CHAPTER -I
INTRODUCTION

1.1 background of the study

The cash is considered as the blood stream of any organizations. This gives the strength to the firm. The steady and healthy circulation of cash throughout the entire business operation is the basics of business solvency. Controlling the cash flow is a daily performance report, which identifies weekly and daily involving cash flow which may have problems that often need immediate attention.

Finance holds the key role in all human activities it is a guide for regulating investment decisions and expenditure and enclaves to squeeze the most out of every available rupee. The government too; treats is a sing post. A become to control and major its steps. Its importance is daily recognizing in any branch of science. No human activities can ever be perused without financial support. Financial visibility is perhaps the central then of any business proposition.

Cash Management involves managing the money of the firm in order to maximize cash availability and interest income on any ideal fund. The cash management plays an important role in overall management of business organization. All business works begin with th1e provision of sufficient cash to do business. Cash as a means and ends of business operations must be held in optimum quantity. Cash has become a very expensive as well as a very rare resource. Managing it effectively has become a key to the profitability of companies and for some it may even be a question of their ultimate survival. The various components of cash management have been categorized. These are the functions of cash management, managing collection and transferring funds, concentration banking, lock-box system and other procedures, control of cash disbursements, zero balance account, electronic fund transfer, balancing cash and marketable securities, compensating balance and fees, model for determining optimal cash, inventory model and stochastic model.

Cash management is one of the key areas of working capital management. A part from this fact that is the most liquid current assets, cash is the common denominated to which all current assets can be reduced because the major liquid assets i.e. receivable and inventory get eventually converted in the cash.

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

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Cash management is the key function of controlling. It is the heart of the business. A business can be run without proper planning but with in a minute by lack of little than little money. Cash cycle is a ratio used in the financial analysis of a business. Keeping a close eye on business, cash flow make easy to forecast potential cash flow problems and take steps to remedy them. So, the financial manager should observe the easiest ways to monitor business' cash flow is to compare the total unpaid purchases to the total sales due at the end of each month. If the total unpaid purchases are greater than the total sales due, it'll need to spend more cash than it receives in the next month, indicating a potential cash flow problem. In any type of firm the financial manager should not only attain towards the aspect of profitability but he should also turn towards ensuring the liquidity of the corporation. Since, every business is a constant debtor and enterprise borrows funds from financial institutions and purchase merchandise on credit thereby is fewer obligations to the government. Thus, every enterprise owns liabilities unless the payment is made at the maturity of the particular debt the reputation of the firm is tarnished at worst the creditor may force the firm to terminate its business. The cash balance of the firm is influenced by credit position of the firm, status of firm's receivable, availability of short-term credit etc. Management should make every effort to speed up cash inflow and delay cash outflow. The cash management of corporation is significant enough to have the best use of idle cash balances, and to take advantage from the opportunity interest in cash velocity determined by sales volume and turnover of assets. So, corporate manager must be familiar with the cash cycle to undertake measure for improvement of collection and disbursement.

By concerning all the above definition we can conclude that cash is a crucial component of all types of organization. They may be manufacturing or non-manufacturing and cash is the blood stream of any organization like the human body. Cash management in a large company is so important that the human body. Cash management in a large company is so important that the related polices and control of the cash inflow. The cash outflow and the related financing is important in all enterprises. Its primary objects are to plan the liquidity position of the business organization as a basis for determining future borrowings and future investment. For example, excess cash if not invested incurs on opportunity cost that is a loss of the interest that could be earned on the excess cash. The timing of cash flows can be controlled in many ways by the management. Giving empathy in cash management, the research of study will be NTC.

1.1.1 Brief profile of NTC

History of NT

In Nepal, operating any form of telecommunication service dates back to 94 years in B.S. 1970. But formally telecom service was provided mainly after the establishment of MOHAN AKASHWANI in B.S. 2005.Later as per the plan formulated in First National Five year plan (2012-2017); Telecommunication Department was established in B.S.2016. To modernize the telecommunications services and to expand the services, during third five-year plan (2023-2028), Telecommunication Department was converted into Telecommunications Development Board in B.S.2026. After the enactment of Communications Corporation Act 2028, it was formally established as fully owned Government Corporation called Nepal Telecommunications Corporation in B.S. 2032 for the purpose of providing telecommunications services to Nepalese People. After serving the nation for 29 years with great pride and a sense of accomplishment, Nepal Telecommunication Corporation was transformed into Nepal Doorsanchar Company

Limited from Baisakh 1, 2061. Nepal Doorsanchar Company Limited is a company registered under the companies Act 2053. However the company is known to the general public by the brand name Nepal Telecom as registered trademark.

Present situation of NTC

Nepal Telecommunications Corporation (NTC), first government won company converted to public limited company. The share classified is a public sector entity owned almost (90% of share capital) by government and 5% by general public and 5% by employee, administered by a government appointed Board of Directors, which includes a chairman and six voting members which includes Managing Director of the company and Employees' Representative. The company is an inevitably accountable autonomous and organized institution. The existing ICT (Information and Communication Technology) scenario in the country clearly shows that the Nepalese telecom market is poised for significant growth. In Nepal Telecom, we pride ourselves on the timely forecast of the scale of business opportunities few years back and subsequently embarking upon the vision of having big-sized telecom infrastructure projects catering both urban and rural markets.

NTC's management has come to believe strongly that growth in telecom infrastructure will greatly contribute in the economic progress of the country. Hence, with a new vigor and with "value-driven" broader corporate purpose, the NT has decided to play an important role in the nation building endeavor by rapidly deploying all kinds of telecom services throughout the country, including remotest villages.

The NTC has following mission vision and goal.

Mission

Nepal Telecom as a progressive, customer spirited and consumer responsive Entity is committed to provide nation-wide reliable telecommunication service to serve as an impetus to the social, political and economic development of the Country.

Vision

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

Goal

Goal of Nepal Telecom is to provide cost effective telecommunication services to every nook and corner of country.

Until the year 2002/03, more than 50% of VDCs did not have any kind of telecom services; tele-density was just 2% with huge gap between supply and demand of telecom services in urban as well as rural areas. By the end of the year 20010/11, Nepal Telecom had 6,03,291 PSTN subscribers, 51,21,518 mobile subscribers, 10,19,167 CDMA subscribers and 11,33,876 Internet subscribers. Total customer of NTC till 2011 s 67,43,976. Now the tele-density of NTC became 23.95 percent. All 75 district cover by its services. So performance of NTC is awesome.

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

Nepal Telecom has always put its endeavors in providing its valued customers a quality service since its inception. To achieve this goal, technologies best meeting the interest of its customers has always been selected. The nationwide reach of the organization, from urban areas to the economically non- viable most remote locations, is the result of all these efforts that makes this organization different from others.

Services of NT

Nepal Telecom is the role institution in the state to provide telecom services. It has offered and provided its services to all possible parts all over the nation in affordable price and position. Nepal Telecom as far as possible has adopted the new technologies and inventions around the world. Liberalization in telecommunication services is the result of globalization growth of markets, new technological changes and the emergence of new services. The services provided by Nepal Telecom are as follow:

A. Types of Telephone Services provided by NT (with number of subscriber) i) PSTN Telephone Services Subscriber

ii) GSM Mobile Services (Post-Paid, Pre-Paid and WCDMA 3G Mobile)

iii) Services of CDMA technology (Fixed type, SKY with mobility, CDMA Pre- Paid Mobile and PCMCIA Data Card, EVDO services)

iv) Marts Telephone Services

v) VHF Telephone Services

vi) V-SAT Telephone Services

vi) Pay Card Phone

B. Internet & Email Services of NT

i) Internet through PSTN dial up and ISDN dial up

ii) Internet trough CDMA and GSM technology

iii) Internet through ADSL technology

iv) Email services

C. Telex Services

(NTC has a Telex Capacity of 256 and only 70 lines of them are distributed.)

D. It has been providing other Value Added Services (VAS) like Voice Mail (VMS) services, Interactive Voice Response (IVR) services and Intelligent Network (IN) services such as Prepaid-Calling-Card (PCC) service, Advanced- Free phone (AFS) service, PSTN-Credit-Limit (PCL) service, Home- Country- Direct (HCD) service.

E. 3G service

Video call, Live TV, High speed internet, On demand video, Video chat

1.2. Statement of the Problem

A lot of controversies exist with respect to the presence of economies of scale in cash holdings and the effects of capital costs on the demand for cash. Cash management is concerned with all decisions and acts that influence the determination of the appropriate level of cash and their efficient use as well as choice of the financing method, keeping in view of liquidity. The cash management practices in public enterprises, their cash management indicates the existence of poor cash management in various enterprises. However, the question exists as to what insight over the problem of cash management. Cash management refers to the proper management of firm cash position. It is concerned with all decisions and acts that influence the determination of the appropriate level of cash and their efficient use as well as choice of the financing method, keeping in view of liquidity. Hence, cash management is in itself a decision-making area within the framework of the overall current assets management. There is no unanimous finding as regards to the effect of interest rate on demand for cash.

Most enterprises had periodic accumulation of surplus cash and corresponding cash shortage from time to time. Most of the Nepalese public enterprises never thought of the source of current assets i.e. cash and usually depends on Govt. of Nepal for it. Thus, the existing problems are there- in the area of finance is mostly directed towards the management of cash rather than in any other area. Nepal Telecom is role institution in the telecom sector in the country with high capital investment. It has been financed by government of Nepal and many donor agencies. Although it has enjoyed almost full monopoly in the industry, now it is facing market competition with same service provider in some areas. So, now it must prepare and strengthen existing competency to achieve productive output in by optimum utilization of resources. The management must focus in Implementation of effective and appropriate action plan, strategies, and control mechanism. Cash management is the heart of overall planning and control system of management. Although, cash management in NT is primarily based on traditional approach has also been suffered from problem of efficient cash management, it has applied several tools and established mechanism for proper planning and control of cash. The study attempts to have an insight over the problem of cash management of Nepal Telecom so that strength has been gathered to identify the answer of the following question. The present study seeks to explore the efficiency and weakness of NTC with the help of various analyses. Thus, this study attempts to answer the following research questions:

1. What kind of the cash management practices in NTC?
2. What are the internal cash control practices in NTC?
3. What is the position of cash and bank balance of NTC?
4. What are the sources of financing or sector of investment?
5. What is the liquidity and cash position of the company?
6. Whether the company should have maintained optimal cash balance or not?
7. What is the relation between cash and other variable of NTC?

1.3. Objectives of the study

The major objective of the study is to discover the cash management system. Which are used by NTC. How the company is managing their cash management policy for the internal and regulatory purpose. The major objective of the study is to examine the management of cash in NTC. More specifically following are the objectives of this study:

- To analyze the cash management practices of NTC
- To study the liquidity position of the company.
- To study the cash and receivable position of the company.
- To study the relationship and trend of cash with other transactions of NTC.
- To suggest and recommend Nepal Telecom based on findings.

1.4. Significance of the study

The importance of this study mainly is filling gap in the study of cash management of NTC. NTC is one of the most prominent public enterprises that is earning relatively good profit and paying highest taxes to government. NT, even with its present status of being public sector enterprise, has the ambition of becoming a dominant player in the telecommunication sector, giving affordable and the cheapest possible services to all regions. Globally, the concept of zero working capital has got more emphasis. The expert, researcher and practitioner are involved in great effort in the management of working capital management through efficient cash management. The most important objective of cash management is optimizing the use and collection of cash.

This study is focused to analyze cash management in NTC. Cash management contributes to improve the profitability as well as the overall financial performance of an organization to help the best utilization of resources. This study will be concise, brief, practical data based, usable and valuable to the major parties interested in maximization through cash management. This will be equally useful and beneficial to NTC, Government of Nepal, and Board of Directors of Nepal Telecom, Shareholders of the company, employee and other stakeholders. Lastly, it will provide relevant and pertinent literature for further research on the field of cash management. Thus, the study of cash management is rewarding. Moreover, this study can also be used as reference for research.

1.5. Limitation of the study

This study is about cash management of NTC. Every research has its own limitation, this research done for Partial Fulfillment of the Requirements for the Degree of Masters of Business Studies (M. B. S). The main limitations are as follows

- The accuracy of this study is based on true response and the data available from management of Nepal Telecom.
- The study is mainly based on secondary data collected from the company. Research based on secondary data may be far from accuracy due to inherent character.
- A whole study is based on the data of five years period i.e. from fiscal year 2006/07 to 2010/11 and hence the conclusion drawn confines only to the above period.
- This study only concentrates on aspect of cash management of NTC.
- Only financial and statistical tools are used for analysis of data.
- The time and resource constraint limits the study.

1.6. Organization of the study

The present study is organized in such way that the stated objectives can easily be fulfilled. The structure of the study will try to analyze the study in a systematic way. The study report has presented the systematic presentation and finding of the study. The study report is designed in five chapters which are as follows:

Chapter-I: Introduction

This chapter describes the basic concept and background of the study, brief profile of NTC. Similarly, focus of the study, various problems of the study, objectives of the study and need or significance of the study and limitation of the study. It is oriented for readers for reporting giving them the perspective they need to understand the detailed information about coming chapter.

Chapter-II: Review of literature

The second chapter of the study assures readers that they are familiar with important research that has been carried out in similar areas. It includes review of books, review of related articles and studies and previous thesis as well.

Chapter-III: Research Methodology

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. It describes about the various source of data related with study and various tools and techniques employed for presenting the data.

Chapter-IV: Presentation and Analysis of data

This chapter analysis the data related with study and presents the finding of the study and also comments briefly on them.

Chapter-V: Summary, Conclusion and Recommendation

On the basis of the results from data analysis, the researcher concluded about the performance of the concerned organization for better improvement.

Bibliography and other appendixes used in statistical results have been attached at the end of the study.

CHAPTER - II
REVIEW OF LITERATURE

Review of literature means reviewing research studies or other relevant proposition in the related area of the study so that all the past and previous studies, their conclusion and perspective of deficiency may be known and further researcher can be conducted or done. The review of literature basically highlights the existing literature and research work related to the present research being conducted with the view of finding out what had been already explained by the authors and researchers and how the current research adds further benefits to the field of research. This review specially focuses on study on management of cash. This chapter is basically concerned with review of literature relevant to the cash management of NTC. This review of literature had been classified into two subgroups as follow.

- Conceptual review
- Review of related studies

2.1 Conceptual Review

2.1.1 Meaning of Cash Management

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. It is no doubt, very difficult to point out as to how much cash is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for maximizing the risk of loss to attain profit object.

Cash is the important current asset for the operations of business. Cash is the basic input needed to keep the business running on a continuous basis; it is also the ultimate output expected by selling the service or product manufactured by the firm. The firm should keep sufficient cash, neither more nor less. Cash shortage will disrupt the firm's manufacturing operation while excessive cash will simply remain idle, without contributing anything towards the firm's profitability. Thus, a major function of the financial manager is to maintain a sound cash position.

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

Cash is the money, which a firm can disburse immediately without any restriction. The term cash includes coins, currency and cheques held by the firm and balance in its bank accounts. The management of cash is also important because it is difficult to predict cash flows accurately, particularly the inflows. and there is no perfect coincidence between inflows and out flows of cash, During some period cash outflows will exceed cash inflows because payment of taxes, dividend or seasonal inventory build up. At other times, cash inflows with be more than cash payment because there may be large cash sales and debtors may be realized in large sums promptly. Cash management is also important because cash constituted the smallest portion of the total current assets. Yet, management's considerable time is devoted in managing it. In recent past, as number of innovations have been done in cash management techniques. An obvious aim of the firm now-a-days is to manage its cash affairs in such a way as to keep cash balance at a minimum level and to invest the surplus cash in profitable investment opportunities (Pandey, 1997)

Cash collection Business Information & Control Cash payment Deficit Surplus or Cash is curtailing component of working capital of a concern. Cash, like blood stream of human body gives strength to human body, gives strength to business unit. It is ultimate resource for a business; unit management should endeavor to secure larger cash at the end of each working capital cycle than what in had at the beginning of working capital cycle. Further, the important objective in managing cash should be trade off liquidity and profitability in order to maximize profits. By keeping larger amount of cash, the firm is able to meet its obligation when they fall due and the risk of technical insolvency is reduced. However, cash is non earning assets, so unnecessary cash should not be kept as hand then the optimum required continuing the operation of the business efficiency. Liquidity and profitability must be balanced in such a way that the organization retains its liquidity and at the same time maximizes its profitability. They also stressed that business transaction, without involvement of cash is mythical in this monitory world. Today importance of cash management is recognized by all segments of organization activities. If some of departments are handled independently without considering their implications of cash management the conflicting interest of these departments are bound to create serious problem. The study of cash management is therefore considered as integrated approach to management science.

The cash is more often than other assets, is the item involved in business transaction. This is due to nature of business transactions, which include a price and condition calling for settlement in terms of medium of exchange. In striking contrast to activity of cash it is unproductive in nature. Since cash is measure of value, it is not expand to grow unless it is converted in to other properties. Excessive balance of cash on hand is often referred to as “idle cash ". To be most useful to a business enterprise, cash must be kept moving.

Net working capital is the measure of liquidity, which is defined as an adequacy of near term cash to meet the firm's obligation. The highly liquid firm has sufficient cash to pay its bill at all time. An illiquid firm is unable to pay its bills when due. The investment of excess cash, minimizing of inventory, speedy collection of receivables and elimination of unnecessary and costly short term financing all contribute to maximizing the value of firm. In a periled of high interest rate, customer may be slow in paying their bills and that will be cause an increase in receivable. If the level of cash is linked to the level of sales variable working capital may be changed. (Hampton, 1989).

Cash management is one part of the key areas of working capital management. A part from the fact that is the most liquid current asset, cash is the common denominator to which all current assets can be reduced because the other major liquid assets, i.e., receivables and inventories get eventually converted into cash; this underlined the significance of management. There are detail accounts of the problem involved in managing cash, i.e., motive for holding cash objective of cash management, factors determining cash needs, cash management models, cash budgets basic strategies for efficient management of cash, and specific technique to manage cash subsequently. (Khan and Jain, 2003).

If cash holding is bad for inefficient corporation, cash shortage is dangerous for efficient corporations. As for inefficient corporations, it does not matter whether cash increases or decreases if they are not in a position to utilize them. But efficient corporation due to undertaking of more operations need more cash besides having profit (Shrestha, 1980).

Cash management involves managing the monies of the firm to maximize the cash availability and interest income to any idle funds. At one end, the function starts when a customer writes a check to pay the firm on its account receivable.

The function ends when a supplier, an employee or government realizes collected fund from the firm as an amount payable or accruals. All activities between these two points fall within the realm of cash management. The firm's decision about when to pay its bills involves account payable and accrual management. He again described an idea of effective collection and disbursement so that maximum cash is available. Collection can be accelerated by means of concentration banking, lock-box system and certain other procedures. Disbursement should be handled to give maximum transfer flexibility and the optimum timing of payment, being mind-full, however, of supplier relations. Methods of controlling disbursement i.e. electronic fund transfer is becoming increasingly important, and most corporation use such transfer in use way or another. (Van Horne, 2002)

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

Cash is the most liquid asset, is of vital importance to the daily operations of business firm. Cash is both the beginning and the end of the working capital cycle cash, inventories, receivable and cash. Its effective management is the key determinant of efficient working capital management. Cash is like the blood stream in the human body gives vitality and strength to business enterprises. The steady and healthy circulation of cash through the entire business operation is basis of business solvency. According to J.M. Keynes "it is cash which keeps a business going. Hence, every enterprise has to hold necessary cash for its existence. In a business firm ultimately, a transaction results in either an inflow or an outflow of cash. In an efficient managed business, static cash balance situation generally does not exist. Adequate supply of cash is necessary to meet the requirement of the business. "Its shortage may stop the business operations and may degenerate a firm in to a state of technical insolvency and even of liquidation. Through it's 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 in securities or by reducing the burden of interest charges by paying off the loans taken previously. If the level of cash balances is more then the desired level with the firm, it shows mismanagement of funds. Therefore, for its smooth running and maximum profitability, proper and effective cash management in a business is of paramount importance

2.1.2 Efficiency of Cash management

Cash can use a number of functions as it makes payment possible. It serves to meet emergencies. However, if cash is kept idle it contributes directly nothing to the earning of corporation. As such corporation must adopt such a policy that makes optimum cash management possible. The financial manager of the corporation should try to minimize the corporation' holding of cash while still efficiency of cash maintaining enough to insure payment of obligation. For improving the efficiency of cash management, effective method of collection and disbursement should be adopted. Some methods for efficiency of cash management are briefly described below.

Speedy Cash Collection of Useable Cash

Reducing the log can accelerate cash collection or gap between the times a customer pays his bill and the time cheque is collected is called deposit float. The greater the deposit float, the longer the time is taken. There are mainly two techniques; which can be used to save in mailing processing time concentration banking, lock box system.

Concentration Banking

Concentrating Banking is a system of centralizing corporate cash in order to control the firm' funds and minimize idle cash balances. Under this system a concentration bank is designated to receive funds from lock boxes or any of the subsidiaries, depository to instruction given by the firm. The concentration bank reports available balances daily so that the firm's treasure can take maximum advantages of investment opportunities.

A second method of concentration banking employs a depository transfer check (D.T. C.), The D. T. C. can be paper or electronic, that is it can be transmitted the form of paper like other check or it can be sent electronically unlike a wire, which is sent immediately during the day. The D.T.C. is sent so that arrives at night or the next day.

In the system the firm operated in the area where the firm has its branches. All branches may not have the collection centers. The collection centers will be required to collect cheques from customer and deposit them in their local bank above some predetermined minimum to a control at the firm's head office each day. A concentration bank is one where ' the firm has a major bank account usually the disbursement account.

1. Special Handling of Cash

Special handling of cash enables Corporation to have sufficient funds that can be put too profitable use.

2. Slowing Disbursement

Apart from speedy collection of account receivable the operating cash requirement can be reduce 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 infect, slow disbursement represent a source of funds requirement, no interest no interest payments. There are some techniques to delay are avoidance of early payment centralized disbursement, floats and accruable.

3. Cash Velocity

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

Cash Velocity = $\frac{AnnualSales}{AverageCashBalance}$

i. Minimum Cash Balance

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

ii. Synchronized Cash Flows

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

iii Using Float

Float is defined as the differences the balance shown in a firm's (or individuals) checkbook and the balance on the bank's records.

iv. Overdraft System

A system where by deposits may write check in excess of their balances with their books automatically extending loans to cover the shortage most of the foreign countries use overdraft system.

v. Transferring Funds

There are two principal method wire transfers and electronic depository transfer. Checks with a wire transfer, funds are immediately transferred from one bank to another, with an electronic depository transfer check (D.T. C.) arrangement in the movement of funds an electronic checks image is processed through an automatic clearing house. The funds became available one business day later. From small transfers, a write transfer may be too costly.

2.1.3 Different Techniques of Cash Management

1. Cash Planning

Cash planning can help anticipate future cash flows and needs of the firm and reduces the possibility of idle cash balances and cash deficits." Cash planning is a technique to plan for and control the use of cash (Panday, 1999: 483)." Therefore, costs may be based on the present operations or anticipated future operation. 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. It depends upon the size of the firm and philosophy of management.

2. Cash Budget

The planned statement of cash budget is necessarily prepared near the end of the annual planning cycle along with the planned income statement and balance sheet. 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 expected cash inflows and outflows over a projected fine period. It gives information on the timing and magnitude size or importance of expected cash flows and cash balance over the projected period, this information helps the financial managers to determine the future cash need of the firm, plans for the financing of these needs and exercise control over the cash and liquidates of the firm.

Cash Management is the estimation of the inflows and outflows for a business. A cash budget is extremely important for business because it allows a company to determine how much credit can be extended to customers before them being to have liquidity problems. Cash budget basically is a budget plan for business owners and business managers, which is made in relation to set certain targets in regard to cost of production, sales and profit to achieve their goals with in a specific time period. However, it is very important to know certain aspects before preparing a cash budget.

These may include the previous budget and the estimated profit and loss with the actual profit and loss, the contemporary market situation as well as concluded review of the competitions in market. At the same time a certain time period, the desired cash position, and estimation as sales and expenses as well as a blank worksheet is required while making a cash budget. Therefore, a cash budget is planning tool tat helps the management of a business company in making important decisions.

Though there are many reasons to prepare a cash budget is to help the management taking good decision in regard to the company's cash reserve for furthering its business. When cash budgets prepared, at the end of the year, the company gets a strong understanding over a series of monthly cash flows with in and with out the company. Therefore, the income fluctuation can be controlled in this way. At the same time it also helps to evaluate a strong plan for the company's capital needs as well as expected emergency needs during any shortcomings. However, this whole procedure is also known as a cash budget cycle.

The net profit of a business company is directly related to the cash budget. However, times it happens that the rapid increase in sales decrease the cash flow of the company. The management of a company should balance its sales objective with the cost of production to avoid negative cash flow incase of a sudden and rapid expansion in sales. When a profit is appreciated in the market and its sales expands then the expected percentage, the company with in a short time has to bring the product back in the market with out a noticeable gap to the customers.

This is important for not only the repute of the company but also for the consistency of the product in the market. Therefore, in such circumstance a company if has a backup of cash flows, will not lose otherwise its profits will transfer to losses. Another way to deal such situation is to raise the prices of such products whose sale has expanded so rapidly, which leads to negative cash flow. The management of any business company should be sharp in its calculations specifically in keeping safety stock for emergency situations. For instance, successful companies will at a very early stage smell the rapid increase in sales of its products, so in such circumstance, if the company has a safety stock it can satisfy its customers and at the same time maintain its inventory.

Therefore, in order to produce a long term financial strategy, it is very important for the management to keep collateral in stock for its financial arrangements specifically to overcome emergent targets.
Financial manager of any business company is responsible to produce a successful cash budget cycles and also keeps in mind the current demands of the market, evaluating the possible profit and loss estimation for its cash budget. Therefore, it summarizes the financial needs of the company, understands the very aspects of financial information related to the business of the company and plans the cash budget it.

Therefore, the financial manager of any company plays the key in structuring a profitable business and maintaining its repute as well as predicts the future of a business company. The time horizon of cash budget may differ from firm to firm. A firm whose business is affected by seasonal variation may prepare monthly cash budget. Daily or weekly cash budget should be prepared from determining cash requirement is cash flows are relatively stable.

3. Cash Forecasting

A useful tool to deal with the forecasting aspect of cash budget is the cash forecast. Cash forecasting may be done short or long term basis.

Short Term Cash Forecasting

Two most common used methods of short term cash forecasting are described as below.

A. Receipt and Disbursement Forecast

The primary aim of receipt and disbursement forecasts is to summarize these flows during a predetermined period. In cash of those companies where each items of incomes and expenses involves flow of cash. This method is favored to keep a close control over cash.

B. Adjusted Net Income Method

This method is also called the sources and approach. In this approach there are two objectives, i.e. to protect the company is need for cash at some future date and next to show if the company can generate this money internally and if not how much will have to borrow or raise from the capital market. It is based on Performa financial statement. Sources of cash, uses of cash and the adjusted cash balances are three different sections of this method which is used in preparing the adjusted net income forecasts items such as net income, depreciation, taxes, dividend, etc.

Long Term Cash Forecasts

These types of forecasts are prepared to give an idea of the company's financial requirement of distant future. These forecasts are not detailed as the short term forecast. The long term cash forecast can be used to indicate a company's future financial needs especially for its working capital requirement.

- To evaluate proposed capital projects: it pinpoints cash required to finance these projects as well as the cash to be generated by company to support them.
- It helps to improve corporate planning long term cash forecasts may be made for two, three or five years. As with the short term forecasts, company's practices may differ on the duration of long term forecasts to suit their particulars needs.

2.1.4 Motives for holding Cash

There are three motives for liquidity: the speculative motive, the precautionary, and the transaction motive.

The term with reference to cash management is used in two senses. In a narrow sense, it is used broadly to cover currency and generally accepted equivalent of cash, cheques, draft and demand deposit in bank. The broad view of cash is also includes near cash assets, such as marketable securities and time deposit in banks. The main characteristics of these are that they can be really sold and converted into cash. They served as reserve pool of liquidity that provides cash quickly when needed. They also provide a short term investment outlet for excess cash are also useful for meeting planned out flow of fund. Irrespective of firm in which it hold a distinguished feature of cash as an asset, is that it has no earning power. Cash does not earn any return, why it is hold? There are four primary motives of cash balance, these are:

A. **Transaction motive**:

This refers to holding of cash to meet routine cash requirement to finance the transaction which a firm carries in the ordinary course of business. A firm enters in to a variety of transaction to accomplish its objectives which have to pay for in the form of cash. The requirement of cash balance to meet routine cash needs is known as transaction motive and such motive refers to the holding of cash to meet anticipated obligation whose timing is not perfectly synchronized with cash receipt.

B. Precautionary Motive:

The cash balance hold in reserves for random and unforeseen fluctuation in cash flows are called as precautionary balances. In-other word precautionary motives of holding cash implies the need to hold cash to meet unpredictable obligation. Thus, precautionary cash balance serves to provide a cushion to meet unexpected contingences. The more unpredictable are the cash flows. The larger is the need for such balance. Another factor which has a bearing as the level of such cash balances is the availability of short term credit. If a firm borrows at short notice to pay for unforeseen obligation, it will need to maintain a relatively small balance and vice versa.

C. Speculative Motive:

It refers to the desire of a firm to take advantage of opportunities which presents themselves at unexpected moments and which is typically outside the normal course of business. While the precautionary motive is defensive in nature in that firm must make provision to tide over unexpected contingencies, the speculative motive represents a positive and aggressive approach. The firm's aim to exploit profitable opportunities and keep cash in reserve does so. The speculative motive helps to take advantage ofi. An opportunity to purchase raw materials at a reduced price on payment of immediate cash.

ii. A change to speculate on interest rate movement by buying securities when interest rates are expected to decline.

iii. Delay purchases of raw materials on the anticipation of decline in prices, and

iv. Make purchases at favorable prices.

D. Compensating Motive:

It is to compensate banks for providing certain services and loans. Usually, clients are requested to maintain a minimum balance of cash the bank. Since this balance can not be utilized by the firm for transaction purpose, the banks themselves can use the amount to earn a return. Such balances are compensating balance. Compensating balance is also required by some loan arrangement between a bank and its customer. During periods when the supply of credit is restricted and interest is rising, banks require a borrower to maintain a minimum balance in his account as a condition precedent to the grant of loan. This is presumably to compensate for a rise in the interest rate during the period when the loan will be pending. Of four primary motives of holding cash balances the two most important are transaction motive and the compensation motive. Business firm do not speculate and need not have speculate balances. The requirement of precautionary balances can be met out of short term borrowing. (Khan and Jain, 2003: 18.9)

2.1.5 Principle of Cash Management

The size of cash balance in the hand and in the account to be maintained depends on the behavior of the operating cash flows of the firms. Each business operation is unique in the matter of cash collection and disbursement, as such, a firm needs to follow cash management strategies based on its own financial strength and objective in the matter of cash management, financial manager are mainly concerned with the:

i. Management or cash receipt

ii. Management of disbursement

iii. Minimization of cash balance

iv. Use of most inexpensive source of financing for cash balance

v. investment of excess balance of cash

The standard principles of cash management are follows:

i. **Collection strategy**: To collect account receivable as soon as possible with out annoying and loosing potential customers by establishing a system of lock boxes, electronic fund transfer, preauthorized checks, and deposit concentration.

ii. **Credit period**: Use credit period on accounts payable as long as permitted without damaging the firm's credit rating by establishing controlled disbursement system.

iii. **Cash management models**: Minimize cash balance without adversely affecting the business operation by following the techniques of cash balance management such as Baumol and Miller Orr-models.

iv. **Balance between cost and risk**: Manage most inexpensive source of financing for meeting short term cash deficiency by optimally balancing between cost and risk.

v. **Cash Surplus**: To invest short term excess cash in most efficient market portfolios of securities such money market instruments.

2.1.6 Objective of Cash Management

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

The basic objective in cash management is to keep the investment in cash as low as possible while still keeping the firm operating efficiency and effectively. This goal uses reduces to the dictum. “Collect early and pay late”.

2.1.7 Determining the Optimum Cash Balance

Financial manager responsibilities are to maintain a sound liquidity position of the firm. So that dues may be settles in time. The firm needs cash for many purpose, i.e. purchase raw material, pay wages, dividend interest, etc. Cash balance is maintained as a buffer or safety stock. The financial manager should determine the appropriate amounts of cash balance. If the firm maintains small cash balance, its liquidity position becomes weak and suffer from a capacity of cash to make payments. But investing released funds in some profitable opportunities can attain a higher profitability. If the firm maintains a high level of cash balance it will have a sound liquidity position but forego the opportunity to earn interest. Thus the firm should maintain an optimum cash balance to find out the optimum cash balance the transaction costs and risk of too small a balance should be matched with the opportunity costs of too large a balance. If the firm maintains larger cash balances its transaction costs would decline but the opportunity costs would increase.

2.1.8 Cash Management Models

These are different types of analytical model for cash management.

i. Baumol Model

ii. Miller-orr Model

iii. Orgler's Model

iv. Cash Management Model

i. Baumol Model:

In view of minimizing the opportunity cost of holding cash and maximizing the return on the available funds, the cash balance should be maintained at a minimum level and the funds not required form immediate use it's invested in the marketable securities. Baumol model is one of the methods that can be used for this purpose. Baumol identifies the cash maintenance as analogues to inventory maintenance and demonstrates that the model of economic order quantities that is applicable to inventory management is perfectly applicable in cash management too. Baumol model is based on the assumption that (i) the cash is used at a constant rate. (ii) the periodic cash requirement is more or less and (iii) there are some costs such as opportunity costs that increase and other costs such as transaction costs that decrease as cash balance increase (Baumol, 1952:545-556).

Because of the assumption (i) and (ii) the graphical representation of cash position looks like as follows:

Unlike the case of inventory purchases, the cash transfer does not take time. Therefore, it is normally not required to maintain safety stock of cash. Given its assumption, the model prescribes an optimal size of cash balance and the optimal size of cash transfer from marketable securities to cash account or borrowing. What matter for a firm is the total of opportunity cost and transaction cost? Therefore, the objective of model is to minimize the total cost.

The Baumol model can be appropriately applied in case of predictable uniform net cash flows, but not in the situations characterized by irregular and uncertain cash. The size of cash need depends on the pattern and degree of irregularity of inflows. The Baumol model does not consider the possible irregularity and uncertainty of receipt and payments. Merton Miller Saniel Orr have developed a model known as Miller-Orr Model, that takes into account the realistic pattern of cash flows and prescribed when and how much to transfer from cash to investment account and vice-versa.

The model is based on the assumption that the daily net cash flows are random in size as well as in, the negative or positive flows and are normally distributed in the long time. The model sets a range of high and low limits with in when the cash balance is allowed to fluctuate and sets the target cash balance (Z) in, between these two limits (Miller, 1966:413-435).

ii. Miller Model:

The model suggests bringing the cash balance to target balance whenever it drifts away to the limits in either direction. The rule is to transfer the amount of cash that is necessary to bring the cash position to its target balance slides down to the lower limit (L), to transfer the cash in excess of target balance to the investment account whenever it reaches to the upper limit (U). The lower limit in the model is set by either managerial decision to meet emergency need or as required by bank to mountain compensating balance in the account.

iii. Orgler's Model:

According to this model, an optimal cash management strategy can be determined though the use of a multiple linear programming model comprises three society i) selection of the appropriate planning horizon. ii) Selection of the appropriate decision variables. iii) Formulation of the cash management strategy itself. The advantage of linear programming model is that it enables coordination of the optimal cash management strategy with the operation of the firm such as production and with less restriction on working capital balance (Orgler, 1970:220)

The model basically uses one year planning horizon with twelve monthly periods because of its simplicity. It has four basic sets of decision variables which influence cash management of a firm and which must be incorporated in to the linear programming model of the firm. These are i) payment schedule ii) short-term financing iii) purchase and scale of marketable securities and iv) cash balance itself.

The formulation of the model requires that the financial manager first specify an objective function and then specify a set of constraints. Orgler's objective function is to minimize the horizon value of the net revenues from the cash budget over the entire planning using the assumption that all revenue generated is immediately re-invested and that any cost is immediately financed. The objective recognizes each operation of the firm that generates cash inflow or cash outflows as adding or subtracting profit opportunities for the firm it cash management operation. In the objective function decision variables, which cause inflow such as payment on receivables, have positive coefficient, while decision variables, which generate cash outflows, such as interest on short-term borrowings, have negative coefficient. The purchases of marketable securities would for example produce revenue and their have a positive co-efficient while the sale of those securities would incurred conversion costs and have a negative co-efficient.

The constraints of the model could be i) institutional ii) policy constraints. The institutional constraints are those imposed by external factors, for instance, the financial manager may be prohibited from selling securities before maturity. Either constraint can occur in the model during on monthly period or over several or all the months in the one year planning horizon.

An example of the linear programming model is as follows:

Objective function: max, profit= $a1x1+b1x2$

Subject to: $b1x2$ production

$b2x2$ constraints

$c1x1+c2x2<$ cash available constraints

$d1x1+d2x2>$ current assets requirement constraints

It is very important feature of this model is to allow the financial managers to generate cash management with production and other aspects of the firm.

iv. Cash Management Model

In this model, it is assumed that the firm on average in growing and is a net user of cash. Marketable securities represent a buffer stocks between episodes of external financing which is drawn as required periodically ordering costs are represented by clerical and transactions costs of making transfers between the investment portfolio and the cash account. The holding cost is the interest foregone a cash balance held. Assuming that expenditure occurred evenly over time and that, cash replenishment comes in lump sums at periodic intervals (Weston and Copeland, 1990:784-785).

2.1.9 Cash Cycle

The cycle refers to the process by which cash is used to purchase materials from which are produced goods, which are then sold to customers, who later pay bills. In addressing ourselves to the cash management strategies, we concerned with the time periods involved in stages A, B, C, D, and F, G, H, I. it may be mentioned that a firm has no control over the time involved between stages A and B the lag between D and B is determined by the production by credit terms and the payments policy of customers. This hypothetical example explains that the corporation needs 60 days or two months to collect funds from the beginning of materials ordered to have ultimate cash. It takes 14 days to receive ultimate cash. It takes 14 days to receive materials from suppliers and adding 20 days for payment and still 2 days assumed for clearing the cheque. Sales of inventory take 48 days to have complete clearing off stocks and customers might pay only after 28 days by mailing cheques. Moreover, six additional days are taken for payment receipt, cheque deposit and ultimate collection. This is applicable only for direct selling of customer goods but in a manufacturing concern the time lag may be still greater.

2.2 Review of Previous Research Studies

This dissertation has been written after studying various books journals article website and previous thesis. In this section an attempt has been made to review some thesis/dissertation and other related publications related to cash management. I here comprise the some previous thesis review, which are mainly concerned about cash and receivable and credit management and of various company. The reviews are as follows:

Ramesh Sharma (2002) conducted the study on "*Cash management in Nepalese public Enterprises"* by using eleven years data from 1991 to 2001. The objectives of his study are as follows;

- To critically review cash management techniques practiced by Nepalese Public Enterprises,
- To examine the demand for cash in the case of Nepalese Public Enterprises,
- To suggest appropriate cash management policy for the future.

The critically review the cash management techniques practiced by Nepalese Public enterprises was main objective of the study. The findings, which may be drawn on the basis of the study, are as follows:

1. Cash management in the public enterprises of Nepal is primarily based on the traditional practices, lacking in a scientific approach. A more serious aspect of cash management has been the absence of any formalized system of cash planning and cash budgeting in many of the enterprises do have the practice forecasting cash requirements on a formal basis. Modern practices with respect to debt collection, monitoring the payment behavior of customers and relevant banking arrangements in connection with collection of receivables have been virtually ignored in many enterprises.
2. The enterprises didn't face any serious liquidity problem. However, this was not because of the effectiveness of cash planning and budgeting. The problem of liquidity actually didn't arise due to the coincidences of delay in receivables collection being matched by delayed payment to creditors.
3. There has been wide variations overtime in the state of financial health of the enterprises in terms of the composition of current assets and current liabilities as revealed by the relevant financial ratios.
4. Regression analysis revealed that there was little effect of the opportunity cost of holding cash on the cash balances held by the enterprises. Neither interest rate nor the rate of

inflation had any effect on the cash balance. Further there was very little evidence of the effect of economy of scale on cash balance holding in most cases.

Thus, for the public enterprises in Nepal, it is necessary to highlight the importance of developing appropriate strategies for cash management in respect of:

i) Cash planning and cash budgeting on a formal basis so as to project cash surplus or cash deficit for a period not exceeding one year and broken up into shorter intervals.

ii) Managing the cash flows so as to accelerate the inflows and as for as possible, to decelerate out flows.

iii) Optimizing the level of cash balance by matching the cost of holding excess cash and the danger of cash deficiency.

iv) Investing idle cash balance taking into account the cost of administering investment in marketable securities.

The review, clearly pointed out that cash management is the major problem in Nepalese enterprises. But the success and failure of and enterprise is greatly dependent upon the efficient management of cash.

Laxman Rimal (2005) has submitted thesis on *"Profit planning in public utility undertaking of Nepal (specific reference to Nepal electricity authority and Nepal Telecommunication Corporation*. He has tried to point out the nature of management; quality of managerial knowledge and prevailing practices of profit planning and premises for adoption profit planning. He explores the data of four years (from 2001 to 2005). He examined the applicability of profit research paper; he has used primary as well as secondary data.

He has listed the following objective and finding in respect of NEA.

- NTC's goals and objectives are not identified to the lower level staffs. There is the absence of management by objectives (MBO) principle of participates management. The top-level executives are only involved in decision making and planning. There is communication gap between top- level management to lower level management and one department to another department.
- There is not any concept of profit planning system. There is high deviation between budgeted data and actual data. This enterprise is suffering from the high fixed cost.

There are some problems to the cost control because there is not classified systematically overhead. NTC is suffering from the idle cash and bank balance. There is increasing trend of idle capacity.

- Also, there is a problem of autonomy; government directly interferes to the PEs. Amy decision like pricing; service personnel etc. should be approved by the HMG.

He suggests various recommendations to improve formulation and implementation of the profit planning system of these enterprises.

- Adequate computer facility is also an essential factors far revenue collection. To fulfill this purpose, provision of necessary counter according to the load of customers, adequate employer's provision in each counter, making systematic Que. System in line, making heating, lighting and drinking water facilities can collect their revenue effectively.
- Another important attention should be give for payment facility. Behind this banking facility should provide to customer. It will save the customer's time and transportation also. On the other hand advance payment. Of bill with discount facility should by provided by NEA and NTC for their customers.
- Government offices are the main defaulters for increasing the outstanding bill. Therefore they should issue circular for all to pay their outstanding bill at time. The finance ministry should provide adequate budget for its offices to pay the outstanding bill of electricity and telephone as soon as possible.
- To develop an efficient system of revenue collection. There have necessary to improve their present accounting system. When there are temporary cash surplus, it should not be remain idle but invested in some marketable securities. However a minimum cash balance is always essential for the corporation to meet unforeseen contingencies.
- There are needed to control and reduce the high coat of production, distribution and operation expended and should utilize their production capacity as possible.
- Both PEs should take long– term from the public so that the higher level technical as well as financial officers would naturally become conscious for repayment of loan as well as regular payment of interest. And that loan should be utilized tor the purpose of extending fixed assets and if there will any internal funds surplus it should be put in reserved and debt redemption fund be created to meet redemption of such loans.

Bhatt (2006) has conducted a research on "*Revenue planning ands cash management of Public Utility in Nepal (A case study of Nepal Telecom)*. The main objectives of the study are as follows:

- To analyze the gap between budgeted and actual revenue and its trend.
- To examine cash collection and disbursement.
- To review cash flow form operating, financial and investing activities.
- To have information, control and security over cash balances and payment system.

Some major findings and conclusion of his research are as follows:

The lack of accurate and proper sales forecast is one of the important contains that affect the financial performance of the company. In Nepal Telecom, there is consistency between planned sales line and actual sales. The analysis of distributed sales line and revenue shows that the achievement is highly consistent. So, if the company forecasts the expected sales accurately, it can manage the various activities accordingly.

2. Sales budget shoes ISD sector's sales revenue is main sources of Nepal Telecom, which contributes more than 40% in average.

3. Because of high demand of telephone line there exist small gap between actual production and actual sales in lines. The local calls are increasing at this stage but the revenue per line is decreasing. It is due to bad governance and slow economic growth.

4. Correlation and coefficient value shows that there are positive correlations between budgeted and actual sales units and Rs, by the regression line, it is clear that future revenue will increase with compare to budgeted if other things remaining same etc.

5. Nepal Telecom should be made effective plan and program and it should be analyzed on the basis of company's ability. It is because; the company made maximum pay on ad hoc basis. So, system of proper sales forecast and budgeting needs to be adopted and followed.

6. Installation capacity of Nepal Telecom is not fully utilized but the demand of telephone line is higher. If installed capacity is utilized, then revenue will be increased and operating expenses will be gone down. Nepal Telecom is paying a huge amount as interest on long term loan, which is not good for company. So it should emphasized internal financing to minimize such burden.

7. Nepal Telecom should try to reduce overdue amount of receivables. Nepal Telecom should provide incentive to staff to encourage them for collection of overdue amount of receivable and

it should be establish separate department for collection old debt (defaulters) that will help to monitor collection revenue. In revenue collection any kind of pressure (especially political), nepotism and biases should strictly be discouraged.

Prabes Karki (2007) conducted thesis entitled "*Revenue Planning In Service Oriented Co. (A Case Study Of Nepal Telecom Company Limited)"* has tried to point out the various aspect of revenue planning. As revenue planning is the corner stone for every planning, proper planning for revenue is necessary for the organization. The main objective of this study is to search and highlight the role of Revenue planning in the performance of NTC. Therefore the main objectives of this study are:

- To sketch out the use of revenue planning tools and techniques.
- To examine the use of planning in managerial short-term and long-term decision-making.
- To point out shortcoming in sales budgeting and planning.

After analyzing the present practice of revenue planning in Nepal Telecom Company Limited, the following conclusions and recommendations are made. NTC has not considered demand determinants such as family income, price of call of one minutes, connection charges, cost of alternative available, cost of auto generation of telecommunication and reliability of NTC service which forecasting demand. NTC has not prepared planned and programmed for distribution SIM cards to their consumers. While setting the target sales for next year, NTC has not considered other factors such as growth of consumer and other relevant factors.

- There is consistency between planned sales and actual sales as a whole. The analysis of category- wise revenue planned shows that achievement in domestic, international commercial and non-commercial categories are highly constants. But the achievement in remaining categories is highly fluctuating.
- NTC has better trading profit comparatively other public enterprises. NTC should considered demand determinants such as family income, price of telephone sets, SIM cards and cost of alternatives available, cost of self-mobile service such as voice mail cost, massage cost.
- NTC should prepare plans and program for consumer and solve network problems. To achieve target growth rate in sales revenue NTC should make realistic forecast.

- NTC should start the practice of preparing monthly budget for sales revenue. While preparing central budget of NTC, its should take suggestions made by branches and sub-branches.
- NTC should achieve their activity highlights such as PSTN Switch Expansion, Prepaid Calling Card (PCC) Service and IVR Technology.
- NTC should introduce programmed and action plans for the solve network problem and stolen telephone lines and miss used of telephone call reduction the loss of technical and non-technical.
- NTC should effectively check and control the unauthorized use of telephones. NTC should put more effort to manage the supply to the profitable sectors such as domestic, national and international wise. There should be providing more facility to their customer than other telecommunications such as Mero Mobile and United Telecom. Price cost volume profit relationship should be considered while formulating the revenue plan.

Bhuwan Raj Chataut (2008) has conducted thesis topic on "*A Study on Cash Management in Nepal Telecom*". The major objective of the study is to examine the management of cash in NT. The basic objectives are as follows.

- To observe devices of planning and control of cash in NT.
- To examine the existing internal control policy in NT regarding cash control practices.
- To identify the shortage or excess of cash in the company and the procedures of financing for the shortage and investment of excess cash.
- To study the liquidity position of the company.
- To analyze the gap between budgeted and actual sources and uses of cash and its trend.
- To review cash flow from operating, financing and investing activities.
- To suggest and recommend Nepal Telecom based on findings.

Major finding and conclusion of the study are as follows:

The liquidity and cash position of the company is strong, it cannot be concluded that the cash management practices in Nepal telecom was satisfactory in general. Company has been adopting various management tools and techniques like annual cash budget, annual actual cash flow statement for cash management of the company. But it only plays formal role and fails to screen the weakness of the cash management. It has not applied any corrective action although its own annual analysis indicates the actual weak situation of cash management in some sector. From the study of targeted sector of cash management practices of Nepal Telecom, it can be concluded as below:

1. Company could not meet targeted expenses and expenditures as it approved in the budget. It shows that there was over estimation of expenses as well as weakness in the implementation of budget. Planning and implementation could not go side by side. It may be due to the security and political reason that company could not run the project and programs.

2. Another astonishing fact is – The Company was able to collect more cash from different sources than it targeted in the budget. It shows good position of actual cash collection of the company. On the other hand, company did not spend cash as it targeted. Due to these facts, there was enough surplus cash in hand every year. But company could not manage the surplus in the productive sector. It was unable to cope up with the market demand which could have fulfilled through tracking the surplus cash in that profitable sector.

3. Under liquidity analysis, current ratio and liquidity ratio were used. Current ratios show that the current assets of the company over the study period were good enough to meet the current liabilities. And the major portion of current assets comprised of cash. And the liquidity ratios show that the position of highly liquid assets to meet the current liabilities of the company.

4. The study shows that company has high liquidity which adversely affects profitability of the company. Moreover, it fails to invest surplus cash in appropriate investment sector. Instead of investing surplus there was separate budget for investment which was compulsory in nature. Company has also taken external loan from foreign institution which was not required to borrow. It was able to meet its expenses of budget by its own source. One of the amazing facts is that only closing balance of cash of a year was sufficient to meet daily operating expenses for five to six years.

5. There are strict provisions regarding cash control practices like procedure of running bank account, central collection policy, authority and responsibility for expenses etc in Nepal Telecom. Strict and lengthy procedure of business activities hamper in decision making which may cause to suffer for not getting business opportunity.

Bhupendra Khanal (2009) has conducted research entitled "*Cash management system of Lumbini Bank Limited*" in his research try to focus and discover the cash management systems which are used by LBL. More specifically following are the main objectives of the study:

- To examine the liquidity position of LBL
- To evaluate the relation of cash with other transactions of LBL.
- To Study the overall cash management practices of LBL

Finding and conclusion of the study are the study revealed that majority of the banking sector did not face any serious liquidity problem. However, this was not because of the effectiveness of cash planning and budgeting. The problem of liquidity actually did not rise due to the coincidence of delay in receivables collection being matched by delayed payment to creditor. By and large most banking sector had periodic accumulation of surplus cash corresponding cash shortage from time to time. However, none of the bank considered the implications of holdings idle cash balance and few took into account the potential benefit of investing surplus in marketable securities. Regression analysis revealed that there was little effect of the opportunity cost of holding cash on the cash balances held by the banking sector, neither interest rate nor the rate of inflation had any effect on the cash valance, Further there was very little evidence of the effect of economy of scale on cash balance. Further there was very little evidence of the effect of economy of scale on cash balance holding in more cases. Many factor or determinants such as nature of business, capacity level, quality of customers, economic conditions etc. have to be considered in cash management, establishment of credit terms, motives for holding cash, efficiency of cash management, different techniques to cash management, cash cycle etc are to be considered .Due to lack of good cash management systems lumbini bank did not provide budget to plan for and control cash flow.

The Cash Management of banking sectors is significant enough to have the best use of idle cash balances and to take advantage from the opportunity inherent Banks Besides, in cash velocity determined by sales volume and turnover of assets. Banking managers must be familiar with the cash cycle to undertake measures of assets. Banking managers must be familiar with the cash cycle to undertake measures for improvement of collection and disbursement. The various motive of holding cash and determination of safety.

Level based on normal periods and peak periods must be adequately considered, the cash flow balance of banks can be sufficiently improved by increasing volume of sales and turnover of total assets. But on the whole, measures should be taken to have efficient collections combined with disbursement. Cash planning manager or experts should be appointed. The lack of knowledge of modern financial management's tools and technique among existing employees in the banking sector is one of the causes of poor financial performance of the banks. Therefore, Lumbai Bank Limited. It must ensue to upgrade the current financial management skill.

Sanjiv Kumar Chetri (2010) has conducted research on "*Working Capital Management of Nepal Telecom (NTC)*". The objectives of this study is to insight in to the management of working capital in Nepal Telecom more specifically, main objectives of the study are as follows

- To evaluate the trend of current or total assets position
- To know how far Nepal Telecom is being able to utilize its Current Assets properly.
- To study the working capital position of NTC
- To see working capital NTC with respect to cash, receivable and inventory management.

Major finding and conclusion of the study are, the overall financial management of NTC is quite satisfactory during the study period since it has sound liquidity position and positive growing profitability. Most of the variables or working capital is in increasing trend and the company is operating with good profit. After a long analysis process, it is concluded that the overall financial management of Asian NTC was quite satisfactory during the five years study period. There was sufficient amount of current assets to meet the current obligations of the company which obviously is a sign of good liquidity position. The company had invested its considerable amount in current assets by increasing the investment on it every year. Relatively large amount of current assets was held to support given level of sales.

The NTC had sufficient amount of working capital. Beside this, the researcher has also indicated some critical aspects of working capital management and has supplemented precise suggestions and recommendation too. The company had more resources available to increase the sales volume as per the demand of the market. The largest portion of current assets was being unproductive by lying in absolute liquid from which is the indication of inefficiency of management in using its assets in productive payment of current liabilities. A significant amount of receivables was tied up which resulted unnecessary amount held up of working capital. Likewise, a significant amount of current assets was covered by miscellaneous current assets. All the variables of working capital as well as volume of sales were in increasing trend and the company was operating with attractive profit. Being a public utility service provider, NTC larger volume of working capital, which indicates, excess liquidity position? The company is facing serious problem on outstanding debt collection. So far cash management and receivable management is concerned, the recommendations suggested above could, to a greater extent, uplift NTC cash and receivables management situations.

Paras Subba (2011) made a study on *"Profits planning and cash management of Everest Bank Limited"*. The basic objective of the study is to focus on analysis of revenue and profit planning of Everest Bank Ltd.

The specific objectives of the study are:

- To assess the impact of investment and lending on profitability of EBL
- To identify cash and investment practice of EBL Bank
- To find out the relationships between total investment loan and advances, deposit, net profit and cash and bank balance
- To provide proper suggestion and possible guidelines

The finding and recommendation of the study are EBL has been maintaining a steady growth rate over this period. EBL earned a net profit of Rs 296.4 million. EBL earned a operating profit of Rs 597.9 million. EBL total deposit of Rs 1818.6 million and this comes to be 31.8% more as compared to the same period in the previous fiscal year and then total loan increase by 38.9% compare as previous year. EBL bank has sufficient liquidity. It shows that bank has not got investment sectors to utilize their liquid money. Remittance has also help to increase the amount of deposit in bank. On the other hand, due to political crisis economic sectors have been damaged. Most of the projects have been withdrawn due to security problem. Therefore, banks have maximum liquidity due to lack of safety investment sectors.

Profitability position, interest income to interest expenses ratio shows the more profitable salivation. In addition, total income to total expenses ratio shows the overall predominance of the bank is satisfactory operating income. Return on loan and advances are showing position that is more profitable on of the EBL. Equity portion of the bank is slightly increasing in the recent years due to issue of directives by Nepal Rastra Bank (NRB) the entire bank to increases it's paid up capital. NRB has issued that direction to provide more safety to the customers. Therefore bank has issued new share in the market.

2.3 Research Gap

This research cash management of NTC is done by measuring various ratios various financial tools as well statistical tools. In this research various ratio are systematically analyzed and generalized. The ratios are categorized according to nature. Here in this research all ratios are categorized according to their area and nature. In this research data are used only five fiscal year but all the data are current and fact. Nepal Telecom has always been customer oriented. Its main objective is to provide the best quality with low cost and it has retained its fame by its reliable service. Several studies have been conducted for the topic "Cash Management" and the analysis part is done either for the banking sectors or for the insurance but very few theses are related particularly to Cash Management of organization like NTC. For the analysis, various tools mainly the ratios relating to cash are used to show the NTC performance. This study tries to show financial analysis by applying and analyzing various financial related tools as well as different statistical tools like average mean, standard deviation, coefficient of variation coefficient of correlation and trend analysis. Probably this will be the appropriate research in the area of cash management of corporation.

CHAPTER - III
RESEARCH METHODOLOGY

3.1 Introduction

Research methodology can be defined as systematic process that is adopted by the research in studying problem with certain objective. Research is careful investigation or inquiry especially through search for new fasts in any branch of knowledge is research.

"The research of knowledge through objective and systematic method of finding solution to a problem in research" (Kothari, 1989:2).

The topic of the study has been selected as Cash management of NTC. In order to reach and accomplish the objectives of the study, different activities will be carried out. For this purpose, the chapter aims to present and reflect the methods and techniques that are carried out and followed during the study period. The research methodology that is adopted for the present study is mentioned in this chapter which deals with research design, sources of data, data collection, processing and tabulating procedure and methodology. The maim purpose of this chapter is to focus on different research method and conditions, which are used while conducting this study. Every study needs a systematic methodology to show the better results of the research the following titles of research methodology have been discussed in this chapter.

3.2 Research Design

Research is a theory building activity. Research design is the plan, structure and strategy of investigations conceived so as to obtain answer to research questions and to control variances.
A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combined relevance to the research purpose with economic in procedure (Kothari, 1999:59).

The research study attempts to analyze the cash management system NTC. Hence, descriptive as well as analytical research designs have been employed. The study depends on the secondary data. Various financial parameters and Descriptive research is essentially effective research techniques are employed to evaluate the cash management corporation. The study is designed as to give a clear picture of the management of cash and circumstances with the help of available data with useful suggestions and recommendation.

3.3 Population and Sample

At present twenty six public utilities organization are operating in Nepal. All the public utilities organization that are operating in Nepal are considered as the population. It is not possible the study all the data related with all corporation because of the limited time period and showed also taken in to consideration of the partial fulfillment of the Master's Degree. So here Nepal Telecom limited (NTC) has been selected as sample for the present study.

3.4 Nature and Sources of Data

The data used in this study are secondary as they have been collected from concerned authorities. For any research work, information is considered the life blood. Thus it is the major task to gather the information and data collection. For the purpose of the study, various related books, booklets, magazine, journals, newspaper and thesis made in this field have been referred. Besides necessary suggestions are taken from various experts both inside and outside the corporation whenever required.

3.5 Method of Data Analysis

Different financial and managerial tools will be used for the analysis of data. Some inferences and generalizations might also be made in the course of preparation of report as demanded by the situation.

3.6 Data Collecting Procedures

Especially the annual report of NTC and the Website of concern Company are taken as main source of data collection for purpose of study. The annual reports of the concerned company were obtained from their head office and their websites. Nepal Telecom publication, such as Economic Reports, Annual Reports of CBI, NEPSE, SEBON, NRB etc. has been collected from the personal visit of concerned department of NTC. Besides, a details review materials are collected from the library of Campus and central library of T.U.

3.7 Method of Data Analysis Technique:

For the purpose of the study all collected primary as well as secondary data are arranged, tabulated under various heads and them after disunities and statistical analysis have been carried out to enlighten the study. Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are also used. To make the study more specific and reliable, the researcher uses two types of tool for analysis,

1 Financial Analysis.

2 Statistical Analysis.

3.7.1 Financial Tools:

Financial tools are those instrument and technique which helps in analysis of financial position of the enterprise. Various financial tools have been used in the study which helps to indicate the position of the company as targeted in the objective of the study.

A. Cash position analysis

Business needs cash for meeting its daily operating expenses and other cash obligations. Therefore cash position should be looked into separately to highlight this crucial business aspect. Cash means actual cash and bank balance extracted from annual report balance sheet. Current liabilities consist of account payable, current portion of long term loan, other provision, pension fund, subscriber/contractor deposit. Total assets include net fixed assets, investments, and current assets except deferred charges. The ratios which determine the cash position are:

- **Trend of cash and Bank Balance**

Under this calculation simply cash and bank balance of NTC is taken and evaluated by using following tool.

Movement of cash and bank at hand is calculated by using following tool

Increase/Decrease = $\dfrac{CashBalance(t+1) - CashBalance(t)}{BankBalance(t)}$

Where, Cash Balance (t+1) = Cash balance at the end of the period

Cash Balance (t) = Cash balance at the Beginning of the period

- **Cash turnover ratio**

The ratio of cash in hand and at the bank to net sales is termed as cash turnover ratio or cash velocity. The ratio indicates the efficient use of cash to generate sales. Cash balance should be kept within reasonable limits just as debtor and stock. In case of Nepal telecom, sales indicate total revenue of the year which is categorized as total revenue from telephone, total revenue from telegraph, lease circuit and other. A high ratio means relatively small amount of cash which is good because cash involves holding cost. But if overdraft is there, it may not be advisable since interest burden may wipe off the resources in due course of time. A lower ratio indicates greater availability of cash which may not be advisable since it may be remaining idle in the business. However, too high a ratio is also dangerous, as it may be an index of overtrading i.e., doing business with too little cash.

B. Analysis of sources and uses of fund.

Mainly BFIs collects deposit form the public on different type of deposit account and can collect short term fund other BFIs to fulfill their resource need. Similarly Mainly BFIs mobilize their resources in the heading of loan and advance, investment, purchase of fixed asset etc. In this study we have assumed borrowing and deposit as sources and mobilization through loan and advance and investment as uses of fund. To find out the movement we have used followings tools.

i. Total income from Sale of service

Main income source of NTC is sale of services. The NTC generate profit by Internal and external sources. Internal sources of financing of cash which were as Collection of revenue, Inter administration, Subscriber deposit, Sale of sets and other income. Those were main sources of financing to meet the expenditure of approved budget. The external source of cash is finance by international agencies. But the external source of financing was very nominal in total source of financing. Now total source of NTC is internal source.

ii. Trend of Deposit

Deposit collection is the gateway of BFIs. After collecting the deposit from the market BFIs become able to generate income through the deposit in different heading. So to manage the cash, knowledge of deposit is essential. A higher growth ratio indicate higher amount of deposit and vice-versa. To find out the trend we have used

iii. Total investment of NTC under study

Investment is most important part of organization. The word investment conceptualized the investment of income, savings or other collected fund. The term investment is only possible where there adequate savings. Investment means to trade current funds for some expected stream of payment or benefits, which will exceed the current outlay by an amount of return or interest that will compensate the investor. So investment is crucial part of income.

iv. Net profit

Net profit is final income of organization. The main objective of company is go gain profit. Net profit is deductions all expenses such as cost, bonus to employees, taxes and provisions have been used in this analysis. The volume of net profit measures the success of a firm in every aspect of its operation and strategy. Without profit no one company can be run. So the net profit determines cash position of organization. Higher profit indicates higher cash and vice versa.

v. Account Receivable

The company operates its transactions both on cash and credit basis. Generally credit sales called as receivable. Account receivable is amount of money owed to a firm by customer who bought good and service on credit.. Debtors or account receivable are to be converted into cash over a short period and therefore are included in the current assets. Account receivable turnover in relationship between actual sales and collection period. If turnover is high then there would be little congestion of fund in turnover and vice versa. The analysis of account receivable turnover time is shown in the following table.

C. Ratio Analysis

Ratio analysis shows the mathematical relationship between two accounting figures. It helps to analyze the financial strengths and weaknesses of the organizations. It is also inevitable for the quantitative judgment with which the financial performance of organizations can be presented properly. Ratio analysis is also concerned with output and managerial decision. Four main categories of ratios have been taken in this study that is mainly related to cash management of NTC.

i. Analysis of Current Ratio

This ratio indicates the current short-term solvency position of NTC. Higher current ratio indicates better liquidity position. In other words, current ratio represents a margin of safety, i.e. a 'cushion' of protection for creditors and the highest the current ratio, greater the margin of safety, large the amount of current assets in relation to current liabilities, more the organization ability to meet its current obligations. It is calculated as follows:

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilitie}}$$

ii. Cash balance to current asset ratio

Cash is the most important current asset for the operation of the corporation. The company should sufficient cash neither more or less. Cash balance to current asset ratio measures the condition of cash from its total current asset. Its measures the proportions of cash balance from its current asset.

$$\text{Cash and bank balance to Current assets ratio} = \frac{\text{cash and bank balance}}{\text{current assets}}$$

iii. Analysis of Account Receivable to Cash and Bank Balance

Cash and bank balances measure the relationship between level of cash and bank to account receivable over a period of time. The greater the account receivable better the cash turnover would be provided that cash and bank balance can be maintained at a desirable level. The following table shows the relationship of account receivable to cash and bank balances.

3.7.2 Statistical Analysis

Under this heading some statistical tool such as coefficient of correlation analysis between different variables, trend analysis of cash management related variable are used to achieve the objective of the study.

A. Correlation Coefficient

Correlation coefficient is used to define the relationship between two or more variable. Coefficient of correlation has been studied to find out whether the two available variables are inter-correlated or not. If the result falls with in the correlated point, the two variables are inter-correlated otherwise not. Now to find out the correlation coefficient between total lending and total assets, the widely used method of Karl Pearson's Coefficient of Correlation has been adopted.

$$\text{Coefficient of Correlation (r)} \ \mathrm{X} \frac{\mathrm{N} \quad \mathrm{xy} - (\quad \mathrm{X})(\quad \mathrm{Y})}{\sqrt{N \quad X^{2}\, \mathrm{Z}(\quad X)^{2}}\sqrt{N \quad Y^{2}\, \mathrm{Z}(\quad Y)^{2}}}$$

Here,

N = Number of pairs of x and y observed.

x = values of credit and advances.

y = values of total assets.

r = Karl Pearson's Coefficient of Correlation.

B. Probable Error:

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error, it is possible to determine the reliability of the value of the coefficient in so far as it depends on the conditions of random sampling. The probable error of the coefficient of correlation is obtained as follows:

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

Here, r = Correlation coefficient

N = Number of pairs of observations

If the value of ‘r’ is less than the probable error, there is no evidence of correlation, i.e., the value of ‘r’ is not at all significant. Then, if the value of ‘r’ is more than six times of the probable error, the coefficient of correlation is practically certain, i.e., the value of ‘r’ is significant.

C. Trend Analysis:

Trend Analysis is the statistical tools for the analyzing the data of selected organization in suitable manners. It helps to forecast the future value of organization expectation. It is used to measure the change of financial, economical as well as commercial data. The least square method to trend analysis has been used in measuring the trend analysis. This method is widely used in practice. The straight line trend of a series of data is represented by the

Following formula.

$$Y = a + bx$$

Here,

Y is the dependent variable

a is y intercept or value of y when x = 0

b is the slope of the trend line or amount of change that comes in y for a unit change in x.

CHAPTER - IV
PRESENTATION AND ANALYSIS OF DATA

Presentation and analysis of data is an important stage of the research study. The main purpose of analyzing the data is to change it from an unprocessed from in an understandable presentation. The basic objective of this study is to have a true insight into "cash management" of NTC. For the accomplishment of these objectives a specific research methodology has been followed, which has been described in chapter three. Now in this section an effort has been made to assess and analyze the actual cash management of NTC. The analysis of data consists of organizing data by tabulating and then placing the data in presentable form by using figures and tables. The presentation and analysis of data section is the main text of the study. It provides insight into the predetermined objectives of the study. For the purpose of presentation of data, the most recent published financial statements and annual reports are used. The collected and tabulated data have been analyzed using different accounting and financial tools. This chapter includes presentation, analysis and interpretation of collected data with organizing sequentially as per the objectives of the study. The analysis are regarding to cash management of NTC.

4.1 Financial Statement Analysis

Financial analysis is done by applying various financial tools in order to clear picture on the viability of the project. The financial analysis is done to ascertain the liquidity, profitability, leverage, debt servicing and interest servicing ability of the firm. The concept of financial statement analysis has been already discussed in previous chapter. Here, we study and analyze the data by using accounting tools.

4.2 Analysis of NTC under Study

Analysis of individual data itself is crucial for the decision purpose. Here under analysis made for various variable of NTC for related to cash management. Cash, receivable, investment, profit, Average collection period and ratio analysis has done. There also analyzed using statistic to such as coefficient of correlation and regression, coefficient of determination P. Err and 6 P. Err as well as trend analysis of NTC related to cash management based on the data of NTC in their respective period, which has been presented and analyzed here. Analysis of the data is based on the deployment of various financial and statistical tools. So main focus of this study is to analyze those tools and to make this research valid, it is necessary to analyze these factors, which influence the cash management analysis. Tables and diagrams (graphs) have been used to make the result more simple and understandable.

4.2.1 Analysis of Cash Balance

Cash balance is rupee which company holds as cash and bank balance. Management of cash plays a significant role in current assets. Generally cash hold for transaction, precautionary and speculative motives. The total cash includes cash in hand, cash deposited on other bank and financial institutions, money that can receive short notice, cash in transit. The data below shows the cash position of the NTC during the period under study.

Table No. 4.1

Cash Balance of NTC for Periods Under study

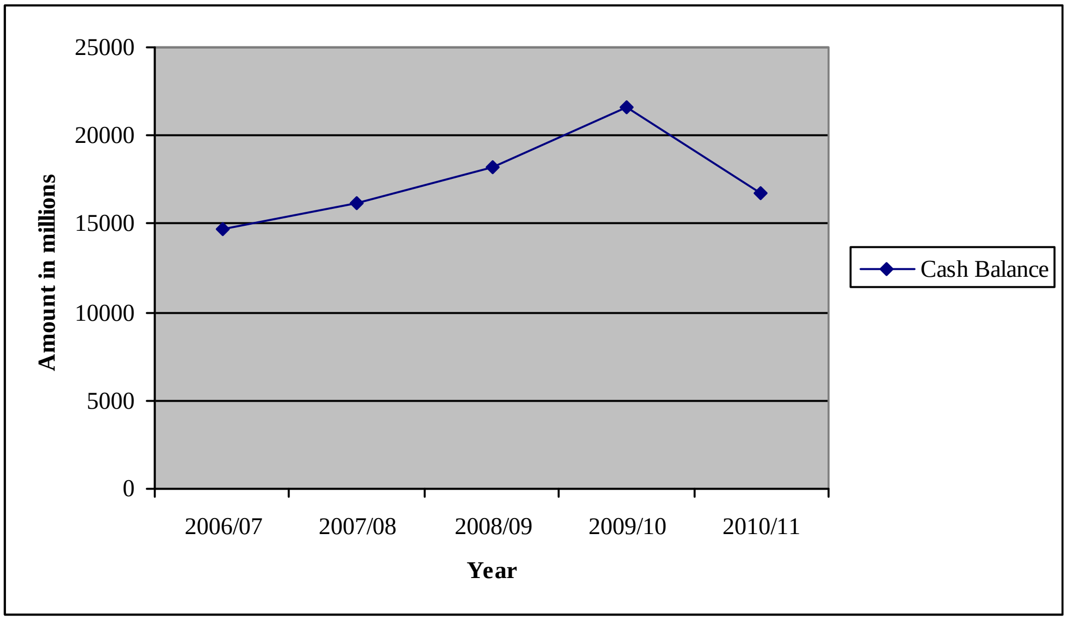
(Rs. In million)

Fiscal Year	Cash Balance	Increase (Decrease)	% change
2006/07	14746.3	-	-
2007/08	16134.5	1388.18	9.41
2008/09	18191.1	2056.54	12.75
2009/10	21611.5	3420.48	18.80
2010/11	16769.2	-4842.3	-22.41
Average	17490.5		

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.1

Analysis of Cash Balance



Above table and figure shows the cash and bank balance of NTC. There analyzed cash balance for fiscal year 2006/07 to F/Y 2010/11. The cash balance of NTC is increasing beside last fiscal year 2010/11. The highest cash balance is in F/Y 2009/10 and lowest cash balance is in F/Y 2006/07. Similarly highest increment of cash balance is 18.80 in F/Y 2009/10 and cash balance is decreased by 22.41% in F/Y 2010/11. is Cash fluctuations from the sample period 2002/2003 is very high, but after crossing the period of 2003/04 it seems less volatile and becoming stable slowly. It means the NTC is trying to maintain stable cash balance which is appropriate cash balance.

4.2.2 Analysis of Cash Turnover

Cash turnover ratio represents how quickly the cash is received from its sales. Higher turnover is the signal of good liquidity and vice versa. The following table shows the cash turnover during the study period of Nepal Telecom Company Limited. Cash turnover ratio provides the information about cash (liquidity) and operating income (sales of Loan products, other direct and indirect incomes)

Table No. 4.2

Analysis of Cash Turnover for NTC for periods under Study

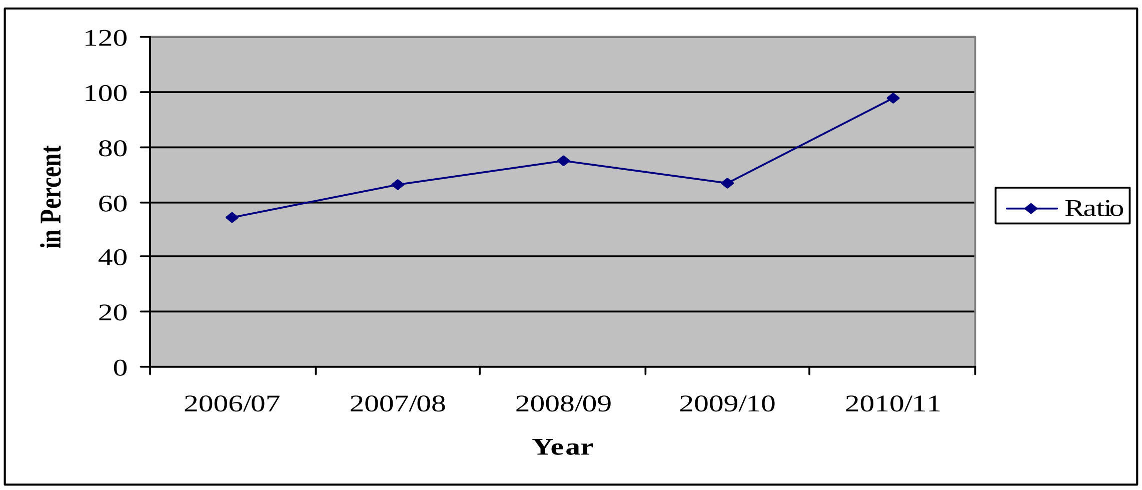
(Rs. In million)

Fiscal Year	Cash/Bank Balance	Operating income	Cash turnover Times
2006/07	14746.3	7983.32	54.14
2007/08	16134.5	10707.3	66.36
2008/09	18191.1	13634	74.95
2009/10	21611.5	14441.1	66.82
2010/11	16769.2	16389.6	97.74

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.2

Analysis of Cash Turnover



Above table and figure shows the cash turnover of NTC during the study period. The cash turnover of NTC is increasing trend. The highest ratio is in F/Y 2010/11 and lowest ratio is in 2006/07. This means cash generation from sales of services is increasing. So, the relation between cash and operating profit is positive. It means the NTC is able to capture it's income in time, means services and other cash generating activities are satisfactory. Similarly, positive figures are the evidence of profit and prosperity strategy. In this point of view operating income of NTC is very good and cash balance is high enough. So, cash management of NTC is good and satisfactory.

4.2.3 Cash flow from All Activity

Organization presents its cash flows form operating, investing and financing activates in a manner which is most appropriate to do its business. Classification by activity provides information that allows users to assess the impact of those activities on the financial position of the company and amount and of its cash and cash equivalents. This information may also be used to evaluate the relationship among those activities. It is the final activities including operating, investing and financing actives. It's the final cash follow from all activities. Following table presents the cash follow from all activates of study period

Table No. 4.3

Cash flow from all Activity

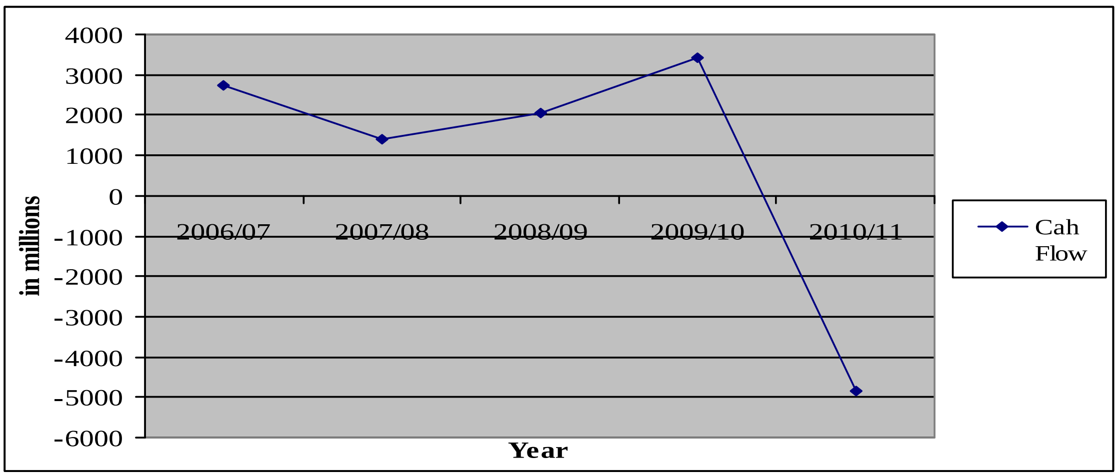
(Rs. In million)

Fiscal Year	Cash flow from all activities
2006/07	2724.71
2007/08	1388.18
2008/09	2056.54
2009/10	3420.48
2010/11	(4842.33)
Average	949.516

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No 4.3

Cash flow from all Activity



Above table show the cash flow from all activity of NTC. All activity is combining of operating, investing and financing activities. Cash flow from all activity of NTC is positive in every year beside last fiscal year 2010/11 of the study period. This indicates that the NTC has cash outflow is more than cash inflow from all activity in F/Y 2010/11. The highest cash inflow from all activity was Rs 3420.48 millions of NTC in F/Y 20009/10. The average cash flow from all activity of NTC is Rs 949.516. The higher Average cash flow indicates that higher cash inflow from all activity in F/Y 2009/10. The lower cash flow from all activities i.e cash outflow in F/Y 2010/11. From analysis we can say NTC has good cash flow in the cash management. The following figure represents the cash flow from all activities.

4.2.4 Cash Position of NTC

Cash position of NTC is efficient. Present cash position of organization is measure by opening cash balance of particular fiscal year and cash flow of all activities. Present cash flow is transaction of all activities of particular year. Opening balance plus present cash flow both creates the closing balance of the particular fiscal year. So increases in cash flow create increase in closing balance and vice versa. That closing balance will be the opening balance of Next fiscal year. Following table show the cash flow position of NTC for the study period.

Table No. 4.4

Cash position of NTC

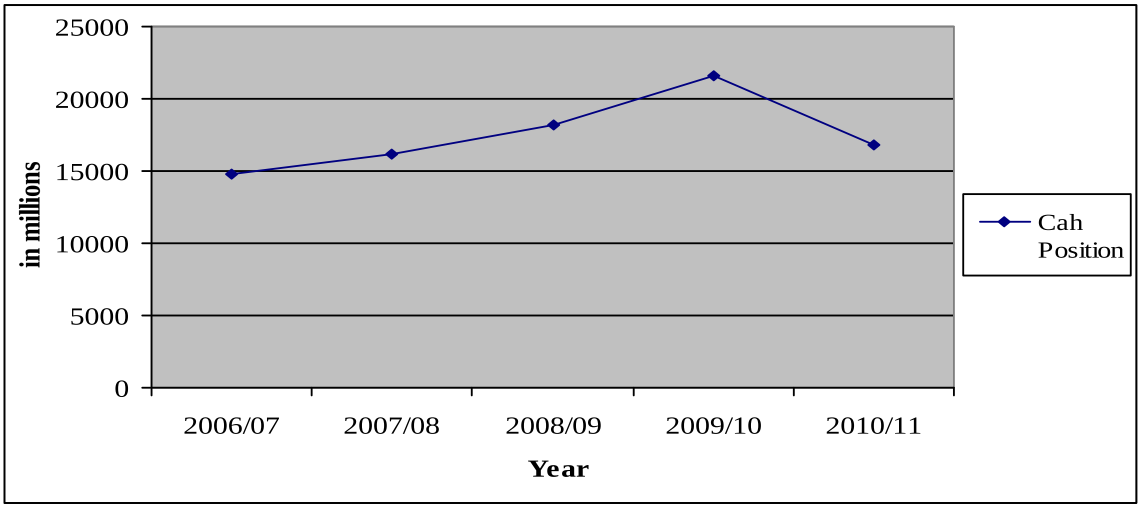
(Rs. In million)

Fiscal Year	Opening Balance	Cash flow	Closing Balance
2006/07	12021.62	2724.71	14746.34
2007/08	14746.34	1388.18	16134.52
2008/09	16134.52	2056.54	18191.06
2009/10	18191.06	3420.48	21611.54
2010/11	21611.54	(4842.33)	16769.21
Average	16541.016	949.516	17490.53

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.4

Cash Position of NTC



Above table show the cash position of NTC during the study period. Opening balance of NTC is increasing form during the study period. Cash flow from all activity of NTC is positive in every year beside last fiscal year 2010/11 of the study period. This indicates that the NTC has cash outflow is more than cash inflow. Similarly closing balance of NTC is increasing every year beside last fiscal year 2010/11 of the study period. Closing balance of NTC is lower and decreases in last year due to decrease of cash flow. The highest opening balance is Rs 21611.54in F/Y 2010/11 and lowest opening balance is 12031.62 million in F/Y 2006/07 similarly hinges closing balance is Rs 21611.54 in F/Y 2009/10 and lowest closing balance is 14746.34 in F/Y 2006/07. The highest cash inflow from all activity was Rs 3420.48 millions of NTC in F/Y 20009/10. The average opening cash balance is 16541.016 million. Similarly average cash flow from all activity of NTC is Rs 949.516 and average closing balance of NTC is 17490.53 million. So Increasing form of opening and closing balance of NTC indicate good cash turnover. From above analysis it concluded NTC has good cash flow in the cash management.

4.2.5 Total Income from Sale of Service

Main income source of NTC is sale of services. The NTC generate profit by Internal and external sources. Internal sources of financing of cash which were as Collection of revenue, Inter administration, Subscriber deposit, Sale of sets and other income. Those were main sources of financing to meet the expenditure of approved budget. The external source of cash is finance by international agencies. World Bank, Danish, NDF, Japanese, Korean and Belgium grants and loan etc. Only the external source used by NT was the Belgium loan. But the external source of financing was very nominal in total source of financing. From the study of actual collection of cash, it shows that the company could fulfill it fund needs by its own internal source.

Table No. 4.5

Total income of NTC for Periods Under study

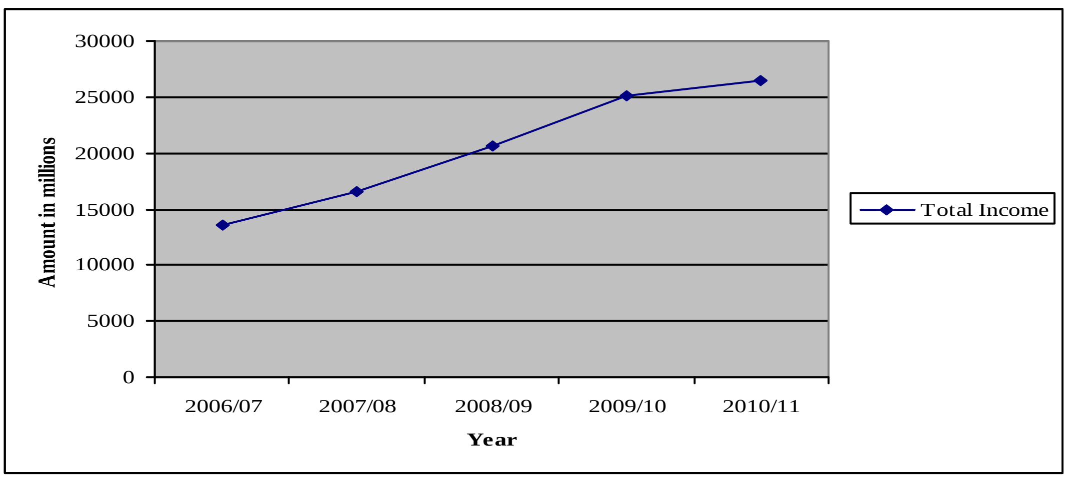
(Rs. In million)

Fiscal Year	Total Income	Increase (Decrease)	% change
2006/07	13524.4	-	-
2007/08	16624.2	3099.84	22.92
2008/09	20646.6	4022.42	24.20
2009/10	25058.3	4411.67	21.37
2010/11	26409.5	1351.2	5.39

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.5

Total income of NTC



Above table and figure shows the total income of NTC during the study period. There analyzed the total income from sale of good and services for fiscal year 2006/07 to F/Y 2010/11. The total income of NTC is increasing form. The highest cash balance is in F/Y 2010/11 and lowest cash balance is in F/Y 2006/07. Similarly highest increment of income is 4411.67 million in F/Y 2009/10. The highest percent of increment is 24.20% in F/Y 2009/10 and lowest increment is

5.39% in F/Y 2010/11. So continuously increasing total income from sales of services of NTC represents good condition. It means NTC continuously increasing its total income.

4.2.6 Analysis of Deposit

Deposit is the most crucial and important of any organization. It measures the strength of company. So every company keeps their certain amount as deposit. Deposit may be form as current saving and fixed deposit. Here under analyzed the fixed deposit of NTC. The high volume of deposit indicates more capacity to investment and better performance of company. A higher growth ratio indicate higher amount of deposit and vice-versa. It also indicates high growth of deposit better interest earning and liquidity position of company.

Table No. 4.6

Fixed Deposit of NTC for Periods under Study

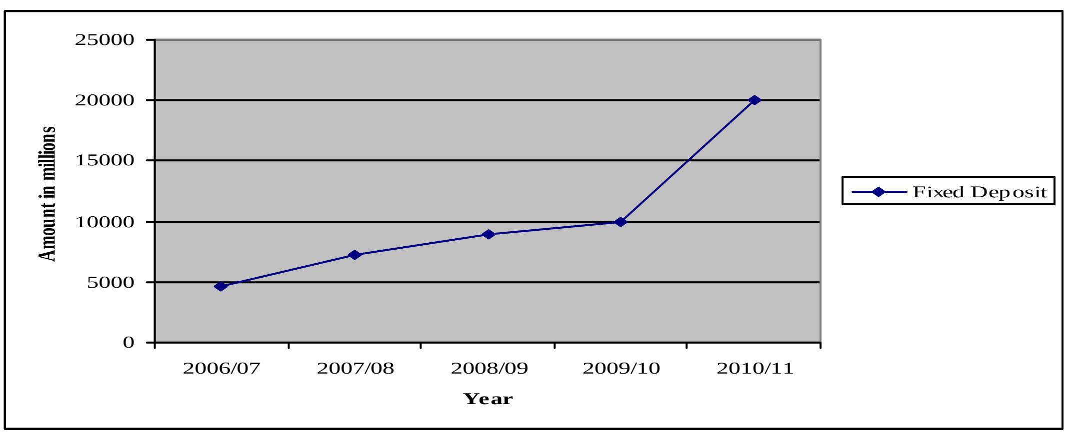
(Rs. In million)

Fiscal Year	Fixed Deposit	Increase (Decrease)	% change
2006/07	4587.2	-	-
2007/08	7218.2	2631	57.35
2008/09	8976.65	1758.45	24.36
2009/10	10007.5	1030.87	11.48
2010/11	20059.9	10052.33	100.45

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.6

Analysis of Fixed Deposit of NTC



The above table and figure shows amount of total deposit and its growth scenario of NTC during fiscal five year. As the table shows that the total deposit is positively growth every year. It indicates deposit of NTC increasing every year. The highest increase in the deposit Rs 10052.33 million and lowest increase Rs 1030.87 million in F/Y 20010/11 and 2009/10 respectively. The highest 100.45 percentage increases total deposit in F/Y 2010/11. Lower percent growth of total deposit increases during the year 2009/10 is just 11.48% in comparison to other years. Continue increment of fixed deposit of NTC indicate that the company has generating better cash management over study period. The following figure represents the growth of total deposit and Relative percentage Changes

4.2.7 Total investment of NTC under Study

Investment is most important part of any organization. The word investment conceptualized the investment of income, savings or other collected fund. The term investment is only possible where there adequate savings. Investment means to trade current funds for some expected stream of payment or benefits, which will exceed the current outlay by an amount of return or interest that will compensate the investor. In another words Investment means the sacrifice of certain present value for (Possible uncertain) future value.

Table No. 4.7

Total investment of NTC for Periods under Study

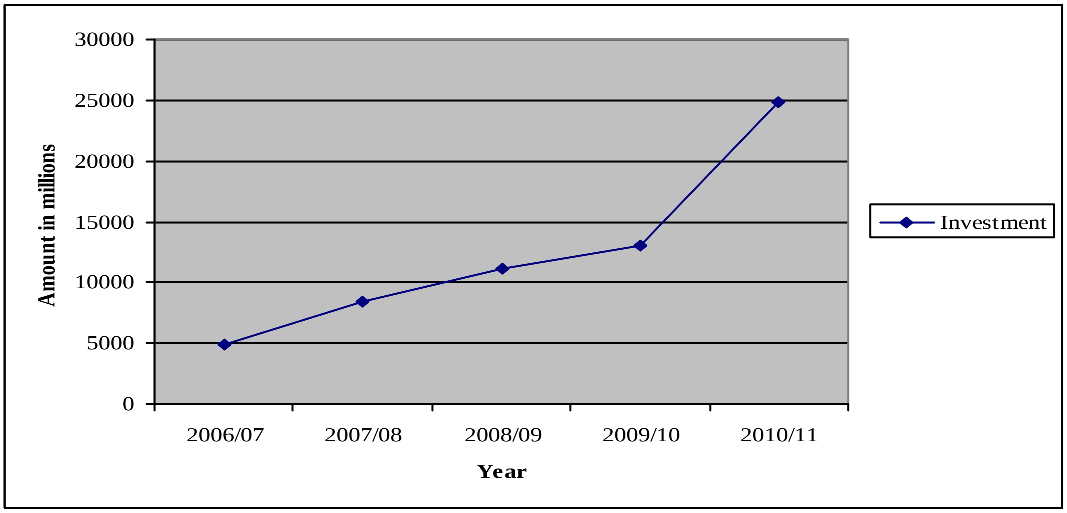
(Rs. In million)

Fiscal Year	Investment	Increase (Decrease)	% change
2006/07	4883.86	-	-
2007/08	8373.31	3489.45	71.45
2008/09	11167.4	2794.06	33.37
2009/10	13034.2	1866.85	16.72
2010/11	24891.97	11857.75	90.97

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.7

Analysis of Total investment of NTC



Above table and figure shows the total investment of NTC during the study period. The total investment of NTC is continuously increasing form. The lowest total investment is in F/Y 2006/07 and highest total investment is in F/y 2010/11. The highest increment of investment is 11857.75 million in F/Y 20010/11 and lowest increment is 1866.85 million in F/Y 2009/10. Similarly highest 90.97 and lowest 16.72 percent increase in investment in F/Y 2010/11 and 2009/10 respectively. So here continuously increasing total investment of NTC during the study period. Which indicates that more investment generates more cash and vice versa. So cash generation from investment of NTC is good.

4.2.8 Net Profit

Net profit is final income of organization. The main objective of company is go gain profit. Net profit is deductions all expenses such as cost, bonus to employees, taxes and provisions have been used in this analysis. The volume of net profit measures the success of a firm in every aspect of its operation and strategy. Without profit no one company can be run.

Table No. 4.8

Net profit of NTC for Periods under Study

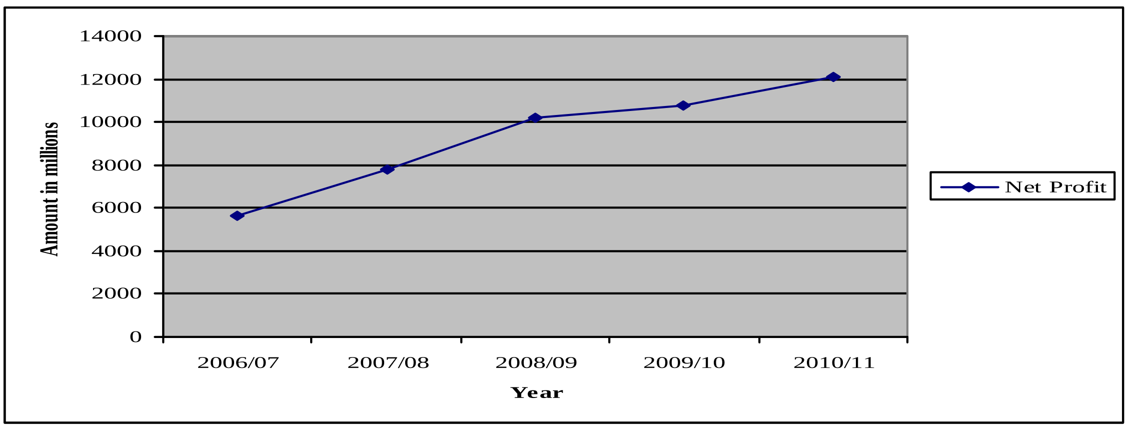
(Rs. In million)

Fiscal Year	Net Profit	Increase (Decrease)	% change
2006/07	5652.69	-	-
2007/08	7778.75	2126.06	37.61
2008/09	10178	2399.27	30.84
2009/10	10775.2	597.13	5.87
2010/11	12120.3	1345.15	12.84

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.8

Analysis of Net profit of NTC



The above table and figure shows the net profit of NTC. The net profit of NTC has increasing all over the years. Lowest net profit of NTC is 5652.69 million during the year 2006/07 and highest net profit of NTC is 12120.30 million in F/Y 2010/11. The profit increases by Rs 2126.06,Rs 2399.27, 597.13 and 1345.15 million increases in fiscal year 2007/08, 2008/09, 2009/10 and 2010/11 respectively. The highest growth is in F/Y 2008/09 and lowest growth is in F/Y 2009/10. Similarly highest increment rate is 37.61% in F/Y 2006/07 and lowest increment is 5.87% in 2009/10. However, growth of NTC can be termed as excellent, if we consider other factors constant and observe in term of net profit only. There is a regular increment over all the years. Profit is the major constraint of cash generation. So cash management of NTC term as excellent.

4.2.9 Analysis of Account Receivable

The company operates its transactions both on cash and credit basis. Generally credit sales called as receivable. Account receivable is amount of money owed to a firm by customer who bought good and service on credit. Debtors or account receivable are to be converted into cash over a short period and therefore are included in the current assets. Account receivable turnover in relationship between actual sales and collection period. If turnover is high then there would be little congestion of fund in turnover and vice versa. The analysis of account receivable turnover time is shown in the following table.

Table No. 4.9

Analysis of A/R of NTC for Periods under Study

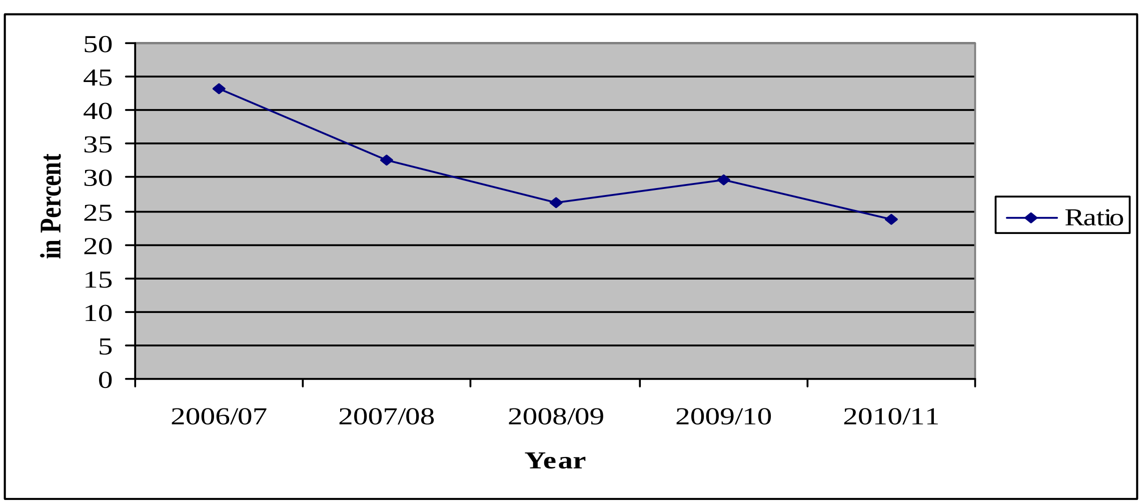
(Rs. In million)

Fiscal Year	account Receivable	Operating income (Sales)	Ratio (in times)
2006/07	3455.51	7983.32	43.28
2007/08	3482.61	10707.3	32.52
2008/09	3593.21	13634	26.35
2009/10	4295.99	14441.1	29.75
2010/11	3904.74	16389.6	23.82

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.9

Trend Line of Analysis of Account Receivable



Above table and figure shows the account receivable, operating sales and efficiency of trade credit management. The efficiency of trade credit sale of NTC is decreasing form, which indicates NTC doing better performance in its receivable. The highest receivable is in F/Y 2009/10 and lowest receivable is in F/Y 2006/07. A similarly higher sale is in F/Y 2010/11 and a lowest sale is in 2006/07 respectively. The turnover ratio is lowest in F/Y 2010/11 and highest in 2006/07. So prompt collection or decreasing receivable indicates highly cash turnover of NTC. So receivable is good for cash management of NTC. The higher the turnover ratio and shorter the average collection period, the better the trade credit management and the better the liquidity of debtors, as short collection period and high turnover ratio imply prompt payment on the part of debtors. On the other hand, low turnover ratio and long collection period reflects that payments by debtors are delayed. In general, therefore, short collection period (high turnover) ratio is profitable.

4.2.10 Average collection period

The average collection period is time where all receivable converted in cash. The period of time where credit sales convert in cash. The objective of collection not only minimized bad debts but also maximize the value of firm. The average collection period can be ascertained by dividing the month (days) in a year by the debtor's turnover. Account receivable turnover is calculated dividing operating sales by total receivable of firm.

Formula:

Average Collection Period = $\frac{Days\sin aYear}{Interest\,\mathrm{Re}ceivable}$

The average collection period of NTC is shown below:

Table No. 4.10

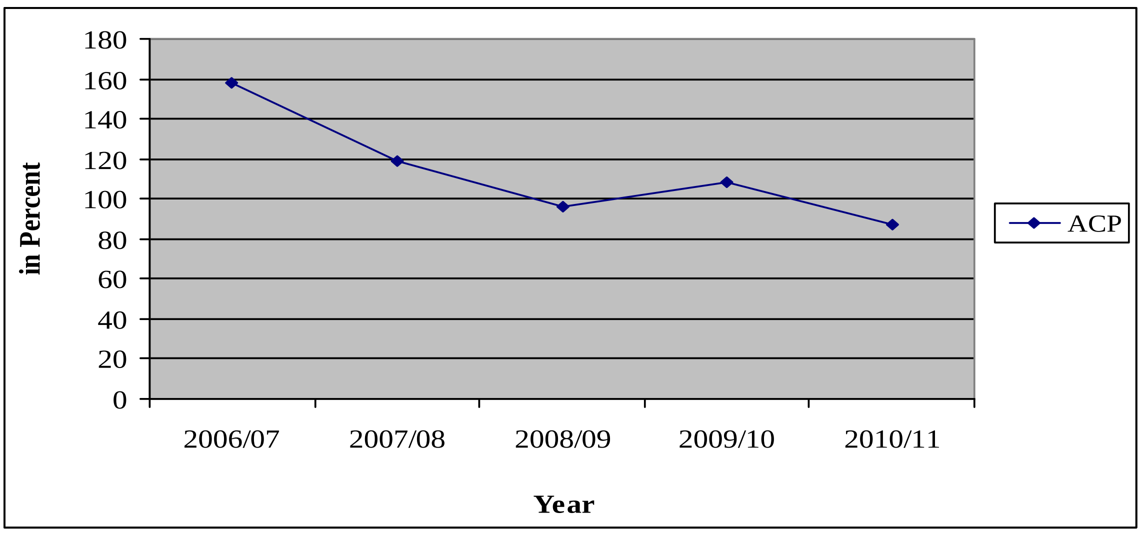
Average Collection Period of NTC for Periods under Study

Fiscal Year	A/R turnover receivable	Day in a Year	Average Collection Days
2006/07	2.31	365	157
2007/08	3.07	365	118
2008/09	3.79	365	96
2009/10	3.36	365	108
2010/11	4.20	365	87

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.10

Trend Line of Average Collection Period



The table and figure 4.10 shows the average collection periods of NTC during the study period. The average collection periods of NTC is decreasing trend. This means credit sale of NTC is decreasing form. If ratio is high, which convey the information that the company is unable to collect it's receivable. However, collection period is decreasing. The highest collection period is in F/Y 2006/07 and lowest collection period is 87 day in F/Y 2010/11. The NTC has perfect collection policy and it should try to maintain its collection days, other wise there is no chance to be good. So NTC doing better for decreasing its collection period.

4.3 Ratio Analysis

Ratio analysis shows the mathematical relationship between two accounting figures. It helps to analyze the financial strengths and weaknesses of the organizations. It is also inevitable for the quantitative judgment with which the financial performance of organizations can be presented properly. Ratio analysis is also concerned with output and managerial decision. Four main categories of ratios have been taken in this study that is mainly related to cash management of NTC.

4.3.1 Analysis of Current Ratio

This ratio indicates the current short-term solvency position of NTC. Higher current ratio indicates better liquidity position. In other words, current ratio represents a margin of safety, i.e. a ‘cushion’ of protection for creditors and the highest the current ratio, greater the margin of safety, large the amount of current assets in relation to current liabilities, more the company ability to meet its current obligations. It is calculated as follows:

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilitie}}$$

It is the ratio of current assets to current liabilities. It is also called working capital. Generally ratio between CA and CL is accepted at twice time lower the CR is good indicators of company called good liquidity position and vice versa. But it is the indicators of idle funds and if the ratio is less then 2, difficulty may be experienced in the payment of current liabilities and day to day operations of the business may suffer. We have taken standard figure to evaluate the current ratio of NTC during the study period. The current ratio of NTC is shown as below.

Table No. 4.11

Analysis of Current Ratio of NTC

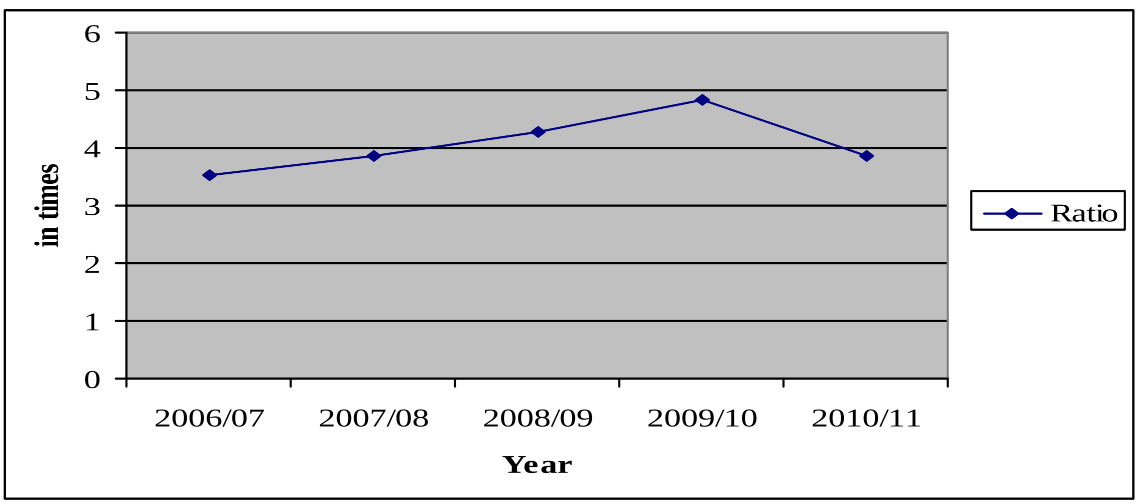
(Rs. In million)

Fiscal Year	Current Assets	Current liabilities	Ratio (CA/CL)
2006/07	23618.25	6715.88	3.52
2007/08	25000.47	6478.04	3.86
2008/09	28837.29	6718.05	4.29
2009/10	33555.58	6929.34	4.84
2010/11	30379.04	7858.02	3.87
Average			4.07

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.11

Current Ratio of NTC



The table 4.1 and figure shows the current assets to current liabilities ratio of NTC. The current ratio of NTC increasing beside last fiscal year 2010/11. The highest ratio is 4.84 times in year 2009/10 and lowest ratio 3.52 times in year 2006/07. The current mean ratio is 4.07 times. The current ratios of first two year and last year are lower than average ratio and else two year is higher than mean ratio. In the beginning and last of study year the current ratio are lower than standard ratio. While observing the average current ratio it is notices that the NTC has more than the standard ratio, which is easily able to meet its short term obligation. So liquidity position of NTC is very high.

4.3.2 Cash balance to current asset ratio

Cash is the most important current asset for the operation of the corporation. The company should sufficient cash neither more or less. Cash balance to current asset ratio measures the condition of cash from its total current asset. Its measures the proportions of cash balance from its current asset.

Table No. 4.12

Cash balance to Current asset Ratio of NTC

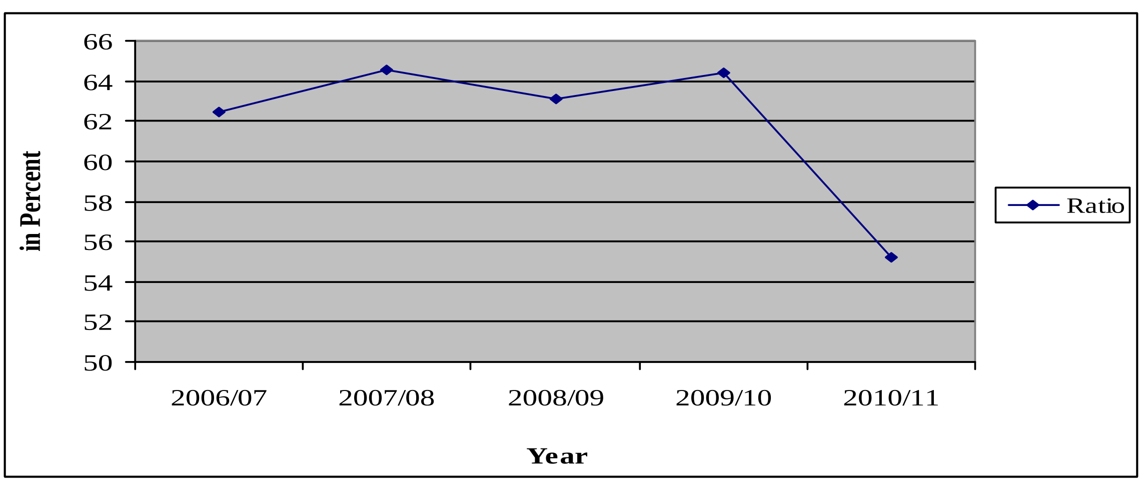
(Rs. In million)

Fiscal Year	Cash Balance	Current Asset	Ratio (%)
2006/07	14746.34	23618.3	62.44
2007/08	16134.52	25000.5	64.54
2008/09	18191.06	28837.3	63.08
2009/10	21611.54	33555.6	64.41
2010/11	16769.2	30379	55.20
Average			61.93

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No 4.12

Cash balance to Current asset Ratio of NTC



The table and figure 4.12 shows the cash balance to current asset ratio of NTC. The cash balance to current asset ratio of NTC has fluctuating form during the study period. The highest ratio is 64.54 percent in fiscal year 2007/08 and lowest ratio is 55.20 percent in fiscal year 2010/11. The average mean cash balance to current asset ratio is 61.93 percent. It indicates that cash balance ply dominant role in its total current asset. That means 61.93 percent of NTC has cash balance from its current asset. While observing the average ratio, The NTC has sufficient amount as cash balance.

4.3.3 Analysis of Account Receivable to Cash and Bank Balance

Cash and bank balances measure the relationship between level of cash and bank to account receivable over a period of time. The greater the account receivable better the cash turnover would be provided that cash and bank balance can be maintained at a desirable level. The following table shows the relationship of account receivable to cash and bank balances of NTC.

Table No. 4.13

A/R to Cash and Bank Balance for NTC for Periods under Study

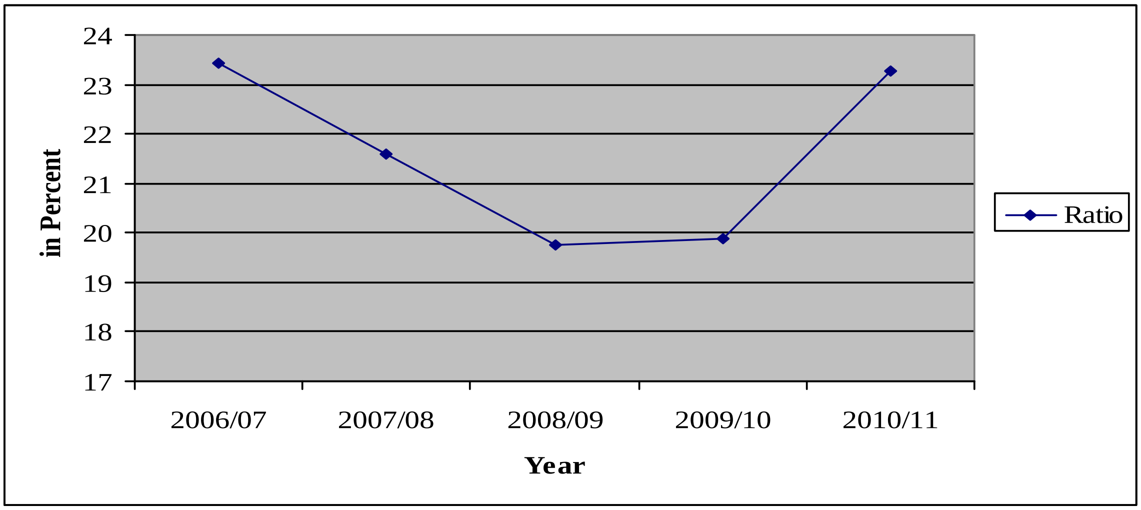
(Rs. In million)

Fiscal Year	Account Receivable	Cash in hands/Bank sales	Ratio (%)
2006/07	3455.51	14746.3	23.43
2007/08	3482.61	16134.5	21.58
2008/09	3593.21	18191.1	19.75
2009/10	4295.99	21611.5	19.88
2010/11	3904.74	16769.2	23.28

Source: Annual Report of NTC (2006/07 - 2010/11)

Figure No. 4.13

Trend Line of Analysis of Cash and Bank Balance



Above table shows the account receivable to cash balance of NTC. The account receivable to cash balance of NTC is decreasing till F/Y 2008/09 and increasing slowly thereafter, the highest ratio is in F/Y 2006/07 and lowest ratio is in F/Y 2008/09. The ratio indicates that at end of year increasing that indicates that receivable is high and cash is low. which shows that management is less concerned to speed up collection of AR. Evaluating this situation cash balance is satisfactory, this can be said that higher account receivable caused lower cash balance and vice versa. Thus management should follow stringent credit policy to increase cash balance to maintain at a desired level of cash balance.

4.4 Statistical Analysis

Under this heading some statistical tool such as coefficient of correlation analysis between different variables, trend analysis of cash management related variable are used to achieve the objective of the study.

4.4.1 Correlation Coefficient

Correlation coefficient is used to define the relationship between two or more variable. Coefficient of correlation has been studied to find out whether the two available variables are inter-correlated or not. If the result falls with in the correlated point, the two variables are inter-correlated otherwise not. Now to find out the correlation coefficient between total lending and total assets, the widely used method of Karl Pearson's Coefficient of Correlation has been adopted.

Coefficient of Correlation (r) $= \dfrac{N\sum xy - (\sum X)(\sum Y)}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$

Here,

N = Number of pairs of x and y observed.

x = values of credit and advances.

y = values of total assets.

r = Karl Pearson's Coefficient of Correlation.

Probable Error

Probable error of the coefficient of correlation can also be calculated from S.E. of the coefficient of correlation by the following formula:

Probable Error (P.E.) = 0.6745 × $\dfrac{1 - r^2}{\sqrt{n}}$

Where r = coefficient of correlation

n = no of observations

The probable error is used to test whether the calculated value of correlation significant or not.

If r < 6 × P.E(r), then the value of r is not significant

If r > 6 × P.E(r), then the value of r is significant

In this course of study, correlation coefficient and probable error is used to measure sample the relation ship between.

- Cash Balance and Actual sale
- Cash Balance and current asset
- Receivables and actual sales
- Net profit and sales

A. Correlation between Cash Balance and Actual Sales

To find out the correlation between sales and cash balance Karl Pearson's co-efficient of correlation (r) is determined. For this purpose cash balance (x) are assumed to be dependent variable and actual income from sales (y) are assumed to be independent variable. It is assumed that actual sales will increase as cash balance will increase or vice versa it means there should be positive correlation between cash balance and actual sales significance of correlation (r) is tested with probable error of “r".

Table No. 4.14

Correlation between Cash balance and Actual Sales

Company	**Evaluation Criterions**				
	Correlation Coefficient (r)	Coefficient of determination (r^2)	P Err.	6 P Err.	Remarks
NTC	0.683	0.4661	0.1611	0.9663	insignificant

Source: *Through SPSS Data Editor*

The above table shows the correlation coefficient between cash balance and actual sales from income of NTC. The correlation coefficient between cash balance and actual sales is 0.683. There is positive correlation between cash balance and actual sales. The coefficient of determination is 0.4661, which depicts that 46.61% of cash is explained by the actual sales. Least is determined by other factor. Probable error (P.E.) is 0.01611 and 6 P Err. is 0.9663. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, ‘r’ is lower than 6 P.E. then there is evidence of insignificant correlation between cash and income from sales. That further reveals there is insignificant relationship between cash and income from sales of NTC.

B. Correlation between Cash Balance and current asset

The coefficient of correlation between cash balance and current asset measures the degree of relationship between these two variables. The following table shows the coefficient correlation between cash balance and current asset i.e. r, P. Er., 6 P. Er. and coefficient of determination (R^2) of NTC during the study period. The table 4.10 shows represent the correlation coefficient between cash balance and current asset.

Table No. 4.15

Correlation between Cash & balance and Current Asset

Company	**Evaluation Criterions**				
	Correlation Coefficient (r)	Coefficient of determination (r^2)	P Err.	6 P Err.	Remarks
NTC	0.897	0.8053	0.0587	0.3523	Significant

Source: *Through SPSS Data Editor*

The above table shows the coefficients of correlation between cash balance and current assets of NTC. The correlation between cash balance and current assets of NTC is 0.897. It shows the highly positive correlation between these two variables. So both ash balance and current assets move same direction. In addition, coefficient of determination of NTC is 0.8053. It means there is 80.53 percent of cash is contribute by current asset. The correlation coefficient is significant because the correlation coefficient is more than 6 P Err. It refers that there is significant relationship between cash balance and current asset. The conclusion can be drawn that the NTC has significant correlation between h balance and current assets.

C. Correlation between Receivable and Sales

Sales are important part of organization. The coefficient of correlation between receivable and sales of good and services measures the degree of relationship between these two variables. The following table shows the coefficient correlation between account receivable and sales as well as coefficient of determination (R^2), P. Err., 6 P. Err and remarks of NTC during the study period. The following table shows represent the correlation coefficient between account receivable and sales. Following analysis shows the correlation between receivable and sales based on year's figures.

Table No 4.16

Correlation between Receivable and Total Income

Company	**Evaluation Criterions**				
	Correlation Coefficient (r)	Coefficient of determination (r^2)	P Err.	6 P Err.	Remarks
NTC	0.252	0.0637	0.2825	1.6947	insignificant

Source: *Through SPSS Data Editor*

The above table 4.16 shows the correlation coefficient between account receivable total income sales of NTC. The correlation coefficient between receivable and total income is 0.252. There is lower positive correlation between receivable and total income from sales. The coefficient of determination is 0.0637, which depicts that only 6.37% of receivable is happened by the total income of sales. Probable error (P.E.) is 0.02825 and 6 P Err. is 1.6947. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, 'r' is smeller than 6 P.E. then there is evidence of insignificant correlation between receivable and total income from sales of services. That further reveals there is insignificant relationship between receivable and income from sales of services of NTC.

D. Correlation between net profit and Sale

Co-efficient of correlation between net profit and actual sales is used to measure the degree of relationship between two variable i.e. net profit and sales of NTC during the study period. Where sale is independent variable (X) and net profit is dependent variable (Y). This ratio determine the degree of relationship whether there the net profit is significantly correlated or not and the variation of net profit to total sales through the coefficient of determination.

Table No. 4.17

Correlation between Net Profit and Income from Sales

Company	**Evaluation Criterions**				
	Correlation Coefficient (r)	Coefficient of determination (r^2)	P Err.	6 P Err.	Remarks
NTC	0.975	0.9505	0.0149	0.0895	Significant

Source: *Through SPSS Data Editor*

The above table shows the correlation coefficient between net profit and income form sales of NTC. The correlation coefficient between net profit and income form sales is 0.975. There is highly positive correlation between net profit and income form sales of NTC. The coefficient of determination is 0.9505, which depicts that 95.05% of profit is explained by the sales. Probable error (P.E.) is 0.0149 and 6 P Err. is 0.0895. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, 'r' is greater than 6 P.E. then there is evidence of significant correlation between profit and sales. That further reveals there is significant relationship between income form sales and net profit of NTC.

4.5 Trend Analysis

Trend analysis helps in forecasting and planning future operation. Trend analysis is a statistical tool, which shows the previous trend of the performance and forecasts the future results of the NTC. Here, trend analysis of cash balance, account receivable, current asset and net profit are projected for the five years. The measure of trend analysis shows the behavior of given variables in series of time. Trend analysis is based on some assumptions;

- All the other things will remain unchanged.
- The company will run in present condition.
- The economy will remain in present stage.
- Authority body will not change its guidelines.

a) Trend Analysis of Cash Balance

Cash balance is rupee which company holds as cash and bank balance. Cash is the important part in any corporation. Hence its trend for next five years will be forecasted for future analysis. This is calculated by the least square method. Here the effort has been made to calculate the trend values of cash balance of NTC for further five years.

Y= a + bx

Where,

Y = dependent variable

a =Y- intercept, b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Table No 4.18

Trend Analysis of Cash Balance of NTC

(Rs. In million)

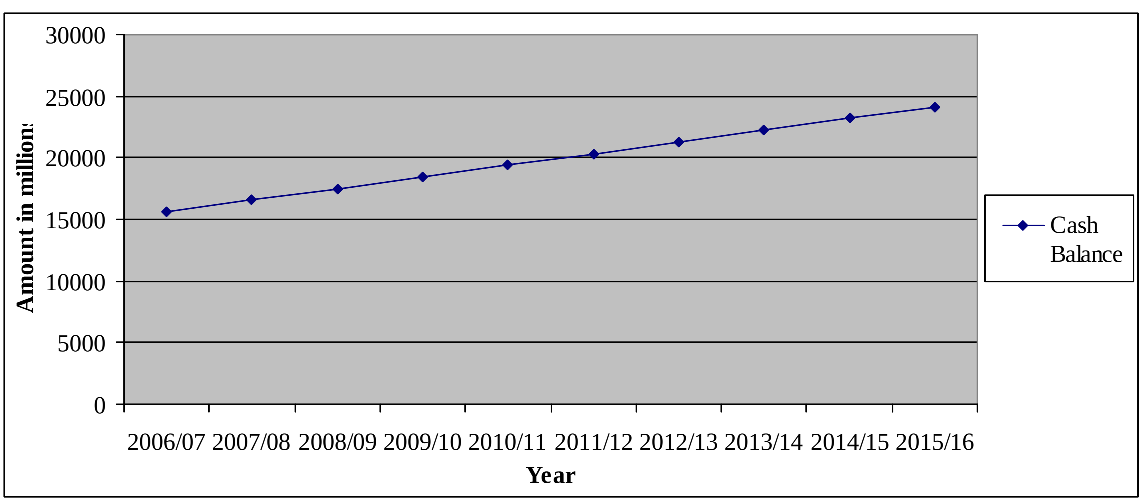
Year	Cash Balance
2006/07	15585.984
2007/08	16538.258
2008/09	17490.532
2009/10	18442.806
2010/11	19395.08
2011/12	20347.354
2012/13	21299.628
2013/14	22251.902
2014/15	23204.176
2015/16	24156.45

Source: Annual Report of NTC (Appendix – 1)

The following graph helps to show the trend lines of cash balance for the projected five years. The equation is Y = 17490.532+952.274*X

Figure No. 4.14

Trend line of cash balance of NTC



Above table and figure shows the cash balance of NTC. The trend of cash of NTC is increasing trend. In other words the trend of cash balance of NTC forecasted increasing. It is good for company. It is better for company but this type of increment should maintain regularly. The trend analysis has projected net profit for fiscal year FY 2010/11 to FY 2015/16. The following figure helps to show the trend lines of cash balance for the projected five years of NTC.

B. Trend Analysis of Account Receivable:

Account Receivable is most important part of company. Under this topic, an attempt has been made to analyze trend analysis receivable of NTC of F/Y 2010/11 to for further five years 20015/16.

Y= a + bx

Where,

Y = dependent variable,

a =Y- intercept, b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Table No 4.19

Trend Analysis of Account Receivable

(Rs. In million)

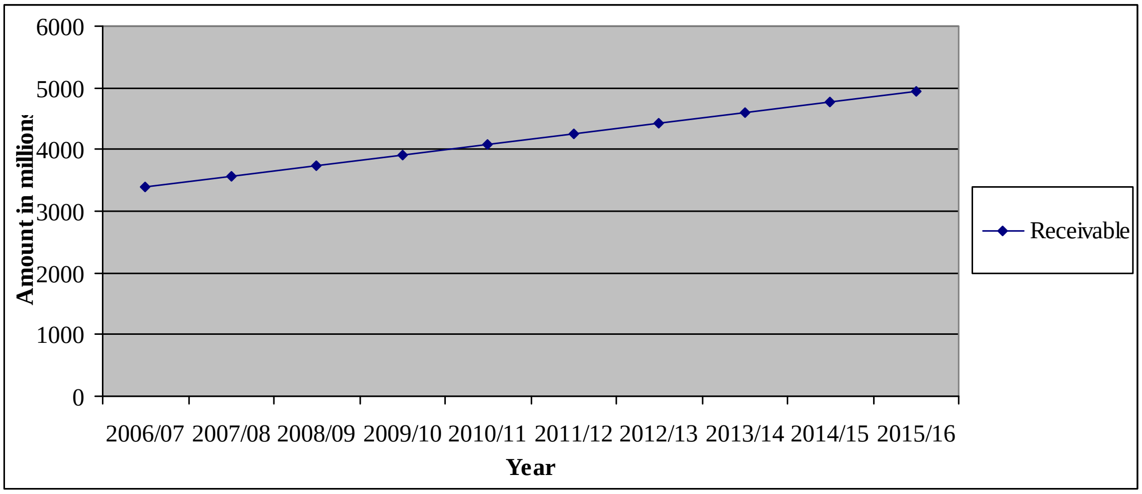
Year	Account Receivable
2006/07	3404.044
2007/08	3575.228
2008/09	3746.412
2009/10	3917.596
2010/11	4088.78
2011/12	4259.964
2012/13	4431.148
2013/14	4602.332
2014/15	4773.516
2015/16	4944.7

Source: Annual Report of NTC (Appendix – 2)

The following graph helps to show the trend lines of account receivable for the projected five years. The equation is Y = 3746.412 + 171.184*X

Figure No. 4.15

Trend Analysis of Account Receivable



Above table and figure shows trend values of account receivable of NTC. The trend shows that of receivable of NTC is increasing trend. The increment of receivable of NTC seems to be lower. So receivable of NTC increasing but slowly this is considerable for company. The trend analysis has been projected for further five year fiscal year FY 2010/11 to FY 2015/16.

C. Trend Analysis of Current Asset:

Current asset is the main part of any organization. Current asset is the main property of an organization. Under this topic, an attempt has been made to analyze trend analysis current asset of NTC of F/Y 2010/11 to for further five years 20015/16.

Y= a + bx

Where,

Y = dependent variable,

a =Y- intercept, b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Table No. 4.20

Trend Analysis of Current Asset

(Rs. In million)

Year	Current Asset
2006/07	23862.788
2007/08	26070.457
2008/09	28278.126
2009/10	30485.795
2010/11	32693.464
2011/12	34901.133
2012/13	37108.802
2013/14	39316.471
2014/15	41524.14
2015/16	43731.809

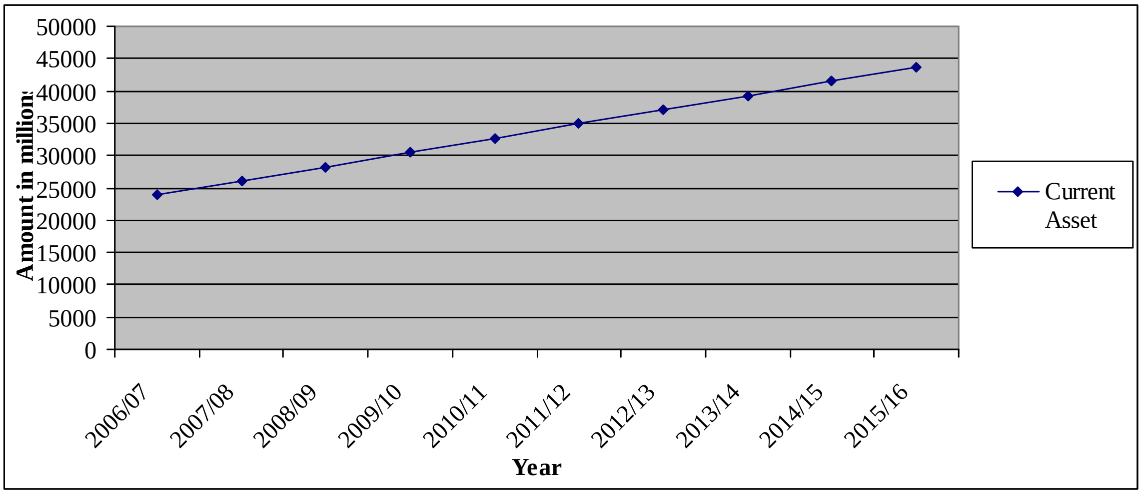
Source: Annual Report of NTC (Appendix – 3)

The following graph helps to show the trend lines of Current Asset for the projected five years.

The equation is Y = 28278.126 + 2207.669*X

Figure No. 4.16

Trend line of Current Asset



Above table and figure shows that trends of current assets of NTC. The trend of Total Assets of NTC is in increasing trend. The rate of increment of current assets for NTC seems to be moderately increasing trend. It is better for company. This type of increment should maintain regularly. The trend analysis has projected current asset for further five fiscal year 2010/11 to FY 2015/16.

D. Trend Line of Net profit

Net profit is final income of organization. NTC has also conscious towards its higher net profit. The trend values of net profit of NTC have been calculated for five years. The trend of Net profit forecasted based on F/Y 20010/11 to for further five year F/Y 2015/16.

$Y = a + bx$

Y = dependent variable,

a =Y- intercept, b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Table No 4.21

Trend Analysis of Net profit

(Rs. In million)

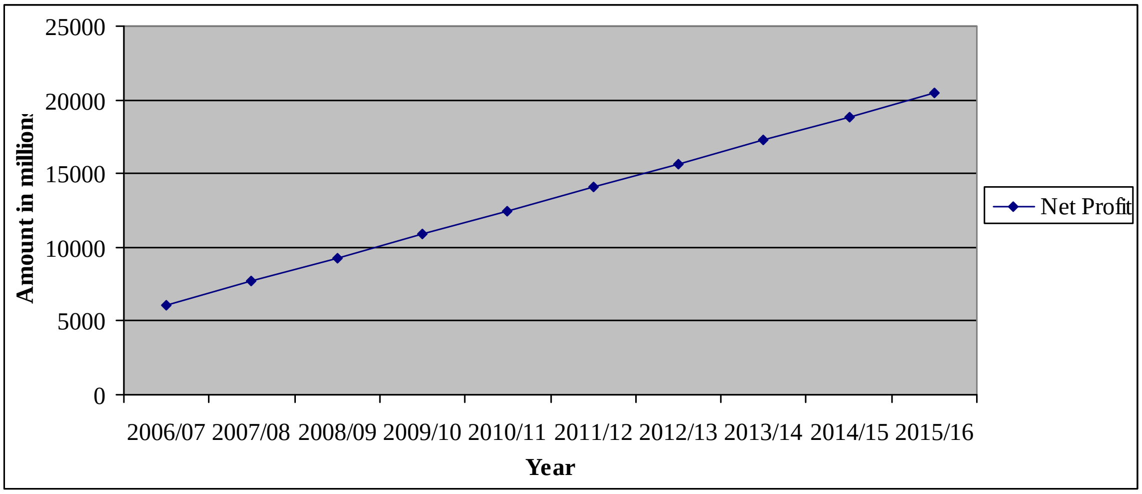
Year	Net Profit
2006/07	6114.658
2007/08	7707.82
2008/09	9300.982
2009/10	10894.144
2010/11	12487.306
2011/12	14080.468
2012/13	15673.63
2013/14	17266.792
2014/15	18859.954
2015/16	20453.116

Source: Annual Report of NTC (Appendix – 4)

T0he following graph helps to show the trend lines of Net profit for the projected five years. The equation is Y = 9300.98+1593.162*X

Figure No. 4.17

Trend Line of Net Profit



Above table and figure shows that net profit of NTC. The trend of net profit of NTC is increasing trend. In other words the trend of net profit of NTC forecasted increasing. It's really good for company. It is better for company but this type of increment should maintain regularly. The trend analysis has projected net profit for fiscal year FY 2010/11 to FY 2015/16. The following figure helps to show the trend lines of Net profit for the projected five years of NTC.

4.6 Major finding of the Study

- The cash balance of NTC is increasing beside last fiscal year. The highest cash balance is Rs 21611.5 millions and lowest cash balance is Rs 14746.3millions. Similarly highest increment of cash balance is 18.80 percent. The NTC is trying to maintain stable cash balance.

- The cash turnover of NTC is increasing form. The highest ratio is 97.74 times and lowest ratio is 54.14 times. This means cash generation from sales of services is highly increasing. So, the relation between cash and operating profit is positive. It means the

NTC is able to capture it's income in time. In this point of view operating income of NTC is very good and cash balance is high enough.

- Cash flow from all activity of NTC is positive in every year beside last fiscal year. Which indicates that the NTC has cash outflow is more than cash inflow from all activity in last year. The average cash flow from all activity of NTC is Rs 949.516. The cash management of NTC is good.

- The closing balance of NTC is increasing every year beside last fiscal year 2010/11 of the study period. Closing balance of NTC is lower and decreases in last year due to decrease of cash flow. The average opening cash balance is Rs 16541.016 million. Increasing form of opening and closing balance of NTC indicate good cash turnover.

- The total income of NTC is increasing form. The highest cash balance is Rs 26409.5 and lowest cash balance is in Rs 13524.4 million. Similarly highest increment of income is Rs 4411.67 million and highest increment is 24.20 percent and lowest increment is 5.39 percent. So continuously increasing total income from sales of services of NTC represents good condition.

- The amount of total deposit and its growth scenario of NTC is increasing. The total deposit is positively growth every year. It indicates deposit of NTC increasing every year. The highest increment is 100.45 percent lowest increment of total deposit is just 11.48%. Continue increment of fixed deposit of NTC indicate that the company has generating better cash management from income.

- The total investment of NTC is continuously increasing form. The lowest total investment is Rs 4883.86 and highest total investment is Rs 24891.97 million. The highest increment of investment is Rs 11857.75 million and lowest increment is Rs 1866.85 million. So continuously increasing total investment creates more cash of NTC.

- The net profit of NTC has increasing all over the study years. Lowest net profit of NTC is Rs 5652.69 million and highest net profit of NTC is Rs 12120.30 million. Similarly highest increment rate is 37.61% and lowest increment is 5.87%. The growth of net profit of NTC is excellent. Profit is the major constraint of cash generation. So cash management of NTC term as excellent.

- The efficiency of trade credit sale of NTC is decreasing form, which indicates NTC doing better performance in its receivable. The highest receivable is 43.28 percent and lowest receivable is 23.82 percent. The turnover ratio is lowest in F/Y 2010/11 and highest in 2006/07. The higher the turnover ratio and shorter the average collection period, the better the trade credit management and the better the liquidity of debtors, as short collection period and high turnover ratio imply prompt payment on the part of debtors. So prompt collection or decreasing receivable indicate highly cash turnover. So receivable is good for cash management of NTC.

- The average collection periods of NTC is decreasing trend. This means credit sale of NTC is decreasing form. If ratio is high, which convey the information that the company is unable to collect it’s receivable. However, collection period is decreasing. The highest collection period is 157 day in F/Y 2006/07 and lowest collection period is 87 day in F/Y 2010/11. The NTC has perfect collection policy and it should try to maintain it’s collection days, other wise there is no chance to be good. So NTC doing better for decreasing its collection day.

- The current ratio shows the current assets to current liabilities ratio of NTC is increasing beside last fiscal year 2010/11. The highest ratio is 4.84 times and lowest ratio 3.52 times. The average mean current ratio is 4.07 times. The current ratio of NTC has more than the standard ratio, which is easily able to meet its short term obligation. So liquidity position of NTC is very high.

- The cash balance to current asset ratio of NTC has fluctuating during the study period. The highest ratio is 64.54 percent and lowest ratio is 55.20. The average mean cash balance to current asset ratio is 61.93 percent. It indicates that cash balance play dominant role in its total current asset. That means 61.93 percent of NTC has cash balance from its current asset. While observing the average ratio, The NTC has sufficient amount as cash balance.

- The account receivable to cash balance of NTC is decreasing beside last fiscal year. The highest ratio is 23.43 and lowest ratio is 19.75 percent. The ratio indicates that at end of year increasing indicate that receivable is high and cash is low. Which shows that the management is less concerned to speed up collection of its receivable. Evaluating this situation cash balance is satisfactory, this can be said that higher account receivable caused lower cash balance and vice versa.

- The correlation coefficient between cash balance and actual sales is 0.683. There is positive correlation between cash balance and actual sales. The coefficient of determination is 0.4661, which depicts that 46.61% of cash is explained by the actual sales. Least is determined by other factor. There is evidence of insignificant correlation between cash and income from sales. That further reveals there is insignificant relationship between cash and income from sales of NTC.

- The correlation between cash balance and current assets of NTC is 0.897. It shows the highly positive correlation between these two variables. So both ash balance and current assets move same direction but not proportionately. In addition, coefficient of determination of NTC is 0.8053. It means there is 80.53 percent of current asset is contributed by cash. The correlation coefficient is significant because the correlation coefficient is more than 6 P Err. The NTC has significant correlation between cash balance and current assets.

- The correlation coefficient between receivable and total income is just 0.252. There is lower positive correlation between receivable and total income from sales. The coefficient of determination is 0.0637, which depicts that only 6.37% of receivable is happened in the total income of sales. There is insignificant correlation between receivable and total income from sales of services. The relationship between receivable and income from sales of services of NTC is insignificant.

- The correlation coefficient between net profit and income form sales is 0.975. There is highly positive correlation between net profit and income form sales of NTC. The coefficient of determination is 0.9505, which depicts that 95.05% of profit is explained by the sales least is determined by other factor. There is evidence of significant correlation between profit and sales. The significant relationship between income form sales and net profit of NTC.

- The trend of cash of NTC is increasing trend. The trend of cash balance of NTC forecasted increasing. It is good for company. It is better for company but this type of increment should maintain regularly.

- The trend shows that of receivable of NTC is increasing trend. The increment of receivable of NTC seems to be lower. So receivable of NTC increasing but slowly this is considerable for company. It is better to decrease. The trend analysis has been projected for further five year fiscal year FY 2010/11 to FY 2015/16.

- The trend of Total Assets of NTC is in increasing trend. The rate of increment of current assets for NTC seems to be moderately increasing trend. It is better for company. Which indicate better liquidity and solvency power. This type of increment should maintain regularly.

- The trend of net profit of NTC is increasing trend. The trend of increasing net profit of NTC is awesome. It’s really good for company. It is better for company but this type of increment should maintain regularly. Because generating profit is main objective of company.

CHAPTER – V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This research has been undertaken to evaluate the cash management of corporation. The research is about the study on cash management of Nepal Telecom Nepal Limited. In this chapter, summary, conclusion and recommendation are included. All the summary and conclusion are made according to obtained data from analysis.

5.1 Summary

This research has been study of cash management of organization. The NTC has been selected for the study and a five year financial statement of respective company has been used for the study. The study has been divided into five chapters which include introduction, review of literature, research methodology, data presentation and analysis and summary, conclusion and recommendation. This study mainly based in secondary data, with include published annual report of NTC and other publication. Other related information was collected from the NTC office and website as well as from company register office, NEPSE, Securities Board of Nepal and different websites. The data have been analyzed by using financial and statistical tools.

The research is about cash management analysis of NTC. The researcher has identified that research problem and set objectives to solve research problems about cash management of NTC as described in introduction chapter. The main objective of the study is to examine the cash management, liquidity position and receivable of NTC. The specific objectives of the study are to Study the overall cash management practices of NTC, to examine the sales, receivable, investment and profit of NTC as well as liquidity position of NTC and evaluate the relation of cash with other variable of NTC and offer suitable suggestions. There related literatures have been reviewed for more effective. This section includes conceptual review and review of related studies. In conceptual review includes meaning and concept of cash management, efficiency and technique of cash management, principle, objective of cash management and cash management model and cash cycles. In the review of related studies includes review of books, journal and articles and review of previous thesis as well.

Research methodology has been described in third chapter, which is a way to solve the research problems with the help of various tools and techniques. This chapter includes the various financial as well as statistical tools to analyze the data. This chapter includes the research design, population and sample data collection procedure, data period covered and methods of analysis. These studies is mainly conducted on the basis of secondary data collected from annual reports of NTC, official report, economic journal, financial statement etc.

The presentation and analysis of data has been made comparative analytical and their interpretation has done in chapter four by applying the wide varieties of methodology as stated in chapter three. It includes the various financial and statistical tools. In case of financial tools ratio analysis is done which consists of cash management. Here various cash management related variable are analyzed such as cash balance, receivable, sale of services, fixed deposit, investment and net profit and other ratios. Various statistical tools such as arithmetic mean, coefficient of correlation, coefficient of determination and trend analysis have been applied to fulfill the objective of this study. The analysis has been done mainly through secondary. The major findings of the study are also included in the final section of the presentation and analysis chapter.

In this chapter, summary conclusion and recommendation are included. All the summary and conclusion are made according to obtained data from analysis. Recommendation has made which would be beneficial for all concerned person, management of the organization and other stakeholder. This research is concerned about the cash management of corporations.

The cash simply represents coins currency and cheque held by the firm and balances in its Bank account. Some times hear cash items, such as marketable securities or bank time deposits, are also included in cash. The basis characteristics of year, cash assets it's that they can readily be converted into cash. Cash is the most liquid assets having very importance to the daily operations of the industry or firm. Cash is the component of working capital of concern cash like the blood steam in the human body. Which gives strength to a business unit? Without it the firm is no able to procure the other resource that it needs to continue the operations of the business.

Cash flow management is the process of monitoring, analyzing, and adjusting business cash flows. For businesses, the most important aspect of cash flow management is avoiding extended cash shortages, caused by having too great a gap between cash inflows and outflows. Business won't be able to stay in market if it can't pay its bills for any extended length of time. Therefore, business need to perform a cash flow analysis on a regular basis, and use cash flow forecasting so they can take the steps necessary to head off cash flow problems. Many software accounting programs have built-in reporting features that make cash flow analysis easy. One of the most useful strategies that used on small businesses is to shorten its cash flow conversion period so that business can bring in money faster.

5.2 Conclusion

This research is conducted with the major objective of highlighting cash management of NTC. Here make analyze the cash management in terms of relevant financial and statistical ratios. Following conclusion has been drawn from the study.

For the analysis of cash position, the cash balance of NTC is increasing beside last year. The highest increment of cash balance is 18.80. The NTC is trying o maintain stable cash balance. The cash turnover of NTC is increasing form. This means cash generation from sales of services is highly increasing. So, the relation between cash and operating profit is positive. It means the NTC is able to capture its income in time. The operating income of NTC is very good and cash balance is high enough. The total income of NTC is increasing form. The highest increment of income is 24.20 percent and lowest increment is 5.39 percent. The continuously increasing total income from sales of services of NTC represents good condition. The amount of total deposit and its growth of NTC is increasing. The total deposit is positively growth every year. It indicates deposit of NTC increasing every year. The highest increment is 100.45 percent lowest increment of total deposit is just 11.48%. Continue increment of fixed deposit of NTC indicate that the company has generating better cash management from income. The total investment of NTC is continuously increasing. This help to generate income and cash balance more. So continuously increasing total investment creates more cash of NTC. The net profit of NTC has also increasing all over the study years. This is the better for company. The growth of net profit of NTC is awesome. Profit is the major constraint of cash generation. So cash management of

NTC term as excellent. The efficiency of credit sale of NTC is decreasing form, which indicates NTC doing better performance in its receivable. So prompt collection or decreasing receivable indicate highly cash turnover. So receivable is good for cash management of NTC. The average collection periods of NTC is also decreasing. This means credit sale collection of NTC is decreasing. Collection period is decreasing. So NTC doing better for decreasing its collection day.

The current ratio shows the current assets to current liabilities ratio of NTC is increasing beside last year. The highest ratio is 4.84 times and lowest ratio 3.52 times. The average mean current ratio is 4.07 times. The current ratio of NTC has more than the standard ratio, which is easily able to meet its short term obligation. So liquidity position of NTC is very high. The cash balance to current asset ratio of NTC has fluctuating. The average mean cash balance to current asset ratio is 61.93 percent. It indicates that cash balance play dominant role in its total current asset. That means 61.93 percent of NTC has cash balance from its current asset. The NTC has sufficient amount as cash balance. The account receivable to cash balance of NTC is decreasing beside last year.

In the aspect of statistical analysis, the correlation between cash balance and actual sales is positive by 0.683. The coefficient of determination is 0.4661, which depicts that 46.61% of cash is explained by the actual sales. There is insignificant relationship between cash and income from sales of NTC. The correlation between cash balance and current assets of NTC is 0.897. It shows highly positive correlation between these two variables. So both variables move same direction but not proportionately. The coefficient of determination of NTC is 0.8053. It means there is 80.53 percent of current asset is contributed by cash. The NTC has significant correlation between cash balance and current assets. The correlation between receivable and total income is just 0.252. There is lower positive correlation between receivable and total income from sales. The coefficient of determination is 0.0637, which depicts that only 6.37% of receivable is happened in the total income of sales. The relationship between receivable and income from sales of services of NTC is insignificant. The correlation between net profit and income form sales is highly positive i.e. 0.975. so both variable moves same direction. The coefficient of determination is 0.9505, which depicts that 95.05% of profit is explained by the sales least is determined by other factor. There is significant relationship between income form sales and net profit of NTC. The trend of cash of NTC is increasing trend. It is good for company. It is better for company but this type of increment should maintain regularly. The trend receivable of NTC is increasing trend but it seems to be lower. So receivable of NTC increasing but slowly this is considerable for company. It is better to decrease. The trend of total assets of NTC is in increasing trend. The current asset for NTC seems to be moderately increasing trend. It is better for company. Which indicate better liquidity and solvency power. The trend of net profit of NTC is increasing trend. The trend of increasing net profit of NTC is awesome. It’s really good for company. This tends to increase in cash and bank balance. It is better for company but this type of increment should maintain regularly.

5.3 Recommendation

Based on the analysis and finding of the study, the following recommendations can be made as suggestions to make the cash management of NTC effective and efficient. This would help to draw some outline and make reform in the respective organization.

- Generally, every organization have to maintained liquid assets. The current ratio of the NTC is high. This can be regarded as good liquidity position. Generally standard current ratio tends to be 1:2 but current ratio of NTC is 4.07 times. This can be regarded as high liquidity position. Excess liquidity burden the income and freeze the cash. So NTC should make more investment and lending for better profit. So, it is recommended to maintain sound liquidity position.

- Government securities such as Treasury bills, Development bonds, saving certificates etc. are risk less investment alternatives because they are free of default risk as well as liquidity risk and can be easily sold in the market. In this research study, the NTC has made some amount of fund in Government securities. But its recommended to NTC invests more funds in Government securities instead risky lending.

- NTC is recommended to invest more in its fund in different sector. NTC has more liquidity so its better to invest and generate more profit and cash.

- Cash flow from all activity of NTC is positive in every year beside last fiscal year. Which indicates that the NTC has cash outflow is more than cash inflow from all activity in last year of study period. The cash flow of NTC is good beside last year. Anyway the cash management of NTC is considering good.

- Average collection period of NTC was poor in previous day despite but now improvement is good in recent years. It recommends emphasis on collection effort needed to be intensified so that ACP can be reduced to more manageable level.

- EPS and DPS play a vital role to determine the market price of the share and also indicate the financial performance of banks. Higher EPS and DPS indicate the NTC' sound financial position that would help them satisfy their stakeholders. So NTC recommended to increase in this regards.

- The call by pass and fraud is one of the critical problems of NTC. So NTC should create effective mechanism for Control VOIP, bypass and other leakage.

- NTC still suffers Traditional management style and hence traditional work culture. It is also the case that the qualified and capable manpower are not in the decision making level. Generally Office In charges are not found to have the management background. There is lack of inter departmental coordination in case of planning, implementation etc. The Customer care is found weak. So the Restructuring of the organization is the must.

- The Organization should impart professional management on its top hierarchy. Given the tough competition emanating from the private sector, the Organization should resist unnecessary political interferences in managing its day to day operations. It should seek freedom to decide on its own under the broad guidelines given by the government.

- The NTC recommended formulating and implementing the sound and effective business strategy to increase volume of total sales and revenue that helps to meet required level of profitability as well as social responsibility. The NTC should consider to extent its service to rural and remote areas of Nepal.

- The NTC should develop an innovative approach to marketing and formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices. The Ncell is big competitor of NTC. So NTC are also required to explore new market areas.

- To be prominent and for grab the present and future potential business opportunities in the market, NTC should establish research and development department. So that the company would be able to get the more profitable opportunities in the market.

- In conclusion, NTC has good cash management which shows better performance however has been showing significant improvement, So NTC should keep up with its growth trend to give strong competition to other company. In the light of growing competition in the Tele communication there is tuff competition so NTC should improve in quality service. It should strengthen and activate its marketing function as it is an effective tool to attract and retain the present and potential customers.

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Appendix - 1

Trend Analysis of Nepal Telecom Limited

Year(x)	Cash Balance (Y)	X = x - 2008/09	X^2	XY
2006/07	14746.34	-2	4	-29493
2007/08	16134.52	-1	1	-16135
2008/09	18191.06	0	0	0
2009/10	21611.54	1	1	21611.5
2010/11	16769.2	2	4	33538.4
Tot n= 5	∑Y = 87452.66	∑X = 0	$\sum X^2 = 10$	∑XY = 9522.74

Source: Annul Report of NTC

Where,

Y = dependent variable

a = Y-intercept

b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

$a = \frac{SY}{N}$

$b = \frac{SXY}{SX^2}$

NTC

a = 17490.532

b = 952.274

Where as

Y = 17490.532+952.274*X of NTC

Appendix - 2

Trend Analysis of Nepal Telecom Limited

Year(x)	**Account Receivable(Y)**	**X = x - 2008/09**	**X^2**	**XY**
2006/07	3455.51	-2	4	-6911
2007/08	3482.61	-1	1	-3482.6
2008/09	3593.21	0	0	0
2009/10	4295.99	1	1	4295.99
2010/11	3904.74	2	4	7809.48
Tot n= 5	$\sum Y$ = 18732.06	$\sum X = 0$	$\sum X^2 = 10$	$\sum XY$ = 1711.84

Source: Annul Report of NTC

Where,

Y = dependent variable

a = Y-intercept

b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Here,

$a = \frac{SY}{N}$

$b = \frac{SXY}{SX^2}$

NTC

a = 3746.412

b = 171.184

Yc = 3746.412+171.184*X of NTC

Appendix -3

Trend Analysis of Nepal Telecom Limited

Year(x)	Current Asset (Y)	X = x-2008/09	X^2	XY
2006/07	23618.25	-2	4	-47237
2007/08	25000.47	-1	1	-25000
2008/09	28837.29	0	0	0
2009/10	33555.58	1	1	33555.6
2010/11	30379.04	2	4	60758.1
Tot n= 5	∑Y= 141390.63	∑X = 0	$\sum X^2 = 10$	∑xy = 22076.7

Source: Annul Report of NTC

Let trend line be

Y = dependent variable

a = Y-intercept

b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Where x = X - Middle year

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

NTC

a = 28278.126

b = 2207.669

Y = 28278.126+2207.669*X of NTC

Appendix - 4

Trend Analysis of Nepal Telecom Limited

Year(x)	Net Profit (Y)	X = x-2008/09	X^2	XY
2006/07	5652.69	-2	4	-11305
2007/08	7778.75	-1	1	-7778.8
2008/09	10178.02	0	0	0
2009/10	10775.15	1	1	10775.2
2010/11	12120.3	2	4	24240.6
Tot n= 5	$\sum Y =$ 46504.91	$\sum X = 0$	$\sum X^2 = 10$	$\sum XY =$ 15931.6

Source: Annul Report of NTC

Where,

Y = dependent variable

a = Y-intercept

b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

$a = \frac{SY}{N}$

$b = \frac{SXY}{SX^2}$

NTC

a = 9300.982

b = 1593.162

Where as

Yc = 9300.98+1593.162*X of NTC