CHAPTER-I
INTRODUCTION

1.1 General Background

Nepal is situated between the two big countries of the world; India in the south 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 $562 at the current rate and the GDP growth rate is 3.53 (CBS, 2066/67). 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 the 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 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 money that is easily accessible either in the bank or in the business. It is not inventory, it is not accounts receivable, and it is not property. These might be converted to cash at some point in time, but it takes cash on hand or in the bank to pay suppliers, to pay the rent, and to meet the payroll. Profit growth does not always mean more cash. Management of cash resources is crucial to smooth operation of all companies (Foster, 1997:208). Cash management is the stewardship or proper use of an entity's cash resources. It serves as the means to keep an organization functioning by making the best use of cash or liquid resources of the organization (FMS, 2002:125)

Cash is the life blood of every business organization. Without cash, no business activities can be taken place. There are several issues involved in the management of this firm's liquidity position. One of them is to develop efficient system for the management of cash in flow 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 was enjoying by making reasonable profit margin and many organizations before 1970's period survive without proper management of cash. Due to the inflation in 1970s the situation has changed. Many profitable enterprises faced the problem of liquidity and even faced technical insolvency. The investors once again lose confidences in the credit worthiness of enterprises. As a result, rise 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 the rates of interest very frequently. After 1970 cash is considered as one of the major component of the working capital of the organization, and they started to manage cash in the best way. Then the separate entity of cash management has been established. The cash came to be the separate and independent entity by the 1970's (Bajracharya, 1990)

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 be an entity of PE (Laxmi Narayan, 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 36 PE’s in Nepal. Among the 36 enterprises fully or partially owned by the government, 17 public enterprises (PEs) have earned profit while 19 PEs are operating at loss in FY 2005/06.A comparative analysis suggests that the progress made by PEs in FY 2006/07 looks satisfactory. In current year (2006/07), 21 PEs are expected to make net profit while the other 15 PEs are expected to incur losses in FY 2005/06 (MoF, 2007).

Among the 36 enterprises fully or partially owned by the government, 17 public enterprises (PEs) have earned profit while 19 PEs are operating at loss in FY 2005/06. A comparative analysis suggests that the progress made by PEs in FY 2006/07 looks satisfactory. In current year (2006/07), 21 PEs are expected to make net profit while the other 15 PEs are expected to incur losses. In FY 2005/06, the operating profit of PEs decreased to Rs.1.69 billion from Rs.2.13 billion last year (2004/05) (MoF, 2007).

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. Primarily, Rs.5 billion new equity investment in the Agriculture Development Bank and Rs. 4.96 billion net profit earned by the Nepal Telecom have contributed to the increase in the shareholders fund (MoF, 2007). Through its contribution effort to fulfill this responsibility, NTC's contribution towards the overall socio-economic development of the nation is more worth than other enterprises.

Introduction of Nepal Telecom Ltd.

Telecommunication is system which facilities 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 modern world. In a developing country like Nepal, the role, importance and contribution of telecommunication in the economic development of country can not be exaggerated as there is no sector where telecommunication has not played 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 so long. The first telecommunication services were started in Nepal during the regime of Chandra Shamser in 1972 B.S .It was the first time and a good opportunity for Nepalese people to transmit message from Kathmandu to Birgunj. This telephone line 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 in 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 Juddha Shamser 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 Juddha Shamser. 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 there were 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 65except 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\3\11 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 non-existent 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 aboard 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.

Services provided by Nepal Telecom Limited

Nepal Telecom Limited is moving ahead to establish nationwide telecommunication infrastructure, the foundations for it revolution in the country. In view of unprecedented development in the world of information and communication technologies, NTCL is trying it's 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 augmenting its telephone exchange line capacity for the best interest of its valued customers.

As per MIS report of chaitra 2067, the total installed capacity has reached 762581, distributed telephone line are 597893 where as the total telephone penetration of PSTN telephone is 2.12. The total capacity includes all the telephone exchanges, rural exchange spread throughout the country. Recently NTCL has operational exchanges of 262 in 75 districts at 250 different locations (MIS report, 2067).

Basic services of the NTC have following subcategories which enable to communicate in Nepalese and international context (NTC, 2067/68).

- Local Calls

- Domestic Telex
- Local Leased Lines
- National Trunk Calls
- International Trunk Calls
- Operator-Assisted Int'l Telephone
- Internet Service
- Packet Switching Data Communication
- Activating/ Deactivating Phone Locks

ii) CDMA-PHONE

C-PHONE is based on CDMA 2000 1X technology which is the latest version of CDMA. CDMA (Code Division Multiple Access) is the fast growing wireless technology in the world. It has the advantage of voice clarity, large coverage and high speed data.

With the aim of providing on demand telephone lines in all cities and towns as well as serving most of the sparsely populated rural areas of the country, Nepal Telecom is introducing CDMA2000 1X based wireless in local loop system. Apart from the good quality voice, we believe that by providing high speed data along with other supplementary and value added services; we can also meet your growing need of being acquainted with the new technology.

iii) 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 NTC has been providing the following services:

- Post-Paid,
- Pre-Paid,
- GPRS,
- 3G Service,
- VAS Service and
- Int'l Roaming.

iv) Email and Internet Services:-

As an organization with a national obligation to provide the most needed communications facilities to as much of the population as possible, Nepal Telecom has started its own Internet services since May 2000, nearly 5 and half years from today despite the presence in the market of several other service providers from the private sector. Since the country is seriously trying to develop Information Technology sector as the important economic engine of the nation in the new IT-driven world, it is imperative that the involvement of a big and credited organization like Nepal Telecom in this field is of fundamental importance. 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.

Internet services provided by NTC are CDMA, EVDO, GSM, Dial-up and ADSL. The total number of customer utilizing these facilities has reached up to a total of 6743976 (NTC, 2067/68).

v) Other services

- Rural Telephony – Ku Band
- Intelligent network
- PCC credit limit
- PSTN credit limit
- Advanced free phone service
- Home country direct (HCD)
- IVR Service

IVR technology was introduced to Nepal Telecom in 2004 for SLC Result Enquiry purchased from Alliance Info Tech India, with the unexpected huge popularity further expansion was urgently needed, and in successive year under the contract with M/S Pulse Software & Consulting Inc., Canada addition of IVR system was done. Along with SLC Result Enquiry service from last year Class 11 and 12 Result Enquiry has also been put up, which is once a year but has been an attractive service with high potentiality.

Present Status of NTCL in the telecommunication Sectors:-

Till the end of the Ashad 2068 the number of telephone users has increased by 23.42% than the last fiscal year. In the fiscal year 2067/68 a total of 12 lacs and 80 thousand lines were distributed and consumer of the NTC has reached to 67 lacs 44 thousand. Of the total line distributed in the fiscal year 2067/68, mobile phone accounted for 11 lacs and 61 thousand, CDMA phone accounted for 99 thousand and PSTN accounted for 20 thousand. Till fiscal year 2067/68 overall density of total communication services of Nepal has reached up to 47.27%, of which NTC has contribute to of 23.95 %. Details of the NTC's increment on the number of users after it has been converted into company on 2061 have been given in Appendix 2.

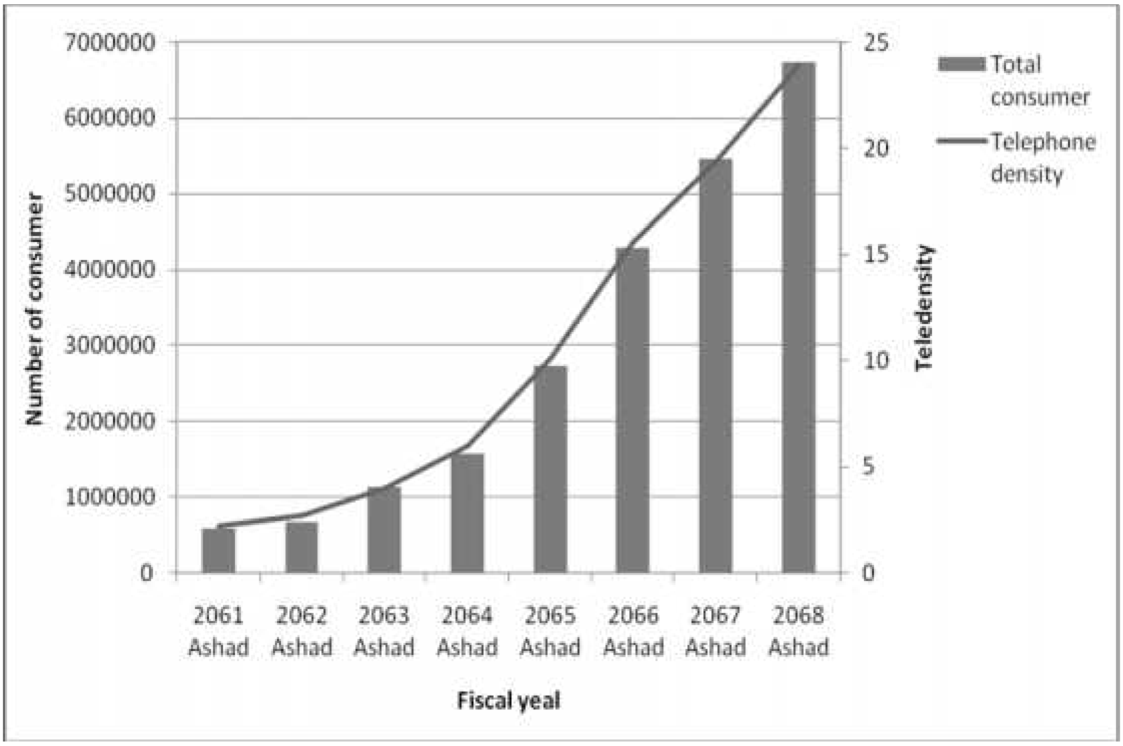

Fig. 1 Graph showing the increase in the total number of consumer and teledensity of NTC from 2061 to 2068

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 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.

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.

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 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"?

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 30 years old NTC, the state-owned telecom operator is known as by new named Nepal Telecom from Ist Baishakh

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 units its shares 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 an authorized capital of corporation, mean while 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 Significance of the Study

Cash management is one of the most important parts 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 parts 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, non-manufacturing 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.

1. What types of cash management practices has been adopted by NTC?
2. What are the revenue generating practices of the NTC?
3. What is the situation of financial performance of the NTC?
4. What is the impact of cash management on profitability?
5. 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 is as follows:-

1 To examine and critically analyze the existing cash management practices in the organization.

2 To assess the revenue generation practices of the organization.

3 To examine the financial performance of the organization.

4 To review the cash mobilization practices of the organization in relation to cash management model.

5 To assess the impact of cash management on profitability of the organization.

6 To make suggestions for the effectiveness of cash management in NTC.

1.7 Limitations of the Study

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

1 This study considers only those factors which are related to cash management of NTC.

2 This study based on secondary data.

3 This study covers the period of seven years from 2061/02 to 2067/68.

4 This study assumes that the impact of political factors of the country such as change in government does not affect the financial decision.

1.8 Organization of the Study

This study has been organized in five chapters. They are:-

1. Introduction

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.

2. Review of Literature

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

3. Research Methodology

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

4. 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.

5. Summary, Conclusion and Recommendation

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

CHAPTER - II

REVIEW OF LITERATURE

Review of literature refers to the reviewing of the past studies in the concerned field. Such studies could be thesis/dissertations that are written earlier books, articles, journals and or any sort of other publication concerning the subject matter, which were written prior by a person or an organization. The purpose of this literature review is to get acquainted with what has been accomplished in the concerned subject matter and what is yet to be accomplished. In other words it helps to find what actually is to be studied and foretells worthiness of the study being undertaken. Works on cash management has been done by various researcher and scholars (Kaushik and Lawrence, 1996; Ward and Ward, 2003).

Balchander et al (2003) studied the cash management system of the malaysian banks and the findings revealed that the demand for general cash among Malaysian banks has been on the decline throughout the years due to the introduction of new channels of delivery. There was also sufficient statistical evidence, though to varying extent, that indicates the presence of month of the year and time of the month effects on bank's demand for and supply of cash.

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 planed 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, 1986).

According to J. M. Keyns “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.” The 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 through out 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).

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.

1 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 centre 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 centres. The selection of the collection centre will depend upon the volume of billing. The collection centres will be required to collect cheques from customers and deposit in their local bank accounts. The collection centre will transfer funds above some predetermined minimum to a central or concentration bank account, generally at the firms 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.

2 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 centre 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 centers, considering customer location and volume of remittance. At each centre, 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). "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.

$$CashVelocity \text{ X} \frac{AnnualSales}{AverageCashBalance}$$

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 can not 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 whereby depositors may write cheques in excess of their balances with their banks automatically extend leans 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 firm's expected cash inflows and outflows over a projected period of time" (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:

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

4 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.

5 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 motives. They are.

1 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.

2 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.

3 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.

4 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 favorable 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:

1 Review the lag from the data of sale of goods and service on credit to the mailing of invoice and the first billing.

2 The cash discount is given to customers for early payment; review their effect on really cash collections and whether the discount is too high or low.

3 Review the credit granting process to determine whether bad credit risks are being screened out.

4 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:

1 All payment is on latest no penalty day.

2 Maximize the float time by using cheque and mostly on afternoon of Friday.

3 Cash discount should be taken for early payment.

4 Cash advance should not be given 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:

1 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 in creases 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.

2 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 purchases 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 obligating 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 of between risk and return influences such a decision. If the firm maintains a small cash balance, its liquidity position become weak and suffers from a capacity of cash to make payment. But investing released funds in some profitable opportunities can attain a higher profitability. If the firm maintains a high level of cash balance it will have a sound liquidity position. Thus the firm should maintain an optimum cash balance to find out the optimum cash balance and risks of small balance should be matched with the opportunity costs of too large balance.

2.1.8 Cash Management Models

The analytical models for cash management are as follows

1. Baumol model
2. Miller-Orr model

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 lump sumps at periodic intervals the optimal size of the cash transfer is formulated as follows;

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

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.

(Western and Copland, 2000: 784).

Baumol model has some limitation such as: It does not allow cash flows to fluctuate. Overdraft is not considered. There are uncertainties in the pattern of future cash flows (http://www.scribd.com/doc/26556946/BAUMOL’S-MODEL).

1 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 zero will be converted from liquid assets to cash. When the cash balance touches an amount which will be invested in liquid asset and the cash balance will be brought to oz.

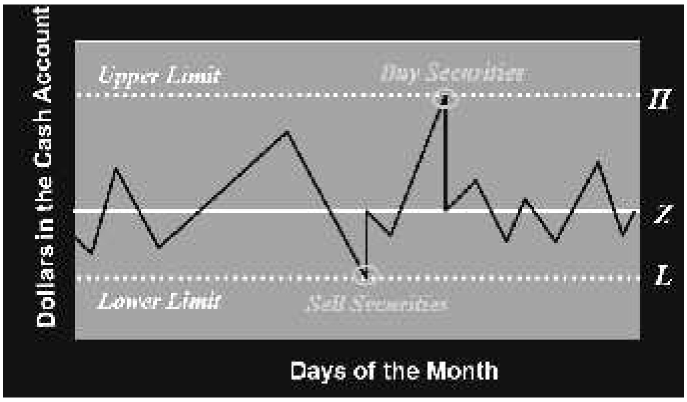

Figure 2.1: Graphical presentation of Miller Orr Model of cash balance

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

$$z \text{ X} \frac{3r^{2}}{4c}$$

Where,

r is average yield of the alternate liquid assed.

is the variance of net cash flow .

C is the cost per transfer from cash to alternate asset and vice varsa.

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:-

1 It prevents insolvency or bankruptcy arising out of the inability of a firm to meet its obligation,

2 The relationship with the bank is not strained,

3 It helps in fostering good relations with trade creditors and suppliers of raw materials, as prompt payment may help their own cash management,

4 A trade discount can be availed of discount can be availed of if payment is made within the due date,

5 It leads to a strong credit rating which enables the firm to purchased goods on favorable terms and to maintain its line of credit,

6 To take advantage of favorable business opportunities that may be available periodically and

7 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, 1986,: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 objective sounds 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 is 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, 1986,:667).

2.2.10 Review of Related Thesis and Publication

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:-

Mr. Neupane (2001) has conducted a research on topic, "A study on profit planning in Nepal Tele Communication Ltd". The main objectives of the study were:-

1 To examine the practices an effectiveness of profit planning in NTC.

2 To examine the present comprehensive profit planning system applied by NTC.

3 To analyze the various functions, plan formulated and implemented in NTC.

4 To evaluate the variance between targets and actual of NTC.

5 To analyze the financial position of NTCL by the help of radio analysis.

The main findings are as follows:-

1 Lack of systematic profit planning and control. Plans are prepared on "adhoc" basis.

2 The sales of NTCL are increasing year by year but the rate of the increase is not stable.

3 NTCL has a practice of preparing short-range sales budget. Long range sales budget is not prepared in detail.

4 Actual production lines are more variable than budgeted production line.

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

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

7 Profit pattern of NTCL is on increasing trend.

8 Variance analysis is completely ignored in the corporation.

The recommendations are as follows:-

1 Long-term objectives should be clearly formulated.

2 Sales budget should be made on realistic ground.

3 Management of NTCL should bring the effective programs of cost reduction and

control.

4 NTCL must restructure its capital structure.

5 Cost-Volume-Profit relationship should be considered while formulating profit plan.

6 Profit planning concept should be communicated top to lower level.

7 Variance analysis should be effective.

8 The financial position of the corporation should be timely evaluated using ratio analysis and other relevant financial and mathematical tools.

Mr. Shrestha (2005) has conducted a research on the topic, Cash Management in Public Manufacturing Enterprises of Nepal, "A case study of Royal Drugs Limited." His major objectives are to examine the management of cash in Royal Drugs Limited. The other objectives of this study are as given below:-

1 To make the analysis of cash flow of RDL.

2 To examine the liquidity position of RDL.

3 To analyze the cash budgeting practice of RDL.

4 To examine the profit scenario of RDL.

5 Critically analyze the cash management practice.

To fulfill the above objectives, he studied from FY 2051/52 to 2059/60 nine years secondary data. After his study, he found the following condition of RDL.

1 RDL doesn't have any definite policy regarding how much of cash balance to hold each fiscal year.

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

3 Profitability of RDL being in worsening trend, liquidity does not practically increase with increase in profitability and vice versa. In other words, positive correlation between liquidity and profitability is not practically certain.

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

5 RDL doesn't prepare cash flow statements and thus the cash budget prepared has not been based on cash flow analysis.

After analysis of above findings, he had suggested to adopt the following recommendation for better cash management.

1 Recommend to maintain optimum cash balance every year.

2 Recommend to prepare cash flow statement.

3 Recommend not tie-up current assets in unsalesable inventories

4 Determine minimum level of cash balance to hold every year, maintain such minimum level of cash balance as a requirement of precautionary, speculative and compensation motive, besides for daily transaction.

5 Maintain optimum current assets variables and current liabilities every year.

6 Use extensively financial and statistical tools as per required.

Bajracharaya (1990) presented entitled 'cash management in Nepalese public enterprises. The study was a detailed cash management study of the prominent Nepalese enterprises during the time and it included research on total of 18 enterprises finally recommending a new cash management model suitable in Nepalese context. Since the thesis presented was for Ph.D. degree, most of the data analyzed were primary data in greater detail. The thesis examined practices of cash management in selected in Nepalese enterprises. By reviewing this thesis the researcher gets the following findings.

1 It is observed that there has been no uniformity along the enterprises with regard to cash budgeting, forecasting, credit terms, payment behavior of customers and investing excess cash balance.

2 Most of the enterprises did not have the practice of monitoring the payment behavior of their customers and did not have the practice of analyzing the again schedules of debtors.

3 Majority of the enterprises did not face any serious liquidity problem. This is because most of the enterprises could afford to delay payments to creditors, even as the debtors delayed payments.

Mr. Pradhan (1997) has conducted a research on the topic "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.

1 To study the existing cash management system in STCL.

2 To access the credit policy adopted in STCL.

3 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 2047/48 to FY 2052/53. 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.

1 The STCL could not make the best use of available cash balance prudently.

2 The cash collection efficiency in the corporation is very low.

3 The collection of trade credit in the corporation is low during the three years of study period.

4 Management has taken liberal credit policy to sales of goods. Hence cash and bank balance of the study period is minimum of AR.

5 No, optimum cash balance is maintained.

On the basis of above findings, it is suggested to adopt the following recommendation for better management of cash.

1 Cash should be efficiently managed.

2 Monthly trial balance, cash and funds flow statement and financial report should

be prepared.

3 Effective account receivable management should be designed.

4 Effective credit policy should be adopted.

5 Optimum cash balance should be maintained.

6 The surplus cash balance should be maintained

The surplus cash should be invested in profitable opportunities.

Ms. Kunwar (2011) has conducted a research on the topic, A study on cash management in Nepal Telecom. Her major objectives are to examine the management of cash in Nepal Telecom Limited. The other objectives of this study are as given below:-

1. To identify the liquidity position of NTC.
2. To review cash flow from operating, financing and investing activities
3. To study the relationship of cash with total revenue and account receivables.
4. To provide NTC recommendation in term cash management.
5. Critically analyze the cash management practice.

To fulfill the above objectives, she studied from FY 20005/06 to 2009/10 five years secondary data. After her study, she found the following condition of RDL.

1. Cash flow statement of NTL shows good cash position of actual cash collection of the company.
2. NTC has high current assets, high liquidity and high opportunity cost
3. Cash budget of the study period showed that there is low deviation in budgeted and actual cash budget.
4. The company's position of liquid cash that remained idle was too high.
5. Cash position of the company was strong over the period sufficient to pay its current liabilities.

After analysis of above findings, she had suggested to adopt the following recommendation for better cash management.

1. NTC should put effort to manage supply to the profitable sectors such as domestic, national and international wise.
2. They should provide more facility to their customer than other telecommunication.
3. NTC should control the cost and should improve the quality of service
4. There must be an appropriate policy and strategies to use the surplus cash in profitable sector.

Mr. 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 were:-

1 To present overall cash condition of GRUL.

2 To study the existing cash management system of GRUL.

3 To analyze the cash collection and disbursement system adopted GRUL.

4 To analyze the cash management policy adopted in GRUL.

After his study he has found the following findings:-

1 The company’s capacity utilization is about 50%.

2 The industry has been facing the problem of skilled manpower.

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

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

5 The company maintained optimum cash balance.

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

7 Account receivable turn over is also low this shows the higher collection period of the industry.

8 Cash to current liabilities ratio found highly fluctuating.

Mr. Joshi (2006), entitled “Cash Management of Public Enterprises in Nepal” (A case study of Salt Trading Corporation Limited).

The main objectives of the study were:-

1 To examine practices used to control cash in STC Ltd.

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

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

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

The main findings of the study were:-

1 The main sources of cash of STCL are sales revenue and loan from the loan from the bank.

2 There is lack of proper planning, budgeting and forecasting. There is absence of any formalized system of cash planning and cash budgeting in STCL.

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

4 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.

5 Over the study period the average inventory turnover ratio is hardly 6 times, which is minimum.

2.3 Research Gap

Simply research means to search again. In research problems are studied again and again to find out something more about the phenomena. From the past studied reviewing related with this topic, the main problems hovering in the Nepalese public enterprises due to lack of planning, implementing, and controlling. From the researched and past studied it reveals that a large number of public organizations are operating in loss condition. In the previous study so many work has done in this very topic. By the nature the social phenomena doesn't appear always in the same condition or situation. New problems and elements are arisen in the course of individual as well as business life. So the study once completed may not be fruitful forever. So in this study an attempt is made to find out the cash management system applied in the NTCL. The last seven year data including the most recent financial year (2067/68) are presented and analyzed. The financial and statistical tools are used to analyze data. This thesis would be fruitful for the public enterprises, business organization, further research and other interested people.

CHAPTER - III

RESEARCH METHODOLOGY

Research is the systematic and organized effort to investigate a specific problem that needs a solution. Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with the certain objects in view to get the conclusion. The objective of this research work is to find out the answer of the questions.

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 enterprises is not possible, so Nepal Telecom Limited which belongs to public utility and social sector has been selected as sample using judgemental 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

a. Analysis of Cash Turnover

The cash turnover ratio explains how quickly the cash received from the sales; in other words in measures the speed with cash move through an enterpriser’s operation. Cash turnover ratio is obtained by following formula:-

$$\text{Cash} \quad \text{turnover X} \frac{\text{Sales}}{\text{Cashinhand/Bank}}$$

b. 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

$$\text{Current Ratio X} \frac{\text{Current} \quad \text{Assets}}{\text{Current} \quad \text{Liabilities}}$$

c. Analysis of Quick ratio or Acid Test Ratio

This ratio establishes a relationship between quick or liquid assets and current liabilities. An assert is liquid if it can be converted into cash immediately or reasonably soon without a loss value the quick ratio is found by dividing quick assets by current liabilities.

$$\text{Quick raito X} \frac{\text{Current Assets Z Inventories}}{\text{Current Liabilities}}$$

Hence, inventories are considered to be less liquid. The standard quick ratio is 1:1

d. Receivables /Debtors Turnover Ratio

Receivable turnover ratio gives an idea as to how quickly receivables are converted into cash. The ratio can be computed as follows:-

$$\text{Receivable turnover (in time) X} \frac{\text{Sales}}{\text{Recievables}}$$

Along with this ratio, average collection period of receivables is also calculated. Shorter average collection period refers to good credit management and vice versa. But too short collection period suggests that the company has very rigid credit policy and thus sales curtail would be the consequences.

The average collection period can be calculated as follows.

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

e. Inventory (stock) Turnover Ratio

Inventory turnover ratio gives idea on how quickly inventory is converted into sales. Following formula is used to calculate inventory turnover ratio

$$\text{Inventory (or Stock) Turnover Ratio X} \frac{\text{Sales}}{\text{Inventory}}$$

f. Cash and Bank Balance to Account Receivable

This ratio measures the cash and bank balance in relation with account receivables of the firm. Higher ratio refers to sound liquidity position and vice versa. However, too high ratio indicates that the business dealing is restricted to only those parties making quick payments, thereby limiting its scope of sales volume.

It is computed by

$$\text{Cash Balance to Account Receivable X}\frac{\text{Cash and bank}}{\text{Account Receivable}}$$

g. Cash and Bank Balance to Current Assets:

This is also supportive to analyze the liquidity position of the firm. It measures the proportion of cash and bank balance, the most liquid asset in the total current assets. Higher ratio implies sound liquidity position and vice versa. Following formula is used to calculate cash and bank balance to current assets.

$$\text{Cash and Bank Balance to Current Assets X}\frac{\text{Cash on Bank}}{\text{Current assets}}$$

h. Cash and Bank Balance to Current Liabilities

It calculates the cash balance available with the firm to make payment of current liabilities. Normally high ratio indicates good liquidity, too high and too low ratios are unfavorable for the firm. Since too high indicates excess cash balance and too low ratio means the firm unable to meet current liabilities. Following formula is used to compute cash and bank balance to current liabilities ratio.

i. Net Profit Margin Ratio

This ratio shows the profitability position of a firm. Higher ratio indicates high profitability and vice versa. In simple terms, this ratio gives the percent profit or loss with respect to its sales. Net profit margin ratio is calculated using the following formula.

$$\text{Net Profit Margin Ratio X}\frac{\text{Net profit After Tax}}{\text{Sales}}$$

j. Return on Working Capital Ratio

The ratio indicates the proportion or current assets employed to earn the profit amount. Higher ratio is favorable and vice versa.

The formula is:

$$\text{Return on Working capital Ratio } X \frac{\text{Net Profit After Tax}}{\text{Current Assets}}$$

k. Net Profit after Tax to Quick Assets Ratio

This ratio also examines profitability of a firm; analyses proportion of quick assets in earning the profit amount.

Formula:

$$\text{Net Profit After Tax to Quick Assets } X \frac{\text{Net Profit After Tax}}{\text{Quick Assets}}$$

3.4.2 Statistical Tools for Analysis

a. Karl Pearson’n Coefficient of Correlation (r) = $\frac{xy}{\sqrt{x^2}\sqrt{y^2}}$

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

$$r = \frac{xy}{\sqrt{x^2}\sqrt{y^2}}$$

Where,

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

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

y = $(Y - \bar{Y})$

And,

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

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.

Together with Karl Pearson coefficient of correlation, probable error (P.E.) of the correlation coefficient is also computed. The probable error is used to measure the reliability and test of significance of correlation coefficient. It is calculated by the following formula:

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

Where,

r = the value of correlation coefficient.

N=number of pairs of observation.

P.E.= Probable error of correlation coefficient.

P.E. is used in interpretation whether the calculated value of r is significant or not.

i) If r <P.E., it is insignificant, i.e. there is no evidence of correlation.

ii) If r > 6 P.E., it is significant; practically the correlation is certain.

iii) If PE < r < 6(PE) nothing can be calculated.

iv) Standard Deviation (S.D.)

$$S.D\,(\pm)\ \mathrm{X}\sqrt{\frac{d^{2}}{N}\ \mathrm{Z}\ \frac{d}{N}^{2}}$$

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 ‘± ’ and is calculated by this formula.

$$\text{S.D. }(\pm) = \sqrt{\frac{1}{N}\quad x^{2}} = \sqrt{\frac{d^{2}}{N}\ \mathrm{Z}\ \frac{d}{N}^{2}}$$

Where,

$x\ \mathrm{X}\ X\ \mathrm{Z}\ \overline{X}$

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

$$\text{C.V.} = \frac{\pm}{\overline{X}}\ \mathrm{l}\ 100$$

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 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.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

In this chapter to fulfill the objectives of the study, the collected data are attractively presented and using the financial and statistical tools, they are analyzed.

4.1 Analysis of Liquidity Position

Computation and analysis of data regarding cash and bank balance; dispersion of cash and bank balance; cash turnover ratio; and correlation between sales and cash balance has been done to analyze the liquidity position of the Nepal Telecommunication Limited (NTCL).

4.1.1 Analysis of Cash and Bank Balance

Cash and Bank balance of Nepal Telecommunication Limited from fiscal year 2060/61 to 2067/68 has been calculated and variation is recorded in table 4.1.

Table 4.1: Cash and Bank Balance and Variations

Rs. in hundred million

Fiscal year	Cash balance	Increase (decrease)
2060/61	107.8	-
2061/62	95.74	(12.06)
2062/63	120.21	24.47
2063/64	147.46	27.25
2064/65	161.34	13.88
2065/66	181.91	20.57
2066/67	216.12	34.21
2067/68	167.69	(48.43)

Source: Balance Sheet of NTCL

Above Table: 4.1 shows the amount of cash and bank balance of NTCL during the period under study. The cash balance of each fiscal year has been compared to preceding year to analyze fluctuations. The cash balance has decreased by 12.06 hundred millions in the year 2061/62. After that there has been an overall increasing trend up to FY 2066/67 except in 2067/68 that was decreased by 48.43 hundreds millions. In fiscal year 2060/61 the cash balance of company was Rs. 107.8 hundred million, which was increased by 35.7% at the end of the fiscal year 2067/68 to Rs. 167.69 hundred million. Hence, to conclude this interpretation, it can be said that NTCL has satisfactory, liquidity position and it has maintained good cash and bank balances.

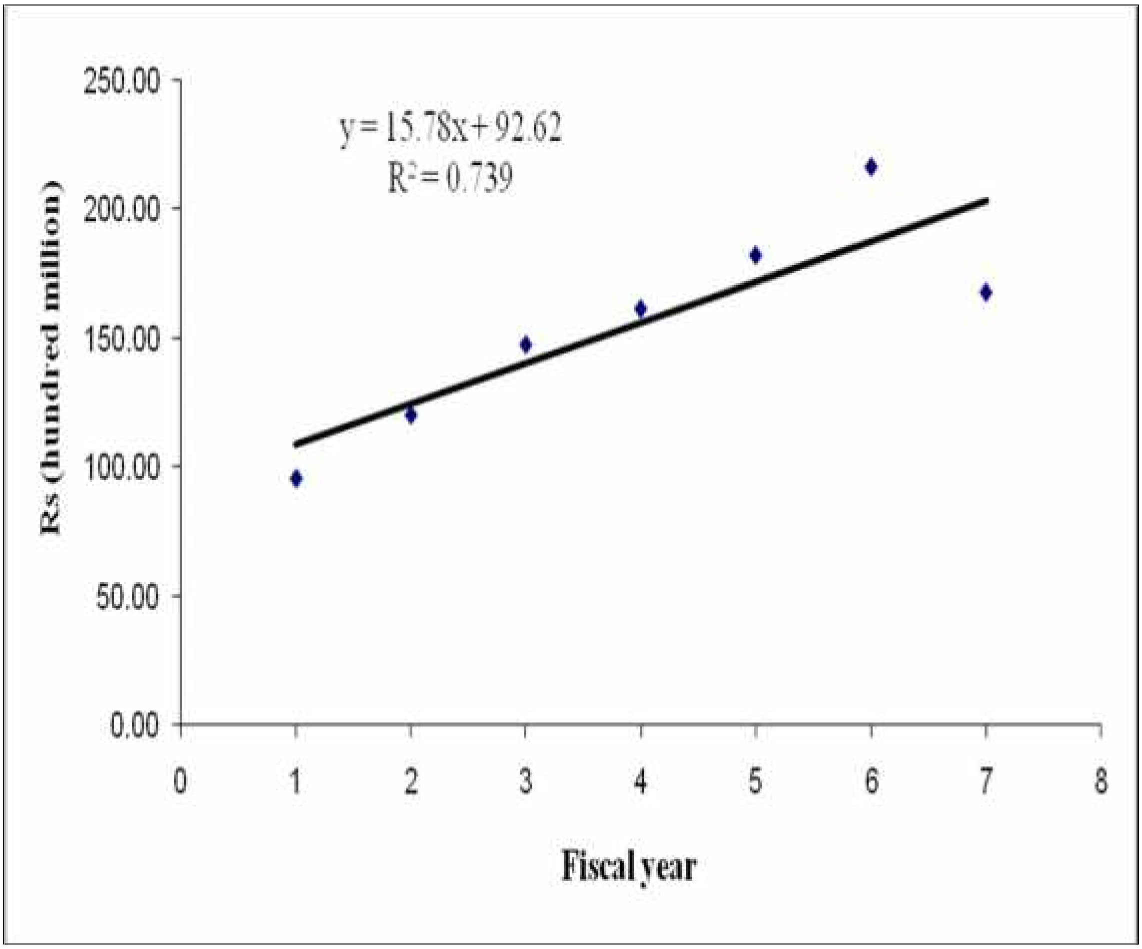

Fig 4.1. Curve showing simple linear regression of Cash and bank balance up to seventh fiscal year

Figure 4.1 shows the increase in the cash balance from the first year of study year (fiscal year 2061/62) to last year of fiscal year (2067/68) which is highly correlated with the regression coefficient of 15.78. Dots are the cash balance in rupees (hundred million) in the study period and the dark line show trend line.

4.1.2 Analysis of Dispersion of Cash and Bank Balance

Standard deviation is the measurement of dispersion, used for the analysis.

Table 4.2: Cash and Bank Balance and Dispersion.

(Rs. In hundred million)

Fiscal year	Cash balance (x)	$x = (X - \overline{X})$	$x^2 = (X - \overline{X})^2$
2061/62	95.74	-60.04	3604.97
2062/63	120.21	-35.57	1265.33
2063/64	147.46	-8.32	69.25
2064/65	161.34	5.56	30.90
2065/66	181.91	26.13	682.70
2066/67	216.12	60.34	3640.74
2067/68	167.69	11.91	141.81
N = 7	x = 1090.47	-	$\Sigma x^2 = 9435.70$

Source: Balance sheet of NTCL

Mean $(\overline{x}) = \frac{\sum x}{N} = \frac{1090.47}{7} = 155.78$ hundred million.

Standard Deviation (σ) = $\sqrt{\frac{\sum x^2}{N}} = \sqrt{\frac{9435.70}{7}} = \sqrt{1347.96}$

$= 36.71$ hundred million

Standard deviation of cash balance shows that the company has been holding satisfactory cash balance. The cash balance increasing ratio was deviated irregularly from the mean. Computed S.D. has been found Rs 36.71 hundred million, which indicates the fluctuation pattern of cash balance.

Coefficient of variation (C.V.) = $\frac{\sigma}{\overline{x}} \times 100 = \frac{36.71}{155.78} = 23.57\%$

4.1.3 Analysis of Cash Turnover Ratio

The cash turnover ratio explains how quickly the cash is received from the sales, or in other words it measures the speed with which cash move through an enterprise's operation. The cash turnover ratio shows the speed of cash received from the sales. Higher ratio represents sound liquidity and vice versa. However, too high ratio indicates excess cash balance being held idle.

Table 4.3: Analysis of Cash Turnover Ratio

(Rs. in hundred million)

F y	Sales	Cash balance	Ratio
2061/62	91.94	95.74	0.96
2062/63	110.58	120.21	0.91
2063/64	147.51	147.46	1.00
2064/65	178.89	161.34	1.05
2065/66	222.58	181.91	1.22
2066/67	272.21	216.11	1.26
2067/68	298.49	167.63	1.78
Total	1322.20	1090.40	8.18
Average	188.89	155.77	1.17

Source: B/s and P/L Account of NTLC

Table 4.3 shows that the highest cash turnover ratio is 1.78 times in the fiscal year 2067/68. The average turnover ratio is 1.17 times. The lowest turnover ratio was 0.91 times in the year 2062/63. This table shows that cash turnover time in the corporation is not consistent.

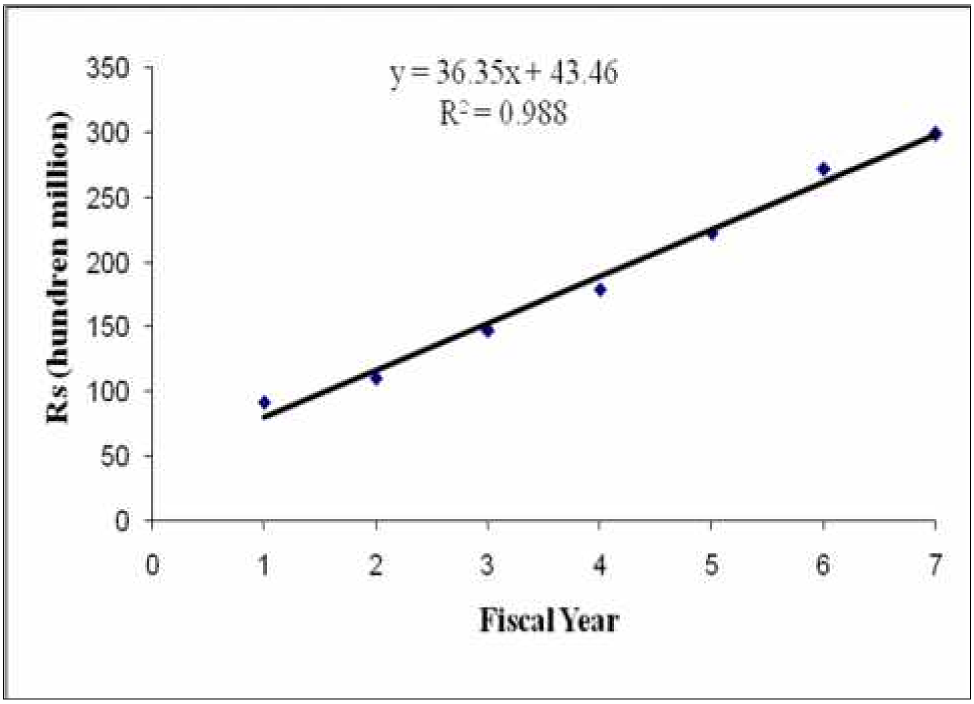

Fig 4.2. Curve showing simple linear regression of sales up to seventh fiscal year

Figure 4.2 one shows the increase in the sales from the first year of study year (fiscal year 2061/62) to last year of fiscal year (2067/68) which is highly correlated with the regression coefficient of 36.35. Dots are the cash balance in rupees (hundred million) in the study period and the dark line show trend line.

4.1.4 Analysis of Correlation between sales and Cash Balance

The cash balance held at the end of fiscal year could fluctuate in relation to fluctuation in other variables. But in general sales grow higher, the cash balance held tend to be higher too, and vice visa. It means that cash balance held and sales volume is positively correlated. The following statistical analysis shows if the company has been following the general rule or not.

Table 4.4: Sales Cash and Bank Balance and Correlation

(Rs. in hundred million)

FY	Sales (X)	Cash Balance (Y)	$x = X - \bar{X}$	x^2	$y = Y - \bar{Y}$	y^2	xy
2061/62	91.94	95.74	-96.95	6190.28	-58.06	3370.38	4567.67
2062/63	110.58	120.21	-78.31	3604.60	-33.59	1127.95	2016.39
2063/64	147.51	147.46	-41.38	534.00	-6.33	40.13	146.39
2064/65	178.89	161.34	-10.00	68.42	7.55	56.93	62.41
2065/66	222.58	181.91	33.69	2700.01	28.12	790.45	1460.90
2066/67	272.21	216.11	83.32	10320.87	62.32	3883.16	6330.68
2067/68	297.49	167.63	109.60	6942.94	60.33	3639.71	5026.95
N = 7	ΣX=1322.20	ΣY=1090.46		Σx^2 = 37433.46		Σy^2= 9434.50	Σxy= 16107.40

Source: Balance Sheet and P/L A/C of NTCL

Mean $(\bar{X}) = \frac{\sum X}{N} = \frac{1322.20}{7} = 188.89$ Mean $(\bar{Y}) = \frac{\sum Y}{N} = \frac{1090.46}{7} = 155.78$

Karl Pearson's Correlation (r) = $\frac{\sum xy}{\sqrt{\sum x^2}\sqrt{\sum y^2}} = \frac{33181.55}{\sqrt{37433.46} \times \sqrt{9434.50}}$

$$= \frac{16107.40}{193.48 \times 97.13} = \frac{16107.40}{18792.71} = 0.86$$

Above calculated correlation shows high degree of positive correlation between sales volume and cash balance. The correlation coefficient 0.86 is practically significant, which is nearer to 1. It implies that cash balance is growing higher with the increase in sales. To test the measurement of reliability of the correlation coefficient (v) the probable error can be shown as below.

Probable error (P.E) $= 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}}$

$$= 0.6745 \times \frac{(1 - 0.86^2)}{\sqrt{7}} = 0.0067$$

6(P.E) = 7 |0.0067 = 0.47

Now, if R > 6 (P.E), it is indicative of statistically significant positive correlation. The upper and lower limits within which the correlation coefficient expected to lie are given by:

Upper limit = r + P.E. = 0.86 + 0.0067 = 1.33

Lower limit = r - P.E. = 0.86-0.0067 = 0.38

So the coefficient of correlation expected to lie between 1.33 and 0.38.

4.2 Analysis of Liquidity Relation between its Variables

Liquidity ratio measures the firm's ability to meet current obligations. It reflects the short-term financial strength of the business. If firm has adequate liquidity poison, the short-term creditors are interested in such firm as a result the firm can fulfill its short-term requirements readily. But too much liquidity position indicates the mismanagement of liquid assets. The liquidity position can be analyzed with the help of current ratio and quick ratio as follow:

4.2.1 Analysis of Current Ratio (Current Assets to Current Liabilities)

The Current Ratio of NTC can be traced below:

Table 4.5: Current Assets, Current Liabilities and Current Ratio

(Rs. In hundred million)

FY	Current Assets	Current liabilities	Ratio (times)
2061/62	205.98	38.59	5.34
2062/63	225.26	44.76	5.03
2063/64	235.19	57.12	4.12
2064/65	241.80	79.15	3.05
2065/66	288.37	67.18	4.29
2066/67	350.15	69.29	5.05
2067/68	303.79	78.58	3.86
Total	1850.54	434.67	30.74
Average	264.36	62.10	4.39

Source: - Balance Sheet of NTCL

Computed current ratio shows that the firm has sufficient short-term financial strength during the period of last 7 years. The ratio of 4.39 times on an average indicates that the corporation has current assets of Rs. 4.39 for the liabilities of Rs. 1. NTCL is able to pay its current liabilities at the time of requirement but company has much more idle capital.

Karl Pearson’n Coefficient of Correlation (r) = $\frac{xy}{\sqrt{x^2}\sqrt{y^2}}$ = 0.65

The correlation coefficient between CA and CL has been identified to be (r) = 0.65. It means positive correlated between CA and CL. r = 0.65. It is indicative of statistically significant positive correlation

4.2.2 Analysis of Quick ratio

The acid test ratio shows the relation between quick assets and current liabilities. This ratio conveys the most precise information on liquidity position of a firm, since it excludes the inventory, the least liquid asset from the current assets and compares it with current liabilities. Inventory is less liquid because it requires certain time to get convert into cash. Quick ratio measures the capacity of firm to meet its current liabilities quickly. It is computed dividing quick assets by current liabilities.

Table 4.6: Quick asset, Current Liabilities and Quick Test Ratio

(Rs. In hundred million)

FY	Quick assets	Current liabilities	Ratio QA/CL
2061/62	202.89	38.59	5.25
2062/63	221.97	44.76	4.96
2063/64	231.90	57.12	4.06
2064/65	237.64	79.15	3.00
2065/66	286.57	67.18	4.26
2066/67	348.43	69.29	5.03
2067/68	300.23	78.58	3.82
Total	1829.63	434.67	30.39
Average	261.38	62.10	7.60

Source: balance sheet of NTCL

* Quick-Assets = current assets- Inventory

The standard quick ratio should be 1:1. However, ratios for all fiscal years have above the standard ratio. Overall the liquidity position is satisfactory though the ratio of fluctuate moderately. The average ratio is 7.60 which is higher than conventionally accepted ratio of 1:1. Besides analysis of quick ratio correlation between quick assets and current liabilities is also analyzed. Normally, relation between these two should be significantly positively correlated.

The correlation coefficient between QA and CL has been identified to be (r) = 0.63. It means positive correlated between QA and CL. r = 0.63. It is indicative of statistically significant positive correlation.

Therefore, this correlation analysis indicated that the company has been significantly increasing its quick assets accordingly with increase in current liabilities and vice versa.

4.3 Analysis of Profitability Position

A company should earn profit to survive and growth over a long period of time. Profit is essential but it would be wrong to assume that every action initiated by management of a company should be aimed at maximizing profit, irrespective of social consequence. It is fact that sufficient profits must be earned to sustain the operation of the business to be able to obtain funds from investors for expensing and growth and contribute towards the social overheads for the welfare of the society.

Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate output of company, and it will have no future if it fails to make sufficient profit. Therefore the financial manager should continuously evaluate the efficiency of its company in term of profit. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management, creditors and owners are also inherited in the profitability of the firm (Pandey, 1999:124).

4.3.1 Analysis of Net Profit Margin Ratio

Net profit margin ratio measures the relationship between net profits and sales of a firm. High profit margin indicates adequate return to the firm. It enables the firm to withstand in adverse economic situation like; sales price declining, cost of production rising, demand for the product failing. Net profit margin ratio is computed by dividing net profit after tax by sales.

Table 4.7: Analysis of Net Profit Margin ratio

(Rs in hundred million)

FY	Net profit after tax (loss)	Sales	Ratio (%)
2061/62	35.42	91.94	38.53
2062/63	49.37	110.58	44.65
2063/64	56.52	147.51	38.32
2064/65	79.42	178.89	44.40
2065/66	101.78	222.58	45.73
2066/67	107.75	272.21	39.58
2067/68	121.20	298.49	40.60
Total	551.46	1322.2	291.80
Average	78.78	188.89	41.69

Source: Profit & loss account of NTCL

The analysis shows that the company has been operating under profit in all of the fiscal years. It shows the NTCL has good condition in profitability position. In the FY 2065/66, the net profit margin ratio was 45.73%, which is the highest in which there was sale of 222.58 hundred million. Similarly, net profit margin ratio is 38.53%, 44.65%, 38.32% and 44.40% in the fiscal year 2061/62, 2062/63, 2063/64 and 2064/65 respectively. It shows that the net profit margin is in fluctuating trend and the company has been gained good profit during study period. The average net profit margin has been calculated as 41.69 %.

4.3.2 Analysis of Return on Working Capital

This ratio shows the utilization of current assets with respect to net profit after tax. It is computed by dividing net profit after tax by current assets. Higher ratio indicates higher utilization of current assets to earn profit and vice versa.

Table 4.8: Net Profit after Tax, Current Assets and Return in Working Capital

(Rs. in hundred million)

Fiscal year	Net profit after tax	Current assets	Ratio%
2061/62	35.42	205.98	17.20
2062/63	49.37	225.26	21.92
2063/64	56.52	235.19	24.03
2064/65	79.42	241.80	32.85
2065/66	101.78	288.37	35.29
2066/67	107.75	350.15	30.77
2067/68	121.20	303.72	39.90
Total	551.46	1850.54	202.0
Average	78.78	264.36	28.90

Source: Balance Sheet and P/L account of NTCL

Table 4.8 shows that the NTCL has been utilizing its current assets effectively in generating profit. Noticeably, in the FY 2067/68 the ratio is 39.90% which is higher than the previous years. Similarly return on working capital is 17.20%, 21.92%, 24.03% and 32.85%, 35.29%, and 30.77% in the FY 2061/62, 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. Besides, the overall ratio is also satisfactory, indicating profit in all over the fiscal year.

Overall the return on working capital is indicating satisfactory performance of the company. Data has shown profit since last seven years in regard with increment of current assent. The average return on working capital has been calculated 28.90%.

4.3.3 Analysis of Net Profit after Tax to Quick Assets

This ratio is used to analyze whether the firm is able to utilize its quick assets or not. Higher ratio indicates efficient utilization of quick assets and vice versa. This is computed by dividing net profit after tax by Quick assets.

Table 4.9: Net Profit After Tax, Quick Assets and Return on Quick Assets

(Rs. In hundred million)

Fiscal year	Net profit after tax	Quick assets	Ratio
2061/62	35.42	202.89	17.46
2062/63	49.37	221.97	22.24
2063/64	56.52	231.90	24.37
2064/65	79.42	237.64	33.42
2065/66	101.78	286.57	35.52
2066/67	107.75	348.43	30.92
2067/68	121.20	300.23	40.37
Total	551.46	1829.63	204.30
Average	78.78	261.376	29.19

Source: Balance sheet and P/L account of NTCL

Quick assets = Current assets - Inventory.

Table 4.9 shows that the net profit on quick assets of NTCL is in the increasing order. The highest percentage of net profit on quick assets is 40.37% in the fiscal year 2067/68 and the lowest of 17.46 in the year 2061/62. Overall the average ratio has been calculated as 29.19%, which definitely signifies good situation of the company.

4.4 Analysis of Liquidity Relation to Profitability

There exists conflict between two words liquidity and profitability. Liquidity measures the solvency position of a firm in the short period, that's why the firm should maintain provision for cash and bank balance. But profitability refers the earning ability. Higher the liquidity lower the risk consequences lower the profitability lower the liquidity, higher risk and higher the profitability. Thus, there is contradiction between liquidity and profitability, so the firm should seek for trade off between the two i.e. liquidity and profitability. The conflicting nature of these two is such that when liquidity is being maintained profitability tends to fail down and vice versa. A firm should maintain satisfactory liquidity as well as profitability.

4.4.1 Analysis of Correlation between Return on Working Capital Ratio and Current Ratio

To analyze the relation between return on working capital ratio and current ratio, Karl Pearson's coefficient of correlation has been calculated.

Table 4.10: Correlation between Return on Working Capital Ratio and Current Ratio

(Rs. in hundred million)

FY	Return on WC% (X)	Current ratio % (Y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
2061/62	17.20	534	-9.81	86.00	96.24	7396.00	843.66
2062/63	21.92	503	-5.09	55.00	25.91	3025.00	279.95
2063/64	24.03	412	-2.98	-36.00	8.88	1296.00	107.28
2064/65	32.85	305	5.84	-143.0	34.11	20449.00	835.12
2065/66	35.29	429	8.28	-19.00	68.56	361.00	157.32
2066/67	30.77	505	3.76	57.00	14.14	3249.00	214.32
2067/68	30.77	505	2.04	4.17	65.86	4337.16	134.44
N = 7	ΣX=201.1	ΣY= 3074.00			Σx^2 =371.87	Σy^2 = 39070.86	Σxy= -2433.76

Source: Balance sheet and P/L A/C of NTCL.

Mean $\bar{X} = \frac{X}{N} = \frac{201.1}{7} = 28.73$

Mean $\bar{Y} = \frac{Y}{N} = \frac{3074.00}{7} = 439.14$

Karl Pearson's coefficient of correlation

(r) = $\frac{xy}{\sqrt{x^2} \times \sqrt{y^2}} = \frac{-2433.76}{\sqrt{371.87} \times \sqrt{39070.86}} = -0.63$

This indicates that there was highly negative correlation. The significant of this negative correlation has been tested as follows:

$$\text{Probable Error (P.E)} = \frac{0.06745\,(1-r^2)}{\sqrt{N}}$$

$$= 0.6745 \times \frac{(1-0.407^2)}{\sqrt{7}}$$

$$= 0.151$$

Since r < P.E. i.e. 0.151 < 0.25, so it indicates that there is significant negative correlation. It indicates that higher the profit generated by utilizing its current assets lesser will be the liquidity position of the company.

4.5 Analysis of Receivables/Debtors Turnover Ratio

This ratio is related with total sales and credit sales (debtors). This ratio shows how quickly receivable or debtors are converted into cash. In other word the debtor turnover ratio is a test of liquidity of the debtors of a firm. The ratio reflects the company's effectiveness of handling receivable that shows the speed of cash collection from the customers. Higher ratio and shorter the average collection period indicates better trade and consequently better liquidity of the enterprises and vice versa.

Table 4.11: Sales Receivables Turnover Ratio and Average Collection Days

(Rs. in hundred million)

FY	Sales (Rs)	Receivables	Ratio (Time)	Average Collection Days
2061/62	91.94	28.26	3.25	112
2062/63	110.58	31.00	3.57	102
2063/64	147.51	34.56	4.27	86
2064/65	178.89	34.82	5.14	71
2065/66	222.58	35.93	6.19	59
2066/67	272.21	42.96	6.34	58
2067/68	298.49	39.04	7.65	48
Total	1322.20	246.57	36.40	535.34
Average	188.89	35.22	5.20	76

Source: Balance Sheet and P/L A/C of NTCL

Table 4.11 shows that the receivable turnover ratio is in increasing trend. The minimum time (3.25) is in the fiscal year 2061/62. Whereas the higher ratio was calculated as 7.65 times in the year 2067/68. The sales to receivable ratios are 3.25, 3.57, 4.27, 5.14, 6.19, 6.34 and 7.65 in the fiscal year 2061/62, 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively.

Average collection days vary from 58 days to 112 days and overall the average of average collection day is 76 days. Since the information regarding credit days extended to customers are not available and more over such credit days are likely to vary depending upon the nature of debtors. There is no absolute means of comparison available to compare the average collection days. So analysis regarding average collection days has not been carried out.

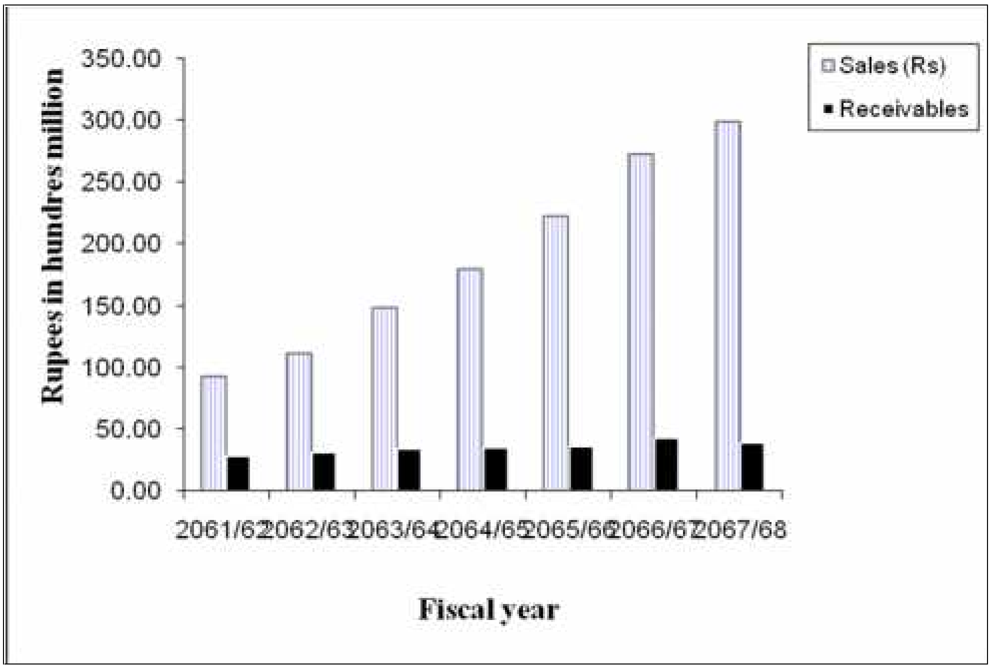

Figure 4.3. Graphical Presentation of Sales and Receivables

In the figure 4.3 it shows that the sales are significantly in the increasing trend and however receivables have only small fluctuation over the study period.

4.6 Analysis of Inventory Turnover Ratio

All organizations have a certain inventory. Inventory is least liquid current assets. High inventory turnover ratio signals better inventory management and vice versa. Inventory is kept for the motive of daily transactions, cautionary and speculative. Thus every firm has to manage optimum level of inventory. Higher inventory turnover time is good sign of profitability and vice versa. The inventory turnover time can be calculated dividing sales by average inventory.

Table 4.12: Sales, Inventory, Turnover Ratio

(Rs in hundred million)

Fiscal Year	Sales (Rs)	Inventory (Rs)	Ratio Times
2061/62	91.94	3.098	29.68
2062/63	110.58	3.293	33.58
2063/64	147.51	3.276	45.03
2064/65	178.89	4.164	42.96
2065/66	222.58	1.801	123.59
2066/67	272.21	1.722	158.08
2067/68	298.49	3.06	97.55
Total	1322.2	20.414	530.46
Average	188.886	2.916	75.780

Source: Balance sheet and P/L A/C of NTCL

The table No. 4.12 shows that the NTCL has efficient inventory management. The inventory turnover is highest in the fiscal year 2066/67 which is 158.08 times and least in the year 2061/62 which was 29.69 times. In the fiscal year 2061/62, 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 inventory turnover was found to be 29.68, 33.58, 45.03, 42.96, 123.59, 158.08 and 97.55 times respectively. These ratios are satisfactory to lead corporation towards profitability.

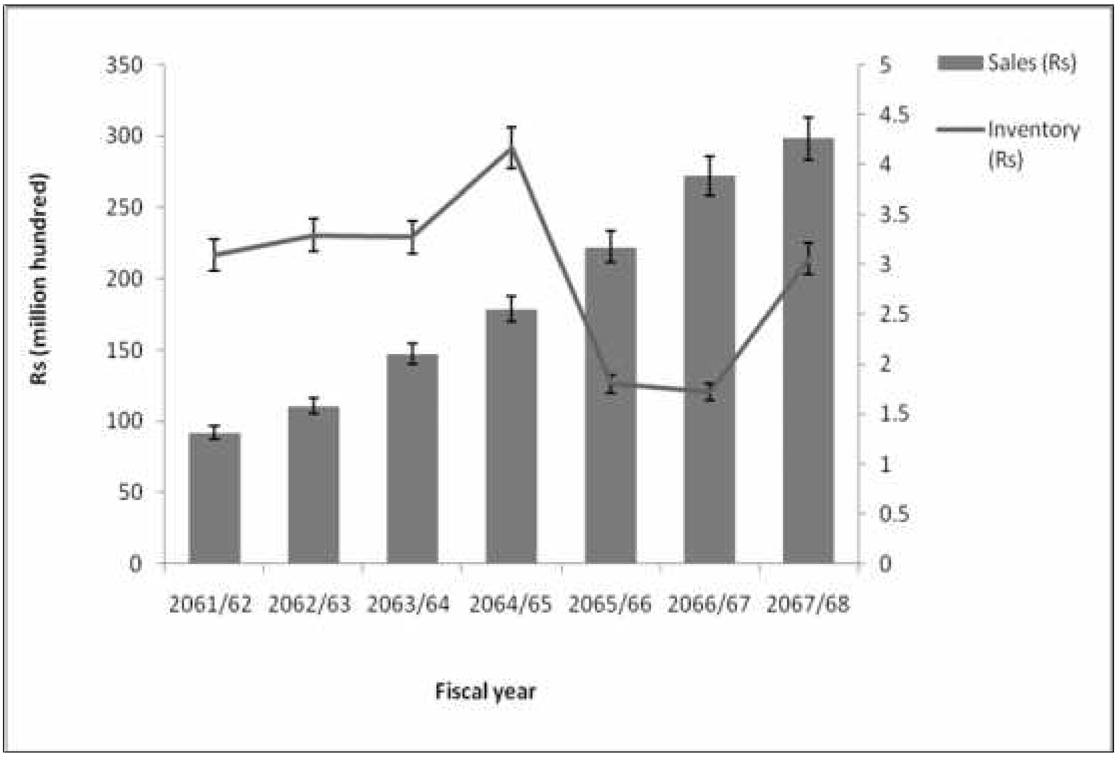

Figure 4.4: Graphical presentation of Sales and Inventory

The figure 4.4 shows that the relation between sales and inventory. Bars indicated the standard error in percentage. The inventory was maximum in the year 2064/65 and minimum in 2066/67.

4.7 Analysis of Cash and Bank Balance to Account Receivable

This ratio can be computed dividing cash and bank balance by account receivable. It measures the relationship between the cash balance on hand to account receivables. The higher ratio indicates better liquidity position and vice versa. However, too high ratio indicates excessive cash balances are held idle or unproductive.

Table 4.13: Cash and Bank Balance to Account Receivable Ratio

(Rs in hundred million)

Fiscal year	Cash Bank Balance (Rs)	Account Receivable (Rs)	Ratio %
2061/62	95.74	28.26	338.79
2062/63	120.21	30.99	387.90
2063/64	147.46	34.56	426.74
2064/65	161.34	34.82	463.35
2065/66	181.91	35.93	506.26
2066/67	216.12	42.96	503.08
2067/68	167.69	39.04	429.53
Average	155.78	35.22	436.52

Source: Balance sheet P/L A/C of NTCL

The table 4.13 shows the relation between cash and bank balance to account receivable. The percentage of cash and bank balance vary 338.79% in FY 2061/62 to 503.08% in FY 2066/67. The percentage of cash / bank balance in fiscal year 2062/63, 2063/44, 2064/65 and 2065/66 are 387.90%, 426.74%, 463.35% and 506.08 respectively which has indicated that the cash balance held is excessive and has been idle. The erratic fluctuation suggest that the company hasn't been following a definitive policy regarding how much cash balance to hold at the fiscal year end. The average ratio is 436.52%.

4.8 Analysis of Cash and Bank Balance to Current Liabilities

Cash and bank balance to current liabilities ratio indicates the amount of cash in percentage available to pay the current obligation of the firm.

The table below shows the level of cash balance in relation to current liabilities of NTCL

Table 4.14: Analysis of Cash and Bank Balance to Current Liabilities

(Rs. hundred million)

FY	Cash and bank balance	Current liabilities	Ratio (%)
2061/62	95.74	38.59	248.10
2062/63	120.21	44.76	268.57
2063/64	147.46	57.12	258.16
2064/65	161.34	79.15	203.84
2065/66	181.91	67.18	270.78
2066/67	216.12	69.29	311.91
2067/68	167.69	78.58	213.40
Average	155.78	62.10	253.54

Source: Balance sheet of NTCL

The table shows that cash and bank balance to current liabilities ratio of NTCL. In the fiscal year 2061/62, 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 the percentage of cash and bank against current liabilities were computed as, 248.10, 268.57, 258.16, 203.84, 270.78, 311.9 and 213.40 respectively. It could be stated that the company has been facing situation of cash excess during the fiscal year under study. The average ratio has been calculated is 253.54%.

4.9 Analysis of Cash Flow Statement

Cash flow statement describes the cash inflows, outflows and year end cash balance. Inflow of cash is known as source of cash and outflow is called use of cash. Cash flow statement is of great importance to both financing and investing activities of business enterprise and the consequent changes in its financial position for a period.

In this analysis, the three components of cash flow statement: operating activities, investing activities and financing activities have been analyzed.

Table 4.15: Cash Flow Statement FY 2061/62 to 2067/68

(Rs in hundred million)

Fiscal year Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
Cash flow from operating activities							
Net profit before tax	49.22	68.44	79.83	108.71	136.34	144.41	163.89
Adjustments :							
Depreciation	10.5	11.96	13.67	14.86	16.81	44.06	32.85
Deferred expanses	0.4	0.4	0.58	0.71	0.41	0.55	0.6
Foreign exchange gain/loss	2.51	(2.8)	5.26	0	0	0	0
Provision for staff bonus and incentive	2.81	3.22	4.84	3.52	(8.39)	(5.9)	(6.71)
Provision for pension and gratuity	3.13	2.41	2.86	(0.47)	(0.64)	(0.84)	(1.07)
Interest on loan	0.0069	0.011	0	0.1			
Bad debts	-	0	2	-			
Provision for liabilities	-	-	-	11.83	22.51	16.46	30.61
Fixed assets written off	0.012	-	-	-			
Income from investment and bank deposit	(4.63)	(5.96)	(7.01)	(9.03)	(13.75)	(20.14)	(32.06)
Provision for expenses on lost goods	-	0.085	1.22	-			
Provision for earned leave	0.24	0.65	0.71	(0.28)		(0.49)	(0.51)
Royalty	4.91	5.91	8.11	-			
Operating profit before working capital changes	69.11	84.33	112.46	122.9	153.29	178.60	187.6
Adjustment for working capital changes							
Decrease in A/R	(1.57)	(2.73)	(5.56)	-			
Decrease in stock	(0.54)	(0.34)	0.0065	-			
Increase/decrease in interest accrued	0.54	0.024	4				
Increase in advance	2.21	3.82	(2.72)				
Increase in advanced tax	16.02	(16.84)	(24.04)				
Branch account (adjust)	0.04	0.027	(0.03)				

Increase/decrease in payable	2.26	(0.023)	0				
Payment of interest	0.0047	(0.023)	-				
Payment of earned leave	(0.21)	(0.22)	(0.21)		(0.39)		
Payment of pension	(0.23)	(0.3)	(0.35)				
Payment of bonus and incentive	(3.84)	(3.01)	(2.48)				
Payment of income tax	-	-	(0.58)				
Last year adjust	1.58	0.012	0.72				
Payment of royalty	(4.5)	(3.7)	5.63				
Working capital changes	(20.84)	(17.11)	(31.94)	24.91	(43.82)	(54.48)	58.17
Net cash flow from Operating activities (A)	48.27	67.22	80.52	97.99	107.17	123.61	129.43
Cash flow from investing Activities							
Purchase of fixed assets	(19.98)	(22.43)	(16.67)	(30.47)	(41.5)	(32.07)	(24.65)
Decrease in WIP	(10.75)	(0.15)	(14.43)	(0.76)	6.13	(6.55)	(7.06)
Increase in deferred expense	(0.42)	(0.34)	(1.9)	-	-	-	
Increase in investment	0.55	(8.18)	(7.26)	(34.86)	(27.94)	(18.67)	(118.22)
Income from investment and Bank Deposit	4.63	5.96	7.01	9.03	13.75	20.15	32.06
Net cash flow from investing activities (B)	(25.95)	(24.83)	(33.26)	(57.09)	(49.55)	(37.15)	(118.22)
Cash flow from financing Activities							
Receipt in Long-term Debt Cordially,	0.24	-	-	-			
Payment of long-term Debt	(0.11)	(0.24)	-	(12.01)			
Payment of dividend	(3.00)	(4.33)	(14.75)	(14.99)	(37.04)	(52.26)	(59.62)
Payment of retained earning to Nepal Govt.	(29.00)	16.11					
Capital reserve adjusted to retained earnings		0.023					
Net cash from financing activities(C)	(31.87)	(20.71)	(14.75)	(27.01)	(37.04)	(52.26)	(59.62)
Net increase in cash (A+B+C)	(9.55)	21.67	32.5	13.88	20.56	34.2	(48.42)

Cash at beginning	107.8	95.74	120.21	147.46	161.34	181.19	216.11
Foreign exchange Gain (Loss)	(2.51)	2.8	(5.26)				
Cash at end	95.74	120.21	147.46	161.34	181.19	216.11	167.69

Source: Cash flow Statement of NTCL

Note: Amount in parenthesis Indicates Cash Outflow and Losses.

4.9.1 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 4.17 shows cash flow statement of the NTCL for the last seven year 2061/62 to 2067/68. The operating result of the NTCL was in increasing order. The operating ranges between Rs. 48.27 hundred million to 129.43 hundred million in the year 2061/62 and 2067/68 respectively. These results indicate that the NTCL has followed the financial policy guidelines. Consistency in the operating activity was observed.

4.9.2 Analysis of Investing Activities:

Investing activities are the acquisition and disposal of long term assets and other investment excluding cash equivalents. The table shows that the investing activities resulted negatively which means the NTCL made investment or out-flows the cash in the all fiscal year. Recently NTCL has increased its investment by 84.25% and reached up to 118.57 hundred million in the year 2067/68. Whereas the lowest outflow amount was found to be Rs. 24.83 hundred million in the fiscal year 2062/36. There is no consistency in the investing activities.

4.9.3 Analysis of Financing Activities:

A company's transactions with its owners and long tern creditors are typically called financing activities. IAS defines, "financing activists are activities that result in changes in the size and composition of the equity, capital and borrowing of the enterprises". The table shows that the company has not issued any kind of shares during the study period. Financing activities has been observed to be satisfactory.

Company has earned profit and its operating and investing activities is in good condition. There is Cash flow in all fiscal years.

4.10 Analysis of Current Assets Variable: Inventory, Sundry Debtors and Advance Deposit:

This analysis aims to examine the position of current assets of NTCL. The operating activities are main elements of the cash flow statement and one integral parts of operating activities include current assets variable.

Table 4.16 Current Asset Variables and Fluctuation on these Variables

(Rs in hundred million)

FY	Inventory	Increase (decease) in inventory	Sundry debtors	Increase (decease) in debtors
2061/62	3.098	-	28.26	-
2062/63	3.293	0.195	30.99	2.73
2063/64	3.276	(0.017)	34.56	3.57
2064/65	4.164	0.888	34.82	0.26
2065/66	1.801	(2.363)	35.93	1.11
2066/67	1.722	(0.079)	42.96	7.03
2067/68	3.06	1.34	39.04	(3.92)

Source: Balance sheet of NTCL (Amount in the parenthesis indicates negative)

One part of the cash management is current assets management. If current assets are properly managed, there is lack of fluctuation in these assets and ultimately that leads consistency in the closing balance of cash. One aspect of current assets management is that, if there has been sound cash management practice in on organization, the fluctuation of these variables is moderate. The other aspect is that these increase /decrease in variables move in the same direction as the increase/decease in sales and profit of the organization. In other words, these variables are related with sales amount of the organization. Thus it can be generalize that inventory, Sundry debtors and advance deposit are positively correlated to sales and profit.

Table 4.17 shows that inventory was found to be increased by Rs 0.195 hundred million in fiscal year 2062/63 with comparing to FY 2061/62. Similarly in the fiscal years 2063/64 inventory is decreased by Rs 0.02 hundred million. In the fiscal year 2064/65 it was again increased with the amount of Rs 0.89 million rupees. In the fiscal year 2065/66 and 2066/67 inventories were decreased by Rs. 2.36 and 0.079 hundred million where as it was increased by 1.34 hundreds million in the year 2067/68.

The highest increase in the sundry debtors was calculated in the fiscal year 2066/67 of about 7.03 hundred million than the previous year. Whereas during the year 2064/65, it was increased only by 0.26 hundred million. During the FY 2061/22, 2062/63, 2063/64 and 2065/66 and 2066/67, the sundry debtors increased each year by Rs 2.73, Rs 3.57, Rs 0.26, Rs 1.11 and Rs. 7.03 hundred million respectively. But the sundry debtor was found to be decreased by Rs 3.92 in 2067/68 than preceding year.

4.11 Analysis of Dispersion in Inventory and Correlation between Sales and Inventory

Standard deviation is the measurement of dispersion and coefficient of variation of the inventory has been computed as follows:

Table 4.17: Analysis of Dispersion and Correlation between Sales and Inventory

(Rs. in hundred million)

FY	Inventory (X)	Sales (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	x^2	y^2	xy
2061/62	3.098	91.94	0.21	0.04	-78.68	6190.28	-16.18
2062/63	3.293	110.58	0.40	0.16	-60.04	3604.60	-24.06
2063/64	3.276	147.51	0.38	0.15	-23.11	534.00	-8.87
2064/65	4.164	178.89	1.27	1.62	8.27	68.42	10.52
2065/66	1.801	222.58	-1.09	1.19	51.96	2700.01	-56.71
2066/67	1.722	272.21	-1.17	1.37	101.59	10320.87	-118.90
2067/68	3.06	298.49	0.14	0.02	109.60	12013.10	15.75
N = 7	X= 20.41	Y = 1322.20			x^2 = 4.55	y^2 = 37433.46	xy= -195.81

Mean $(\bar{X}) = \frac{x}{N} = \frac{20.41}{7} = 2.92$

Mean $(\bar{Y}) = \frac{y}{N} = \frac{1322.20}{7} = 188.89$

Standard deviation of inventory $(\sigma x) = \sqrt{\frac{x2}{N}} = \sqrt{\frac{4.55}{7}} = 0.81$ hundred million

Coefficient of variation (CV) = $\frac{\sigma x}{\bar{X}} = \frac{0.81}{2.92} = 27.74\%$

Karl Pearson's Coefficient of correlation (r) between sales and inventory

$$r = \frac{xy}{\sqrt{x^2}\sqrt{y^2}} = \frac{-195.81}{\sqrt{4.55} \times \sqrt{3743346}}$$

$$= \frac{-195.81}{2.13 \times 193.48} = \frac{-195.81}{412.79} = -0.47$$

Computation of probable error (P.E)

$$P.E = \frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745\{1-(-0.47)^2\}}{7}$$

$$= \frac{0.6745 \times 0.77}{2.65} = \frac{0.51}{2.65} = 0.19$$

The result, standard deviation 0.81 hundred million and coefficient of variation 27.74% means there is fluctuation in the inventory. The corporation is unable to manage its inventory properly.

Karl Pearson's correlation coefficient –0.47 means there is negative correlation between inventory and sales. Since, correlation (r) is negative, in order to compare it with probable error r has been calculated as follows: r = (-0.47) = 0.47. In this case, PE < r < 7PE, i.e. 0.19 <0.47 < 1.33, which implies, though there existed negative correlation between inventory and sales.

Table 4.18: Analysis of Dispersion in Sundry Debtors, Correlation between Sales and Sundry Debtors

FY	Sundry debtors (X)	Sales Y	x = X $\bar{X}$	y= Y $\bar{Y}$	x^2	y^2	xy
2061/62	28.26	91.94	-6.33	40.03	-78.68	6190.28	497.77
2062/63	30.99	110.58	-3.60	12.94	-60.04	3604.60	215.94
2063/64	34.56	147.51	-0.03	0.00	-23.11	534.00	0.62
2064/65	34.82	178.89	0.23	0.05	8.27	68.42	1.93
2065/66	35.93	222.58	1.34	1.80	51.96	2700.01	69.80
2066/67	42.96	272.21	8.37	70.11	101.59	10320.87	850.66
2067/68	39.04	298.49	3.82	14.57	109.60	12013.10	418.38
N = 7	Σx = 246.56	Σy = 1322.20			Σx^2 = 141.93	Σy^2 = 37433.46	Σxy = 2124.82

Score B/S and P/L of NICL

Mean $(\bar{X}) = \frac{\sum X}{N} = \frac{246.56}{7} = 35.22$

Mean $(\bar{Y}) = \frac{\sum Y}{N} = \frac{1322.20}{7} = 188.89$

Standard deviation of sundry debtors $(\sigma x) = \sqrt{\frac{\sum x2}{N}} = \sqrt{\frac{141.93}{7}} = 4.50$ hundred million

Coefficient of variation $= \frac{\sigma x}{\bar{X}} = \frac{4.50}{35.22} = 12.78\%$

Karl Pearson's Coefficient of correlation (r) between sales and inventory

$$r = \frac{\sum xy}{\sqrt{\sum x2^{2}}\sqrt{\sum y2^{2}}} = \frac{2124.82}{\sqrt{141.93} \times \sqrt{37433.46}}$$

$$= \frac{2124.82}{11.91 \times 193.48} = 0.85$$

Computation of probable error (P.E)

$$P.E = \frac{0.6745\,(1 - r^2)}{\sqrt{N}} = \frac{0.6745\,(1 - (0.85)^2)}{\sqrt{7}}$$

$$= \frac{0.6745 \times 0.15}{2.65} = 0.04$$

Standard deviation Rs. 4.50 hundred million and coefficient of variation 12.78 % suggest that the sundry debtor fluctuate moderately. Karl Pearson's coefficient of correlation (r) between sales and sundry debtors is 0.85. This indicates higher degree of positive correlation between two i.e. r < PE > i.e. 0.85 > 0.04 > 0.28 which indicated that there is significant positive correlation.

4.12 Analysis of Current Liabilities

To analyze the current liabilities, the degree of dispersion and coefficient of variation tools are used. Low degree of dispersion and coefficient of variation considered favorable, signifying the firm to handle properly its liabilities.

Table 4.19: Computation of Dispersion and Coefficient of Variation of Current Liabilities

(Rs. In hundred million)

FY	Current Liabilities (X)	$x = X - \overline{X}$	Σx^2
2061/62	38.59	-20.76	430.91
2062/63	44.76	-14.59	212.82
2063/64	57.12	-2.23	4.97
2064/65	79.15	19.80	392.11
2065/66	67.18	7.83	61.34
2066/67	69.29	9.94	98.84
2067/68	78.58	16.48	271.73
N=7	$\Sigma X = 434.67$		$\Sigma x^2 = 1517.99$

Source: B/S of NTCL

$$\text{Mean}(\overline{X}) = \frac{X}{N} = \frac{434.67}{7} = 62.10$$

$$\text{Standard Deviation of Current Liabilities } (\pm \text{ x}) = \sqrt{\frac{x2}{N}}$$

$$= \sqrt{\frac{1517.99}{7}} = 15.91$$

$$\text{Coefficient of Variation} = \frac{\pm x}{\overline{\overline{X}}} = \frac{15.91}{62.10} = 25.62\%$$

Standard Deviation Rs.15.91 hundred millions and coefficient of variation 25.62 % indicates there is vast fluctuation in current liabilities. It is due to the increase in the amount of current liabilities during the study years.

4.13 The Main findings of the Study

The main findings of the study are as attributed as follows:-

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 Nepal which facilities conveying information quickly overlong distance with a cheap cost. The effects of Tele communication on 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 totally 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 and recently income has also generated through various kind of internet services.

4. The dispersion of cash and bank balance is 36.71 hundred million and co-efficient of variation is 23.57%. That resulted in low consistency in cash and bank balance.

5. The sales of NTCL are increasing year by year but the rate of the increase is not stable. The correlation between sales and cash balance is positive. That means sales relationship with cash balance is positive.

6. NTCL has satisfactory liquidity position and it has maintained good cash and bank balance. The cash and bank balance with respect to current liabilities has been increasing trend.

7. Relationship between sales and net profit of NTCL is in good condition because it has earned profit in each fiscal year and sales has been increasing trend.

8. The company has been utilizing its current assets effectively and the return on working capital of NTCL is indicating satisfactory performance of the company. The average return on working capital over the study period is 28.90%.

9. The amount of account receivable is in the fluctuating trend and the percentage of cash and bank balance over account receivable is in average 436.52% over the period.

10. The average cash turnover in a year is 1.17 times which is in fluctuating trend over the study period. Sales and cash balance were highly positively correlated.

11. The average net profit margin is 41.69 over the study period. Net profit margin of corporation is maximum and is in increasing trend

12. Inventory turnover ratio is 75.78 times which is in satisfactory level. The data shows that every year the level of inventory is in increasing trend.

13. Cash budgeting practice of NTCL is not satisfactory. There is absence of any formalized system of cash budgeting.

14. The balance sheet of NTCL shows the huge amount of cash and bank balance remaining idle.

15. The current ratio of NTCL through the study period was found be within the range of 3.05 to 5.34 which shows the good liquidity position.

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. Cash comes in the key position for the foundation of present business environment. From the early stage of human being when money came to the 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 thought 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 its separate entity. Before 1970's cash management was affiliated with the economics. Many more organization of the world was enjoying by making reasonable profit margin and many organizations 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 of rising of funds, the issue of shares from the present and potential investors becomes impossible. The liquidity problem also put 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. 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 2066/67, NTCL has seen 5.75% growth in its revenue from the previous fiscal year 2065/67. These increased can be attributed to the growth of additional lines distributed throughout the country along with the strict surveillance in revenue collection from the domestic and international services.

NTCL has now extended its telephone service in all 75 districts and about 3915 VDC's of the country. Members using the telephone have reached more than 67 lacks, 43 thousand, 9 hundred and 76 at the end of the fiscal year 2067/68. It occupies the 49% of the share of the total communication sector available in Nepal. The total numbers of internet users were around 11 lacks, 34 thousand at the end of the fiscal year of 2068. Likewise GSM and CDMA mobile users were 51 lac 21 thousand and 10 lac 19 thousand respectively. Beginning of the year 2062, the 30 years old NTCL is converted into a company and the changes in the new name as Nepal Telecommunication Company 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 seven years period i.e. fiscal year 2061/2061 to 2067/2068. 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 and 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 and has been so far successful, though it has been facing some problem in the corporate planning and participative management. Management system of NTCL needs to be reformed. Telecome 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 its entire employer should focus more service because “customers are king” in case of any service-oriented organization.

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.

1. The maximum cash balance of NTCL is still being held idle though it has invested more during the last fiscal year. It should be maintained properly to generate extra revenue.

2. The financial position of the NTCL must be evaluated time to time to control the overflow of liquidity (cash).

3. NTCL has high capital capacity but current market is not sufficient. It should further expand its market to provide adequate service to its customer.

4. The operating expenses of NTCL are higher. It reduces the net profit over the period. So the corporation should apply the cost reduction and cost control techniques like standard costing, budgeting and variance analysis in its operation.

5. NTCL should prepare monthly trail balance, which helps the organization in

taking timely corrective measures on adverse financial situation.

6. NTCL should prepare cash budget on the basis of cash flow statement to find out excess or shortage of cash. If the cash is in excess amount it can invest in short term assets and if there is cash deficit it can borrow short term loan.
7. To survive in the present competitive and global market situation, NTCL should apply strategic management policies for entering new firms.
8. NTCL should timely evaluate its relevant variables and follow up program should be made more effective, productive and result oriented.

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APPENDIX I

Cash Flow Statement FY 2061/62 to 2066/67

Fiscal year Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
Cash flow from operating activities							
Net profit before tax	49.22	68.44	79.83	108.71	136.34	144.41	163.89
Adjustments :							
Depreciation	10.5	11.96	13.67	14.86	16.81	44.06	32.85
Deferred expanses	0.4	0.4	0.58	0.71	0.41	0.55	0.6
Foreign exchange gain/loss	2.51	(2.8)	5.26	0	0	0	0
Provision for staff bonus and incentive	2.81	3.22	4.84	3.52	(8.39)	(5.9)	(6.71)
Provision for pension and gratuity	3.13	2.41	2.86	(0.47)	(0.64)	(0.84)	(1.07)
Interest on loan	0.0069	0.011	0	0.1			
Bad debts	-	0	2	-			
Provision for liabilities	-	-	-	11.83	22.51	16.46	30.61
Fixed assets written off	0.012	-	-	-			
Income from investment and bank deposit	(4.63)	(5.96)	(7.01)	(9.03)	(13.75)	(20.14)	(32.06)
Provision for expenses on lost goods	-	0.085	1.22	-			
Provision for earned leave	0.24	0.65	0.71	(0.28)		(0.49)	(0.51)
Royalty	4.91	5.91	8.11	-			
Operating profit before working capital changes	69.11	84.33	112.46	122.9	153.29	178.60	187.6
Adjustment for working capital changes							
Decrease in A/R	(1.57)	(2.73)	(5.56)	-			
Decrease in stock	(0.54)	(0.34)	0.0065	-			
Increase/decrease in interest accrued	0.54	0.024	4				
Increase in advance	2.21	3.82	(2.72)				
Increase in advanced tax	16.02	(16.84)	(24.04)				
Branch account (adjust)	0.04	0.027	(0.03)				

Increase/decrease in payable	2.26	(0.023)	0				
Payment of interest	0.0047	(0.023)	-				
Payment of earned leave	(0.21)	(0.22)	(0.21)		(0.39)		
Payment of pension	(0.23)	(0.3)	(0.35)				
Payment of bonus and incentive	(3.84)	(3.01)	(2.48)				
Payment of income tax	-	-	(0.58)				
Last year adjust	1.58	0.012	0.72				
Payment of royalty	(4.5)	(3.7)	5.63				
Working capital changes	(20.84)	(17.11)	(31.94)	24.91	(43.82)	(54.48)	58.17
Net cash flow from Operating activities (A)	48.27	67.22	80.52	97.99	107.17	123.61	129.43
Cash flow from investing Activities							
Purchase of fixed assets	(19.98)	(22.43)	(16.67)	(30.47)	(41.5)	(32.07)	(24.65)
Decrease in WIP	(10.75)	(0.15)	(14.43)	(0.76)	6.13	(6.55)	(7.06)
Increase in deferred expense	(0.42)	(0.34)	(1.9)	-	-	-	
Increase in investment	0.55	(8.18)	(7.26)	(34.86)	(27.94)	(18.67)	(118.22)
Income from investment and Bank Deposit	4.63	5.96	7.01	9.03	13.75	20.15	32.06
Net cash flow from investing activities (B)	(25.95)	(24.83)	(33.26)	(57.09)	(49.55)	(37.15)	(118.22)
Cash flow from financing Activities							
Receipt in Long-term Debt Cordially,	0.24	-	-	-			
Payment of long-term Debt	(0.11)	(0.24)	-	(12.01)			
Payment of dividend	(3.00)	(4.33)	(14.75)	(14.99)	(37.04)	(52.26)	(59.62)
Payment of retained earning to Nepal Govt.	(29.00)	16.11					
Capital reserve adjusted to retained earnings		0.023					
Net cash from financing activities(C)	(31.87)	(20.71)	(14.75)	(27.01)	(37.04)	(52.26)	(59.62)
Net increase in cash (A+B+C)	(9.55)	21.67	32.5	13.88	20.56	34.2	(48.42)

Cash at beginning	107.8	95.74	120.21	147.46	161.34	181.19	216.11
Foreign exchange Gain (Loss)	(2.51)	2.8	(5.26)				
Cash at end	95.74	120.21	147.46	161.34	181.19	216.11	167.69

APPENDIX 2

NTC's increment on the number of users after it has been converted into company on 2061

Services	2061 Ashad	2062 Ashad	2063 Ashad	2064 Ashad	2065 Ashad	2066 Ashad	2067 Ashad	2068 Ashad
Basic Telephone	408417	453475	485997	509873	532391	562162	583542	603291
GSM mobile	178544	227310	622737	909483	1717230	3009962	3960293	5121518
CDMA	–	–	23579	161155	480016	721318	920257	1019167
Internet	–	–	–	15674	40009	98981	280692	1133876
Total consumer number	586961	680785	1132313	1580511	2729637	4293442	5464092	6743976
Telephone density	2.2	2.69	4.0	5.99	10.12	15.58	19.40	23.95