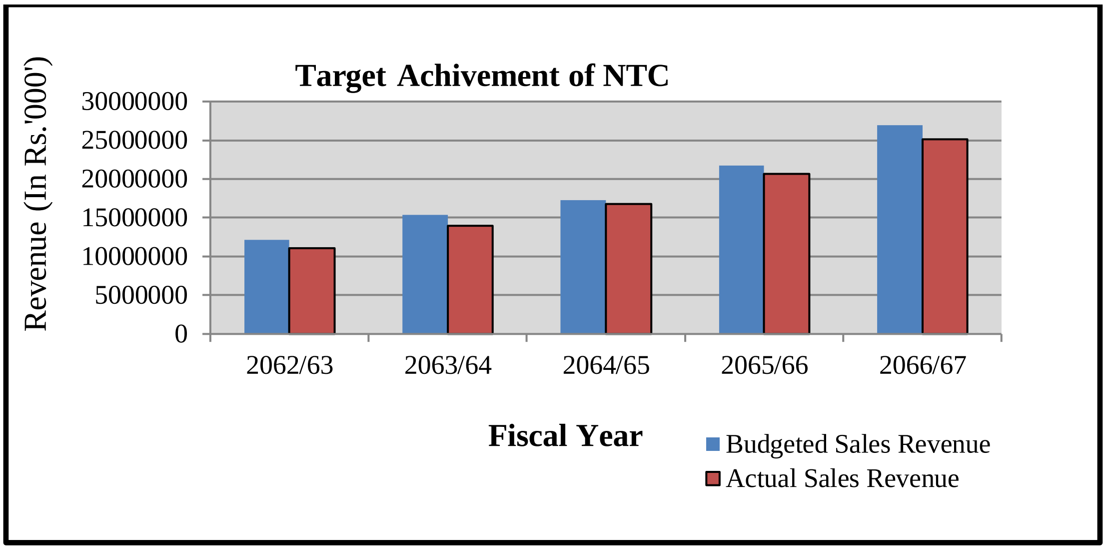
The table 4.2 signifies that the budgeted and the actual sales in unit and Rupees with their respective achievement of NTC. The analysis of above table 4.2 shows the satisfactory sales performance of Nepal Telecom. In unit basis, sales achievement is 78.27 % in average which is at least satisfactory. In the F/Y 2062/63 the budgeted sales of NTC was 602252 lines and gradually increased up to the F/Y 2066/67 which was 749205 lines. But, the achievement percentage is gradually decreasing and remains constant within the ratio of 78% during the research period, which is not positive signal to the company regarding the sales units/No. of telephone lines. Thus, the company should increase its achievement rate by proper planning and control.

In the same way, in F/Y 2062/63 the budgeted sales revenue was Rs. 12107812. Annual budgeted sales revenue is increasing from F/Y 2062/63 to F/Y 2066/67. On the other hand, the actual sales revenue is in increasing trend during the research period. The actual sales revenue of NTC in F/Y 2062/63 was Rs. 11058915 which reached to Rs. 25114462 in F/Y 2066/67. The actual sales revenue is less than the targeted revenue in all fiscal year during the research period. By the analysis of table, it can be said that targeted sales revenue is not meet by the actual sales revenue. In all the fiscal year actual sales revenue is less than budgeted sales revenue. It shows that the sales revenue achievement of NTC is not highly satisfactory. The average achievement of revenue is 93.56% which is itself not good signal for the company. The analysis of the table, it can be said that the Nepal Telecom has not clear guidelines of selling and revenue collection to meet the targeted sales revenue.

The sales revenue achievement of NTC also can be shown efficiently by the help of diagram.

Diagram 4.1

Target Achievement of Sales Revenue of NTC



The above diagram 4.1 shows the achievement of sales revenue of NTC from F/Y 2062/63 to 2066/67 which explains that actual sales revenue is always less than the budgeted sales revenue. The diagram clearly depicts that NTC have to more improved in planning and control for the collection of sales revenue to achievement of targeted sales revenue. In F/Y 2064/65 the actual sales revenue is nearly to the budgeted sales revenue.

4.2.3 Summary of Statistical Calculation:

In order to find out the nature of variability of planned sales, actual sales and their achievement of different year's, calculation of arithmetic mean, standard deviation and co-efficient of variation of planned and actual sales and their achievement of NTC should be conducted. The table 4.3 presents the summary of statistical calculation.

Table: 4.3

Summary of statistical calculation

Statistical Tools	**Budgeted sales in Rs. (X)**	**Actual sales in Rs. (Y)**
Mean	18680.41	17515.14
Standard deviation	5178.11	4949.80
Co-efficient of variation (C.V)	27.72%	28.24%

Source: Appendix I

The above table 4.3 shows the value of statistical tools. A distribution having more C.V is considered more variable or more heterogeneous or less consistent. A distribution having lesser C.V is considered less variable or more homogeneous or more consistent or more uniform. It also states that the actual sales are more deviated or fluctuated year by year as the coefficient of variation of the actual sales as shown in the table is greater than the budgeted sales. The C.V of actual sales is 28.24% where as budgeted sales is 27.72%.

A major statistical tool called least square methods can be used to analyze the trend of actual sales and to estimate the possible future sales for a given time (years). This tool is considered as a time factor because time element is also an important factor to analyze the trend. With the passage of time the sales achievement will be changed, which can be expressed by the components of time series.

A straight line trend by the method of least squares will show the relationship between actual sales and years (time). For the least square method, it is assumed that the sales are consistently changed (increased or decreased) with the change in time. To fit the straight line trend, time factor is considered as independent variable(X) and actual sales achievement(Y) is assumed as dependent upon time (years). Now the straight line trend by least square method for actual sales upon time is expressed by

Y_c =a + bx………………….(i)

Where, Y= Actual sales achievement

X= Deviation taken in time

a= Fixed value

b= Variable value

Table: 4.4

Fitting The Straight Line Trend by Least Square

Fiscal Year (X)	Actual Sales in Rs.00000(Y)	x=X-2064/65	x^2	xY
2062/63	11058.915	-2	4	-22117.83
2063/64	13967.318	-1	1	-13967.32
2064/65	16788.359	0	0	0

2065/66	20646.629	1	1	20646.63
2066/67	25114.462	2	4	50228.92
	$\sum Y$ =87575.683	$\sum x$=0	$\sum x^2$ =10	$\sum xY$=34790.40

Since, $\sum x$=0, then,

$$a = \frac{\sum Y}{n} = \frac{87575.683}{5} = 17515.14$$

$$b = \frac{\sum xY}{\sum x^2} = \frac{34790.40}{10} = 3479.04$$

Now, the best fit of straight line trend is obtained by substituting the value of 'a' and 'b' in equation i.e. $Y_{c\,=}$ a + bx, we get,

$$Y_c = 17515.14 + 3479.04x$$

This trend line equation shows the positive relationship between time [years} and actual sales achievements. The actual sales will be increased by 3479.04 million every year if the sales trends of past years continue in the future.

By using this trend line equation, we can estimate the actual sales for fiscal year 2067/68.

The value of deviation {x} for fiscal year 2067/68 is 3.

We have,

$$\begin{aligned} Y_c &= 17515.14 + 3479.04x \\ &= 17515.14 + 3479.04 \times 3 \\ &= \text{Rs.}27952.26 \text{ millions.} \end{aligned}$$

If the past sales trend does not change then the future actual sales will be Rs.27952.26 millions in fiscal year 2067/68. By the help of least square method, we can say that the trend of actual sales will have in increasing pattern.

<u>Testing of Hypothesis:</u>

Hypothesis testing is a well defined and a clear cut decision making procedure. Hypothesis testing begins with an assumption or supposition, called a hypothesis that we make about a population parameter.

In hypothesis testing, the first thing is to set up a hypothesis about a population parameter. Then we collect sample data, produce sample statistics and use this information to decide how likely it is that our hypothesized population parameter is correct. Suppose we assume a certain value for a population mean. To test the validity of our assumption we gather sample data and determine the difference between the hypothesized value and the actual value of the sample mean. Then we judge whether the difference is significant. The smaller the difference, the greater the likelihood that our hypothesized value for the mean is correct. The larger the difference, the smaller the likelihood. The statistical hypothesis may be divided into two types: Null hypothesis (H_0) and alternative hypothesis (H_1). The null hypothesis in testing the significance states that there is no real difference in the sample mean and the population mean and is denoted by (H_0). Any hypothesis which is complementary to the null hypothesis is called on alternative hypothesis and is denoted by H_1.

In a hypothesis testing the level of significance is set up. It is denoted by 'α' {alpha}. We generally use 5 %.{ 0.05} level of significance unless otherwise stated. For a hypothesis testing student's t-distribution or' t-test is adopted here which was developed by W.S. Gosset. The t- distribution {t-test} is used when the sample is 30 or less than 30(≤30).

The t-test can be numerically presented as under:

$$t = \frac{\overline{X} - \mu}{\frac{S}{\sqrt{n}}}$$

Where,

$$\overline{X} = \frac{\sum X}{n} \text{=Sample Mean}$$

μ = population mean

n = sample size

S =standard Deviation of Sample

$$= \sqrt{\frac{\sum x^2}{n-1}}, x = X - \overline{X}$$

Now formulation of Hypothesis:

Null Hypothesis (H_o): There is no significant different between actual sales achievement (i.e. sample mean) and budgeted achievements (i.e. population mean) or $\overline{X} = \mu$

Alternative Hypothesis (H_1): There is significant different between actual achievement and budgeted Sales or $\overline{X} \neq \mu$.

Hence, applying t-test formula;

Then we have,

$$t = \frac{\overline{X} - \mu}{\frac{S}{\sqrt{n}}} = \frac{17515.14 - 18680.41}{\frac{4949.80}{\sqrt{5}}} = \frac{-1165.27}{2213.62} = -0.53$$

Hence, (t) = - 0.53, and |t| = 0.53

Where,

$\overline{X}$ = Sample mean or actual sales mean.

μ = Population mean or budgeted sales

S = Sample S.D.

Therefore, degree of freedom (d.f.) = n-1 = 5-1= 4

Tabulated value of't' at 5% level of significance for 4 d.f. for two tail test =2.776.

The tabulated value of't' (i.e. 2.776) is greater than calculated value of't' i.e 0.53 so, the alternative hypothesis is rejected and null hypothesis is accepted. Therefore we can conclude that there is no significance difference between actual sales and budgeted sales of NTC.

4.2.4 Category-wise Analysis of Revenue:

While preparing revenue plan, the emphasis need to be given to category of sales. Different category of sales contributes in revenue generation process in NTC. Therefore, analysis of sales of each category is important. The major aspect of this analysis is to measure the achievement of actual sales revenue of each category of NTC.

Table: 4.5

Category-wise Achievement of sales in relation to the budgeted sales (In %) of NTC

F/Y	**2062/63**	**063/64**	**064/65**	**065/66**	**066/67**	**Average**
Local Telephone	97.19	105.56	103.71	96.41	84.96	97.57
S.T.D.	90.00	96.65	75.55	68.21	68.54	79.79

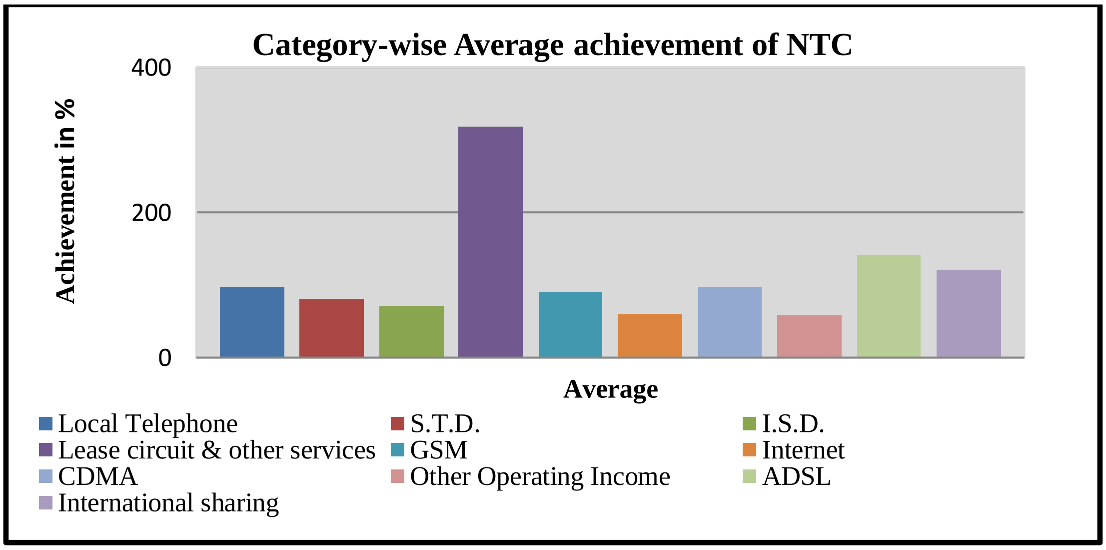
I.S.D.	96.57	83.07	68.20	62.22	40.51	70.11
Lease circuit & other services	93.97	126.44	412.94	865.82	95.81	318.99
GSM	86.97	84.21	92.20	86.82	101.19	90.28
Internet	85.98	76.67	35.37	80.09	21.50	59.92
CDMA	107.85	110.53	119.45	88.99	60.24	97.41
Other Operating Income	65.80	49.96	-	-	-	57.88
ADSL	-	-	170.58	132.06	122.88	141.84
International sharing	74.64	89.09	124.23	177.44	137.50	120.58
Average	88.77	91.35	133.58	184.23	81.46	115.88

Sources: Appendix- II

The above average achievement of sales revenue of NTC can be shown in the following diagram 4.2,

Diagram 4.2

Category wise Achievement of Sales Revenue of NTC



The above table no. 4.5 and diagram no. 4.2 shows the category wise achievement of sales revenue of NTC. The categories are Local Telephone, STD, ISTD, Leased circuit and other service, GSM, Internet, CDMA, other operating income, ADSL and International sharing.

It is predicated that the average achievement of sales revenue in Local Telephone is 97.57%. The achievement of sales revenue from Local Telephone in F/Y 2062/63 is 97.19% which is increased by 105.56% and 103.71% in F/Y 2063/64 and 2064/65 respectively. But in F/Y 2065/66 the achievement of sales revenue is gone down to 96.41%. It again decreased in F/Y 2066/67 to 84.96%. The mean figure of Local Telephone is 97.57% which shows satisfactory level in Local Telephone revenue achievement.

In the STD category, the average achievement is 79.79% which is less than 100%. It shows not satisfactory result so the company should increase its revenue achievement capacity in STD. Similarly the average achievement in ISTD is 70.11% which shows poor condition in STD revenue achievement. The average achievement in Leased circuit & other service is 318.99% which is more than the targeted, but it is more fluctuated in different years. In the same way, the average achievement in GSM is 90.28% it shows not satisfactory achievement. Similarly the average achievement in internet is 59.92% which shows poor performance in revenue achievement, so the company should improved its actual revenue collection to achieve its budgeted amount. But in the achievement of CDMA revenue collection is better condition i.e. 97.41%. And other hand, in the case of other operating income the achievement is not satisfactory it shows poor achievement which is only 57.88%. But in ADSL category is better satisfactory condition which average achievement is 141.84%. International sharing category is in very better condition which average achievement is 120.58%.

The overall category achievement in F/Y 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 are 88.77%, 91.35%, 133.58%, 184.23% and 81.46% respectively. In all the F/Y 2062/63, 2063/64 and 2066/67 the sales revenue achievement is less than 100% which shows poor performance of the company. But in F/Y 2064/65 and 2065/66, the average achievement of sales revenue is greater than 100% it shows better condition. In conclusion, the company's average achievement of sales revenue percentage is 115.88% which shows good signal for its bright future but the company still has to pay efforts to improve its achievement capacity.

4.2.5 Contribution of Each Category in Totals Sales:

Contribution of each category in total sales revenue from fiscal year 2062/063 to 2066/67 is presented in table no. 4.6

Table: 4.6

Percentage contribution of each category in Total Sales Revenue

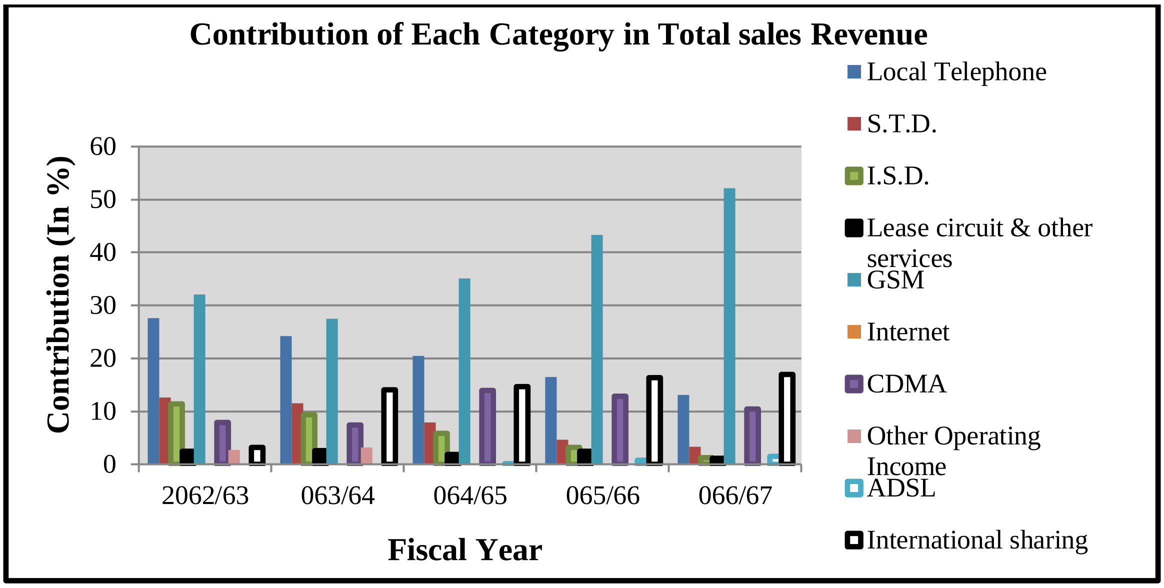
Category/ Fiscal year	**2062/63**	**063/64**	**064/65**	**065/66**	**066/67**	**Average**
Local Telephone	27.56	24.25	20.43	16.42	13.04	20.34
S.T.D.	12.67	11.51	7.90	4.65	3.30	8.006
I.S.D.	11.37	9.35	5.87	3.16	1.31	6.212
Lease circuit & other services	2.49	2.58	1.89	2.40	1.16	2.104
GSM	32.05	27.52	35.09	43.29	52.19	38.028
Internet	0.13	0.14	0.14	0.11	0.05	0.114
CDMA	7.89	7.36	13.97	12.80	10.46	10.496
Other Operating Income	2.69	3.17				2.93
ADSL			0.10	0.78	1.52	0.8
International sharing	3.14	14.12	14.61	16.39	16.97	13.046
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Appendix III

The above table 4.6 gives the insights of contribution of each category in total sales revenue. The table shows that the GSM (Mobile service) category gives the highest contribution in total sales revenue. The contribution of GSM in total sales revenue remained in between 32.05% and 52.19% with the average 38.028%. The second highest contributing category in sales revenue is Local Telephone category which average contribution is 20.34%. Similarly, the third highest contributing category in sales revenue is international sharing category with the average contribution is 13.064%. In the same way, other category such as CDMA, STD, ISTD, other operating income and Lease circuit & other services has considerable contribution in total revenue with average contribution 10.496%, 8.006%, 6.212%, 2.93% and 2.104% respectively. But internet and ADSL category have less than 1% contribution.

The contribution of each category in total sales revenue of NTC can be presented by the following diagram.

Diagram 4.3



The above diagram 4.3 shows that the contribution of GSM category in total sales revenue is the highest which is closely followed by the Local Telephone category and there is lowest contribution in sales revenue is from ADSL and Internet.

4.2.6 Analysis of Sales variance of Nepal Telecom:

In any control process, the comparison of actual results with planned of budgeted goals. Comparison is assisted by the performance reports. Variance is the deviation between budgeted or planned goals and actual results obtained. Variance analysis is the determination of the reasons for a reported variance whether it is favorable or unfavorable. If the variance is unfavorable then the company management should lead to remedies through appropriate corrective actions by the efficient management. Now, the following sales variance of Nepal Telecom is analyzed for last five fiscal years.

<u>Sales Variance in Units (No. of Lines):</u>

When actual sales are higher than budgeted sales, it is known as favorable variance and such variance is usually a right of efficiency. On the other hand, when the actual sales are lower than budgeted sales, it is called unfavorable variance and usually indicates inefficiency. The following table shows the sales variance in lines of NTC for last five fiscal years

Table: 4.7

Sales Variance (In No. of Lines) of Nepal Telecom

Fiscal Year	**Actual Sales Lines**	**Budgeted Sales Lines**	**Variance (+ or -)**	**Remarks**
2062/63	485997	602252	(116255)	Unfavorable
2063/64	509873	656070	(146197)	Unfavorable
2064/65	532391	684942	(152551)	Unfavorable
2065/66	562162	726980	(164818)	Unfavorable
2066/67	583542	749205	(165663)	Unfavorable

Source: Annual Report & Budget Book of NTC

The above table shows that actual sales lines are lower than budgeted sales lines in all fiscal year. Thus, the situation is unfavorable for the company. It shows that Nepal Telecom does not have well developed scientific mechanism for predetermining standard.

<u>Sales Revenue Variance (In Rs.):</u>

The analysis of the sales revenue variance has been conducted in this research which gives the actual results of sales revenue realization. The following table shows the sales revenue variance of Nepal Telecom for the last five fiscal years from 2062/63 to 2066/67

Table: 4.8

Sales Revenue Variance (In Rs.) of Nepal Telecom

In Rs. (000)

Fiscal Year	**Actual Revenue**	**Budgeted Revenue**	**Variance (+ or -)**	**Remarks**
2062/63	11058915	12107812	(1048897)	Unfavorable
2063/64	13967318	15348921	(1381603)	Unfavorable
2064/65	16788359	17272992	(484633)	Unfavorable
2065/66	20646629	21708429	(1061800)	Unfavorable
2066/67	25114462	26963913	(1849451)	Unfavorable

Source: Annual Report & Budget Book of NTC

The table no. 4.8 shows the sales revenue variance of Nepal Telecom from 2062/63 to 2066/67. According to the table in all fiscal year the actual sales revenue is less than budgeted sales revenue so all year's variances are unfavorable. It can be said that Nepal Telecom has not been operating its activities efficiently. So, to achievement of budgeted revenue the company should maintained its activities by proper planning and controlling.

4.2.7 Relationship between Total Revenue and Profit:

Profit is the major element of each and every business endeavor for survival and future development. Business without Profit exists nowhere. However, the concept of profit is changing from time to time. In presents reasonable profit approach seems to hold a strong position. Profit is the nerve center of any business organization. So, it can be said that profit is the blood circulation of any organization. Profit is essential to pay expenditure, dividends, to get benefits from opportunities and to make financials contribution to natural treasury. In modern times effectiveness and efficiency of any business/management are measured by profit. Profit of any organization highly depends upon sales revenue.

NTC has been generating positive returns. Thus, it has been well-known to public as highly profitable organization in public utility sector. The following table shows the revenue and profit & loss trend of NTC from F/Y 2062/63 to 2066/67.

Table: 4.9

Total Revenue and Profit & Loss Trend of NTC.

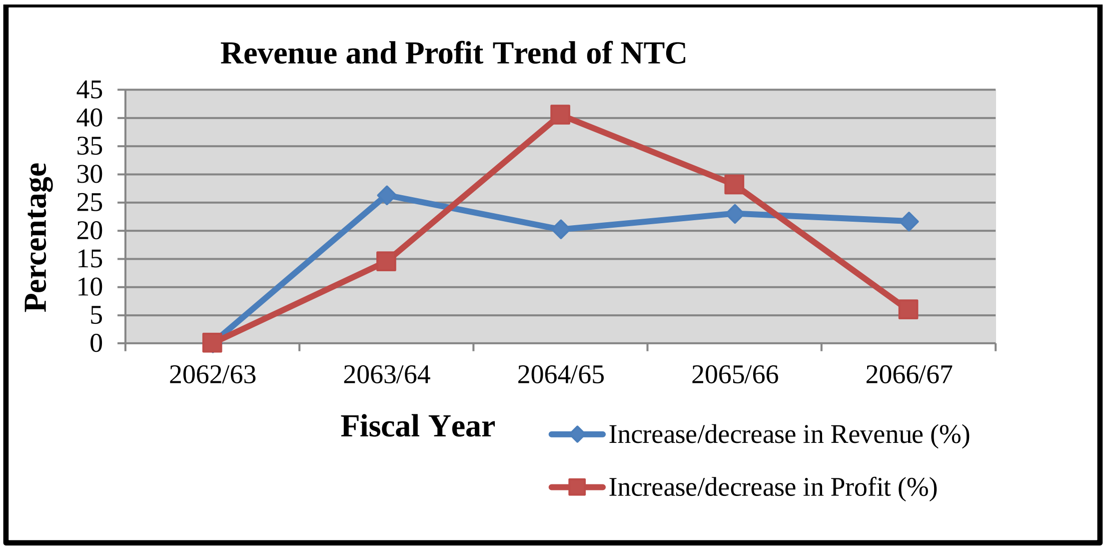
Fiscal Year	Total Revenue (In Rs. '000')	Increase/Decrease over previous year (%)	Profit & Loss (In Rs. '000')	% of Profit & Loss on Total Revenue	Increase/Decrease over previous year (%)
2062/63	11058915	-	4936647	44.64%	-
2063/64	13967318	26.30	5652688	40.47%	14.50
2064/65	16788359	20.20	7942902	47.31%	40.52
2065/66	20646629	22.98	10178025	49.30%	28.14
2066/67	25114462	21.64	10775154	42.90%	5.87

Source: Annual Report of NTC

The above table no.4.9 gives the account of Total Revenue and profit & loss trends of NTC from F/Y 2062/63 to 2066/67. It is clear that NTC has been generating positive expect of profit during the research period. Thus NTC is well known to the general public as a most profitable organization. In all the F/Y percentage of profit & loss on sales revenue is more than 40% which shows better performance of organization. So it should maintain its positive percentage of profit and loss a/c on total sales revenue in future also.

Increase/decrease over previous year or the trend of total revenue and profit & loss can be presented by the help of following graph 4.5.

Graph: 4.5

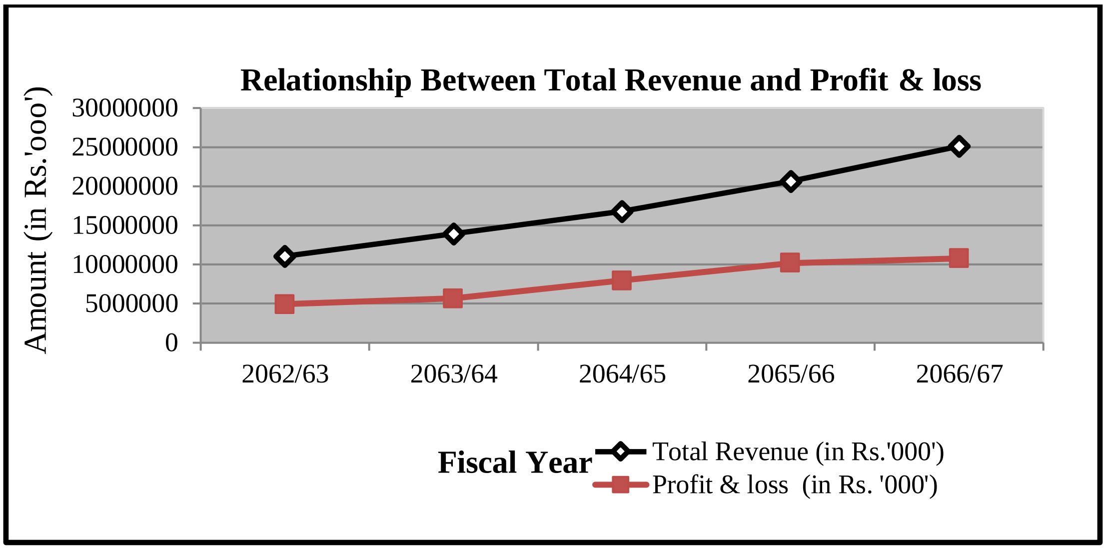


The above graph 4.5 shows the revenue and profit & loss trend i.e. increase/decrease over previous year assuming F/Y 2062/63 as base year. The graph presents that the total revenue and profit & loss a/c are in fluctuating trend. At first, total revenue is decreasing trend in F/Y 2063/64 and then it is increasing trend up to F/Y 2065/66 but it again decreasing in F/Y 2066/67. And other hand profit is in increasing trend up to F/Y 2064/65 then is in decreasing trend but the increase/decrease ratio of percentage of total revenue and profit & loss in not same. The increase/decrease ratio of profit & loss a/c is more fluctuating then the ratio of total sales revenue.

The relationship between total revenue and profit can be presented by the following graph.

Graph 4.6

Relationship between Total Revenue and Profit & loss



The above line graph gives the clear picture of relationship between total revenue and profit & loss of NTC during the research period of 2062/63 to 2066/67. The total revenue is in increasing trends from F/Y 2062/63 to 2066/67. And the profit & Loss trends is also increasing trend up to F/Y 2066/67 but in it is less increasing trend then previous year in F/Y 2066/67. In conclusion, Total revenue & profit & loss trend both are in increasing trend.

The least square method can be used to analyze the trend of profit & loss and to estimate the possible future profit or loss for a given time of year. Considering the time factors as independent and profit or loss as dependent factor upon time, it will show the relationship between year and profit or loss.

Let, the straight line trend be $y_c = a + bx$

Table: 4.10

Fitting Straight Line Trend by Least Square

F/Y (X)	Profit/loss (Y) (In Rs.'000')	x=X-064/65	x2	xY
2062/63	4936647	-2	4	-9873294
2063/64	5652688	-1	1	-5652688
2064/65	7942902	0	0	0
2065/66	10178025	1	1	10178025

2066/67	10775154	2	4	21550308
	∑Y=39485416	∑x=0	$\sum x^2$=10	∑xY=16202351

Since ∑x=0 then,

$$a = \frac{\sum Y}{n} = \frac{39485416}{5} = 7897083.20$$

$$b = \frac{\sum xY}{n} = \frac{16202351}{5} = 3240470.20$$

Now substituting the value of 'a' and 'b' in the above equation,

We have,

Y_c= 7897083.20 + 3240470.20x

For the estimation of profit or loss for the year 2067/68,

We have,

a = 3

Y_c= 7897083.20 + 3240470.20×3

= 17618493.80 (In Rs. '000')

The estimated profit for the fiscal year 2067/68 will be Rs. 17618493.80 (In Rs. '000') if the past profit trend continues. With the help of least square method, we can say the trend of profit of NTC is increasing.

To analyze the relationship between sales and profit of NTC, some statistical tools are used which are presented below.

Table: 4.11

Summary of Statistical Tools

Statistical Tools	**Total Revenue "X"**	**Profit "Y"**
Arithmetic Mean	17515.14	7897.08
Standard Deviation	4946.80	2336.22
Coefficient of Variation (C.V)	28.24%	29.58%
Correlation Coefficient (r)	0.97	
Coefficient of Determination (r2)	94%	

Probable Error (P.E)	0.0181

Source: Appendix IV

The above table shows that the profit is more deviated than revenue being C.V 29.58% as compared to C.V 28.24% of total revenue. The correlation coefficient is used to analyze the relationship between total revenue and profit. From above table the value of correlation is 0.97 which shows highly positive correlation between total revenue and profit. That means total revenue and profit moves in quite same direction.

One very convenient and useful way of interpreting the value of coefficient of correlation is coefficient of determination (r^2). The value of coefficient of determination between total revenue and profit is 0.94 which shows that profit is expanded up to 94% only by total revenue and remaining part by other factors.

The significance of correlation can be tested or verified by probable error. If the value of "r" is less than six time of P.E there is no evidence of correlation i.e. the value of "r" is not significant. Here the value of "r" is greater than 6*PE (i.e. 0.97>0.94) that means the value of "r" is significant. So, it can be concluded that the value of profit will go on for same direction of total revenue.

4.2.8 Analysis of Account Receivable of Nepal Telecom:

Receivable management is one of the major challenges of Nepal Telecom at present. Average collection period provides the information on the liquidity of the receivable, the shorter period of collection has higher debtor's turnover ratio. Higher the duration of collection periods express over liberal and inefficient credit policy. To analyze the account receivable of Nepal Telecom, mainly debtor's turnover and average collection periods are useful to measure the relationship between receivables and net revenue from sales. So, the debtor's turnover ratios are presented from the period F/Y 2062/63 to 2066/67. The ratio is calculated as follows and the detail results of these analyses are presented in given below on the table.

Average collection Period (ACP) =

$$\frac{Receivable}{Net\ Sales} \times 365\ days$$

Or,

$$= \frac{Days\ in\ Year}{Debtor\ Turnover\ Ratio}$$

Debtor's turnover ratio (DTR)

$$= \frac{Credit\ Sales}{Average\ Receivable}$$

Or,

$$= \frac{Sales\ revenue}{Receivable}$$

Table: 4.12

Account Receivable, Sales Revenue, Average Collection Period and Debtor Turnover Ratio:

Fiscal Year	Sales Revenue (In Rs. '000') A	Account Receivable (In Rs. '000') B	Debtor Turnover C=A/B	Average Collection Period = 360/C
2062/63	11058915	3099495	3.57 Times	101 days
2063/64	13967318	3455511	4.04	89
2064/65	16788359	3482610	4.82	75
2065/66	20646629	3593205	5.75	63
2066/67	25114462	4295998	5.85	62

Source: Annual Report of NTC

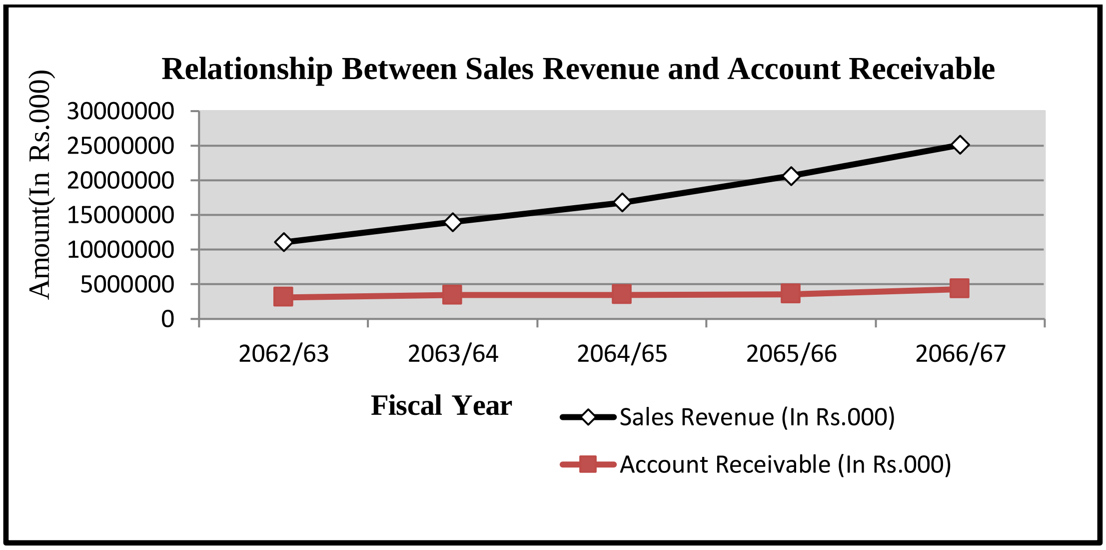
The above table 4.12 shows sales revenue, account receivable, debtor turnover and average collection period of NTC from year 2062\63 to 2066/67.The table highlight that as sales revenue increases/decreases, it puts impact on Account receivable, so, account receivable increases/decreases. Debtor turnover is in increasing trend. It is 3.57 times in F/Y 2062\63 and increasing up to 5.85 times in F/Y 2066/67.The debtor turnover ratio is 4.04 times, 4.82 times, 5.75 times in F/Y 2063/64 to 2065/66 respectively.

The average collection period of NTC is also is decreasing trends. It is 101 days in F/Y 2062/63 and decreasing to 62 days in F/Y 2066/67. It is 89 days in F/Y 2063/64 and it decreasing in F/Y 2064/65 and 2065/66 by 75days and 63 days. It shows that NTC has improving in its debtor collection.

The relationship of sales and account receivable can also be shown by the help of graph as follows.

Graph-4.7

Relationship between Sales Revenue and Account Receivable



The above graph shows that both the sales and account receivable are increasing trends during the whole research period. Account receivable is increasing with the increment in sales revenue.

4.3 Cash Management of Nepal Telecom:

One of the objectives of this study as stated in chapter 1 is to have true insight in to 'cash management' of Nepal Telecom. One of the major responsibilities of management is to plan,

control and self guard the resources of the enterprise. There are two kinds of resources flow through many business i.e. cash and non-cash assets. Cash is ready money in the bank or in the business and it is the important current asset for the operations of the enterprises. Cash is the basic input needed to keep the enterprises running smoothly. It would probably be more to say that business failure is due to poor cash management. So, how can manage organization's cash situation better? In this study the effort has been made to assess and to analyze the cash management to disclose the actual position of cash management in Nepal Telecom.

4.3.1 Analysis of Cash Balance of NTC:

Management of cash plays vital role for knowing when, where and how organization's cash needs will occurs? What are the best resources for meeting additional cash needs? It plays a crucial role in current assets of company. The total cash includes cash in hand, cash at bank and cash in transit. In overall, cash is the life blood of any organization. Without cash, no business activities can be conducted. So, it is necessary for any organization to have sufficient cash balance.

Cash turnover ratio represents how quickly the cash is received from its sale. Lighter turnover of cash is the signal of good liquidity and vice versa. The table below shows the cash position & turnover of the company during the period under study.

Table: 4.13

Calculation of Actual Total Cash Collection, Closing Cash Balance and Cash Turnover Time

(In Rs.000)

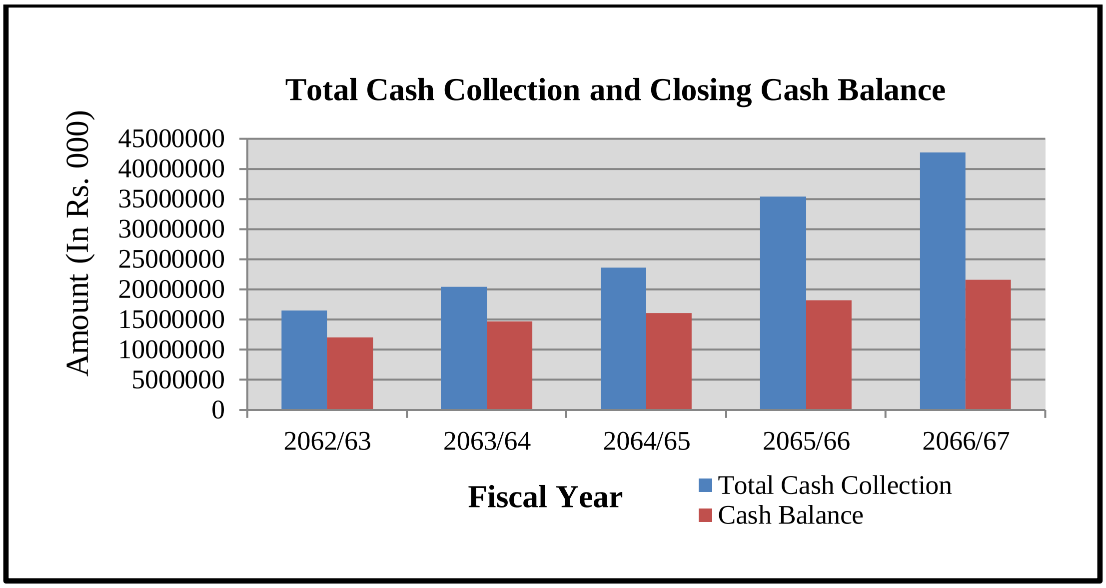
Fiscal Year	Actual Total Cash Collection	Cash Balance (A)	Increase/Decrease in Cash Balance	Sales Revenue (B)	Cash Turnover Time = A/B
2062/63	16540177	12021625	-	11058915	0.92
2063/64	20482552	14746338	22.67%	13967318	0.95
2064/65	23576892	16134517	9.41%	16788359	1.04
2065/66	35415595	18191058	12.75%	20646629	1.13
2066/67	42724619	21611536	18.80%	25114462	1.16

Source: Annual Report and Budget Book of NTC

The results of actual total cash collection and cash balance also can be shown by the help of the following diagram.

Diagram: 4.4

Total Cash Collection and Closing Cash Balance of NTC



The table no.4.13 shows that actual cash collection is in increasing trend over the five year period. In F/Y 2062/63 total cash collection was Rs. 1654077 (In Rs. '000') then increasing it reached to Rs. 42724619 in F/Y 2066/67. Cash balance of the company is in fluctuating trend. First, it is in increasing F/Y 2063/64 by 22.67% and it is decreasing in F/Y 2064/65 up to 9.41% and then it is increasing trends in F/Y 2065/66 and 2066/67 up to 12.75% and 18.80% respectively. The table also shows that the cash balance is less than actual total cash collection in all Fiscal year. In fact, this shows that the company has little success on the best use of these available cash balance. In conclusion, these figures show that the company has maintained the policy of cash management.

The above table also shows that cash turnover time is increasing order. The lowest turnover ratio is 0.92 times in F/Y 2062/63. Cash turnover are 0.95, 1.04, 1.13 and 1.16times in F/Y 2063/64, 2064/65, 2065/66 and 2066/67 respectively and the average is 1.04 times. Lower turnover is the signal of shortage of liquidity. This shows that cash turnover is poor in the company in F/Y 2062/63 and 2063/64. It indicates that the company is unable to collect cash from its credit rate timely on these years. From the analysis, it can be concluded that the cash collection efficiency in Nepal Telecom is satisfactory.

4.3.2 Analysis of Cash to Current Liabilities of NTC:

Among the technique of measuring corporate liquidity, the ratio of cash to current liabilities may also be used as an index of cash management. This ratio indicates the amount of cash (in percentage) available to pay the current obligation of the firm. In general, a low percentage of cash to current liabilities may be regarded as favorable indicators because sufficient use of cash helps to increase profit. However, a very low ratio is also not desirable as it may lead to corporate insolvency.

The table 4.14 below presents the level of cash in relation to current liabilities of Nepal Telecom for five fiscal years from 2062/63 to 2066/67;

Table: 4.14

Position of Cash and Current Liabilities of NTC

(In Rs.000)

Fiscal Year	**Cash & Bank**	**Current Liabilities**	**Percentage**	**Ratio**
2062/63	12021525	4475753	268.59%	2.69
2063/64	14746338	6715883	219.57%	2.20
2064/65	16134517	7915501	203.83%	2.04
2065/66	18191058	6718055	270.78%	2.71
2066/67	21611536	6929335	311.88%	3.12

Source: Annual Report and Budget Book of NTC

The above table No.4.14 indicates that the cash and bank balance are always higher than current liabilities. The level of cash in relation to current liabilities is in decreasing trend i.e. 268.59%, 219.57% and 203.83% for F/Y 2062/63, 2063/64 and 2064/65 respectively. But, it is in increasing trend i.e. 270.78% and 311.88% for F/Y 2065/66 and 2066/67. In the other way, cash to current liabilities ratio is also in decreasing trend up to F/Y 2064/65 then it is in increasing trend up to F/Y 2066/67. from the analysis, it can be said that the company has enough cash to pay the current obligation of the company but it also shows that Nepal Telecom has not manage its cash properly. In conclusion, excessive cash balance shows that NTC is not utilizing its cash properly and hence the company has faced the problem of cash management. So the company should invest its sufficient cash in different profitable area to manage the cash balance.

4.3.3 Cash Flow Projection and Actual Cash Budget of NTC:

Cash flow statement is an important financial tool for the management. It is useful internally to management and externally to investors and creditors. It helps the management to assess the liquidity of business, to determine dividend policy, to evaluate the policies regarding investment and financing. Similarly this statement is useful for investors and creditors in assessing the company's ability to manage cash flow, to generate positive future cash flow, to pay dividend and interest etc.

Cash flow statement is the process of monitoring, analyzing and adjusting business' cash flows. The most important aspect of cash flow management is avoiding extended cash shortages, causes by having too great a gap between cash inflows and out flow. Therefore, business need to perform a cash flow analysis on a regular basis, and use cash flow forecasting so the business can take the steps necessary to head off cash flow problems. For managing and improving cash flow Nepal telecom has estimated and actual cash budget for each fiscal year.

The cash flow projection shows how cash is expected to flow in and out in the business. It is an important tools for cash flow management, when business expenditure are too high or when we might want to arrange short-term investments to deal with a cash flow surplus. Budget cash flow is a plan of cash flow and shows the cash that is anticipated to be generated or expended over a chosen period of time in the future. On the other hand, actual cash budget describes the cash flow that has occurred in the past. Estimated and actual cash budget of Nepal Telecom is presented on the table below.

Table: 4.15 (I)

Estimated and Actual cash Budgeted summary of NTC

(In Rs. 000)

Description	2062/63			2063\64		
	Budgeted	Actual	Achieved	Budgeted	Actual	Achieved
Total Cash Collection (A)	11912645	1651077	138.59%	18935782	20482552	108.17%
Total Cash Application (B)	19168471	14063052	73.37%	17856934	17757839	99.45%
Opening Balance of Cash	10655130	9574500	89.86%	9968728	12021625	120.59%
Surplus/Deficit	(7255826)	2447125		1078848	2724713	252.56%
Closing Balance of Cash	3399304	12021625	353.65%	11047576	14746338	133.48%

Source: Annual Report and Budget Book of NTC

Table: 4.15 (II)

Estimated and Actual cash Budgeted summary of NTC

In Rs. (000)

Description	2064/65			2065/66			2066/67		
	Budgeted	Actual	Achieved	Budgeted	Actual	Achieved	Budgeted	Actual	Achieved
Total Cash Collection (A)	25847492	23576892	91.22%	32519319	35415595	108.91%	43800544	42724619	97.54%
Total Cash Application (B)	30169399	22024503	73.00%	36382678	33359054	91.69%	45959120	39304142	85.52%
Opening Balance of Cash	11030579	14746338	133.69%	16272489	16134517	99.15%	17787257	18191058	102.27%
Surplus/Deficit	(4321907)	1388179		(3863358)	2056541		(2158576)	3420478	
Closing Balance of Cash	6708672	16134517	240.50%	12409131	18191058	146.59%	15628681	21611536	138.28%

Source: Annual Report and Budget Book of NTC

The above table 4.15 (I) and (II) shows that the budgeted and actual cash budget as well as achievement of planned of Nepal Telecom. Total cash is collected from only one source i.e. internal sources. From the above table, it can be found that the achievement of planned cash collection is in fluctuating trend during the research period. The achievement of cash collection in F/Y 2062/63 is 138.59% but it reached to 97.54% in F/Y 2066/67. Similarly, achievement in total cash application is also in fluctuating trend but it is less than 100% in all the fiscal year. This shows that the budgeted total cash application is always higher than actual in all the fiscal year. This indicates the NTC has not been able to utilize the cash properly. In the same way, the above table also shows that budgeted total cash application is higher than budgeted total cash collection in F/Y 2062/63 to 2065/66. But in F/Y 2066/67 the budgeted cash collection is higher than budgeted cash application. This means, NTC has been practicing deficit budget in all four fiscal year, but actual cash budget shows surplus in all the fiscal year. Actual total cash collection is always higher than actual total cash application in all fiscal year. This shows the fact that NTC has been facing serious problem about the best utilization of cash.

In the same way, the above table clarifies that the actual closing balance of cash is always higher than budgeted closing balance of cash. The achievement of closing cash balance is higher achievement in F/Y 2062/63 i.e. 353.65% and then it is decreased up to 133.48% in F/Y 2063/64 but it increased to 240.50% in F/Y 2064/65 and it is 146.59% and 138.28% in F/Y 2065/66 and 2066/67. Similarly, actual closing cash balance is increasing trends in all fiscal year. It is in F/Y 2062/63 is Rs.12021625 and reached to Rs.21611536 in F/Y 2066/67. In conclusion, closing cash balance of NTC is positive and it is higher than projected cash balance on the whole study period.

The estimation or projection of cash flow is powerful management tool in Nepal Telecom. By knowing its cash position now and the future, Nepal Telecom can get benefit to purchase sufficient inventory for seasonal cycles, to take advantage of discount and special purchases, for adequate future financing and properly plan equipment purchases for replacement or expansion. It is said that lack of liquidity can be a killer even for profitable business. But Nepal Telecom has sufficient cash till the study period. After analyzing the budgeted and actual cash position, there is huge difference on budgeted and actual cash balance. Thus, Nepal Telecom should get an effort to minimize the difference.

If the cash coming 'in' to the business is more than the cash going 'out' of the business, the company has a positive cash flow. Nepal Telecom has also positive cash flow i.e. good for the company. Sometimes it is worry about what to do with the excess cash. The main danger when putting together a cash flow projection is being over optimistic about the projected sales. Nepal Telecom has succeeded to avoid a cash crisis by developing cash flow projection.

4.3.4 Cash Flow Statement of NTC:

Cash flow statement is an important tool which provides information to its users about the ability of the enterprise to generate cash and its utilization. In recent years, the statement of cash flows has come to be viewed as a part of full set of financial statement. NTC prepares short term cash budget in a systemic way. It estimate the probable cash receipts and cash disbursements with the help of other functional budget and estimates the probable future cash deficits or surplus. Cash flow statement signifies the movements of “Cash-in” and “Cash-out” of the company. Inflow of cash is known as source of cash and outflow of cash is called use of cash.

Cash flow statement of the corporation signifies the movements of cash in hand and out of corporation. Inflows of cash are known as source of cash and outflow is called use of cash. This statement also depicts the factors for such inflow and gets flow of cash. It virtually takes the nature and character of cash receipt and cash payments through the basic information used in the preparation of this statement differs from that which is used in recording cash receipts and cash payments in cash inflows and outflows are explained and shown in cash flow statement before highlighting its nature and utility. The actual cash flow statement is presented on the heading of cash flow investment activities for the fiscal year 2062/63 to 2066/67. The following table shows that the position of cash flow from operation, investing and financing activities and their mean, and % of cash flow from operating activities with operating profit.

Table: 4.16

Statement Showing Cash Flow Position from Various Activities

Activities	2062/63	2063/64	2064/65	2065/66	2066/67	Mean/Average
CFOA	6722360621	7526293970	9799160046	10716850813	12361498089	9425232708
CFIA	(2483522527)	(3326419166)	(5709497306)	(4955364151)	(3715058882)	(4037972406)
CFFA	(2071719115)	(1475161619)	(2701483949)	(3704945329)	(5225960846)	(3035854172)
Operating Profit	4936647252	5652688491	7942901598	10178024718	10775154464	7897083305
% of CFOA with operating profit	136.17%	133.15%	123.37%	105.29%	114.72%	136.17%

Source: Annual Report of NTC

The table and figures above shows the cash flow position of company in different fiscal year. From fiscal year 2062/63 to 2066/67 cash inflow from operating activities was increasing year by year. The cash inflow from operating activities in F/Y 2062/63 is Rs.6722360621 and it is increasing up to Rs.12361498089 in F/Y 2066/67. Cash flow from operating activities shows the strong position of the NTC. Cash flow from investment activities was in negative and high in F/Y 2064/65 and then it is fewer outflows of cash in F/Y 2066/67 which is Rs. (3715058882). In rest of the study period there was negative cash flow in investing activities but not as much as in year 2064/65. This shows that the company was extending it services and project. Again it shows that the company was in growing stage and it can be said that the company is investing its huge capital in different sectors. But it has less invested capital in the comparison of cash inflow. Similarly, the table shows that the company had negative cash flow from financing activities from year 2062/63 to 2066/67 that means it was paying its long term liabilities. Moreover, it can be concluded that the company is paying back its loan and investing its fund simultaneously, which became possible because of retained earnings. Cash flow from operating activities was ploughed for the investment and loan payment. It shows strong financial position of the company.

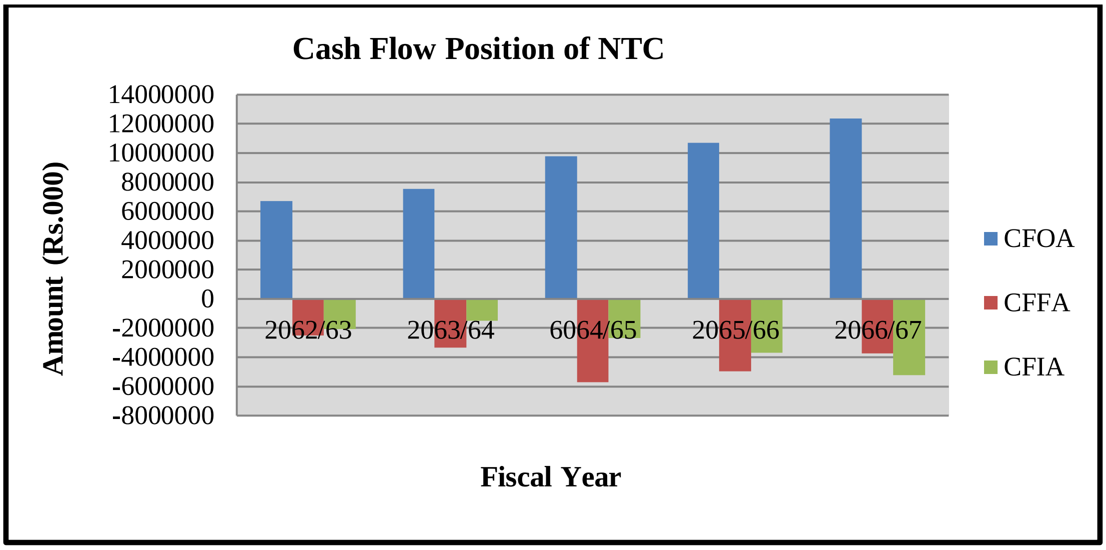
Percentage ratio of cash flow from operating profit is fluctuating during the research period. It is equal percentage in the year 2062/63 and 2066/67 i.e. 136.17% which is highest percentage during the research period. It is just 105.29% in the F/Y 2064/65, is lowest Percentage. In all fiscal year the percentage ratio of cash flow from operating profit is more than 100%.Hence, we can conclude that NTC's financial position is strong if comparing with the operating profit. It shows that the company is in profitable condition but not in proper planning. If there is proper planning the company can achieve more profit in future.

An average or mean cash flow from operating activities is Rs. 9425232708 as an overall. In F/Y 2062/63 and 2063/64 the cash inflow from operating activities is lower than average. This shows that the company doesn't maintain an average. But in the F/Y 2064/65, 2065/66 and 2066/67 it are Rs.9799160046, Rs.10716850813 and Rs.12361498089 respectively which shows better than average. Comparing with average it can be said that the company is in good position regarding the cash flow from operating activities. Similarly, the mean or average cash flow from investing activities and financial activities are Rs. (4037972406) and Rs. (3035854172). It shows that the company is investing huge amount in telecommunication infrastructure development and different sectors to cover the market of telecommunication. And also the company is investing huge amount in repaying its debt and in marketable securities. In conclusion, the company has been maintaining adequate liquidity despite its repayment of loan and investment in infrastructure.

The position of the cash flow from different activities of the NTC also can be shown by the help of the following diagram.

Diagram: 4.5

Cash Flow Position of NTC



Where,

CFOA = Cash flow from operating activities

CFIA = Cash flow from investing activities

CFFA = Cash flow from financing activities

The above diagram 4.5 shows the cash flow position from operating financing and investing activities. From the analysis of the diagram it can be easily be found that the cash flow from investing and financing is in negative form. This shows that the NTC is investing huge amount of money of financing activities. Cash investment in financing & investing activities is fluctuating trends. The diagram also shows the cash flow from operating activities is increasing year by year and it is sufficient to cover the negative cash flow from investing and financing activities. Finally the closing cash balance of NTC is all the fiscal year is positive and increasing year by year. This shows the good condition of cash balance in the company but remains the danger of idle cash balance if the closing cash balance increases. Therefore, the company should adopt the effective cash management policy for the better utilization of cash and should more invest in telecommunication sectors to achieve more Profit.

4.4 Major Findings:

The major findings of this research study are based on the analysis of available data which are pointed out as follows;

1. Actual operating income of the NTC is increasing in fluctuating trend. Sales plan of NTC is not systematic. So, it has not achieved its target to increase operating income.
2. Budgeted sales unit is in fluctuating trend from 8.94% to 3.06% during the research period. Similarly, actual sales unit also is in fluctuating trend from 4.91% to 4.42% and 5.59% to 3.8%.

3. Achievement in sales unit has not been met during the research period. The highest achievement in units is 80.70% in F/2062/63. But achievement in sales revenue has slightly increased than sales unit. Highest achievement was 97.19% in fiscal year 2064/65. In all fiscal year sales revenue achievements are more than 91%. It means its achievements on sales revenue are satisfactory condition.

4. The trend line equation by least square method shows that the actual revenue in the F/Y 2067/68 will be Rs.27952.26 millions.

5. The 'T' test distribution shows that there is no significant difference between budgeted sales and actual sales of NTC.

6. The analysis of category wise achievement of sales revenue of NTC shows that there is 115.28%% achievement in average. The highest achievement is in Lease circuit and other service is 318.99% and lowest achievement is 57.88% of other operating income category. But in these two categories, NTC has not been generating significant revenue.

7. The analysis of category wise contribution in sales revenue shows that the category of GSM has the highest contribution i.e. 38.028% in average while the least contribution is 0.114% on internet category.

8. The analysis of sales variance in unit (No. of lines) shows the unfavorable situation. Because of the high demand of telephone line there exist gap between budgeted and actual sales of no. of telephone line. The local calls are increasing at this stage but the revenue per line is decreasing. It is due to the bad governance and slow economic growth. Similarly, the sales variance in Rupees also shows the unfavorable situation. It is clear that NTC is trying to achieve actual revenue from the budgeted sales revenue which is possible but have to improve its planning.

9. The analysis of profit and loss shows that NTC is generating maximum profit during the whole research period. Percentage of profit in total revenue is more than 40% in all the fiscal year.

10. The regression line calculated by least square method shows the expected profit Rs. 17618493.80 (In thousands) for the F/Y 2067/68.

11. The correlation coefficient (r) of total revenue and profit is 0.97 which shows that the correlation is highly positive. This means they move to the same direction.

12. The value of r is found to be 0.97 which means that there exists a high degree of positive correlation between sales revenue and profit i.e. the two variables increase/decrease strongly in the same direction. The value of r is far greater than the six times the probable error, which means that there is clear evidence of significant association between these two variables. The computed value of r indicates a cause and effect relationship.

13. The coefficient of determination (r^2) is 0.94 i.e. 94%. This means that profit is expanded up to 94% only by total revenue and the remaining portion 0.06 i.e. 6% is expanded by other factors.

14. Correlation and coefficient value shows that there is a positive relationship between total sales revenue and profit. By the help of regression line, it is clear that future revenue will increase with the increment of total revenue if other things remaining the same.

15. The average debtor turnover ratio of NTC for past five years is 4.77 times. It ranged between a highest of 5.85 times in F/Y 2066\67 and lowest of 3.57 times in the F/Y 2062/63. It shows an upward movement over the study period.

16. Average collection period of NTC over the study period is 78 days. It is in decreasing trend over the study period that is good indication for the company as to convert receivables into cash.

17. The review of overall cash management aspect of NTC shows that there is satisfactory cash balance in the company. Cash to current liabilities ration is also highly satisfactory with the average 2.55 times. Similarly, the cash flow projection

shows that actual cash collection is higher than projected in F/Y 2062/63, 2063/64 and 2065/66. But actual cash application is lower than budgeted in all the year during the research period.

18. The analysis of the cash flow statement shows that cash flow from operating activities is positive and in increasing trend. But cash flow from investing and financing activities is negative. Closing cash balance is positive in all the fiscal year and in increasing trend.

19. NTC has not adopted of practice of preparing monthly revenue earning reports.

20. Nepal Telecom has practiced international accounting system.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary:

The study emphasizes on the cash management and Revenue planning of NTC. Cash management involves planning to controlling activities of the cash and cash equivalents. As stated in the introduction chapter, the objective of the study are to observe the planning and controlling of cash in NTC, to examine internal control policy in NTC regarding cash control practices, to identify surplus and cash position in the company, source of financing, sector of investment and to study liquidity position of the company. Review of related literature and previous studies has been concluded in the second chapter. Tools and techniques, which was implemented in fourth chapter has been described in chapter three. Fourth chapter includes presentation and analysis of data. Hence, an effort has been made in this chapter to present major findings on the arena of cash management of NT to fulfill the objectives of the study.
Planning is the essence of management. Without it, efficient management cannot be imagined. Management planning provides the basis for performance. In NTC revenue results from the sale of telephone service which is measured by the charges made to customers. Revenue is influenced by both internal and external factors. Most of the corporate planning process begins from revenue planning which co-ordinates the effort of revenue department, production department and all other departments. Many factors should be considered for revenue planning including revenue trends, limitations of supply, potential competitors and general level of economy.

Cash management is concerned with the decision regarding the short term funds influencing overall profitability and risk involving in the firm. The management of cash has been regarded as one of the conditioning factors in the decision making issue. It is, no doubt, very difficult to point out as to how cash is needed by a particular company. It is very essential to analyze and find out the solution to make an efficient use of funds for minimizing the risk of loss and to attain profit objectives.

Telecommunication is an inevitable infrastructure of development to all countries. It is considered as prerequisite for the other dimension of development. In Nepal, the need of telecommunication services is primarily fulfilled by Nepal Telecom. History of telecommunication service in Nepal is not so long. First telecommunication service in the country had been introduced in 1972 BS. Since then and up to the launching of first five year plan of 2013 BS, the development of telecommunication was in slow pace. After Nepal started systematic economic development by launching its first five year plan in 2013BS, various national and international trunk lines were added and cross bar telephone lines to people and public offices were distributed. Introduction of liberalized economic policy in Nepal gradually facilitated the private sector investment as a result multinational companies also showed their presence. Further more public enterprises started to be privatized. Such trend couldn't also remain intact without influencing Nepal Telecommunications Corporation. Hence Nepal Telecommunications Corporation has been changed to Nepal Doorsanchar Company limited in 2061 BS under the Company Act. It s popularly known commercial name is "Nepal Telecom" with "Nation Building is Our Goal". Nepal Telecom has been recently established under the Company Act. Its 91.52689% ownership has been held by Nepal Government by receiving the entire investment from government. As financial health is the key indicator of the success and failure of the organization, different financial indicator show to what extent would the organization is capable to meet the expectations of various stakeholders of the company. In the light of this main issue the study is to evaluate the profit planning of Nepal Telecom on the basis of latest available information. It will light upon the past financial strength and weaknesses faced by the organization and provide the guidelines to improve the financial health. Financial Analysis and planning function is not a decision- making in itself rather it is an ancillary service which helps in planning for those two decisions and evaluating the outcome of those two decisions and recommending necessary rectifying measures. The study has been concentrated into the profit planning mechanism practice and its chronological development over the study period.

Since the establishment of Nepal Telecommunication Corporation, it has been providing reliable and affordable telecommunication services to the nation. The privatization of Nepal Telecom has been proved to be beneficial for the efficient operation of the company. Nepal Telecom has growing concern of greater national importance in the area of providing telecommunication services and to serve as an impetus to the social, political and economic development of the country. Nepal Telecom has been enjoying monopoly in telecommunication sector except UTL and Spice Nepal. However, the company is continuously facing problem of cash management due to the improper management of revenue and increasing debtors. Furthermore, Nepal Telecom has been investing a large amount of net profit in non- productive sectors that increases the operating expenses which never help it to generate the revenue. So, the objective of this study is to have true insight into its "Revenue planning and cash management". If Nepal Telecom is able to manage revenue efficiently, the company can manage its cash very effectively. In the light of this fact, the study has attempted to provide a possible suggestive framework for the better revenue planning and cash management of Nepal Telecom.

As per the nature and requirement of the study, secondary data are used with the descriptive and analytical research design. For this research study five years data from fiscal year 2062/63 to 2066/67 has been used. Data are tabulated and presented as per the requirement of the study.

For the analysis of data different statistical tools like arithmetic mean, standard deviation, coefficient of correlation, coefficient of variation, coefficient of determination, probable error of correlation, regression graph, diagrams and hypothesis testing have been used. Similarly, financial tools such as ratio analysis and variance analysis have also been used.

The sales performance of Nepal Telecom is satisfactory and sales revenue is increasing every year but rate of increment is fluctuating. The company's main source of revenue is GSM service which covers 38.028% of total revenue and second highest contributing sector is Local call. Thus, these two sector has been playing crucial role in generating revenue if compare to other category. As a matter of fact, Nepal Telecom is still unable to provide telephone services according to consumer's demand. Therefore, Nepal Telecom needs to improve its quality of services through proper standardization which may help to increase its revenue and profit.

Throughout the study, it is found that Nepal Telecom has huge amount of cash and bank balance. Cash is an inevitable means and ends for the business operation and it must be held in sufficient. Holding of cash both in excess and insufficient than requirement may lead a firm to serious problems. Nepal Telecom has enough cash but it is found that the cash management of Nepal Telecom is not effective. Basically, efficient cash management is concerned with the management of cash inflow and out flow but the figure and data shows the inability of effective cash management of Nepal Telecom because it is lying idle.

The main source of cash of Nepal Telecom is sales of telephone services. Besides this source, company receives income from the sale of materials, maturity of financial investment and other. Company uses its cash to purchase telephone exchange, materials, capital expenditures, administrative expenses, employee cost and operating & maintenance cost etc. The company holds cash for transaction motives. Despite this fact, Nepal Telecom has getting effort for the effective cash management which helps the company to maintain sufficient liquidity and to improve its profitability.

5.2 Conclusions:

Having analyzed the overall revenue planning and cash management of NTC, the following conclusions are drawn.

1. During the whole study period, the actual sales achievement in units or no. of lines is lower than the budgeted targets. This fact is realized due to ineffective implementation of budget.

2. The actual sales achievement in Rupees is also lower than budgeted. It means it has not proper revenue planning to collect revenue as per budgeted.

3. NTC has not considered demand determents such as family income, price of call of one minute, connection charge, cost of alternative available, cost of auto generation of telecommunication and reliability of NTC service which forecasting demand.

4. Analysis of consumption or use of mobile, there is no good networking system.

5. The category wise achievement in sales revenue shows fluctuating average which is due to ineffective planning. So, the categories having average below hundred percent should be increased.

6. NTC should get consistency in the contribution of different category for the total revenue especially in some category such as internet and other services.

7. During the whole research period, there is no any contribution of in mar sat, sat phone category. So, this category should be stopped.

8. NTC has been generating highly satisfactory profit during the whole research period. So, it is a profitable organization but the profit is based on high price charge by the company.

9. NTC has failed to make collection plans of next year on the basis of previous year collection. But its Average collation period is decreasing trends which show positive for the company.

10. The relationship between budgeted and actual sales is positive. Therefore, it can be concluded that the actual sales revenue in future will be increased.

11. NTC has not exercised in preparing monthly budget which is extremely necessary for planning and controlling.

12. The balance sheet and cash budget of Nepal Telecom shows the huge amount of cash and bank balance lying idle and it indicates some deficiencies of the company to utilize its liquid assets. So, Nepal Telecom could not make the best use of available cash balance prudently.

13. The cash collection efficiency in Nepal Telecom is better through which the company can maintain desire level of cash balance but the company has not determine optimum cash balance.

14. The cash and bank balance with respect to current liabilities shows that the company has enough cash to pay the current obligation. In overall, Nepal Telecom has positive cash flow which is good for the company but the company has not clear policy to invest excess cash. Thus, the company has faced the problem of effective cash management.

5.3 Recommendations:

Revenue planning and cash management is the essence of management. Financial efficiency is essential for achieving the goals and objectives of any business enterprises. Based on the overall research study, the following suggestions are recommended for the efficient formulation and implementation of revenue planning and cash management of Nepal Telecom.

1. Nepal Telecom's economic planners must be properly trained for the effective Revenue planning and cash management.
2. NTC should considered demand determents such as family income, price of telephone installed, SIM card and cost of cost alternatives available, cost of self-mobile service such as voice mail cost, massage cost. And reliability of NTC service while forecasting demand.
3. NTC should prepare plans and program for consumer and solve network problems.
4. Budgeted target of sales unit or no. of line has not been met but the demand of telephone line is higher. Thus, Nepal Telecom should follow management by objectives (MBO) techniques to maintain co-ordination, cooperation and self-motivation among the different regional branches, departments and employees.
5. Nepal Telecom is paying a huge amount as interest on long-term loan which is not good for the company. So, the company should give emphasis for internal financing to reduce such burden. Moreover, Nepal Telecom must restructure its capital structure, for this purpose, it can refund its debt by issuing shares.
6. The financial position of the company should timely be evaluated by the help of ratio analysis and other relevant financial and mathematical tools.
7. Nepal Telecom should follow the proper cash planning to estimate cash collection and payments accurately which helps to control the cash flow very effectively. Similarly, NTC should follow various cash management techniques such as Baumol & Miller-Orr model etc. which can be applied to predict the optimal cash balance.
8. NTC should forecast planned collection for next year on the basis of actual cash collection of previous year.
9. NTC is keeping excess cash balance which is the main cause of idle cash. Therefore, NTC should determine its optimum cash balance. Then, excess cash balance should be invested in productive sector so that idle cash balance would not occur.
10. The company's liquidity position is satisfactory. However, it is important for the company to estimate how much fund is necessary to maintain liquidity position and to invest the surplus cash funds in marketable securities or profitable opportunities to generate revenue.

11. Nepal Telecom should develop & follow the long term strategy related to revenue planning and cash management which is very important to generate maximum revenue and maintain adequate cash in long term. Moreover, the company must use such strategy to shorten the cash conversion period so that it can be helpful for ' close the cash flow gap.

12. Nepal Telecom should try to reduce overdue amount of receivables. NTC should provide incentives to its employee to encourage them for the collection of overdue amount of receivable. Moreover, NTC should establish separate department for the collection of old debt (defaulters) that will help to monitor revenue collection. In revenue collection process any kind of undue influence (especially political), nepotism and biases should strictly be discouraged.

13. Most of the Nepalese enterprises are facing the problem of government interfere and their programs are not implemented properly NTC is facing these kind of problem. So, it should control government therefore in decision making and planning.

14. NTC should introduce programmed and action plan to solve network problem and stolen telephone lines and miss used of telephone call reduction the loss of technical and non-technical.

15. While preparing central budget of NTC, it should take suggestions made by branches and sub-branches.

16. NTC should start to practice of preparing monthly budget for sales revenue.

17. To achieve target growth rate in sales revenue NTC should make realistic forecast.

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APPENDICES

APPENDIX-I

Calculation of Arithmetic mean, Standard deviation, Co-efficient of variation of Budgeted and Actual sales revenue;

In Rs. '000'

Fiscal Year	Budgeted Sales (X)	Actual Sales (Y)	$(X-\bar{X})^2$	$(Y-\bar{Y})^2$
2062/63	12107.812	11058.915	43199044.47	41682841.25
2063/64	15348.921	13967.318	11098818.96	12587040.94
2064/65	17272.992	16788.359	1980825.43	528210.62
2065/66	21708.429	20646.629	9168899.06	9806223.36
2066/67	26963.913	25114.462	68616421.95	57749694.86
	$\sum X = 93402.067$	$\sum Y = 87575.683$	$\sum(X-\bar{X})^2$ =134064009.9	$\sum(Y-\bar{Y})^2$ =122354011

(A) Budgeted Sales:

a. Arithmetic Mean $(\overline{X}) = \frac{\sum X}{n} = \frac{93402.067}{5} = 18680.41$

Standard Deviation $(\sigma_x) = \sqrt{\frac{\sum(X-\overline{X})^2}{n}} = \sqrt{\frac{134064009.9}{5}} = 5178.11$

Coefficient of Variation $(C.V._x) = \frac{\sigma_x}{\overline{X}} \times 100 = \frac{5178.11}{18680.41} \times 100 = 27.72\%$

(B) Actual Sales:

Arithmetic Mean $(\overline{Y}) = \frac{\sum Y}{n} = \frac{87575.683}{5} = 17515.14$

Standard Deviation $(\sigma_y) = \sqrt{\frac{\sum y^2}{n}} = \sqrt{\frac{122354011}{5}} = 4946.80$

Coefficient of Variation $(C.V._y) = \frac{\sigma_y}{\overline{Y}} \times 100 = \frac{4946.80}{17515.14} \times 100 = 28.24\%$

APPENDIX- II (A)

Category-wise Achievement of sales in relation to the budgeted sales (In %) of NTC

(Rs. 000)

	2062/63			2063/64			2064/65		
Category	**Budgeted**	**Actual**	**Achievement (%)**	**Budgeted**	**Actual**	**Achievement (%)**	**Budgeted**	**Actual**	**Achievement (%)**
Local Telephone	3135789	3047522	97.19	3209246	3387748	105.56	3307308	3430153	103.71
STD	1556980	1401297	90.00	1663724	1607942	96.65	1755067	1326005	75.55
ISTD	1302578	1257939	96.57	1572301	1306134	83.07	1445304	985685	68.20
Leased Circuit & other service	292792	275125	93.97	285278	360695	126.44	76786	317077	412.94
GSM	4075127	3544237	86.97	4563799	3843309	84.21	6388900	5890885	92.20
Internet	17293	14869	85.98	25243	19351	76.67	64312	22744	35.37
CDMA	809233	872753	107.85	929463	1027355	110.53	1963120	2344998	119.45
Other operating income	452833	297956	65.80	886589	442951	49.96	287195	-	-
ADSL	-	-	-	-	-	-	10287	17548	170.58
International Sharing	465187	347217	74.64	2213278	1971833	89.09	1974713	2453264	124.23
Total	**12107812**	**11058915**		**15348921**	**13967318**		**17272992**	**16788359**	

Sources: Annual Report and Budgeted Statement of NTC

APPENDIX- II (B)

Category-wise Achievement of sales in relation to the budgeted sales (In %) of NTC

(Rs. 000)

	2065/66			2066/67		
Category	**Budgeted**	**Actual**	**Achievement (%)**	**Budgeted**	**Actual**	**Achievement (%)**
Local Telephone	3516639	3390373	96.41	3855016	3275034	84.96
STD	1407371	959939	68.21	1208791	828536	68.54
ISTD	1048124	652156	62.22	814950	330114	40.51
Leased Circuit & other service	57152	494831	865.82	302835	290144	95.81
GSM	10295691	8938748	86.82	12952089	13106751	101.19
Internet	28063	22476	80.09	58557	12590	21.50
CDMA	2969888	2642857	88.99	4361503	2627576	60.24
Other operating income	356424	-	-	-	-	-
ADSL	121600	160583	132.06	310473	381517	122.88
International Sharing	1907477	3384666	177.44	3099699	4262200	137.50
Total	**21708429**	**20646629**		**26963913**	**25114462**	

Sources: Annual Report and Budgeted Statement of NTC

APPENDIX- III (A)

Percentage contribution of each category in Total Sales Revenue

From Fiscal Year 2062/63 to 2066/67

	2062/63		2063/64		2064/65	
Category	**Actual sales**	**Contribution**	**Actual sales**	**Contribution**	**Actual sales**	**Contribution**
Local Telephone	3047522	27.56%	3387748	24.25%	3430153	20.43%
S.T.D.	1401297	12.67%	1607942	11.51%	1326005	7.90%
I.S.D.	1257939	11.37%	1306134	9.35%	985685	5.87%
Lease circuit & other services	275125	2.49%	360695	2.58%	317077	1.89%
GSM	3544237	32.05%	3843309	27.52%	5890885	35.09%
Internet	14869	0.13%	19351	0.14%	22744	0.14%
CDMA	872753	7.89%	1027355	7.36%	2344998	13.97%
Other Operating Income	297956	2.69%	442951	3.17%	-	
ADSL	-		-		17548	0.10%
International sharing	347217	3.14%	1971833	14.12%	2453264	14.61%
Total	**11058915**	**100.00%**	**13967318**	**100.00%**	**16788359**	**100.00%**

Sources: Annual Report and Budgeted Statement of NTC

APPENDIX- III (B)

Percentage contribution of each category in Total Sales Revenue

From Fiscal Year 2062/63 to 2066/67

	2065/66		**2066/67**	
Category	**Actual sales**	**Contribution**	**Actual sales**	**Contribution**
Local Telephone	3390373	16.42%	3275034	13.04%
S.T.D.	959939	4.65%	828536	3.30%
I.S.D.	652156	3.16%	330114	1.31%
Lease circuit & other services	494831	2.40%	290144	1.16%
GSM	8938748	43.29%	13106751	52.19%
Internet	22476	0.11%	12590	0.05%
CDMA	2642857	12.80%	2627576	10.46%
Other Operating Income	-		-	-
ADSL	160583	0.78%	381517	1.52%
International sharing	3384666	16.39%	4262200	16.97%
Total	**20646629**	**100.00%**	**25114462**	**100.00%**

Sources: Annual Report and Budgeted Statement of NTC

APPENDIX- IV

Relationship between Total Revenue & Profit:

Total Revenue is assumed to be independent variable denoted by 'X' and Profit as assumed to be dependent variable denoted by 'Y'.

Fiscal Year	Total Revenue (X) (In Rs. '000')	Profit (Y) (In Rs. '000')	$x=\left(X-\overline{X}\right)$	$y=\left(Y-\overline{Y}\right)$	x^2	y^2	xy
2062/63	11058.915	4936.647	-6456.22	-2960.44	41682797.35	8764182.494	19113232.14
2063/64	13967.318	5652.688	-3547.82	-2244.40	12587016.82	5037309.814	7962707.036
2064/65	16788.359	7942.902	-726.78	45.82	528205.6799	2099.362433	-33300.0775
2065/66	20646.629	10178.025	3131.49	2280.94	9806244.651	5202695.495	7142751.912
2066/67	25114.462	10775.154	7599.33	2878.07	57749746.54	8283291.53	21871396.53
	$\sum X=$ 87575.68	$\sum Y=$ 39485.42	$\sum x=0$	$\sum y=0$	$\sum x^2=$ 122354011.03	$\sum y^2=$ 27289578.7	$\sum xy=$ 56056787.54

1. For Total Revenue (X):
   a. Arithmetic Mean $\left(\overline{X}\right)=\frac{\sum X}{n}=\frac{87575.68}{5}=17515.14$
   b. Standard Deviation $\left(\sigma_x\right)=\sqrt{\frac{\sum x^2}{n}}=\sqrt{\frac{122354011.03}{5}}=4946.80$
   c. Coefficient of Variation $\left(C.V._x\right)=$
   $\frac{\sigma_x}{\overline{X}}\times 100=\frac{4946.80}{17515.14}\times 100=28.24\%$

2. For Profit (Y):
   a. Arithmetic Mean $\left(\overline{Y}\right)=\frac{\sum Y}{n}=\frac{39485.42}{5}=7897.08$
   b. Standard Deviation $\left(\sigma_y\right)=\sqrt{\frac{\sum y^2}{n}}=\sqrt{\frac{27289578.70}{5}}=2336.22$
   c. Coefficient of Variation $\left(C.V._y\right)=$
   $\frac{\sigma_y}{\overline{Y}}\times 100=\frac{2336.22}{7897.08}\times 100=29.58\%$

3. Coefficient of Correlation (r) Between Total Revenue and Profit (r_{xy});

We have,

Coefficient of Correlation (r_{xy}) =

$$\frac{\sum xy}{\sqrt{\sum x^2} \times \sqrt{\sum y^2}} = \frac{56056787.54}{\sqrt{122354011.03} \times \sqrt{27289578.70}}$$

$$= \frac{56056787.54}{11061.37 \times 5223.94} = 0.97$$

4. Coefficient of Determination $(r^2) = (0.97)^2 = 0.94 = 94\%$
5. Probable Error of Correlation Coefficient $P.E.(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

$$= 0.6745 \times \frac{(1-0.94)}{\sqrt{5}} = 0.0181$$