

CHAPTER - I

INTRODUCTION

1.1 General Background

Nepal is bordered between the two most populous countries of the world India in the east, south and west and China in the north. Nepal is one of the least developed countries in the world lying as sandwiched between the two big countries, China and India. Poverty is widespread and necessities of many have not been fulfilled. The annual per capita GDP of Nepal is estimated to be just \$388 by ADB (Nepal in figure; 2008). Economic growth of the country has not improved substantially over time to overtake population growth.

Low economic growth rate, growing unemployment and poverty etc. are main problems of the country. These problems can be reduced through mobilizing all kinds of available resources. Nepal has adopted mixed economy to develop nation through participation of both private as well as public sector.

"Nepalese main source of income is agriculture sector. More than 80% of the total population depends on the agriculture sector. Economic development of the country is easy through development of this agriculture sector" (*Ghimire; 2004: 187*).

Most of people are living in the rural areas and are below the line of poverty. Though agriculture is main stay of Nepalese economy, only this sector is handicapped, so the nation should also emphasize other industrial and commercial areas.

Like other developing countries in the world, the government of Nepal has also taken public enterprises as a means of economic development of the country, after the introduction of first plan in 1956. The rationale behind the establishment of such

enterprises is to carry the programs set in the economic plan for economic development, which makes the country self sufficient ultimately. Due to lack of infrastructure, lack of skilled man power, investment problem, unwillingness to bear the risk of private sector, unbalance development of the country were the reasons behind the emergence of public sector.

1.2 Cash Management

Cash is the life blood of every business organization without cash no business activities can be taken place. There are several issues are involved in the management of this firm's liquidity position. One is to develop efficient system for the management of cash inflow and cash outflow. Efficient cash gathering and disbursal has become a major area of managerial finance so high level corporate executives are involved and so many conceptual issues are raised that important institutional developments in cash management have taken place. Because the developments in this field are so rapid and the literature has become so substantial.

The idea of cash management has not come directly and independently in it's separate entity. Before 1970's" "cash management was affiliated with the economics. Many more organization of the world were enjoying by making reasonable profit margin and many organization before 1970's period survive without proper management of cash. But by the reason of inflation in 1970's the situation changed and many profitable enterprises were confronted with the problem of liquidity and even faced technical insolvency. The investors once again lost confidences in the credit worthiness of enterprises. As a result rising of funds, through the issue of shares from the present and potential investors become impossible. The liquidity problem also put pressure on the financial institutions

making long term loans and forced them to raise to rates of interest very frequently. After 1970 and problem faced by the enterprises cash is considered as a major component of the working capital of the organization and started to manage cash in the best way then the separate entity of cash management has established. So the cash was came to the separate and independent entity by the 1970's "inflation" (*Bajracharya;1990: 160*).

1.3 Public Enterprises

Public enterprises in Nepal constitute a vital instrument for the socioeconomic development of the country. It enjoys a strategic and crucial position in our mixed economy. "PE's are autonomous bodies which are owned and managed by government and which provide goods or service for a price. The ownership with the government should be 51 percent or more to take an entity PE" (*Laxmi Narayan Updhyaya; 1972: 42*). They have been established in many sectors for the overall development of the country with different goals and objectives. Nepal tried to develop public sector institutions after the advent of democracy in the year 1951. The first enterprise to be turned to public sectors was Nepal Bank limited established in 1994

B.S. Nepal started its planned economic development in 1956 with launching of first five year plan. Since then the number of PE has increased substantially in the various field of Nepalese economy. There were 64 PE's before the privatization program of His Majesty Government at present there are 43 PE's in Nepal. Out of 43, 13 are in industrial sector, 6 are in trading sector, 8 are in service sector, 5 are in social sector, 3 are in public utility sector and 8 are in financial sector. The PE's are dominant in the production of sugar, cement, cigarettes, agriculture tools, petroleum product. Since the establishment of Nepal

Telecom Limited, 28 years ago as public enterprises, its responsibility has been to provide reliable and affordable telecommunication

Service throughout the kingdom. Through its contribution effort to fulfill this responsibility, NTC's contribution towards the overall socio-economic development of the nation is noteworthy.

1.3.1 Introduction of Nepal Telecom Ltd.

Telecommunication is a system which facilitates conveying information quickly over long distance with a cheap cost. It is also known as one of the quickest, cheapest as well as the most scientific means of communication in the modern world. In a developing country like Nepal, the role, importance and contribution of telecommunication in the economic development of the country cannot be exaggerated as there is no sector where telecommunication has not played a role. The effect of telecommunication on the rural areas and their contribution to rural development are potentially extremely important, yet rather difficult to measure.

The history of telecommunication development in Nepal is not long one. The first telecommunication services were started in Nepal during the regime of Chandra Shumser in 1972 B.S. it was the first time and a good opportunity for Nepalese people to transmit messages from Kathmandu to Birgunj. This telephone line was attributed as magneto connected Birgunj with Kathmandu under the name of "Shree Chandra Telephone". Through no remarkable development has been found, another telephone line connecting Kathmandu and Gaur had been installed in the year 1980 B.S. In the year 1992 B.S., 25 automatic telephone lines were distributed among the high ranking personalities of

Nepal for their own uses. The telecommunication office was first established near Rani-Pokhari, Kathmandu.

Future telecommunication lines were made available during the rule of Prime Minister JuddhaShamser by catering the line in the different districts to the extent of 300 miles long. The telephone lines were being extended from Kathmandu to Siraha, Shaptari while the same being extended up at Hanuman Nagar in 1994 B.S. In the year 1998 B.S. additional installation of telephone line linking Dhankuta, dharan and Biratnagar were distributed.

A noticeable change happened toward telecommunication during the period of JuddhaShamser. About 200 miles long telephone line was also bought into use in western part of Nepal. The government of Nepal felt the need of telecommunication for effective administration and active participation of people to achieve national goal. So 200 local C.B. telephone lines were setup and distributed for his Majesty's Government offices having exchange office at Singh Durbar. In the year 2002 B.S. before implementation of first five year national plan, Nepal 200 C.B. lines, 100 magnet lines, 15 automatic lines, 10 military exchange lines and 600 miles of trunk lines connecting Kathmandu with other districts.

Before the implementation of first five year national plan had wireless relation between 28 centers only in various parts of the country. About 18 of these stations were equipped with modern equipment. The wireless services were made workable by means of petrol generators in different districts 65 except Kathmandu and Biratnagar.

As the material and machinery required for wireless has been made available during the period of second world-war, a satisfactory service could not be achieved on account of problems faced while transporting the petrol in remote districts.

Nepal telecom ltd. was established on 2032\03\01 B.S. under Nepal telecommunication act 1971 to provide reliable and affordable telecommunication service all over the country. Most rural areas of Nepal are characterized by low population density, long distances between settlement areas and unfavorable geographical and climatic conditions. Other difficulties are low education level, less job opportunities, low per capita income, increasing tendency of population to migrate to urban centers, poor, unreliable or non-existent public transport, irregular or nonexistent power supply, poor health care and medical services. The basic objective of the need for providing telecommunication facilities in those rural areas is to trigger the development activities and to minimize above mentioned disadvantage, thereby by improving the quality of life. NTCL is planning to serve rural areas by adopting various technologies. VSAT shall be deployed in high mountain areas and in those remote areas where other terrestrial system are not feasible or viable. Mid mountain areas and southern plain areas (tearibelt) shall be served by combination of wireless local loop (WLL), VHF/UHF radio communication, small rural exchanges with copper network or other appropriate system.

Nepal telecommunications corporation (NTC) is a wholly government owned public sector entity, administered by a government appointed a Board of Directors which includes a chairman and voting members. The board includes NTC's General Manager who chairs the meeting in the absence of the chairman. A senior officer of NTCL is appointed as a nonvoting secretary. NTC, like other government owned corporations, is

subjected to government regulations for investment plan approval, foreign credit access and staffing and staffing and employment conditions. However, more autonomy to the entity may be in the offing in near future which shall be a part of the Government's proposed deregulation and liberalization policy in the telecommunication sector. NTC's general manager is the chief executive officer and is appointed by GOVT. OF NEPAL, not by NTC's Board of Directors.

1.3.2 Services provided by NTCL

NTCL is moving ahead to establish nationwide telecommunication infrastructure, the foundations for its revolution in the country. In view of unprecedented development in the world of information and communication technologies, NTCL is trying its best to make a quantum leap forward to expand services not only in urban areas but also in the vast rural areas. More efficiency, increased productivity, better consumer services and more professionalism in the management are the key areas where NTCL will be giving top priority in the coming days of competitive environment in the telecom sector. The main services provided by NTCL are as follows.

i) Basic Telephone Services

In its continued effort to satisfy the ever growing demand for telephone lines, NTCL has augmented its telephone exchange line capacity for the best interest of its valued customers. As per MIS report of Magh 2065, the total installed capacity and distributed telephone line of NTCL has reached the 554566 and 371816, 2060/61 marks respectively. The total capacity includes all the telephone exchanges, Rural exchange spread

throughout the country. Recently NTCL has 171 operational exchanges in 72 districts and the service is available in all the 75 districts of Nepal.

All the exchanges of Kathmandu valley are linked by optical fiber SDH network. Outside the valley the exchanges between Bhairahawa-Butwal is also linked by optical fiber network. This shift towards the optical transmission systems has resulted in more reliable network and significantly improved quality of voice and data transmission.

ii) National Trunk Telephone Services

The total number of trunk circuits is 50,700. This network enables NTCL to provide telephone service to more than 72 district, metropolitan centers and main towns of the country.

iii) Rural Telecom Services

The significance of communication channels such as Public Call Offices (PCOs) in a country where about 85 percent of the people live in the rural areas with very remote and inaccessible terrains cannot be overlooked. NTCL is working vigorously towards achieving the GOVT. OF NEPAL's objective to serve all the VDCs of Nepal with basic telephone lines and is expanding its communications infrastructure in rural areas to connect more VDCs to the national network irrespective of its economical value and law prospects of returns. NTCL now covers about 72 districts.

iv) Pay Phone Services

Catering to the customer's need who do not own a own telephone line, for easy access to the telephone services anywhere, any time while on the move without having to carry

coins to make phone calls. NTCL launched payphone services using smart cards in Kathmandu since 2058 and other parts of the country such as Pokhara, Bharatpur, Nepalgunj and Dhanagadhi later. Today there are altogether 260 payphone sets (201 indoors and 59 outdoor sets) installed in key commercial, business oriented and public service places of the country.

v) GSM mobile services

NTCL started GSM cellular mobile services in year 1999 in recent days this service has been expanded to various major cities throughout the country. At present, the total mobile subscribers in the country are reaching a 38,000 landmark. By end of July 2003, GSM cellular mobile coverage has been extended along the highways from Kathmandu to Pokhara, Kathmandu to Bharatpur, Bhairahawa region, Nepalgunj region in the west and to Kakarvitta in the east. Hence, all neighbouring towns along the highway shall also have GSM coverage. Together with the expansion of the coverage area of the mobile services the subscriber capacity has been increased to 50,000 lines for post paid services. 40,000 lines for new services like PPC (Pre-Paid Service) with has been introduced from September 2003. Mobile subscribers continue to avail services such as voice, fax, Data, Voice mail system (VMS), short message services (SMS), National and International services. In fiscal year 2065/66 magh GSM Mobile are 2357790.

vi) Voice, Data and Telegraph Leased Circuits Services

NTCL provides voice leased circuit services for voice telecast to the various countries to which NTCL has direct links. NTCL also provides national and international leased circuit services of high speed and low speed for data communication purposes.

vii) Email and Internet Services;

NTCL has been providing Email and Internet service to its customers in Kathmandu valley since 2000. Internet billing system has been in operation since October 2001. Monthly bills for all mobile telephone subscribers have also been put on the net since January 2002. Number of subscribers utilizing these facilities is on the rise everyday. At present a total of 10441 internet user and 4489 email users have registered to this service.

ix) Inmarsat mini-services

Keeping in tune with the fast changing technology trend in the present mobile communications Industry has become a necessity. This being used for commercial, rescue, adventurous and safety applications. NTC's Inmarsat mini-m is a digital, fax and data system which works with very compact terminals.

x) Home Country Direct Dialing Services

Foreign visitors in Nepal can directly call their own country's telephone operator by dialing specific access code and book to their home country numbers without need of paying locally. Presently NTCL provides home country direct dialing services to USA, UK, Japan, South- Korea and Singapore.

xi) International Telegraph Services

International telegraph service available is quail able

all parts of the world through satellite optical fiber links. Nepal has direct telegraph circuits with India Japan.

xii) International Program TV Services

NTCL provides this service for occasional use. This service includes transmission of video message by press correspondent, TV broadcast of major events either records or live on booked basis.

xiii) Telex Services

The telex service provided by NTCL is fully automatic. The present new telex exchange was installed in 2001. Telex service operates through satellites circuits and optical links. Nepal has direct telex links with 7 countries- 8 destinations (USA, UK, Germany, Singapore, Japan, Hong Kong, and India- Mumbai and Kolkatta). It provides international telex services to more than 200 countries. Domestic telex services are available in Birgunj, Biratnagar, Bhairahawa, Pokhara, Butwal and Nepalgunj.

xiv) V-SAT and WII Services

NTCL has been providing telecommunication service in various remote and inaccessible parts of the northern mountains region by v-sat equipment. The v-sat service provided by NTCL has altogether 61 stations installed in various parts of the country under the WII system 67 lines in Nawalparasi, 62 lines in Rupandehi and 15 lines in Kapilvastu district were distributed.

1.3.3 Present Status of NTCL in the Telecommunication Sectors

"With the present tendency (number of telephone per 100 population) of just 1.3 and more than 60 percent of rural areas without any kind of telecommunication services, the main challenge in telecommunication sector is to fulfill the ever increasing urban demand

for telephone lines and at the same time expand telecom infrastructure in vast areas of rural areas. If one looks back at the development scenario of the telecommunication sectors in the past decade, the picture could be considered as reasonably satisfactory. Between 1995 and 1999, annual growth rate in telephone lines in Nepal was 28.8 percent, the third highest in Asia-Pacific region after Srilanka (33.8) and Cambodia (32.1%). The figures were 8.9 percent in Bangladesh, 27 percent in China, 19.8 percent in India, 7.4 percent in Pakistan, 10 percent in Thailand and 26.3 percent in Vietnam. However, with present waiting list of about 2,90,000 applications, for new telephone connections as against 3,25,000 connected main lines, coupled with urban demand for latest high-tech services on one side and rural obligation on the other side, the current and future challenge remain daunting. It now a forgone conclusion that in the modern day world, IT (Information Technology) development is essential for overall economic growth of a country like Nepal and without adequate telecommunication infrastructure, IT development is not possible." (<http://www.nepalcom.com.np/>)

Given Nepal's mountains and Kathmandu valley's separation on from the densely populated areas of the terai region on the south along the border with India, telecommunications service has become a vital element in government administration, trade and industry and the entire socio-economic development of the society. With this realization, GOVT of Nepal has already formulated the new telecommunication

Act and Telecom Policy, which has allowed competition with entry of one private operator each in mobile as well as fix telephone service based on wireless local loop.

An autonomous regulatory body named Nepal Telecommunication Authority (NTA) is functioning last five years. With more than a dozen ISPs (Internet Services Providers)

and V-SAT operators operating with licenses from NTA, IT sector is moving at faster pace and NTCL is the leading role in establishment of telecommunication infrastructure in the entire country including remote rural areas.

1.3.4 Objectives of the NTCL in Tenth National Plan

Since its establishment 28 years back, NTCL is dedicated towards providing reliable and affordable telecommunication services throughout the country as a sole national telecommunications operator of local, mobile, long distance and international telecom services. NTC's role is crucial for the social, economic, cultural development and overall upliftment of the nation. NTCL has 100 percent digitalized network employing the world's latest state-of –art technologies. NTC's vast telecommunications network infrastructure is playing a key role in the fast development of information technology in the country, aiding its participation in the global economy and ultimately helping in poverty alleviation.

The main objectives or aim of the NTCL in the Tenth National Plan are as follows

To attain teledensity (basic fixed telephone lines) of 2.7 (this excludes the possible telephone line addition from private operators) by the end of tenth national plan (expected teledensity at the of ninth national plan is about 1.35)

To provide basic telephone facilities in those VDCs of central, western, mid-western and far-western regions, where there are no telephone facilities at the end of ninth plan. It is to be noted that eastern region is singled out to be served by private operating company as per Nat's directive.

To attain mobile teledensity (number of telephones per 100 population) of 0.6 (this excludes the possible mobile subscribers of private operators) by the end of tenth national plan (expected mobile teledensity at the end of ninth national plan is about 0.1).

To provide basic telephone service within six month of demand by any person or institution anywhere in any part of the country including remote rural areas by the end of tenth national plan.

To create “on- demand” telephone distribution situation (which means connection of new telephone lines within 7 days of application) in all major cities and towns of the country by the end of tenth national plan.

To introduce new services and high technologies to fulfill the demand from urban population, specially to cater trade and industry requirements

To give impetus to IT development in the country by expanding internet network throughout the country.To establish broadband backbone links in terlinking major cities and towns, which will help the country to move towards “information society”?

1.3.5 NTC Turns into the Company

Nepal telecom Ltd. (NTCL), the country’s biggest and the most profitable public enterprises, is turning into a company. The 34 years old NTC, the state-owned telecom operator is known as by new named Nepal Telecom from 1stBaishakh 2061.With the beginning of the new year 2061, the NTCL is converted into a company and the change in name has come to reflect its new status. Its official registration name however, will be

Nepal Telecommunication Company Limited. But even after becoming a company, it will continue to run as a government entity until its shares are floated by year end.

NTCL is among few state-owned enterprises that had been drawing good returns for years-largely due to monopoly market. The government however, declared to open the telecom sector from the last of 2060. The privatization of the NTCL is taking place in accordance with the government's plan of gradually handing over public enterprises to private hands.

The estimated amount of paid up capital and authorized capital of corporation, meanwhile, stand at 15 billion and Rs. 25 billion respectively. However the management is yet to decide on the proportion of shares that the Nepal Telecom would issue to general public.

Meanwhile, a seven-member committee has already been constituted that will manage and decide on behalf of Nepal Telecom. The committee has been formed under the chairmanship of the secretary at the ministry of information and communications (MOIC). The other members of the committee include representatives from the NTC, the MOIC, finance ministry, citizenship investment trust and ministry, of law and justice.

It is believed that changing into the company will make NTCL an autonomous entity, giving full authority of decision making on its own. This will certainly enhance its entire function and make NTCL more efficient. The service delivery will be further enhanced with the conversion of NTCL into company limited.

1.4 Focus of the Study

Cash management is one of the most important part of the business that deals by the management and official staffs of the organization. Cash management deals with the sources and uses of cash in the best way. At the present world for the individual people without cash there is question mark for existence and prosperous in the society. Every human economic activity depends on cash. For the business life its success and failure depends on sufficient availability and proper utilization of cash.

To capture the opportunities hovering in the competitive business environment or to avoid the threats in the business path or to implement the business strategy there is required sufficient cash source. Cash is life blood for business life, so it should be managed properly. Cash management deals with finding the sources and utilization of the available sources tactfully. Public enterprises play significant role in the economy of the nation. Nepal telecom is a pioneering organization in the communication sector of nation. The focus of the study is cash management of this organization.

The financial situation of the public enterprises is not encouraging at the present. Many PEs have been either bankrupt or closed due to inefficient of various resources management. Cash management is one of the vital part of the overall organization management. This organization only be benefited in the optimum level of cash balance. Hence, this study is significant to find out cash management techniques being adopted by PEs and then analyze its effectiveness, strength and weakness. This study aims to find out the importance and contribution of cash management in the organization's operations. It helps the management committee of NTCL to know the effect of cash management in

their corporation's profit margin. It is also significant for the other public enterprises and researches. The study is also important for the private sector organizations.

1.5 Statement of the Problem

NTCL is one of the leading public enterprises functioning in public utility sectors. NTCL is one of the basic infrastructures for the development of the nation without it, no industrialization of the economy can be imagined. In this context, NTCL has a great role than other public enterprises as all manufacturing, nonmanufacturing industries and government; depends on information supplied by it. In the past, it was a single public enterprise which provides information facilities to the people of Nepal. But nowadays It is facing marketing competition. There are other private companies like; United Telecom Limited, Spice Nepal, which are playing competitors role in sector of communication. Whatever NTCL is large scale public enterprise of the country and an apex institution in the communication sector.

Most of the public enterprises of Nepal are in a big crisis. Some of them are liquidated, some are privatized some are in the process of privatization. The first privatization policy was introduced in United Kingdom during 1980s and in Nepal it gained momentum after the restoration of multiparty democracy in 1990. At present among PEs of Nepal, NTCL is regarded as one of the few successful corporations.

But how long can this prosperity be continued? This question is haunting and daunting to each and every conscious person. The monopoly of NTCL in telecom sector has ended. In this competitive and complex situation, NTCL and all its stables should focus more towards customers.

NTCL is a fully government-owned and government controlled organization. Government is looking toward to privatization of this organization and primary studies are being undertaken. However NTCL has been victimized indifferent political movements. Many valuable NTCL infrastructures are destroyed during ten years of Maoist insurgency.

The present study intends to analyze and examine the impact of cash management in NTC. Furthermore this study has tried to answer following questions.

- What types of cash management practices has been adopted by NTC?
- What are the revenue generating practices of the NTC?
- What is the situation of financial performance of the NTC?
- What is the impact of cash management on profitability?
- How the cash is mobilized in the NTC?

1.6 Objectives of the Study

The general objective of the study is to examine the cash management techniques adopted by the NTC. The specific objectives this study are as follows

- i. To examine and critically analyze the existing cash management practices in the organization.
- ii. To assess the revenue generation practices of the organization.
- iii. To examine the financial performance of the organization with regards to cash management models.
- iv. To review the cash mobilization practices of the organization.

1.7 Significance of the Study

The financial situation of the public enterprises is not encouraging at the present. Many PEs have been either bankrupt or closed due to inefficient of various resources management. Cash management is one of the vital part of the overall organization management. This organization only be benefited in the optimum level of cash balance. Hence, this study is significant to find out cash management techniques being adopted by PEs and then analyze its effectiveness, strength and weakness. This study aims to find out the importance and contribution of cash management in the organization's operations. It helps the management committee of NTCL to know the effect of cash management in their corporation's profit margin. It is also significant for the other public enterprises and researches. The study is also important for the private sector organizations.

1.8 Limitations of the Study

This study is mainly concerned with the cash management of NTC. The following are the main limitations of this study.

- This study considers only those factors which are related to cash management of NTC.
- This study based on secondary data.
- This study covers the period of six years from 2005/06 to 2009/10.
- This study assumes that the impact of political factors of the country such as change in government does not affect the financial decision.

1.9 Organization of the study

This study has been organized in five chapters. They are

This chapter concerns on the background of the study, focus of the study, significant of the study, statement of the problem, objective of the study, research methodology and limitations of the study.

Chapter II : Review of Literature

This chapter deals with review of various books, journal, old dissertation, published and unpublished reports, articles and previous newspapers.

Chapter III : Research Methodology

This chapter represents as a form of the tools to collect data, techniques for the study and analysis of data.

Chapter IV : Data Presentation and Analysis

In this chapter the acquired data are presented and analyzed through the way of designed methodology. Tables and diagrams are also presented to accomplish the research objectives. Major findings of the study are also included in this chapter.

Chapter V : Summary, Conclusion and Recommendation

This chapter will deal with the summary, conclusion and recommendations. In the final of this dissertation the bibliography and necessary annex are enclosed.

CHAPTER - II

REVIEW OF LITERATURE

2.1 Conceptual Framework

2.1.1 Meaning of Cash Management

The term “cash” is defined in various ways as per context. From an economist view point, cash is the means to satisfy human wants, whereas a lawyer states that cash is the legal tender of money issued by the government of the state. On the contrary, when it comes to the financial literature, cash is defined in yet another fashion that is totally different from earlier definitions.

"The term cash which refers to cash management is used in two senses. In a narrow sense, it is used to cover cash (currency) and generally accepted equivalent of cash such as cheques, drafts and demand deposits in bank. The broader view of cash also includes near cash assets, such as marketable securities and time deposits in banks. The main characteristic of these is that they can be readily sold and converted into cash. They serve as reserve pool of liquidity that provides cash quick when needed. They also provide a short-term investment outlet for excess cash and are also useful for meeting planned outflows of funds. We employ the term cash management in a broader sense. Irrespective of the form in which it is held, a distinguished feature of cash as an asset is that it has no earning power". (*Khan and Jain; 1972: 667*)

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 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 operation and may degenerate a firm into a state of technical insolvency and even of liquidation.

Though idle cash is sterile; its retention is not without cost. Holding of cash balance has an implicit cost in the form of its opportunity cost. According to J.M.KeynsThe highest 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 poor management of funds. Therefore, for its smooth running and maximum profitability, proper and effective cash management in a business is of paramount.”

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 and risk involving in the firm. The management of cash has been regarded as one of the conditioning factors in the decision-making issues". (*Saksena; 1974 : 31*)

Cash is the most liquid asset, is of vital importance to the daily operations of business firm. “Cash is both beginning and 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”. (*Kent; 1964: 128*)

2.1.2 Efficiency of Cash Management

"Cash use a number of functions as it makes payment possible. It serves to meet emergencies. But if cash is kept idle it contributes directly nothing to the earning of the corporation. As such corporation must adopt a policy that makes optimum cash management possible. The financial manager of the corporation should try to minimize the corporations holding of cash, while still maintaining enough to ensure 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." (*Shrestha; 1980: 625*)

i. Speed collection

One method of optimum cash management is to speed collection from customers. 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 caused by the mailing time. The amounts of cheques sent by customers but not yet collected are called deposit float.

The greater the deposit float, the longer the time taken in converting cheques into usable funds. There are mainly two techniques, which can be used to save mailing processing time, concentration banking and lock box system.

Concentration Banking

A large firm operating over wide geographical areas can speed up its collections by following a decentralized collection procedure. A decentralized collection procedure, called concentration banking in the USA, is a system of operating through a number of

collection centers, instead of a single collection center centralized at the firm's head office. The basic purpose of the decentralized collection is to minimize the lag between the mailing time from customers to firm and the time when the firm can make the use of funds. Under decentralized collection, the firm will have a large number of bank accounts operated in the areas where the firm has its branches. All branches may not have the collection center. The selection of the collection center will depend upon the volume of billing. "The collection center will be required to collect cheques from customers and deposit in their local bank accounts. The collection center will transfer funds above some predetermined minimum to a central or concentration bank account, generally at the firm's head office, each day a concentration bank is one where the firm has a major account—usually disbursement account." (*Pandey; 1999; 775*) Funds can be transferred to a central or concentration by wire transfer or telex or fax or electronic mail. Decentralized collection procedure is thus, useful way to reduce float.

Lock-Box System

Another technique of speeding up the mailing, processing and collection times which is quite popular in the USA and European countries is lock-box system. Some foreign banks in India have started providing this service to firms in India. In case of the concentration banking cheques are received by a collection center and after processing, are deposited in the bank. Lock-box system helps the firm to eliminate the between receipt of cheques and their deposit in the bank. In a lock-box system, the firm establishes a number of collection center, considering customer location and volume of remittance. At each center, the firm hires a post office box and instructs its customers to mail their remittances to the box. "The firm's local bank is given the authority to pick up

the remittances directly from the local- box. The bank picks up the mail several times a day and deposits the cheques in the firm,s account. For the internal accounting purposes of the firm, the bank prepares detail records of the cheques picked up." (*Pandey; 1999: 775*)

ii. Delaying Disbursement

"A part from speedy collection of account receivable the cash requirement can be reduced by slow disbursement of account payable. It may be recalled that a basic strategy of cash management is to delay payment as long as possible without impairing the credit rating of the firm. In fact slow disbursement represents a source of funds requiring no interest payments. Some techniques to delay payment are: avoidance of early payment, centralized disbursement, floats and accruable. Quick collection and slow disbursement accomplish the corporation with adequate cash in hand for longer periods. Effective control of disbursement cash results in a faster turnover of cash". (*Shrestha; 1980: 625*).

"Where the underlying objectives of collection are maximum acceleration, the objective in disbursements are to slow them down as much as possible." (*Van Horne; 1974: 426*)

iii. Cash Velocity

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

$$\text{Cash Velocity} = \frac{\text{Balance cash Average}}{\text{Sales Annual}}$$

iv. Minimum Cash Balance

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

v. Synchronized cash flows

Situation in which inflow coincides with outflows, there by permitting a firm to hold transaction balance to a minimum.

vi. Using float

Cheque written by firm cannot deducted from bank records until they are actually received by the bank, possible matter of several days the lag between the times the cheque is written until the time the bank receives it is known as float.

vii. Transferring fund

A transferring fund is a system for moving funds among accounts at different banks. The main transfer mechanisms are depository transfer cheques (DTC), electronic depository transfer cheques (EDTC) and wire transfer.

viii. Overdraft system A system where by depositors may write cheques in excess of their balances with their banks automatically extend loans to cover the shortage. Most of the foreign countries use overdraft system.

2.1.3 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 deficits. Cash planning is a technique to plan and control the use of cash." (*Pandey; 1999: 843*)

It protects the financial condition of the firm by developing a projected cash statement from a forecast of expected cash inflows outflows for a given period. The forecast may be based on the present operations or the anticipated future operations.

Cash plans are very crucial in developing the overall operating plans of the firm. Cash planning may be done on daily, weekly or monthly basis. The period and frequency of cash planning generally depends upon the size of the firm and philosophy of management.

ii. Cash Budget

"Cash budget is the most significant device to plan for and control cash receipt and payment. A cash budget is a summary statement of the firms" expected cash inflows and outflows over a project time period." (*Pandey; 1999: 843*) It gives information on the timing and magnitude of expected cash flows and cash balance over the projected period. This information helps the financial manager to determine the future cash needs of firm, plan for the financing of these needs and exercise control over the cash and liquidity of the firm.

The time horizon of a cash budget may differ firm to firm. Monthly cash budget may be prepared by a firm where business is affected by seasonal variations. Daily or weekly cash budgets should be prepared for determining cash requirements if cash flows show extreme fluctuations. Cash budget for a longer intervals may be prepared if cash flows are relatively stable.

Cash forecasting is needed to prepare cash budget. Cash forecasting may be done on short on long term basis.

iii. Short Term Cash Forecasting

Two most commonly used methods of short- term cash forecasting are as follows.

a) Receipts and Disbursements Method

Cash flow in and out most companies on a continuous basis, the prime aim of receipt and disbursement forecasts is to summaries these flows during a predetermined period. In case of those companies where each item of income and expense involves flow of cash, this method is favoured to keep a close control over cash.

b) Adjusted Net Income Method

This method of cash forecasting involves the tracing of working capital flows. It is sometimes called the sources and uses approach. Two objectives of the adjusted net income approach are: i) to project the company's need for cash at some future data and ii) to show where the company can generate this money internally, and if not, how much will have to be borrowed or raised in the capital market. It generally has three sections: Sources of cash, uses of cash and the adjusted cash balance. This procedure helps in

adjusting estimated earnings on an accrual to cash basis. In preparing the adjusted net income forecasts items such as net income, depreciation, taxes, dividends etc. can easily be determined from the company's annual operating budget.

iv) Long-Term Cash Forecasting

Long- term cash forecasting is prepared to give an idea of the company's financial requirements in distant future. Once a company has developed long-term cash forecast, it can be used to evaluate the impact of say, new product developments or plant acquisitions on the firm's financial condition three, five or more years in the future. The major uses of long-term cash forecasts are:

It indicates as a company's future financial needs, especially for its working capital requirements.

It helps to evaluate proposed capital projects. It pin points the cash required to finance these projects as well as the cash to be generated by the company to support them. It helps to improve corporate planning; long term cash forecast compels each division to plan for future and to formulate projects carefully. Long term cash forecasting reflects the impacted of growth, expansion or acquisitions; it also indicates financing problems arising from these developments.

2.1.4 Motives for Holding Cash

The firm holds cash for various montivesThey are.

Transaction motive

The principal motive for holding cash is to conduct day to day operations. A cash balance associate with routine payments and collections like purchase of raw material, payment of wages, salaries, interest, dividends, taxes etc.

Compensating Balance

A cash balance that a firm must maintain with a bank to compensate the bank services rendered or for granting a loan. Firm often maintains bank balance in excess of transactions needs as a means of compensating for the various services. These balances are called compensating balance. Bank provides various services to the firm like payment to cheque, information of credit, loan etc. so, firm should maintain the compensating balance.

Precautionary Motive.

A cash balance held in reserve for random, unforeseen fluctuation in cash inflows and outflows, for example-flood, strike, inefficiency in collection of debtors, cancellation of order, failure of important customers, sharp increase in cost raw materials etc.

Speculative Motive

A cash balance that is held to enable the firm to purchase that might arise. For example-purchasing of raw material at a reduced price on payment of immediate cash falls in price of shares and securities, purchasing at favourable price (*Thapa; 2059: 102*).

2.1.5 Techniques for Improving Cash Flow

Planning the cash flows of a company should include consideration of how to improve cash flow. Improving cash flow basically involves increasing the amount of available cash on a day-to-day basis. To accomplish this objective the management should focus on following techniques:

Cash Collection Process

The management should increase the efficiency on cash collection process. Some ways often used to improve the efficiency of the cash collection process are as follows:

- Review the lag from the data of sale of goods and service on credit to the mailing of invoice and the first billing.
- The cash discounts are given to customers for early payment; review their effect on really cash collections and whether the discount is too high or low.
- Review the credit granting process to determine whether bad credit risks are being screened out.
- The float lag can be minimized by using a lock box system or by establishing the bank account in outlying areas or by decreasing cheque processing time or by promoting timely frequent billing on all receivables.

Cash payment process:

The company could make effective payment process through delay payment of the cash as possible. Some techniques can be used to improve efficiency of cash payment process are as follows:

- All payment is on latest no penalty day.
- Maximize the float time by using cheque and mostly on afternoon of Friday.
- Cash discount should be taken for early payment.
- Cash advance should not give for any purpose.

Investment policies

The investment policies for the immediate investment of idle cash balance to maximize interest earnings. The company should develop a specific policy about the investment of temporarily idle cash.

2.1.6 Approaches Used to Develop Cash Budget

Following two approaches are used to develop cash budget:

Cash receipts and Disbursement Approach

Cash receipt and disbursement approach is also called direct or cash-account method. This method is based on a detailed analysis of the increases and decreases in the budgeted cash account that will reflect all cash inflows and outflows from such budgets are sales expenses and capital expenditure. This approach is often used for short-term cash planning as a part of annual profit plan is used.

Financial Accounting Approach

Financial accounting approach is useful for making long range cash projection. It is also called indirect or income approach. This approach requires less supporting detail and provides about the cash inflows and outflows. The starting point of this approach is planned net income and it is converted from accrual basis to a cash basis.

2.1.7 Determining the Optimum Cash Balance

Financial manager's 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 dividends interest, taxes and countless other purposes. The test of liquidity is really the availability of cash to meet the firm's 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 amount of cash balance. A trade-off between risk and return influences such a decision. If the firm maintains a small cash balance, its liquidity position becomes weak and suffers from a lack of 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. Thus the firm should maintain an optimum cash balance, to find out the optimum cash balance the transaction cost and risks of too small a balance should be matched with the opportunity costs of too large a balance.

2.1.8 Cash Management Models

The analytical models for cash management are as follows:

a) Baumol Model

b) Miller-Orr model

a) Baumol Model (Western and Copland; 2000: 784).

William Baumol developed a basic inventory model to cash management. In this model it is assumed that the firm on average is growing and is a net user of cash. Marketable securities represent buffer stock between episodes of external financing, which is drawn down as required periodically. Ordering costs are represented by the clerical and transactions cost of making transfers between the investment portfolio and the cash account. The holding cost is the interest foregone on cash balance held. Assuming that expenditures occur evenly over time and that cash replenishments come in lumpsum at periodic intervals the optimal size of the cash transfer is formulated as follows:

$$C^* = \sqrt{\frac{2bt}{i}}$$

Where,

C*= the optimal size of the cash transfer

t= the total cash uses for the period of time include.

b=the cost of transaction in purchase or sales of marketable Securities.

i = the applicable interest rate on marketable securities.

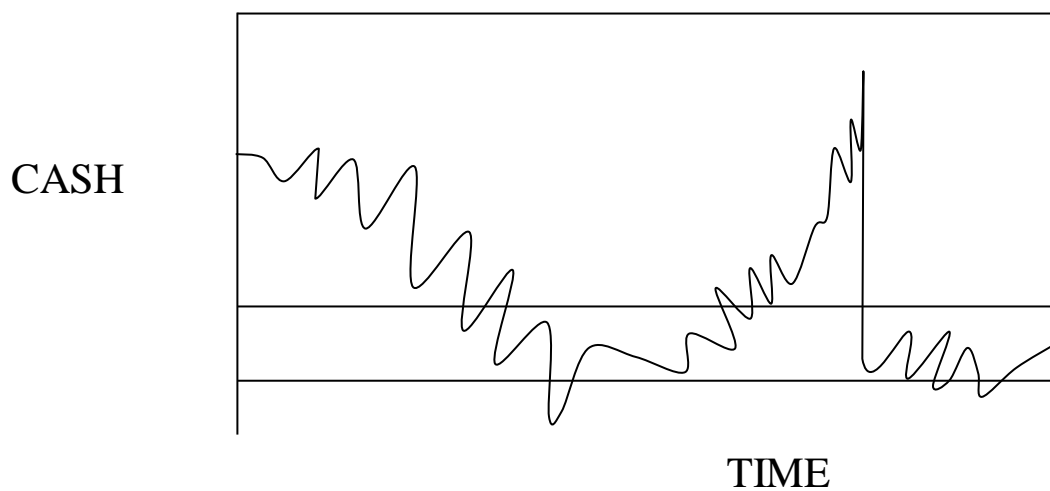
b) Miller – Orr Model

Miller and Orr incorporated stochastic nature of cash flows in their model. According to this model the cash flow is completely stochastic. The cash balance is adjusted to optimal return point Z when the cash balance touches zero or the optimal upper limit h. that is,

when the cash balance touches zero an amount equal to OZ will be converted from liquid assets to cash. When the cash balance touches h an amount Hz will be invested in liquid asset and the cash balance will be brought to oz.

Figure: 2.1

Graphical presentation of Miller Orr Model of cash balance



(Source: Baumol; 1996: 784)

Under certain assumptions about the distribution of the cash flows they have established that

$$h = 3z$$

And the optimal value of z is given by

$$z = \left(\frac{3r^2}{4c} \right)$$

Where,

Is average yield of the alternate liquid asset? The variance of net cash flow C is the cost per transfer from cash to alternate asset and vice versa.

"This model like Baumal's model assumes transfer cost independent of the amount of transfer and direction. Again, the extreme assumption that net cash flows are completely stochastic may not be true on many occasions" (*Kuchhal; 1998:177*).

2.1.9 Cash Management Objectives

Khan and Jain have expressed the basic objective of cash management are two fold

a) To meet the Cash Disbursement Need (Payment Schedule)

In course of daily business transaction, a firm has to make payments of cash to suppliers, employees and others. Likewise, cash balances are also collected through various debtors. To meet the payment schedules, a firm should maintain an adequate amount of cash balance. The advantages of maintaining adequate cash balance are:

It prevents insolvency or bankruptcy arising out of the inability of a firm to meet its obligation, The relationship with the bank is not strained, It helps in fostering good relations with trade creditors and suppliers of raw materials, as prompt payment may help their own cash management, A trade discount can be availed of discount can be availed of if payment is made within the due date, It leads to a strong credit rating which enables the firm to purchase goods on favorable terms and to maintain its line of credit.

To take advantage of favorable business opportunities that may be available periodically and finally, the firm can meet unanticipated cash expenditure with minimum of strain

during emergencies, such as strikes, fires or a new marketing campaign by competitors (Khan and Jain; 1974:667).

b) To minimize Funds Committed to Cash Balance

"The next objective of cash is to curtail cash balance so that excess cash do not remain idle incurring a high cost. The later objectives sound contradictory in relation with the former. The firm should hold cash balance to meet payment schedules; however such balance should not exceed the sufficiency level. If there is more than required amount of cash balance, cash as an asset has no earning capacity, and thus it's disadvantageous for the firm in the sense that the unused portion of cash could have earned some profit if invested in other in alternatives of business. However, if there were deficit in cash balance, the firm would starve of meeting payment schedules leading into serious problem. So the core objective of cash management is that the business firm should have optimum level of cash or near-cash assets" (*Khan and Jain; 1974:667*).

2.2 Review of Thesis

In this section the review of thesis relating to cash management have been considered. It encompasses a combined effort of entire researcher. The main objective of this part is to analyze the previous research study. An attempt is made here to review some of the research work works submitted are as follows

Pradhan(1997) has conducted a research on “*A Study on Cash Management of salt Trading Corporation Limited*”. His main objective of the study is to examine the management of cash in STCL.

Under this main objective, he has set the following specific objectives.

- To study the existing cash management system in STCL.
- To access the credit policy adopted in STCL.
- To expand few suggestions on the basis of above analysis to improve the cash management in future.
- To find the above objectives, he has conducted a research of six years periods under consideration from FY 2062/63 to FY 2066/67. He has used both primary and secondary data. Primary data were collected from questionnaire; interview and secondary data were collected from financial statements of STCL.

After his brief study, he has found the following condition of STCL.

- The NTC could not make the best use of available cash balance prudently.
- The cash collection efficiency in the corporation is very low.
- The collection of trade credit in the corporation is low during the three years of studyperiod.
- No, optimum cash balance is maintained.

Neupane(2001) has conducted a research on, *“A study on profit planning in Nepal Tele Communication Ltd”*.The main objectives of the study were

- To examine the practices an effectiveness of profit planning in NTC.
- To examine the present comprehensive profit planning system applied by NTC.
- To analyze the various functions, plan formulated and implemented in NTC.
- To analyze the financial position of NTCL by the help of radio analysis.

The main findings are as follows

Lack of systematic profit planning and control. Plans are prepared on “ad hoc” basis.

Actual production lines are more variable than budgeted production line.

Overhead expenses are not classified systematically and it creates problem to analyze its expenses properly.

Financial analysis shows that the financial performance of NTCL is not so good during the study period.

Profit pattern of NTCL is on increasing trend.

Shrestha(2005) has conducted a research on, *Cash Management in Public Manufacturing Enterprises of Nepal, A Case Study of Royal Drugs Limited*. His major objectives of study are:

Royal Drugs Limited. The other objectives of this study are as given below

To make the analysis of cash flow of RDL.

To examine the liquidity position of RDL.

To analyze the cash budgeting practice

Critically analyze the cash management practice.

Large portion of RDL’s current assets has been tied-up in the most illiquid asset, i.e. inventory.

Current assets and quick assets are not being maintained in accordance with current liabilities.

Ghimire(2005) conducted a research on the topic “*Cash Management, A Case Study of Gorakhkali Rubber Udhyog Limited.*” In his study he has set the research problem: what policy is taken for cash management of the company? What system is adopting the company for collection and disbursement of cash? Average collection period is satisfactory or not? What position exists in holding of cash to transaction motives? The cash management system which is adopted by the company is well or not?

The Main Objectives of the Study Are

To present overall cash condition of GRUL.

To study the existing cash management system of GRUL.

To analyze the cash collection and disbursement system adopted GRUL.

To analyze the cash management policy adopted in GRUL.

After his study he has found the following findings

The company's capacity utilization is about 50%.

The industry has been facing the problem of skilled manpower.

The main sources of cash of the GRUL are sales of products and loan.

The industry sales its products in cash and in credit basis.

The company maintained optimum cash balance.

Cash turnover ratio is low which indicates low collection efficiency of the industry.

Joshi (2006), entitled “*Cash Management of Public Enterprises in Nepal*”(A Case Study of Salt Trading Corporation Limited).

The main objectives of the study are

To examine practices used to control cash in STC Ltd.

To analyze liquidity position, profitability position and relation between different variables.

To examine and analyze cash flow statement and cash budgeting practices used by the STC Ltd.

To provide suitable recommendation to improve the cash management system in STC Ltd.

The main findings of the study are

The main sources of cash of STCL are sales revenue and loan from the loan from the bank. There is lack of proper planning, budgeting and forecasting. There is absence of any formalized system of cash planning and cash budgeting in STCL.

The corporation has not exercised the modern techniques to debt collection, monitoring the payment behaviour of customers etc.

The corporation has not maintained optimum cash balance. The cash and bank balance with respect to current assets has been fluctuating trend similar to the case with respect to the total assets.

Chataut(2008) *“Cash Management In Nepal Telecom” Described About Cash Management of Nepal Telecom.*The major objective of the study is to examine the management of cash in NTC.

The Objectives are as follows:

To observe devices of planning and control of cash in NTC.

To examine the existing internal control policy in NTC regarding cash control practices.

To identify the shortage or excess of cash in the company and the procedures of financing for the shortage and investment of excess cash.

To study the liquidity positions the company.

The findings of the study as follows

To meet operating expenses, 25% of actual annual expenses can be provided as advance budget in case the budget is not approved.

Deposits from customer of other parties received time to time should be deposited in deposit account.

In regards of account operation, transaction should be done with Nepal Rastra Bank of other commercial banks as recommended by committee.

Telecom offices should transfer the income amount from office fund account to central fund account keeping minimum balance amount in their offices.

Research Gap

All the research studies mentioned above concerned with the study of the cash management of NTC. The findings and conclusions of all studies are generally the same.

All have pointed out that there is not proper planning and control system in the PEs to

achieve the goal and objectives. Thus this study is designed to highlight the effect of cash position, surplus/deficit, liquidity position regarding cash management practices of the company. Since there are no any recent study has been mode, this study emphasized the effect of cash management of NTC. On the other hand, on any research attempt has been made after NTC. Suffered for losses. So, this research work is very much centered to identify the responsible cases to analyze them and recommended practical suggestions for the betterment of NTC. So, this study will be helpful to those personwho researches like students, businessman, governments, professors for academically perspective.

CHAPTER - III

RESEARCH METHODOLOGY

The methodology, which has been used in this study, consists of research design, nature and sources of data, data gathering procedure and the analytical tools etc.

3.1 Research design

The research design refers on overall framework or plan for the collection and analysis of data. It also refers to the systematic framework under which the research is conducted. The research design serves as a framework for study, guiding the collection and analysis of data. The research design focuses on the data, collection methods, the research instruments utilized and the sampling plan to be followed. It is planned structure and the strategy for research investigation. It involves selecting the most appropriate methods or techniques to solve the particular problems under the investigation. This research has followed the descriptive as well as analytical approach to achieve the objective.

3.2 Population and Sample

Public enterprises in Nepal had been established in various sectors for the development of the country. There are 36 government owned organizations, which are operating at present. These are the population of the study. As study of each and every enterprise is not possible, so Nepal Telecom Limited which belongs to public utility and social sector has been selected as sample using judgmental basis.

3.3 Nature and Sources of Data

True and fact information are necessary for the reliability and effectiveness of research work as information is the lifeblood for any research work. For this study different techniques and procedure have been adopted to collect necessary information and data. The study is based on secondary data.

3.4 Data Analysis Tools

Collection data is the connecting link to the world of reality for the researcher. The data collection in raw and crude form are managed, arranged, analyzed and presented in proper tables and formats are interpreted. To analyze the collected data, basically two types of tools are used.

3.4.1 Financial Tools for Analysis

i. Analysis of Current Ratio

This ratio examines the liquidity position of the company. It examines the position of the company as to its holding of current assets against its current liabilities. Higher ratio indicates satisfactory position and vice versa. However, too high ratio is indication of poor cash management indicating high inventory and poor credit management.

The ideal current ratio is 2:1 however for a public enterprise, the ratio tends to be little lower than 2:1, as these enterprises generally require very little current assets. But never the less any company should maintain this ratio above 1:1, since ratio lower than this definitely indicates poor liquidity position. The ratio computed as follows

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The average collection period can be calculated as follows.

$$\text{Average Collection Period} = \frac{\text{Days in a year}}{\text{Receivable Turnover in Time}}$$

ii. Cash Conversion Cycle: The length of time from the payment for the purchase of raw materials to manufacture a product until the collection of the accounts receivable associated with the sale of the product. Cash conversion cycle calculated by the following formula.

$$\begin{aligned} \text{** Cash conversion cycle} &= \text{Inventory Conversion cycle} + \text{Receivable Conversion} \\ &\quad \text{Cycle} - \text{Payable deferred cycle} \end{aligned}$$

Inventory conversion period

The average length of time required to convert materials into finished goods and then to sell those goods. It is the amount of time the product remains in inventory in various stages of completion. In inventory conversion period is calculated by dividing inventory by the cost of goods sold per day.

$$\text{Inventory conversion period} = \frac{\text{Inventory}}{\frac{\text{Cost of goods sold}}{\text{Inventory conversion}}}$$

Receivable Conversion Cycle

The receivable conversion period is the average length of time required to convert the firms receivables into cash that is to collect cash following a sale. The receivables

collection period also is called the days sales outstanding (DSO) and it is calculated by dividing accounts receivable by the average credit sales per day.

$$\text{Receivable Collection period (DSO) = } \frac{\text{Receivable}}{\frac{\text{Sales}}{360}}$$

Payable Deferred Period

The Payable deferred period is the average length of time between the purchase of raw materials and labour and the payment of cash for them. It is computed by dividing Accounts payable by the daily credit purchases.

3.4.1 Statistical Tools for Analysis

i) Karl Pearson's Coefficient of Correlation (r) = $\frac{\Sigma xy}{\sqrt{\Sigma X^2} \sqrt{\Sigma Y^2}}$

If two variables (Say x and y) vary such that change in one variable results the change in other, then these two variables are said to be correlated. Such correlations may be positively correlated, if increases in X results increases in Y and decreases in X follows decrease in Y. Likewise, such correlations are said to be negatively correlated, if increases in X results decrease in Y and decrease in X follows increase in Y.

Correlation analysis refers to the statistical technique, which measures the degree of relationship or association between the variables. To put it differently, it helps in analyzing the co-variation of two or more variables. It is to be noted that a high degree of correlation between two variables doesn't always necessarily imply that changes in one

variation cause changes in the other, i.e. correlation doesn't necessarily imply causation while causation always implies correlation. Out of the several methods of computing correlation, Karl Pearson's coefficient of correlation is one of the best and popular methods. Karl Pearson's coefficient of correlation (r) measures the degree of association between the two variables suppose X and Y given by

$$(r) = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma Y^2}}$$

Where,

r = Karl Pearson's coefficient of correlation between X and Y

x = (X - \bar{X})

y = (Y - \bar{Y})

And,

$$\bar{X} = \frac{\Sigma X}{N}$$

N = No. of years/time period.

The value of r lies between +1.00 to -1.00

Value of +1 refers to highly positive correlation between the variables. i.e. one variable is directly proportional to another and vice versa.

Value of -1 refers to highly negative correlation between the variables, i.e. one variable is indirectly proportional to another, or in other words, increase in one variable leads to decrease in another variables and vice versa.

Likewise, value nearer zero „O“ refers, there is no association between the variables, i.e. increase or decrease in one variable results no impact on another variable and vice-versa.

ii) Standard Deviation (S.D.)

$$\text{S.D. } (\sigma) = \sqrt{\frac{\sum d^2}{N} - \left(\frac{\sum d}{N}\right)^2}$$

Standard Deviation (S.D.) measures scatterness, spreadness or variation and provides idea of homogeneity or heterogeneity of the distribution out of various method of studying dispersion such as Range, Inter quartile range and Quartile deviation, mean deviation, standard deviation and variance, Lorenz curve. The most popular methods are the standard deviation and variance method. Standard deviation is represented by the symbol sigma „ σ “ and is calculated by this formula.

$$\text{S.D. } (\sigma) = \sqrt{\frac{1}{N} \sum x^2} = \sqrt{\frac{\sum d^2}{N} - \left(\frac{\sum d}{N}\right)^2}$$

Where,

$$x = X - \bar{X}$$

N = Number of years/observations/time period

Along with standard deviation, coefficient of variation (C.V.) is also computed. Coefficient of variation is the relative measure based on standard deviating and is defined as the ratio of standard deviation to the mean expressed in percent.

Coefficient of Variation (C.V) is given by

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100$$

Low economic growth rate, growing unemployment and poverty etc. are main problems of the country. These problems can be reduced through mobilizing all kinds of available resources. Nepal has adopted mixed economy to develop nation through participation of both private as well as public sector.

Nepalese main source of income is agriculture sector. More than 80% of the total population depends on the agriculture sector. Economic development of the country is easy through development of this agriculture sector (Ghimire; 2004: 187).

Most of people are living in the rural areas and are below the line of poverty. Though agriculture is main stay of Nepalese economy, only this sector is handicapped, so the nation should also emphasize other industrial and commercial areas.

Like other developing countries in the world, the government of Nepal has also taken public enterprises as a means of economic development of the country, after the introduction of first plan in 1956. The rationale behind the establishment of such enterprises is to carry the programs set in the economic plan for economic development, which makes the country selfsufficient ultimately. Due to lack of infrastructure, lack of skilled man power, investment problem, unwillingness to bear the risk of private sector, unbalance development of the country were the reasons behind the emergence of public sector.

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA

The main purpose of this chapter is to introduce the method of interpretation of the data to fulfill the research objective. The raw data collected from the literature review and through review of various financial statement of Nepal telecom limited, were organized and presented in the form of tables, charts, diagrams, appropriate statistical and financial tools were applied to the data to draw valid conclusions. Thus, the main purpose of the study is to highlight the cash management system in non-manufacturing public enterprises. For this reason, Nepal telecommunication limited has chosen, Nepal telecommunication limited has been randomly selected from the study. To accomplish these objectives, this chapter gives detailed analysis the various aspects of cash management as prevailed in the organization. Specially, the study covers the period of 5 years fiscal years form 2062/63 to 2066/67.

4.1 Analysis of Liquidity Position

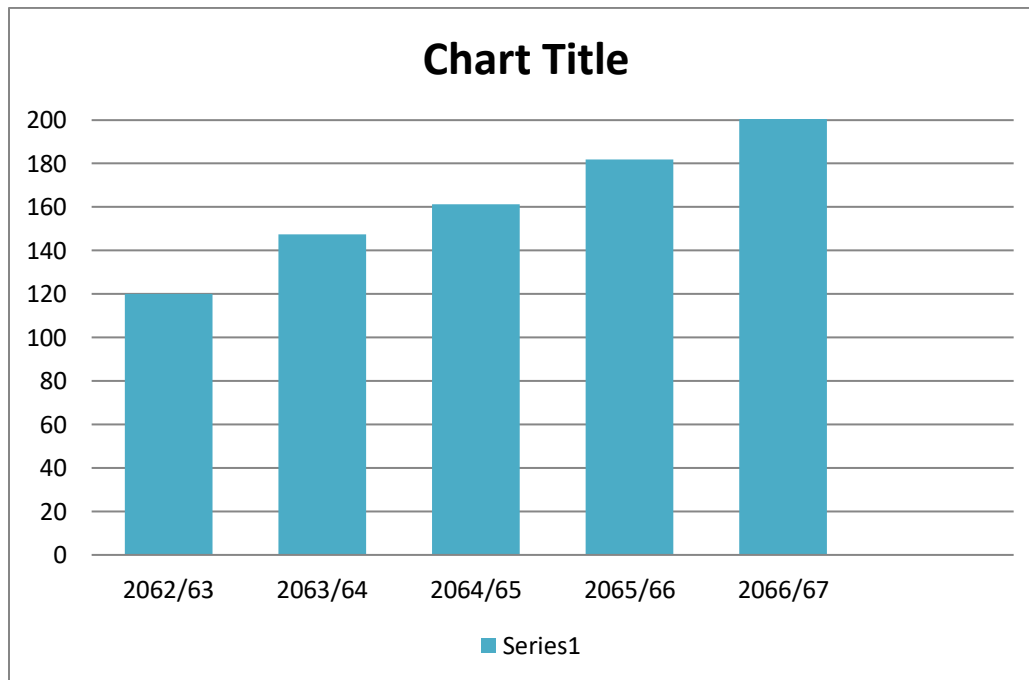
Table no. 4.1

Analysis of Cash & Bank (Rs. In hundred million)

Year	Cash & Bank	Increase/Decrease
2062/63	120.22	-
2063/64	147.46	22.66%
2064/65	161.35	9.42%
2065/66	181.91	12.74%
2066/67	216.12	18.81%

The above table shows that the amount of cash & Bank balance of NTCL during the period under the study of fiscal year 2062 to 2067. The cash balance of each fiscal year and has been compared to preceding year to analyze fluctuations. The holding of cash of NTCL has an increasing trend in overall the year 2066/67. In fiscal year 2062/63 the cash balance of company was Rs.120.22 hundred million, which increase by 22.67% to Rs.147.46 hundred million in the fiscal year 2063/64. In fiscal year 2064/65 increasing ratio is 9.42% to 161.35 hundred million. In fiscal year 2065/66 and 2066/67 the increasing ratio is 12.74% and 18.81% respectively.

Figure 4.1
Bar Diagram Showing Cash and Bank Balance
(F.Y. 2062/63-2066/67)
(In hundred million)



The above bar diagram shows that cash and bank balance is minimum in the year 2062/63 maximum in the year 2066/67.

Table no.4.2

Analysis of standard deviation & coefficient of variance (Rs. Hundred million)

Year	X	(x- \bar{x})	(x- \bar{x}) ²
2062/63	120.22	-45.19	2042.14
2063/64	147.46	-17.95	322.20
2064/65	161.35	-4.06	16.48
2065/66	181.91	16.5	272.25
2066/67	216.12	50.71	2571.50
	$\sum x = 827.06$		$\sum (x-\bar{x}) = 5224.57$

$$\bar{x} = \frac{\sum x}{n} = \frac{827.06}{5} = 165.41$$

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum(x-\bar{x})^2}{n}} = \sqrt{\frac{5224.57}{5}} = 32.33$$

$$\text{Coefficient of Variance (C.V.)} = \frac{\sigma}{\bar{x}} \times 100 = \frac{32.33}{165.41} \times 100 = 19.54\%$$

The standard deviation (σ) of the NTCL is 32.33

The coefficient of variance of NTCL is 19.54%.

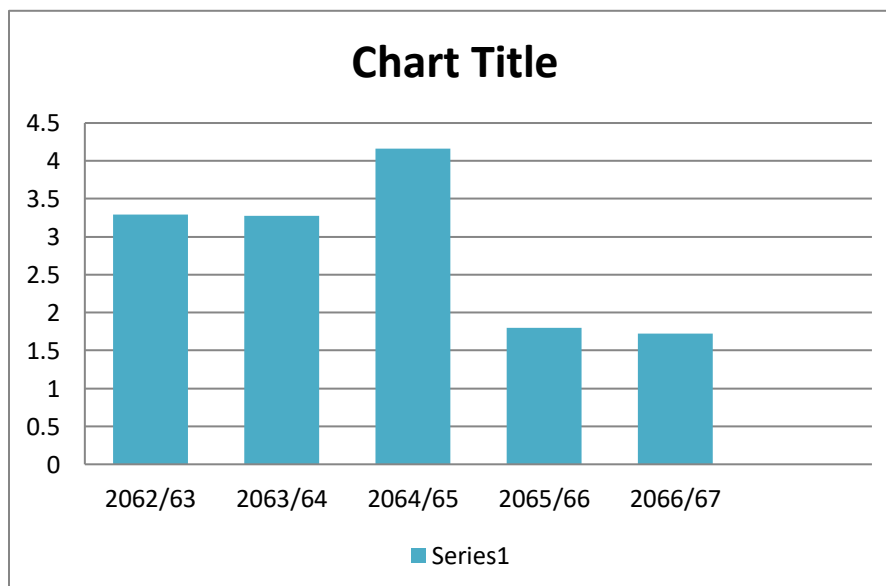
Table no.4.3

Analysis of Inventory (Rs. In hundred million)

Year	Inventory	Increase/Decrease
2062/63	3.29	-
2063/64	3.28	(0.306)%
2064/65	4.16	26.83%
2065/66	1.80	(56.73)%
2066/67	1.72	(4.44)%

The above table shows that the inventory of NTCL during the period under the study. The inventory of each fiscal year and has been compared to preceding year to analyze fluctuations. Beginning from the year 2062/63 to 2066/67, the inventory of NTCL last three year is in increasing trend and last two year is in decreasing trend. In fiscal year 2062/63 the inventory of company was Rs.3.29 hundred million, which decrease by .306% to Rs.3.28 hundred million . In the fiscal year 2064/65 the increasing ratio is 26.83% to Rs 4.16 hundred million. In fiscal year 2065/66 and 2066/67 the decreasing ratio is 56.73% to Rs1.80& 4.44% of Rs.1.72 hundred million respectively.

Figure 4.2 Bar Diagram Showing Inventory (F.Y. 2062/63-2066/67)(In hundred million)



The above

bar diagram shows

that cash and bank balance is minimum in the year 2066/67 and maximum in the year 2064/65.

Table no.4.4

Analysis of standard deviation of coefficient of variance.(Rs.in hundred million)

Year	X	(x- \bar{x})	(x- \bar{x}) ²
2062/63	3.29	0.44	0.1936
2063/64	3.28	0.43	0.1849
2064/65	4.16	1.31	1.7161
2065/66	1.80	-1.05	1.102
2066/67	1.72	-1.13	1.276
	$\sum x = 14.25$		$\sum (x-\bar{x})^2 = 4.474$

$$\bar{x} = \frac{\sum x}{n} = \frac{14.25}{5} = 2.85$$

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum(x-\bar{x})^2}{n}}$$

$$= \sqrt{\frac{4.474}{5}}$$

$$= 0.95$$

Coefficient of Variance

$$\text{C.V.} = \frac{\sigma}{\bar{x}} \times 100$$

$$= \frac{0.95}{2.85} \times 100$$

$$= 33.33\%$$

The standard deviation is 0.95 and C.V. of NTCL is 33.33%.

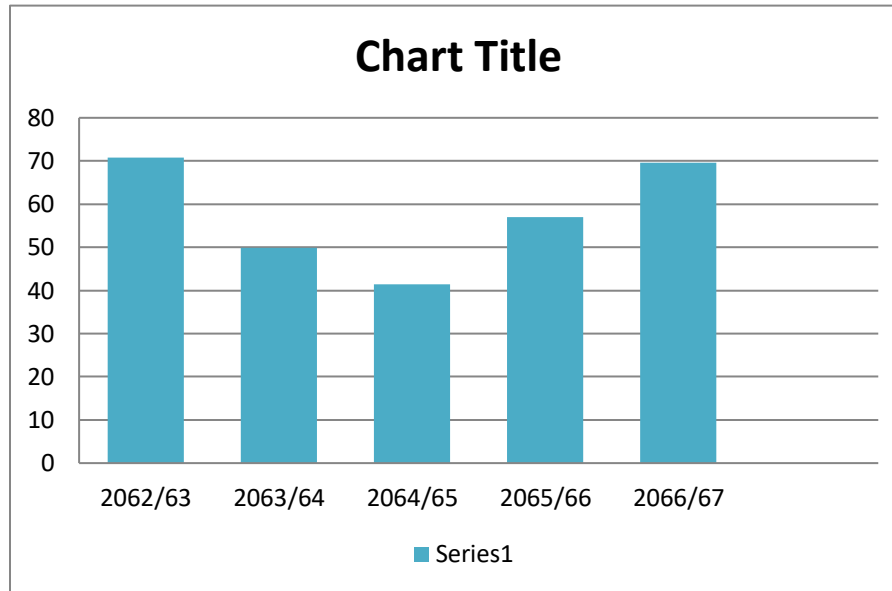
Table no. 4.5
Analysis of Loan & Advance

Year	Loan & Advance	Increase/Decrease
2062/63	70.76	-
2063/64	49.90	(29.48)%
2064/65	41.47	(16.89)%
2065/66	56.99	37.42%
2066/67	69.60	22.13%

The above table shows that the loan and advance NTCL during the period under the study. The loan and advance of NTCL is in decreasing trend in fiscal year 2062/63 to 64/65 but from fiscal year 2065/66 is in increasing trend. In fiscal year 2062/63 the loan and advance of NTCL was 70.76 hundred million which decreased by 29.48% in fiscal year 2063/64 was 49.90 hundred million. In fiscal year 2064/65, the decreasing ratio was 16.89% which decrease to 41.47 hundred million from 49.90 hundred million. The fiscal year 2065/66 and 2066/67 the increasing ratio is 37.42% and 22.13% which increased to Rs.56.59 & 69.60 hundred million respectively.

Figure 4.5

**Bar Diagram Showing Loan and Advance
(F.Y. 2062/63-2066/67)(In hundred million)**



The above bar diagram shows that cash and bank balance is minimum in the year 2064/65 and maximum in the year 2062/63.

Table no.4.6

Analysis of standard deviation of coefficient of variance. (Rs.in hundred million)

Year	X	(x- \bar{x})	(x- \bar{x}) ²
2062/63	70.76	0.44	0.1936
2063/64	49.90	0.43	0.1849
2064/65	41.47	1.31	1.7161
2065/66	56.99	-1.05	1.102
2066/67	69.60	-1.13	1.276

$$\sum x = 288.72$$

$$\sum (x-\bar{x})^2 = 636.92$$

$$\text{Mean } (\bar{x}) = \frac{\sum x}{n} = \frac{288.72}{5} = 57.74$$

$$\begin{aligned} \text{Standard deviation } (\sigma) &= \sqrt{\frac{\sum(x-\bar{x})^2}{n}} \\ &= \sqrt{\frac{636.92}{5}} \\ &= 11.29 \end{aligned}$$

Coefficient of Variance

$$\begin{aligned} \text{C.V.} &= \frac{\sigma}{\bar{x}} \times 100 \\ &= \frac{11.29}{57.71} \times 100 \\ &= 19.55\% \end{aligned}$$

The standard deviation and coefficient of variance of NTCL is 11.29 and 19.55% respectively.

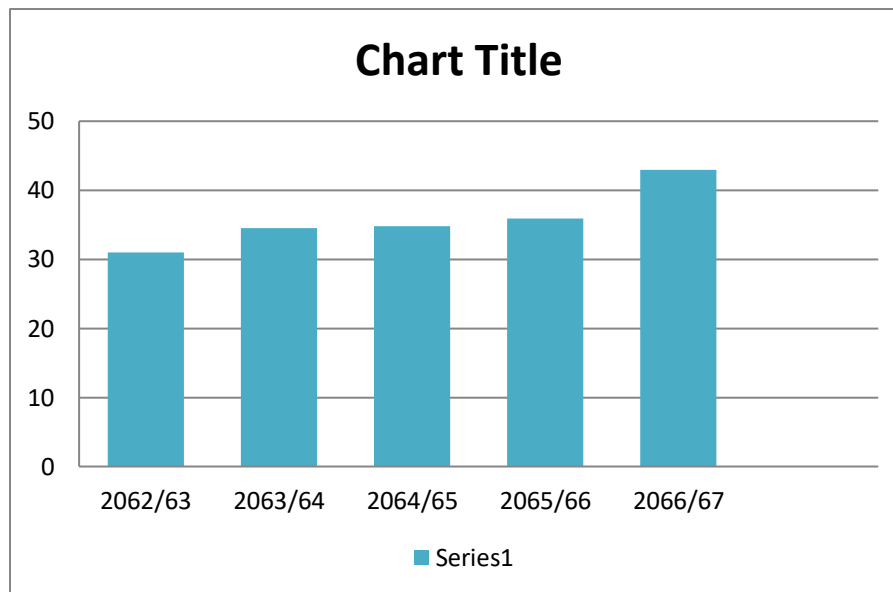
Table no.4.7

Analysis of Debtors (Rs. In hundred million)

Year	Debtors	Increase/Decrease
2062/63	30.99	-
2063/64	35.56	11.52%
2064/65	34.56	0.78%
2065/66	35.93	3.16%
2066/67	42.96	19.57%

The above table shows that the debtors of NTCL during the past five years .In fiscal year 2063/64 the debtors of NTCL was 35.56 which increase 11.52% regarding previous year 2062/63 from 30.96 hundred million. In the fiscal year 2064/65 it slightly decreased by 0.78% which was Rs. 34.56 hundred million. In the fiscal year 65/66 and 66/67 the increasing ration is 3.16% and 19.57% which was Rs. 35.93 42.96 hundred million respectively.

Figure 4.7
Bar Diagram Showing Debtors
(F.Y. 2062/63-2066/67)(In hundred million)



The above bar diagram shows that cash and bank balance is minimum in the year 2064/65 and maximum in the year 2062/63

Table no.4.8

Analysis of standard deviation and coefficient of variance

Year	X	(x-\bar{x})	(x-\bar{x})²
2062/63	30.99	-6.06	36.72
2063/64	35.56	-3.63	13.18
2064/65	34.56	0.24	0.06
2065/66	35.93	0.51	0.26
2066/67	42.96	0.64	74.65
	$\sum x = 171.60$		$\sum (x-\bar{x})^2 = 124.87$

$$\text{Mean } (\bar{x}) = \frac{\sum x}{n} = \frac{175.60}{5} = 34.32$$

$$\begin{aligned} \text{Standard deviation } (\sigma) &= \sqrt{\frac{\sum (x-\bar{x})^2}{n}} \\ &= \sqrt{\frac{124.87}{5}} \\ &= 4.98 \end{aligned}$$

Coefficient of Variance

$$\begin{aligned} \text{C.V.} &= \frac{\sigma}{\bar{x}} \times 100 \\ &= \frac{4.98}{34.32} \times 100 \\ &= 14.51\% \end{aligned}$$

The standard deviation of NTCL is 4.98 and coefficient of variance is 14.51%.

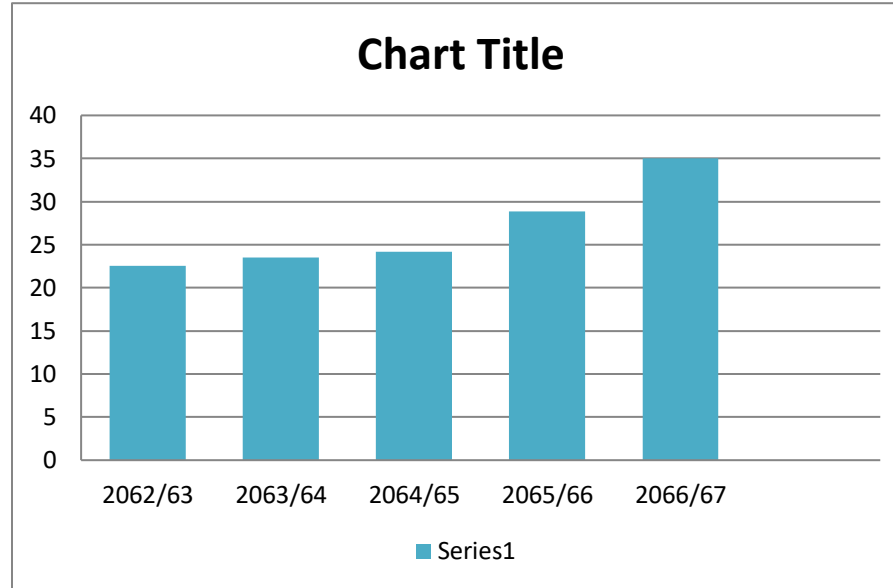
Table no.4.9

Analysis of Current Assets(Rs. In hundred million)

Year	Current Assets	Increase/Decrease
2062/63	22.52	-
2063/64	23.51	4.39%
2064/65	24.18	2.84%
2065/66	28.83	19.23%
2066/67	35.01	21.44%

The above table shows that the trend of current assets of NTCL. In the fiscal year 2062/63, the current assets was 22.52 million which was increased by 4.39% in fiscal year 2063/64 to Rs.23.51 hundred million. In fiscal year 2064/65 the increasing ratio is 2.84% which increased to 24.18 hundred million from 23.51 hundred million. In fiscal year 2065/66 &2066/67 the increasing ratio is 19.23% and 21.44% to 28.83and 35.01 hundred million respectively.

Figure 4.9
Bar Diagram Showing Current Assets
(F.Y. 2062/63-2066/67)(In hundred million)



The above bar diagram shows that cash and bank balance is minimum in the year 2062/63 and maximum in the year 2066/67.

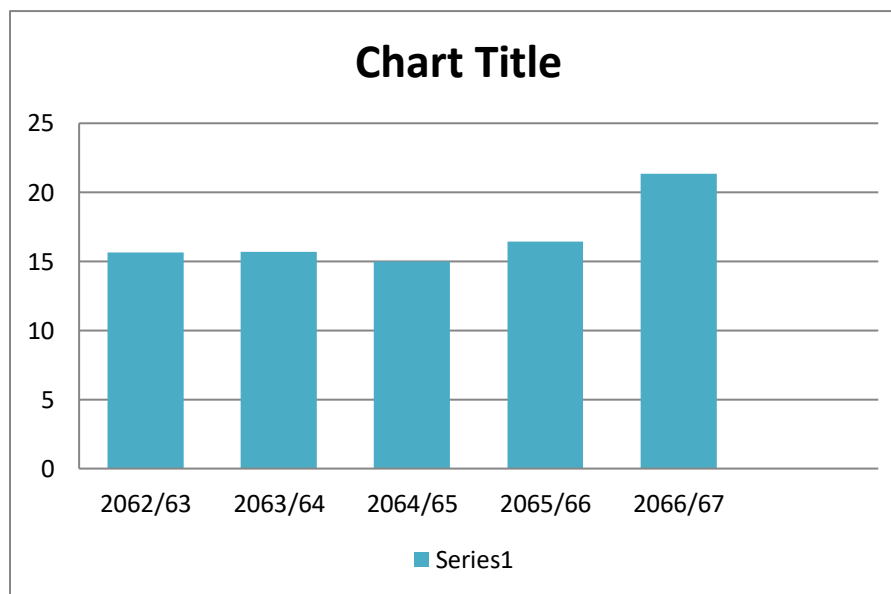
Table no. 4.10
Analysis of Current liabilities (Rs. In hundred million)

Year	Current Liabilities	Increase/Decrease
2062/63	15.66	-
2063/64	15.67	0.06%
2064/65	15.01	(4.21)%
2065/66	16.43	9.46%
2066/67	21.35	29.94%

The above table shows that the current liabilities of NTCL during the past five years. In fiscal year 2062/63 the current liabilities of NTCL was 15.66 hundred million which decrease by .06% to 15.67 hundred million in fiscal year 2063/64. In the fiscal year 2064/65 was Rs 15.01 hundred million decreased by 4.21% . In the fiscal year 65/66 and 66/67 the increasing ratio is 9.46% and 29.94% which was Rs. 16.43 & 21.35 hundred million respectively.

The standard deviation of NTCL is 2.31 and coefficient of variance is 13.73%.

Figure 4.10
Bar Diagram Showing Current Liabilities
(F.Y. 2062/63-2066/67)(In hundred million)



The above bar diagram shows that cash and bank balance is minimum in the year 2064/65 and maximum in the year 2066/67.

Table no.4.11
Analysis of Current Ratio (Rs.in hundred million)

F/Y	Current Assets	Current liabilities	Current Ratio
2062/63	22.52	15.66	1.43
2063/64	23.51	15.67	1.50
2064/65	24.18	15.01	1.61
2065/66	28.83	16.43	1.75
2066/67	35.01	21.35	1.64

From the above table, the current ration shows that the firm did not get any scarcity of the short term settlement during the last 5 years period. The ratio of 1.61 times on a average indicates that the corporation has current assets of Rs.4.56 for the liabilities of Rs.1. NTCL is able to pay its current liabilities at the time of requirement so, it should be conclude that the whenever the current liabilities are higher the current assets should be higher so as to counter the problem of payment short-term business or vice-versa.

Cash Conversion Cycle

The length of time from the payment for the purchase of raw materials to manufacture a product until the collection of the accounts receivable associated with the sale of the product. Cash conversion cycle calculated by the following formula.

$$** \text{ Cash conversion cycle} = \text{Inventory Conversion cycle} + \text{Receivable Conversion Cycle} - \text{Payable deferred cycle}$$

Inventory conversion period

The average length of time required to convert materials into finished goods and then to sell those goods. It is the amount of time the product remains in inventory in various stages of completion. In inventory conversion period is calculated by dividing inventory by the cost of goods sold per day.

$$\text{Inventory conversion period} = \frac{\text{Inventory}}{\frac{\text{Cost of goods sold}}{\text{Inventory conversion}}}$$

Table no.4.12

Analysis of inventory conversion period (ICP) (Rs. In hundred million)

Year	Sales	Inventory	ICP
2062/63	110.58	3.29	10 days
2063/64	147.51	3.28	8 days
2064/65	177.25	4.16	8 days
2065/66	221.47	1.80	3 days
2066/67	272.22	1.72	2 days

Receivable Conversion Cycle

The receivable conversion period is the average length of time required to convert the firms receivables into cash that is to collect cash following a sale. The receivables collection period also is called the days sales outstanding (DSO) and it is calculated by dividing accounts receivable by the average credit sales per day.

$$\text{Receivable Collection period (DSO) } = \frac{\text{Receivable}}{\text{Sales}}$$

Table no.4.13**Analysis of Receivable conversion period (RCP)**

Year	Sales	Receivables	ICP
2062/63	110.58	30.99	100 days
2063/64	147.51	34.55	84 days
2064/65	177.25	33.18	67 days
2065/66	221.47	35.93	58 days
2066/67	272.22	42.90	56 days

Payable Deferred Period

The Payable deferred period is the average length of time between the purchase of raw materials and labour and the payment of cash for them. It is computed by dividing Accounts payable by the daily credit purchases.

Table no.4.14**Analysis of Payable Deferred period (ACP) (Rs. In hundred million)**

Year	Sales	Receivables	ICP
2062/63	110.58	30.99	100 days
2063/64	147.51	34.55	84 days
2064/65	177.25	33.18	67 days

2065/66	221.47	35.93	58 days
2066/67	272.22	42.90	56 days

Table no.4.15

Analysis of Cash conversion cycle (CCC) (Rs. In hundred million)

Year	ICP	RCP	PDP	CCC
2062/63	10 days	100 days	26 days	84 days
2063/64	8 days	84 days	31 days	61 days
2064/65	8 days	67 days	43 days	32 days
2065/66	3 days	58 days	48 days	13 days
2066/67	2 days	56 days	42 days	16 days

From the above table, In fiscal year 2062/63 the cash conversion cycle is 8 days. The cash conversion cycle is in decreasing trend from fiscal year 2062/63 to 2066/67. In fiscal year 2064/65 the cash conversion cycle is 61 days. The cash conversion cycle is 32 days,13 days and 16 days in fiscal year 2064/65, 2065/66 and 2066/67 respectively.

Cash Flow Analysis

Analysis of cash flow statement cash flow statement prevails the cash and liquidity position of any organization cash flow statement describes the cash inflow outflow and year and cash balance inflow of cash is known as source of cash and out flow is called use of cash. Cash flow statement is of great importance to both financing and investing activities of business enterprises and the consequent changes in its financial position for a

period. In this analysis the three component of cash flow statement operating Activities, Investing Activities and financing Activities have been Analyzed.

Analysis of operating activities those transactions which are considered in the determination of net income are known as operating Activities. All cash flows except related with investing and financing activities are classified as cash available from operating activities.

Table no.4.16

Analysis of Operating Activities (Rs. In hundred million)

Year	Operating Activities	Increase/Decrease
2062/63	67.22	-
2063/64	80.52	19.97%
2064/65	97.99	21.69%
2065/66	107.17	9.37%
2066/67	123.61	15.34%

The above table shows the operating activities of the NTCL for the last five year. The operating result of the NTCL is in increasing nature. The operating range is between Rs.67.22 hundred million to 80.52 hundred million from the fiscal year 2062/63 to 63/64. The cash flow from operating activities is minimum in fiscal year 2062/63 was 67.22 hundred million and in the fiscal year 2066/67 there is the highest cash flow from operating activities is Rs.123.61 hundred million. Similarly the cash inflow in fiscal year 2064/65 and 2065/66 was Rs.97.99 and 107.17 hundred million respectively. This result shows that the NTCL has followed a certain guideline policy. There is no consistency in the operating Activities.

Table no.4.17

Analysis of standard deviation and coefficient of variance.Rs. In hundred million)

Year	X	(x-\bar{x})	(x-\bar{x})²
2062/63	67.22	-28.08	788.48
2063/64	50.52	-14.78	218.45
2064/65	97.99	2.69	7.24
2065/66	107.17	11.7	36.89
2066/67	123.61	27.7	767.29
	$\Sigma x = 476.51$		$\Sigma (x-\bar{x})^2 = 1918.35$

$$\text{Mean } (\bar{x}) = \frac{\Sigma x}{n} = \frac{476.51}{5} = 95.30$$

$$\begin{aligned} \text{Standard deviation } (\sigma) &= \sqrt{\frac{\Sigma(x-\bar{x})^2}{n}} \\ &= \sqrt{\frac{1918.35}{5}} \\ &= 19.59 \end{aligned}$$

$$\text{Coefficient of Variance (C.V.)} = \frac{\sigma}{\bar{x}} \times 100 = \frac{19.59}{95.30} \times 100 = 20.56\%$$

The standard deviation and coefficient of variance is 19.59 and 20.56% respectively.

Analysis of Investing Activities

Investing Activities are the acquisition and disposal of long term Assets and other investment not included in cash equipments. The table shows that the investing Activities result is not stable in the past five years.

Table no.4.18

Analysis of Investing Activities (Rs. In hundred million)

Year	Investing Activities	Increase/Decrease
2062/63	24.84	-
2063/64	33.26	33.89%
2064/65	57.09	71.65%
2065/66	49.55	(31.20)%
2066/67	37.15	(25.03)%

From the above table the highest outflow is Rs.57.09 hundred million in the fiscal year 2064/65., which increases by 71.65% comparing its past year. The lowest outflow amount is Rs.24.84 hundred million in the fiscal year 2062/63. In the fiscal year 2063/64, 2065/66 and 2066/67 cash outflows was Rs.33.26, 49.55, 37.15 hundred million respectively. Increasing percentage was 33.89% i.e from Rs.24.84 to 33.26.And decreasing percentage was (31.20%) i.e from Rs.57.09 to 49.55, & from Rs.49.55 to Rs. 37.15 hundred million decreasing by (25.03)% respectively.

Table no.4.19

Analysis of standard deviation and coefficient of variance. (Rs. In hundred million)

Year	X	(x- \bar{x})	(x- \bar{x}) ²
2062/63	24.84	-15.54	241.49
2063/64	33.26	-7.12	50.69
2064/65	57.09	16.71	279.22
2065/66	49.55	9.11	84.09
2066/67	37.15	-3.23	10.43
	$\Sigma x =$ 201.89		$\Sigma (x-\bar{x})^2 = 665.93$

$$\text{Mean } (\bar{x}) = \frac{\Sigma x}{n} = \frac{201.89}{5} = 40.38$$

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\Sigma(x-\bar{x})^2}{n}} = \sqrt{\frac{669.48}{5}} = 11.57$$

$$\text{Coefficient of Variance (C.V.)} = \frac{\sigma}{\bar{x}} \times 100 = \frac{11.57}{40.38} \times 100 = 20.65\%$$

The standard deviation (σ) and coefficient of variance (c.v.) is 11.57 and 20.65% respectively.

Analysis of financing Activities

A company transaction with its owners and long term creditors are typically called financing Activities. IAS defines financing Activities are Activities that the result in changes in the sing and composition of the equity capital and borrowing of the enterprises.

Table no.4.20

Analysis of financing activities (Rs. In hundred million)

Year	Financing Activities	Increase/Decrease
2062/63	20.72	-
2063/64	14.75	(28.81)%
2064/65	27.01	83.12%
2065/66	37.05	37.17%
2066/67	52.26	41.65%

The above table shows that the financing activities of NTCL is fluctuation but satisfactory. The maximum cash flow from financing Activity is Rs.52.26 hundred million in fiscal year 2066/67 and the lowest cash flow is Rs.14.75 hundred million in fiscal year 2063/64.

Table no.4.21

Analysis of standard deviation and coefficient of variance

Year	X	(x-\bar{x})	(x-\bar{x})²
2062/63	20.72	-9.64	92.93
2063/64	14.75	-15.61	243.67
2064/65	27.01	-3.35	11.22

2065/66	37.05	6.69	44.76
2066/67	52.26	-3.221.93	10.43479.61
	$\sum x = 151.79$		$\sum (x-\bar{x})^2 = 872.19$

$$\text{Mean } (\bar{x}) = \frac{\sum x}{n} = \frac{151.79}{5} = 30.36$$

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum (x-\bar{x})^2}{n}} = \sqrt{\frac{872.19}{5}} = 13.21$$

$$\text{Coefficient of Variance (C.V.)} = \frac{\sigma}{\bar{x}} \times 100 = \frac{13.21}{30.36} \times 100 = 43.51\%$$

The standard deviation (σ) and coefficient of variance (C.V.) of NTCL is 13.21 and 43.51% respectively.

Analysis of Correlation Coefficient

If the two variables have a strong positive linear correlation, the value of 'r' is close to +1. The 'r' value of exactly +1 indicates a perfect positive fit. The positive value indicates a relationship between two variables such that as value of one variable increase, value of another variables also increases. Similarly if two variables have a strong negative linear correlation, 'r' is close to -1. An 'r' value of exactly -1 indicates a perfect negative fit. Negative value indicates while value of one variable increases, value of another variable decreases. If there is no linear correlation or a weak linear correlation 'r' is close to 0. A value near zero means that there is a random non linear relationship between the two variables.

A correlation greater than 0.8 is generally describe as strong whereas a correlation less than 0.5 is generally described as weak.

Table no.4.22
Analysis of Correlation Matrix

	Inventory	Loan and Advance	Debtors	Current Assets	Current Liabilities
Cash and Bank	-0.68	0.11	0.96	0.96	0.81
Inventory	×	-0.59	-0.58	-0.78	-0.73
Loan and Advance	×	×	0.17	0.38	0.59
Debtors	×	×	×	0.95	0.86
Current Assets	×	×	×	×	0.93
Current Liabilities	×	×	×	×	×

From the above correlation matrix table, the strong positive correlation value between cash and bank with debtors and current assets $r = 0.96$ which is nearer to +1. The debtors with current assets, current assets with current liabilities is also a positive correlation. There is a negative correlation between inventory with loan and advance, debtors, cash & bank, current assets and current liabilities. Whereas there is a weak correlation between cash & bank with debtors, loan and advance with debtors, loan & advance with current assets.

Table no.4.23

Analysis of Correlation Matrix

	Investing Activities	Financing Activities
Operating activities	0.53	0.91
Investing Activities	×	0.26
Financing Activities	×	×

From the above correlation matrix table, there is a strong positive correlation value between operating Activities with Financing Activities $r = 0.91$ which is nearer to +1. Whereas there is a weak correlation between Investing Activities with Financing Activities $r = 0.26$ which is less than 0.

4.14 The Findings of the Study

On the basis of the different analysis, the following major findings have been drawn:

1. It is found that public sectors enterprises play backbone role for the economic development of the nation. NTCL is pioneering service oriented corporation of the Nepal which facilities conveying information quickly overlong distance with a chep cost. The effects of the communities the rural areas and their contribution to rural development are potentially extremely important, yet rather difficult to measure.

2. Specific goal and strategy for the organization are setup by the top level executive and the management is governed by Government of Nepal.
3. The study result implies that the main sources of cash of NTCL are international trunk telephone, local telephone and domestic trunk telephone both of PSTN and mobile.
4. The dispersion of cash and bank balance is Rs. 32.33 hundred million and coefficient of variation is 19.54%. That result, there is low consistency in cash and bank balance.
5. The sales of NTCL are increasing year but the rate of increase is not stable.
6. NTCL has satisfactory liquidity position and it has maintained proper cash and bank balance.
7. The current ratio of NTCL is satisfactory throughout the study period. It is found within the range of 1.43 to 1.75. This shows that NTCL is efficient in maintaining the good liquidity position. The ratio helps to analyze the financial capacity of NTCL to repay current liabilities and short-term loan. The average current ratio of 1.61 times indicates that the corporation has current assets of Rs 1.61 for the liabilities of Rs 1. It should be concluded that NTCL is able to pay its current liabilities at the time of requirement.
8. The company has been utilizing its current assets effectively. The current assets of NTCL is in increasing trend, average current assets is 24.18 hundred million.
9. The average Inventory is 3.28 hundred million which is satisfactory level, The data shows that some year the level of inventory is increasing trend. Some year inventory decrease, fluctuating trend shows. The standard deviation is 0.95 hundred million and coefficient of variance is 33.33%.

10. The average loan and advance is 57.74 hundred million, standard deviation is 11.29 hundred million and coefficient of variance is 19.55%.
11. The amount of debtors is in decreasing trend. The standard deviation is 4.98 hundred million and coefficient of variance is 14.51%.
12. The trend of current assets is in increasing trend, the average current assets is 24.18 hundred million.
13. The current liabilities is in increasing trend, the average current liabilities is 15.01 hundred million.
14. The cash conversion cycle is in decreasing trend, the cash conversion period is satisfactory in two years only. The shorten cash conversion cycle is better for the organization.
15. The cash flow from operating activities is in increasing trend, the average cash flow is 95.30 hundred million. The standard deviation is 19.59 hundred million and covariance is 20.56%.
16. The cash flow from investing activities data shows that some year is increasing trend, Some year it is decrease, fluctuating trend shows. The average cash flow is 40.38 hundred million, standard deviation is 11.57 hundred million and C.V is 20.65%.
17. The average cash flow from financing activities is 30.36 hundred million, standard deviation is 13.21 hundred million and C.V is 43.51%.
18. There is a strong positive correlation value between cash and bank with debtors and current assets. There is a positive correlation between debtors with current aseets and current assets with current liabilities. There is a negative correlation between inventory with loan and advance, debtors, cash and bank, current assets and current liabilities. There is a weak correlation between loan and advance with cash and bank, debtors and current assets.
19. There is a strong positive correlation value between operating activities with financing activities and there is a weak correlation between investing activities with financing activities.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Cash is the life blood of every business organization. Without cash no businesses come to the establishment. So cash come to the position of the foundation of present business environment. From the early stage of human being when money came to he exchange system, they have been aware with management of money or cash. So the management of cash came to the exchange system when human mind has created money. After creating money in the exchange system, human being through to manage cash in the best way in their daily house hold arrangement and business organization. And those business organizations come to the strong competitive position, which make the effective cash planning and best management of cash.

The idea of cash management has not come directly and independently in it's separate entity. Before 1970's cash management was affiliated with the economics. Many more organization of the world were enjoying by making reasonable profit margin and many organization before 1970's period survive without proper management of cash. But by the reason of inflation in 1970's the situation changed and many profitable enterprises were confronted with the problem of liquidity and even faced technical insolvency. The investors once again lost confidences n the credit worthiness of enterprises. As a result rising of funds, through the issue of share from the present and potential investors become impossible. The liquidity problem also out pressure on the financial institutions making long term loans and forced them to rice to rates of interest very frequently. After 1970 and problem faced by the enterprises cash is considered as a major component of

the working capital of the organization and started to manage cash in the best way then the separate entity of cash management has established. So the cash was come to the separate and independent entity by the 1970's inflation (Bajracharya, 1990)

Nepal Telecom Ltd. was established on 2032-03 01 B.S. under Nepal Telecommunication Act 2028 B.S but name change on 2060-10-22 B.S under company act 2053 as a public utility sector enterprise to provide reliable and affordable telecommunication services throughout the country. It is exerting it's almost effort to provide communication services to larger scale of population. In the fiscal year 2062/64 NTCL has seen 20.28% growth in its revenue, 2063/64 is 33.9% and 2066/67 is 21.27% increasing revenue from the previous fiscal year. Fiscal year 2063/64 to 2066/67 revenue is double. These increased can be attributed to the growth of 44,693 and total line is 554566 till 2066/67 magh additional lines distributed throughout the country along with the strict surveillance in revenue collection from the domestic and international services.

NTCL has already installed 437,919 lines and distributed about 369,428 lines by the end of Chaitra 2061 B.S Out of which almost 199,312 telephone lines are concentrated in the Kathmandu valley alone. With the beginning of the new year 2062, the 30 years old NTCL is converted into a company and changes in the new name as Nepal Telecom Limited. The head office is located at Bhadrakali Plaza, Kathmandu.

The basic objective of this study is to analyze the cash management practices of the Nepalese organization. The present study is small step to examine the use of cash management practices in Nepal Telecommunication Ltd.

The scope of the study is limited for five years period i.e. fiscal year 2062/63 to 2066/67. Analytical and descriptive research design is followed; mainly secondary data has been used. Financial tool like financial ratio have been used to analyze the data. Similarly, accounting statistical tool have been also used.

The study concentrates in accounting and financial aspects. Thus it lacks the other area. This study has been divided into five different chapters: introduction, review of literature, research methodology, presentation and analysis of data and summary, conclusion and recommendation.

5.2 Conclusion

The research study concludes that cash is one of basic elements for all organizations. All activities are lifted by cash. Above analysis reveals that the cash management of NTCL is satisfactory. The elements of cash management such as cash and bank balance, sales, inventory, receivables, advance deposit, cash turnover all are managed properly following definite rules and regulations. But there is not separate cash planning and budgeting technique adopted by the corporation.

The liquidity position of the NTCL is satisfactory level. The corporation has earned maximum profit over the study period. Net profit margin, return on working capital and net profit after tax to quick assets shows the satisfactory financial position. The correlation between different variables of liquidity and profitability is in the required situation.

NTCL is also trying to address social needs of the common people by organizing various programs but has not been very successful. The corporation has been facing some

problems in corporation planning, participative management, evaluation of broad and long range objectives and co-ordinate system in the organization. NTC's management system needs change. NTCL is having another problem of government intervention. Most of the top level executive has linkage with political parties and they manipulate the decisions in the interest of the parties of their concern. Frequent intervention and instability of the government very negatively influence the performance of NTC. The corporation has ignored the environmental factors and it has also not adequately considered controllable and non-controllable and non-controllable variables affecting the corporation. Moreover, the corporation has no in depth analysis of the strengths, weakness and threats, where as this study can be concluded by listing out of strength wands weakness as follows:-

Strengths

- Enough space for corporation.
- Government favourism.
- Sufficient manpower.

Sophisticated and technically enriched machinery.

- Leading as monopolistic organization in telecom sector.
- Customer facilities

Weakness/Threats:

- Lack of proper management
- High government and political intervention.

- Lack of technical manpower and technical know how.
- Natural challenges such as heavy rain, lightning, storm, landslide, conflagration etc.
- The change and development of technology.

5.3 Recommendations

It is a suggestive framework based on analysis of the study. These recommendations will be useful to the management of the NTC, other concerned organization, individuals, institutions and other interested parties.

- NTCL has maximum cash balance due to maximum or idle cash balance of NTCL minimize return. If it's maintained properly, it generates extra revenue.
- NTCL should prepare monthly Trail balance. Which help to the organization, to take corrective measures on adverse financial situation is time.
- NTCL should give attention in account receivable management .Account receivable can be managed efficiently by designing an appropriate receivable management programme by trying to maximize collection efforts by using credit terms likes 2/10 net 30, 1/20 net 60, 3/5 net 20 etc.
- According to capital capacity, market situation of NTCL, it has not provided adequate service to it customers.
- NTCL should prepare cash budget on the basic of cash flow statement. The objectives of preparing cash budget is to predict whether it any point of time there its likely to be an excess or shortage of cash. By finding excess or shortage of cash the company can manage the excess cash in investing short term assets and can manage cash deficit by borrowing short term loan.

- The financial position of the NTCL must be evaluation time to time due to overflow of liquidity
(cash)
- NTCL should be very well aware of its strengths and weakness. The monopoly of NTCL in telecom sectors has ended. In this competitive and globalize market situation many other firms are found to develop in some sector. Hence it is suggested that NTCL must be taken corrective action for entering new firms by strategic management policies.
- NTCL should give attention in its operating. The operating expenses is high that reduces the net profit for the period. So the corporation should apply the cost reduction and cost control techniques in its corporation should apply the cost reduction and cost control techniques in t

its operation. Standard costing budgeting, variance analysis techniques should adop and periodically performance report should be prepared for each responsibility center.
- NTCL should timely evaluate its relevant variables and above all managerial involvement, organization adaptation, responsibility accounting, full communication, realistic expectation, time dimensions, flexible application, behavior view point and follow up program should be made more effective, productive and result oriented.
- For the overall development of any organization, its internal condition should be sound. NTCL has not yet come out of chronic decrease such as slow decision

making, lack of systematic mechanism, coordination and co-operation, unnecessary internal expenses, time-consuming administrative procedure etc.

- Telecom technologies have been changing in the blink of an eye. Choices of customers are also changing in accordance with the changing technologies. In this competitive and complex situation, NTCL and all its employees should focus more on service because “customers are king” in case of any service-oriented organization. The mentality of all employees must be positive towards the organization.
- The present burning issue of GTCL is how to handle challenges of survival in a tough competitive environment. NTCL is on the verge of crisis. So, at this moment all NTCL employees should uniformly stand for the welfare of the organization. Actually, NTCL has a scarcity of required logistic and well-trained human resources. Therefore, the overall quality and productivity of services are not satisfactorily increasing. NTCL is still running through traditional trends, the right men are not in the right positions. For instance, the administrative department looks after the human resource activities and the responsible administrator does not manage the employees, NTCL itself should create an environment. Recruitment, promotions, transfers and career opportunities should be always transparent. Management by objectives technique should be followed with co-ordination and co-operation among all levels of personnel responding to all departments. ,

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Year	Milestone Details
1913	Establishment of first telephone lines in Kathmandu
1914	Establishment Of Open Wire Turnk Line From Kathmandu To Raxaul (India)
1935	Instalation of 25 lines automatic exchange in Royal Palace
1936	Installation of Open Wire Trunk line from Kathmandu to Dhunkuta
1950	Establishment of Telegram Service
1950	Introduction to High Frequency Radio System (AM)
1950	Establishment of CB telephone exchange (100 lines) in Kathmandu
1951	Installation of Open wire Turk line from Kathmandu to Palpa
1955	Distributes of telephone line to general public
1955	First public telephone exchange in Kathmandu (300 lines CB)
1963	First Automatic exchange in Nepal (1000 lines in Kathmandu)
1964	Beginning of International Telecommunications Services using HF Radio to India and Pakistan
1971	Introduction of Telex Services
1974	Microwave transmission links establishment for internal trunk
1982	Establishment of standard "B" type earth station for international circuits
1982	Establishment of SPC telex exchange
1983	Establishment of digital telephone exchange
1984	Commencement of STD service
1984	Reliable Rural Telecom Service (JICA)
1987	Commencement of STD service
1995	Installation of Optical Fiber Network
1996	Conversion of all Transmission link to Digital transmission link

- 1996 Automation of the entire Telephone Network
- 1996 Automation of the entire Telephone Network
- 1996 Intoduction of VSAT service
- 1997 Digital Link with D.O.T. India through Optical Fiber in Birgunj-Raxual
- 1998 Direct Link with Bangladesh
- 1999 Launching of GSM Mobile service
- 2000 Implementation of SDH Microwave Radio
- 2000 Launching of Internet Service
- 2001 Launching of Payphone Service
- 2001 International Roaming in G.S.M. Mobile
- 2002 East West Highway Optical Fiber Project
- 2003 GSM Prepaid Service
- 2004 Nepal Telecom (transformation for corporation to Nepal 1Dorrsanchar Company Limited)
- 2004 Pre-paid calling card service (IN services)
- 2004 IVR service by 1600 S.L.C. Result
- 2005 Soft launch of CDMA
- 2005 Tool Free Service
- 2005 Access Network Service
- 2005 Outsourcing of Enquiry Service (197)
- 2006 IVR service by 1061 10 +2 result
- 2006 Home country Direct Service-Nepal Direct (IN)
- 2006 MCC (198) complaint registration via IVR in Katmandu Valley
- 2006 CDMA Limited Services in Kathmandu Valley
- 2006 PSTN voice mail service
- 2007 Expansion of Internet Bandwidth through India-Nepal cross boarder optical link
- 2007 National Roaming for CDMA mobile (Sky phone)
- 2007 IVR Service by 1888 free VOIP call complaint in GSM mobile GPRS, 3 G/CRBT service
- 2008 ADSL Internet Service
- 2008 IVR service by 1607 GSM and CDMA
- 2008 Notice Bard Service
- 2009 SMS service GSM to CDMA

2009 CDMA postpaid mobile service
2009 GSM voice mail service
2010 EVDO Service started
2011 Soft Launch of EasyPhone IP Call Service

