CHAPTER - I
INTRODUCTION

1.1 Background of the Study

The overall development of the nation depends upon the uplifting of the national economy which in turn depends upon the nature of its infrastructure. One of the basic elements in achieving self reliant growth of the economy for sustaining desired level of economic development is an accelerated rate of infrastructure development. Telecommunication has been identified as one of the three basic infrastructures apart from Power and Roads, which is needed for the socio-economic development. Investment in telecom sector has multiplier effects. It is considered that every rupee invested in telecommunication sector generates three fold effects in the nation's GDP. Telecommunication is the pre-requisite for other dimension of development and it plays an important role for other industries. Information and the facilities for accessing, processing and disseminating it in electronic form have become strategic resources as important as and, labors and capital. Thus telecom has dual role as both a traded product and service and as a facilitator of trade in other product and services. Moreover Telecommunication can have a dramatic impact on achieving specific social and economic development objectives.

In fact the development of telecommunication is not only vital for IT based industry but it has wide effect on entire economy of the country. Realizing the facts, Nepal Government has also recognized that the provision of world class Telecommunication infrastructure is the key to rapid economic and social development. For bringing telecommunication as the major infrastructure of development, government has implemented national communication policy (1992). Introduction of liberalized economic policy in Nepal has gradually facilitated the private sector investment as a result multinational companies also showed their presence. At this context, to speed up the process of telecommunication development, The Telecommunication Act; 1997 was brought into action which has created the competitive atmosphere in telecom industry which resulted the private sector investment in the telecommunication industry. As size and sector of telecommunication grew up to IT, Telemedicine, e-governance, e-commerce, e- education etc the government brought the telecommunication policy; 2004 to address the entire telecommunication sector.

At this point of time, there are various telecom based company which are actively doing there business. The major telecommunication service providers are Nepal Doorsanchar Company Limited, United Telecom Limited (UTL) and Spice Nepal (P) Ltd. Other small Players are STM Sanchar (P) Ltd and Global Plus. UTL is in the business of fixed basic telephone and limited mobility mobile telephone of wireless technology whereas Spice Nepal has the business of Mobile telephone. Both UTL and Spice Nepal have the focus in urban area only. STM has got the license to perform the business of V-Sat Telephone of 534 VDCs of eastern development region where as Global plus has been establishing Tele-centers in various part of Mustang District.

Nepal Doorsanchar Company Limited is popularly known with its name as Nepal Telecom as a trade mark. In Telephone service, Nepal Telecom is the key market player as it holds about 90% of total market share of Nepal. It offers various services like Basic telephone, Mobile telephone, Internet, email, ISDN, Leased line etc. The primary objective incorporated by Nepal Telecom is to provide reliable and affordable telecommunication services in every nook and corner of the country. It has been expanding the services in urban as well as rural area to fulfill the socio-economic development objectives. Nepal Telecom is the member of International Telecommunication Union (ITU). It has been able to provide its telephone services with STD and ISD services in all the 75 districts of the country. It has 225 Public Switch Telephone Network (PSTN) exchanges in 72 districts and has covered 2028 VDC with Telephone service and exerting its best effort to cover remaining 1886 VDC, where its Telephone service is not accessed. Total Telephone line distribution till Ashadh 2063 BS is 1132478 where as waiters are in the figure of 316546. The installed capacity of PSTN telephone line is 602252 on the other hand the organization is working hard to build the each one million capacity of CDMA based Fixed as well as mobile telephone and GSM based Mobile telephone within few years. The company has the telephone density of 4.4 per 100 people which one year ago was 4.2 and 2.69 two years ago. Average revenue per line it generates is Rs 1108. (MIS, 2063). There are 5047 internet users and 3443 e-mail users subscribed from the company. There are 3140 International Telephone circuits in operation and domestic microwave channels available are 135900. Similarly Optical SDH-E1 link are in the figure of 1251 which are owed by the company. East west Optical Fiber link is considered as information super high way and is expected to bring about IT revolution in the country. Nepal Telecom has high contribution in the total revenue of the nation which is about 4.2 % of total national revenue. Considering the fact The Company has got the felicitation of 'Commercially Important Person' (CIP) from the government. The major portion of the total revenue of the company is from International Subscriber dialing. These days due to fall in ISD tariff and illegal use of Voice over Internet Protocol, there is high fluctuations in the trend of International revenue. Other services provided by Nepal Telecom in various parts of the country are Telegram, Telex, PCC, IVR, IN, HCD, V- SAT, ISDN, Inmersat etc which too have their own importance in revenue generation and serving the people for their information and communication needs. The quality of service it has produced is considered to be of international class as the company uses the latest technology of the reputed International brands. The tariff of service it offers is considered to be of high rational as compared to the other Telecommunication operators of the Asian region.

Though the company was registered in Magh 2060 BS in office of the company registrar the company has got the formal inception in Baisakh 2061 BS after all the assets and liabilities of then Nepal Telecommunications Corporation (NTC) were transferred to it by formal notice of the government in gazette. Nepal Telecommunications Corporation was state owned enterprise established in 2032 BS to provide telecommunication in the nation. Before its establishment the telecommunication service were managed and distributed by Telecommunication Development Board both as an operator and authority, a government body under the ministry of communication. The main reason behind the changing of status of 'Nepal Telecommunications Corporation', a state owned enterprise as a public utility concern to 'Nepal Doorsanchar Company Limited (Nepal Telecom)' as a limited company is to transfer the government investment in the organization to the private sector. This was happened according to the policy of economic liberalization that the government has adopted. Nepal Telecom is just a hypothetical company as its entire ownership is yet held by government in the name of state owned entities. The change of organization status gave it autonomy to some extent though there is still interference of government in decision making process. The company is on the process of issuing share to the public and expected to enjoy full autonomy after its share disbursement to private sector.

At present Nepal Telecom has the authorized capital of Rs 25 Billion allocated to 250 million shares of each Rs100 Par. Issued and paid up capital is Rs 15 Billion.

The company at its top most level has a seven member Board of Director (BOD). Chairman is secretary of Ministry of information and Communication; Members are representatives from Ministry of information and communication, Ministry of Finance, Ministry of Law, Justice and Parliamentary affairs and Citizen Investment Trust. Other members are Managing Director and representative from employees (Article of memorandum-2)**.** Senior Management Committee is the second in hierarchy which is headed by Managing Director and constitutes senior executives of the company. Managing Director performs as a Chief Executive Officer (CEO). Under the Head Office there are 20 departments 4 directorates. The regional directorates are performing as full fledged Profit centers. Total approved Post in NT are 6,095 but the total no of working manpower at present is 5,717, out of which 816 are Officers and 4,901 are of Assistant level.(MIS-2064, Asadh).

Industrialization and Information revolution has brought the globalization which is considered as the economic, technical and political integrations of the people in world. This in reality made the world as a global village. At the 21'st century people in one corner of the earth is affected by the activities in another corner. Globalization made trade facilitation around the world. In this context Nepal could not be alone without affiliating to the global Trade forum of World Trade Organization (WTO), hence became the member of World Trade Organization in 2004**.** Now Nepal is the member of other regional economic blocks BIMSTEC and SAARC. To become successful in present global environment of the business, organizations should be able to face the global competition in quality and cost of the product. In this context Nepal has adopted the liberalized economy and hence giving up the ownership of state owned enterprises gradually by participating private sector in the ownership. The Government is promoting the private sector by various means which facilitated the investment of private sector, as a result there are various players doing there business in Telecommunication Industry as well.

In this context Nepal Telecom is facing competition in its services and seems to face stiff competition in future. Despite the competition rose, the demands of NT services are high but the company is not able to meet the customers demand due to various constraints like government intervention, slow procurement procedure, management style, work culture, mismanagement of resources etc.

Despite the various shortcomings the company plays vital role in achievement of desired level of national development goal by fulfilling the need of reliable dimension of infrastructure development.

Role of Nepal Telecom

- To fulfill the need of distance communication
- To add a reliable dimension of infrastructure development
- To introduce emerging technology of communication
- To enhance economic development of nation
- To minimize the digital divide by serving in rural area

1.2 Focus of the Study

Although, Nepal Telecom has better performance than other state owned enterprise of Nepal , in the sense that it is such a state owned enterprise which is operating under the net profit margin since the establishment of NTC, coming days are not so easy as earlier because it has to face stiff competition in the future. Financial statement show that the Gross Revenue as well as Net Profit has increased to a tune of higher rate before 1998 but after that the increasing rate is lower in comparison to earlier years. Profitability alone could not show the overall financial position of the organization and to make the assessment of the organizational strength and weakness, ups and downs, opportunities and challenges financial performance analysis could be very important tool. Different financial indicator shows the capability of the organization to meet the various expectations of stakeholders of the company. The present study primarily focuses on the financial performance aspect of company in terms of its capacity on meeting financial obligation, generating rate of return, capital investment and internal revenue generation. The study confines to the problem of financial operation in Nepal Telecom on the basis of primary information and latest available secondary data. It will light upon the past financial strength and weakness faced by the company and will provide the guideline to improve the financial health.

1.3 Statement of the Problem

Nepal Telecom as a state owned enterprise has involved in providing the cost effective and people friendly telecom services in the nation since long time. The organization has enjoyed monopoly in the telecom market and got policy privilege during long period. The scenario has completely changed after recent entry of telecom operators in the market. As those companies are involved in business of various telecom services the natural monopoly enjoyed by Nepal telecom tends to be ended. In the emerging liberalized policy that the government should not involve in the profit motive business except the sensitive affairs and facilitating jobs, private and multinational companies were established in the various part of the nation. Similarly the public enterprises were made private by making them private company or public limited company. In this scenario, Nepal Telecom a state owned enterprise is going to issue it's share to the public as a public limited company. In this context the analysis of financial health of Nepal Telecom as a largest business enterprise in Nepal would have great deal of importance to the various stakeholders.

Nepal Telecom as a state owned enterprise; it is complicated to assess the efficiency with its socio economic development goals but every organization should have sound financial health to be efficient in the utilization and management of the resources. Proper collection, utilization and management of the fund is financial management. To make assurance of the strong financial operation of the company, the empirical analysis called financial performance analysis can have the great importance.

As most of the organization depends heavily upon the external and internal information, industrialization without proper access of telecommunication is difficult to imagine. Nepal is on the process of industrialization and people have the demand of new and new technology and telecommunication is now thought to be basic requirement in urban area and important means of development in rural sector. In this context, there is high demand of NT services and it does have a little market competition. Despite the fact NT has not seen efficient to fulfill the demands.

The Balance sheet shows the huge amount of cash and bank balance lying idle. Volume of sundry debtors seems to be very large. Various studies related to the NT pointed out the problem of its outstanding debt collection and high liquidity position. Further suggestion is that NT management should estimate immediate required funds and either invest all the excess fund in marketable securities, or use that fund in refunding debt as the interest it pays for loan for capital investment is less than the rate of earning in liquid fund. Studies have shown that the return on total assets is not so good.

Thus the problem toward which this study is directed is assessment of financial operation of Nepal Telecom. So, the present research tries to solve the following research questions:-

- What are sources of long term financing on Nepal Telecom?
- If assets utilization in Nepal Telecom is efficient?
- What is the position of Nepal Telecom to meet the current obligations?
  Is the company providing fair rate of return?

Financial analysis may not provide exact answer to these questions but it does indicate what can be expected in the future.

1.4 Objectives of the study

The objectives of this study is to insight in to the management of working capital in Nepal Telecom more specifically, following the objectives 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.

1.5 Significance of the study

Analysis of financial performance is a crucial part of financial decision making process of business enterprise. Poor financial management affects adversely on liquidity, turnover and profitability. It is required to measure the financial position of the enterprise periodically in order to ensure smooth function of an enterprise. Financial analysis assists in identifying the major strengths and weakness of a business enterprise. It indicates whether a firm has enough funds to meet the obligation, a reasonable accounts receivable collection period, an efficient inventory management policy, sufficient plant property and equipment and adequate capital structure, all of which are necessary if a firm is to achieve the goal of maximizing shareholder's wealth. Financial analysis can also be used to assess a firm's viability as an ongoing enterprise and to determine whether a satisfactory return on investment is being earned for the risks taken.

Nepal Telecom is an enterprise of great national concern. It has to face stiff competition in near future as private players are already entered and there is open door to further enter. The government is going to participate to the private sector in its ownership. So the concerned parties are looking over its performance with keen interest. As a state owned enterprise it has the obligation of socio economic development with its profitability concern. So the insight over financial position of Nepal Telecom; leading telecommunication service provider in the nation will be useful to provide information to stakeholders and draw attention of concerned management regarding what can be done for further strengthening the financial position. Further it will be important for the following groups and individuals.

- Present and perspective customers
- Present and perspective investors
- Policy making authority

- Further researchers
- Government
- ICT based companies

1.6 Limitation of the study

There will be some limitations while undergoing this study. The main limitations of the study will be:

- This study is based on the 5 years financial reports.
- Only the financial aspect and financial structure analysis shall be made with bird eyes view, the other area such as Marketing, Human Resource, Research and Development aspects are also the combined input to measure the overall efficiency.
- Secondary data are collected from annual reports of the concerned enterprises, so the study suffers from all those limitations that are associated with these reports.
- The study makes the analysis of financial performance of Nepal Telecom; it may not be applicable to any other enterprise.
- There is time and budget limitation.

1.7 Organization of the study

The study is divided in the following five chapters as prescribed by the university.

Chapter I	:	Introduction
Chapter II	:	Review of Literature
Chapter III	:	Research Methodology
Chapter IV	:	Presentation and Analysis of Data
Chapter V	:	Summary, Conclusion and recommendation

Chapter one focuses on general background of the study. It deals with major issues to be investigated along with general background of the study, statement of problem, objective of study with organization of the study. This chapter signifies the rational of this study.

Chapter two deals with conceptual consideration and review of related literature, which provide a framework with the help of which the study has been accomplished. In this chapter major empirical works has been also discussed.

Chapter three is devoted to methodological approach employed in this study. This chapter includes research design, nature and sources of data, population and samples, method of analysis and definition of key terms.

The Fourth chapter deals with the techniques used in analyzing the collected data and its presentation in the descriptive and analytical manner. This chapter also deals with the strengths, weakness, opportunities and challenges faced by Nepal Telecom.

The last chapter consists of summary, conclusion, and recommendation of the study.

CHAPTER - II
REVIEW OF LITERATURE

2.1 Introduction

The main purpose of this chapter is to review the available literature on such as books, journals, research paper and other studies related to the working capital management of Nepalese enterprises including the available information of NTC. the term paper includes two following sections:

- Conceptual Framework
- Review of Previous Studies

2.2 Conceptual Framework

In this section has been made to review some books on financial management of working capital.

2.2.1..Concept of Working Capital

Working capital is a controlling nerve of center of every business organization because no business can run smoothly without the proper control upon it. Thus, it plays the crucial role in the success and failure of the organization. As the management of current assets and current liabilities of the business organization is necessary for day-to-day operations, it plays the key role in the success and failure of the organization not only in the short run, in the long run also. In the concern of the management of working capital there have been made number of studies from different management experts and students in various enterprises.

Every manufacturing firm needs various types of assets in order to carry out its function without any interruption. They are fixed and current assets. Some fixed assets have physical existences and are required to producing goods and services over long period. This type of fixed assets is called tangible fixed assets. It includes land, building, plant, machinery, furniture, and so on. But some other fixed assets do not generate goods and services directly. However, it reflects the right of the firm. It is called intangible fixed assets. It represents patents, copyrights, trademarks, and goodwill. Both fixed assets are written off over a period off time. Current assets are those resources of the firm, which are either held in the form of case or expect to be converted into cash with in an operating cycle of the business. It includes, cash, marketable securities, account receivable, stock of raw materials, work-in-progress, and finished goods. Among these, some assets are required to meet the need of regular production and some for day-to-day expenses and short-term obligations. Current liabilities are those claims of outsiders, which are expecting to be matured with in an accounting year. it includes; creditors, bill payable and outstanding expenses.

There are specially two concepts of working capital: Gross concept and net concept. The gross working capital simply called as working capital refers to the firm's investment on current assets. Current assets are those assets which can be converted in to cash with in an according year and included cash, short term securities, debtors, bill receivable, stock, inventories and pre-paid expenses. The term net working capital refers to the differences between current assets and current liabilities. Current liabilities are those claims of outsiders which can expected to mature for payment with in an accounting year and includes creditors, bills payable, Bank overdraft and outstanding expenses or accrued income. Net working capital can be negative or positive. A negative net working capital occurs when current liabilities are in excess of current assets (Pandey,1992:800).

Working capital management is the effective life blood of any business. Hence the management of working capital plays a vital role for exiting of any public enterprises successfully while studies it. It is the centers on the routine day-to-day administration of current assets and current liabilities. Therefore, working capital management in public enterprises is very important mainly for four reasons. Firstly, public enterprises must need to determine the adequacy of investment in current assets otherwise; it could seriously erode their liquidly base. Secondly, they must select the type of current assets, suitable for investment so as to raise their operational efficiency. Thirdly they are required to ascertain the turnover of current assets, which determine profitability of the concerns. Lastly, they must find out the appropriate source of funds of finance current assets (Agrawal, 1996:8).

Weston and Brigham have given some theoretical insights into working capital management after their various research studies on it. The bond conceptual findings of their study provide sound knowledge and guidance for the further study on the field of management working capital in any enterprises and naturally to this study as well. They explain in the beginning, the important of working capital, the use of short term versus long-term debt, relationship between current assets to fixed assets. The components of working capital they have deal with current assets, which are, cash, marketable securities, receivable and inventory. For the efficient management of cash, they have explained the different cash management model. They have also explained the major sources and form of short-term financing. Such as trade credit, loan from commercial banks and commercial paper.

Proper management of working capital must ensure, adequate amount of working capital as per need of business firms. It should be in good health and efficiency circulated. To have adequate healthy and efficient circulation of working capital it is necessary that working capital be properly determined and allocated to its various segments, effectively controlled and regularly reviewed.

There are two concepts of working capital: Gross Concept and Net Concept .According to gross concept, working capital refers to the capital invested in current assets of a firm. It focuses only the optimum investment in the current assets and financing of current assets (Khan and Jain, 1996:604). It includes cash, short-term securities, inventory and account receivable. /the level of current assets should be just adequate. The level of current assets must be fluctuating with the changing business activity. Thus, his concept can help earning more profit through maximum utilization of current assets. This concept is called quantitative concept.

In the view of SC Kuchal, there are two concepts of thoughts working capital. One school of though out says that working capital is meant for the current assets only. Another school thought argued that working capital is the excess of current assets over current liabilities. In other words, it is that portion of current asserts financed with long term funds. It is the liquidity position of the firm and suggests extending which working needs to be financed by permanent source of funds. It is in or very successful for comparing the performance of different firms a measuring of liquidity, but it is quite useful for internal control. This concept helps to compare the liquidity of the same firm under a time (Pradhan, 1986:7).

The first school of thought under the sponsorship of mead, baker, malts and field, relates with gross working capital and the second school of thought under the leadership of Lincoln , Doris, Stevens and Sailors, relates with net working capital. The gross working capital refers to the firms' investment in current assets which includes to the management of cash, inventories and account receivable of the firm while, net working capital refers to difference between current assets and current liabilities.

From the management point of view, gross working capital deals with the problem of managing individual current assets in the day-to-day operation. But having along run view of working capital, we have to concentrate on the net value of current assets, i.e. the operation of current assets, which is constant in short run analysis and decision making but variable and manageable in long run operation. The net concepts of working capital helps the management to look for permanent source for it's financing since working capital under this approach does not increase with increase in short term borrowing.

According to NP Agrawal: "Working capital consists broadly at the portion of the assets of the business used in, or related to, current operational and represented at any one time of the operating cycle by such items as account receivables, inventories of raw materials, stores, work-in-progress and finished goods, bill receivables and cash. Assets of this type are relatively temporary nature, since the invested names are normally capable of being recovered or of being change in form with in a short period of time and the time element of ultimate recovery depend on the manufacturing cycle as well as sales and collection cycle."

According to KV Smith: "Working capital management is usually described as involving the administration of these assets namely cash, marketable securities, receivable and inventories and the administration of current liabilities. It means the working capital management is concerned with the problems that arise in attempting to manage the assets, current liabilities and the inter-relationship that exist between them."

Working capital management is the process of planning and controlling the level and mix of the current assets of the firm as well as financing these assets. Specially, working capital management requires financial manager to decide what quantities of cash, other liquid assets account receivables and inventory the firm will hold at nay point in time. In additional, financial managers must decide now there current assets are to be financed.

2.2.2 Types of Working Capital

Working capital can be classified into two parts: permanent (fixed working capital0 and fluctuating working capital. Those two types of working capital are necessary for continuous production and sales.

(i) Permanent Working Capital

Permanent working capital refers to that level of current assets, which is required on a continuous basis over the entire year. A manufacturing concern cannot operate regular production and sales functions in the absence of this portion of working capital. Therefore, a manufacturing concern holds certain minimum amount of working capital to ensure uninterrupted reduction and sales function. This portion of working capital is directly related to the firm's expansion of operation capacity. This minimum working capital a firm has to provide out of long – term sources, such as,

- Issue of share
- Issue of debenture
- Retention in various forms (i.e., plugging back of profits, general reserves etc.)

(ii) Variable Working Capital

Variable working capital represents the portion of working capital, which is required over permanent working capital. Therefore, this portion of working capital depends upon the nature of firm's production, relation between labour and management. The firm's, which are seasonal in character in their business, need a large amount of capital for holding inventory during the peak period. But, as soon as the peak period is over, their working capital becomes idle. Therefore, firm's having seasonality in their business find it convenient to meet their working capital requirements by resorting to short – term sources, such as:

- Bank loan
- Public deposits
- Trade credit and other payables
- Provision for taxation
- Depreciation provision etc.

2.2.3 Working Capital Policy

Working capital policy refers to the firm's basic policies regarding (i) target levels for each category of current assets and (ii) how current assets will be finished. So, of all, in working capital management, firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according to the financial manager's attitude towards the risk-return trade off. One of the most important decisions of finance mangers is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for working capital.

Goals of working capital policies are as follows

a. Adequate Liquidity

If a firm lacks sufficient cash to pay its bills when due, it will experience continuing problems. The most important goal is to achieve adequate liquidity for the conduct of day to ay operations.

b. Minimization of Risk

In selecting its sources of financing, payables and other short term liabilities may involve relatively low costs. The firm must ensure that these near term obligation do not become excessive compared to the current assets on hand to pay them. The matching of assets and liabilities among current accounts is a task of minimizing the risk of being unable to pay bills other obligations.

c. Contribute to Maximizing Firm's Value

The firm holds working capital for the same purpose as if holds any other asset, which is to maximize the present value of common stock and value of the firm. It should not hold idle current assets any more than idle fixed assets. The investment of excess cash, minimizing of inventories, and speedy collection of receivables and elimination of unnecessary and costly short term financing all contribute to maximizing the value of the firm.

In the working capital management the firm has to determine how much funds to be invest in working in gross concept i.e. in current assets and how much should be financed in working capital through different sources of funds. The funds can be raised from long term sources and short term sources. So, the firm should decide how much of long term and short term funds to be financed in working capital.

2.2.3.1 Current Assets Investments Policy:

Current assets investment policy refers to the3 policy regarding the total amount of current assets to be carried to support the given level of sales. There are three alternative current assets investment policies – Fat cat, Lean and Mean & Moderate.

(i) Fat cat Policy:

This is known as relaxed current assets investment policy. In this policy, the firm holds relatively large amount of cash, marketable securities, and inventory and cash conversion cycles. It also creates the longer receivable collection period due to the liberal credit policy. Thus, this policy provides the lowest expected return on investment with lower risk.

(ii) Lean and Mean Policy:

In lean and mean policy, a firm holds the minimum amount of cash, cash marketable securities, inventory and receivable to support a given level of sales. This policy trends to reduce the inventory and receivable conversion cycle. Under this policy, firm follows a light credit policy and bears the risk of losing sales.

(iii) Moderate Policy:

In moderate policy, a firm holds the amount of current assets in between the relaxed and restrictive policies. Both risk and return are moderate in this policy.

2.2.3.2 Current Assets Financing Policy:

It is the manner in which the permanent and temporary current assets are finance. Current assets are finance with funds raised from different sources. But cost and risk affect the financing of any assets. Thus, current assets financing policy should clearly outline the sources of financing. There are three types of policies.

(i)Aggressive Policy:

In an aggressive policy, the firm finances a part of its permanent current assets with short- term financing and rest with financing. In other words, the words, the firm finance not only temporary current assets but also a part of the permanent current assets with short-term financing. Fig No. 3 shows that short-term financing finances 50 percent of the permanent current assets. In general, interest rate increases with time i.e. shorter the times lower the interest – rate. It is because lenders are risk adverse and risk generally increases with the length of leading period. Thus, under normal the form borrows on a short term financing rather than financing. On the other side if the firm finances its permanent current assets by short term financing, then it runs the risk of renewing the borrowing again and again. This continued financing exposes the firm to certain risk. It is because; in future in retest expenses will fluctuate widely. And also it may be difficult for the firm to raise the funds during the stringent credit periods. In conclusion, there is higher risk, higher return and low liquidity position under this policy.

(ii) Conservative Policy:

In conservation policy, the firm uses to finance not only fixed and permanent current assets, but also part of the temporary current assets. This policy leads to high level of current assets, with long conversion cycle, low level of current liabilities and higher interest cost. The risk and return are lower than that of aggressive policy and adverse management follows this policy.

(iii) Moderate Policy:

In this policy the firm finances the permanent current assets with long term financing and temporary with short term financing. It lies in between the aggressive and conservative policies. It leads to neither high nor low level of current assets and current liabilities. Fig No. 5 shows temporary working capital is financed by short term financing and long term by long term financing. Thus, no working capital is financed by long term funds. Hence, net working capital is zero under this policy.

2.2.3 Need for Working Capital:

Most of firms aim at maximizing the wealth of shareholders. The firm should earn sufficient return from its operation. The extent to which profit can be earned naturally depends upon the magnitude of sale among the other things. For constant operation of business, every firm needs to hold the working capital components cash receivable, inventory etc. therefore every firm needs working capital to meet the following motives:

(i) The transaction motive:

According to transaction motive a firm holds cash and inventories to facilitate smooth production and sales operation in regular. Thus, the firms need the working capital to meet the transaction motive.

(ii) The precautionary motive:

Precautionary motive is the need to hold cash and inventories to guard against the risk of unpredictable change in demand and supply forces and other factors such as strike, failure of important customer, unexpected show down in collection of account receivable, cancellation of some order for goods and some other unexpected emergency. Thus, the firm needs the working capital to meet any contingencies in future.

(iii) The speculative motive:

Speculative motive refers to the desire of firm to take advantage of following opportunities:

- Opportunities of profit making investment.
- An opportunity of purchase raw materials at a reduced price on payment of immediate

cash.

- To speculate on interest rate.
- To make purchase at favorable price etc.

Thus the firms need the working capital to meet the speculative motive.

2.2.4 Financing of Working Capital:

Every manufacturing concern or industry requires additional assets whether they are in stable or growing conditions. The most important function of financial manger is to determine the level of working capital and to decide how it is to be financed. Financing of any assets is concerned with two major factors: cost and risk. Therefore, the financial manager must determine an appropriate financing mix, or decide how current liabilities should be used to finance current assets. However, a number of financing mixes are available to the financial manager. He can resort generally three kinds of financing.

(i) Long – term financing
(ii) Short – term financing
(iii) Spontaneous financing

(i) Long – term financing:

Long – term financing has high liquidity and low profitability. Ordinary share, debenture, preference share, retained earning and long – term debt from financial institution are the major source of long – term financing.

(ii) Short – term financing:

Firm must arrange short –term credit in advance. The sources of short term financing of working capital are trade credit and bank borrowing.

- Trade credit: It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms have not to pay cash immediately for the purchase is called trade credit. It is mostly and informal arrangement and is granted on an open account basis. Another form of trade credit is a bill payable. It depends upon the term of trade credit.
- Bank credit: Bank credit is the primary institutional sources for working capital financing. For the purpose of bank credit, amount of working capital requirement has to be estimate by borrows and banks are approached with the necessary supporting data.

After available of this data, bank determines the maximum credit based on the margin requirement of the security. The types of loan provide by commercial banks are loan arrangement. Overdraft arrangement, commercial papers etc.

(iii) Spontaneous financing:

Spontaneous financing arises firm the normal operation of the firms. The two major sources of such financing are trade credit (i.e. creditor and bill payable) and accruals. Whether trade credit is free cost or not, actually depends upon the terms of trade credit.

Financial manager of the firm would like to finance its working capital with spontaneous source as much as possible. In practical aspect, the real choice of current assets financing is either short – term or long – term sources. Thus, the financial manager concentrates his power in short – term versus financing. Hence, the financing of working capital depends upon the working capital policy, which is perfectly dominated by management attitude towards the risk and return.

2.2.5 Cash Conversion Cycle:

Cash conversion cycle, which nets out the three periods inventory conversion period, receivable period, payable deferral period equals the length of time between inventory convert into cash, the firm's actual and expenditures to pay for productive resources (materials and labour) and the cash receipts from the sale of products (that is, the length of time between paying for labor an materials and collecting on receivables). The cash conversion cycle thus equals the average length of time a rupee is tied up in current assets.

We can now use these definitions to analyze the cash conversion cycle. Cash conversion cycle can be expressed by this equation:

Cash Conversion period= Inventory Conversion period + Receivable Conversion period - Payables Conversion period

2.2.6 Determinants of Working Capital

The important of efficient working capital management is a aspect of over all financial management. Thus, a firm plans its operations with adequate working capital requirement or it should have neither too excess nor too inadequate working capital. But there are no sets of rules or formula to determine the working capital requirements of the firm. It's because of a large number of factors that influence the working capital requirement of the firm. A number of factors affects different firm in different ways. Internal policies and environment change also affect the working capital. Generally, the following factors affect the working capital requirements of the firms:

A. **Nature and size of business:**

The working capital requirements of firm are basically related to size and nature of the business. If the size of the firm is bigger, then it requires more working capital. While small firm needs less working capital. Trading and financial firms require larger amount of working capital relatively to public utilities.

B. Manufacturing cycle:

Working capital requirements of enterprises is also influenced by the manufacturing or production cycle. It refers to the time involved to make the finished goods from the raw materials. During the process of manufacturing cycle funds are tied – up. The longer manufacturing cycle, working capital requirement larger and vice – versa.

C. Production policy:

Working capital requirement is also determined by its production policy. If a firm produces seasonal goods, then it production and sales volume fluctuates with different seasons. This type of fluctuation production policy affects the working capital policy of the firm.

C. Credit policy:

Credit policy also affects the working capital of a firm. Working capital requirement depends on term of sales. Different term may be followed to different customers according to their credit worthiness. If the firm follows the liberal credit policy, then it requires more working capital. Conversely, if a firm follows the stringent credit policy, it requires less working capital.

D. Availability of credit:

Availability of credit facility is another factor that affects the working capital requirements. If the creditors benefit open-minded credit terms, then the firm will need less working capital. In other words, the firm can get credit facility easily on favorable conditions. Thus, it requires less working capital to run the firm otherwise more working capital is required to operate the firm smoothly.

E. Growth and Expansion:

Growth and expansion also affect the working capital requirement of a firm. However, it is difficult to exactly determine the relationship between the growth and expansion of the and firm and working capital needs. But the other things being the same growing firm needs more working capital than these static ones.

F. Price Level Change:

Price level change also affects the working capital requirement of a firm generally, a firm requires maintaining the higher amount of working capital it the price level raises. Because the same level of current assets needs more funds due to the increasing price. In conclusion, the implications of changing price level on working capital position will differ from firm to firm depending on the nature and other relevant consideration of the operation of the concerned firm.

G. Operating Efficient:

Operating efficient is also important factor, which influences the working capital requirement of the firm. It refers to the efficient utilization of available resources at minimum cost. Thus, financial manager can contribute to strong working capital position through operating efficiency. If a firm has strong operating efficient then it needs lesser amount of working capital and vice – versa.

H. Profit Margin:

The level of profit margin differs firm to firm. It depends upon the nature and quality of product, marketing management and monopoly power in the market. If the firm deals with the high quality product and has a sound marketing management and enjoyed the monopoly power in the market then it earns quite high profit. Profit is sources of working capital, because it contributes towards the working capital as a pool by generating more internal funds.

I. Level of Taxes:

The level of taxes also influences working capital requirement. The amount of taxes to be paid in advance is determined by the prevailing tax regulation. But the firm’s profit is not constant, or can’t be predetermined. Tax liability in a sense of short – term liquidity is payable in cash. Therefore, the provision for tax amount is one of the important aspects of working capital planning. If tax liability increases, it needs to increase the working capital.

2.3 Review of Journals and Articles

In this section the review of journal/ articles, various published articles by different management expert relating to Working Capital Management.

In this regards, Monohar K. Shrestha, in an articles has considered ten selected PEs and studied the working capital management in those PEs. He has focused on the liquidity, turnover and profitability position of those enterprises. In this analysis he found that four PEs had maintained adequate liquidity position. Two had excessive and the remaining four had failed to maintain desirable liquidity position. On the turnover side, two PEs had negative working capital, four adequate turnovers, one had high turnover and remaining three had not satisfactory turnover on net working capital. He had also found that out of ten PEs six Public Enterprises were operating at losses while only four were getting some percentage of profits. With reference to those finding he had bought certain policy issues such a lack of suitable financial planning negligence of working capital management, deviation between liquidity and turnover and return on net working capital. To end he had made some suggestive measures to overcome from the above policy issues, identification of needs funds, regular checks of accounts, development of management information system, positive attitude towards risk and profit and determination of right combination of short-term and long term sources of funds to finance working capital needs.

Another observation of twelve-selected PEs has been conducted by Monahar K. Shrestha. In this article he has described the conceptual setting sources of working capital and types of working capital and types of working capital. From the analysis he found that the liquidity position of the selected PEs differ widely in view of the differences is their nature of business. These were also above normal acid-test ratio. While analyzing the turnover of those selected PEs showed wide deviation. Based on the sales value four out of seven PEs had normal inventory turnover, the other three had not been satisfactorily maintained and in some of them inventory had exceeded sales. The collection period relating to the selected PEs exhibited market difference ranging from 32 days to 755 days, the profitability position was analyzed through return on net working capital was positive for eight PEs, negative for two PEs, and rest two had not any return, since they were in establishment phase.

During the analysis the observed, some problem like the lack of far sighted liquidity adjustment strategy in most of the PEs no guiding criteria to as certain the satisfactory malignances of acid-test ratio and working capital needs. Large blocking of capital in inventories and low capacity utilization. All these were due to efficient management of working capital in that PEs.

The next article relating to working capital management published by K. Acharya, He has described the two major problems operational problems and organizational problems regard the working capital management in Nepalese PEs. The operational problem he found listed in the first part are: increase of current liabilities than current assets, not allowing the current ratio relation 2:1 and slow turnover of inventory. Similarly, change in working capital in relation to fixed capital had very low impacts over the profitability, thin transmutation of capital employed to sales, absent to apathetic management information system, break even analysis, funds flow analysis and ratio analysis were either undone or ineffective for performance evaluation. Finally monitoring of the proper functioning of working capital management had never been considered a managerial job.

In the second part, he has listed the organizational problems in the PEs. In most of the PEs there is lack of regular internal and external audit system as well as evaluation of financial results. Similarly very few PEs have been able to present their capital requirement, functioning of finance department is not satisfactory and some PEs are even facing the under utilization of capacity.

To make an efficient use of funds for minimizing the risk of the loss to attain profit objectives, he has made some suggestion. The PEs should avoid the system of crisis decision which prevailed frequently in their operation, avoid fictitious holding of assets, the finance staff should be acquainted with the modern scientific tools for the presentation analysis of data and lastly. He has suggested optimizing its level of investment as a point of time. The management of an enterprise desires neither over nor under investment in working capital because both of these situation will erode the efficiency of the concern.

An article relating to working capital is by R.S. Pradhan. He studied on "*The Demand for Working Capital by Nepalese Corporations.*" For the analysis nine manufacturing public corporations were selected with the 12 years data from 1973-1984. For the analysis the regression equation has been adopted. From the study, he concluded that: The earlier studies concerning the demand for cash and inventories by business firms did not report unanimous findings. A lot of controversies exits with respect to the presence of economics of scale, rate of capital cost, and capacity utilization rates, and the speed with which actual cash and inventories are adjusted rates to describe cash and inventories respectively. The pooled regression result shows the presence of economics of scale with respect to the demand for working capital and its various components. The regression results, suggests strongly that the demand for working capital and its components is a function of both sales and their capital costs. The estimated results shows that the inclusion of capacity utilization variable in the modern seems to have contributed to the demand functions of cash and net working capital only. The effects of capacity utilization on the demand for inventories, receivables and gross working capital are doubtful.

Neupane (2006), *'Increasing bad debt: matter of thinking'* in his articles, pointed out some facts about the bad debt and doubtful debt of Nepal Telecom during 2055/56 BS to 2059/60 B S.
He found the amount of doubtful debt is in increasing trend and Bad debt is in fluctuation trend. He concluded the following reasons;

- There is no clear cut strategies and vision to recover bad debt in time.
- There is lack of inter office coordination to collect receivables.
- It has seen that there delay payment by government offices which has enhanced others to make delay payment or remain unpaid.
- There is lack of motivation to employees as they feel recovery of bad debt is a risky job.
- In some cases, there is unauthorized use of telephone service and organization has no effective control mechanism.

A study on the performance of PEs of Nepal was conducted by the Management Consultant Company. In the study, it was concluded that the assets management, in general Current Assets Management in particular were weakest point in Nepalese PEs.

It was pointed out that financial performance of the PEs was poor and indicated management of the resources. The report also pointed out that because of the lack of operational objectives, application of the long run planning, use of modern management tools. Capital budgeting and efforts towards cost control had not seen made so far. The study thus pointed that there was poor current assets management and management of resources in PEs of Nepal thereby causing poor financial performance.

Upadhaya, P R (2007) in his article *"Five years financial projection of Nepal Telecom"* published in 3 rd Anniversary Souvenir 2007. He highlights Nepal Telecom have to invest on modern technology in time and optimum utilization of the technology so as to guide for the high return on investment. Only investing on modern technology may not be sufficient to get the required return on investment its optimum utilization is must other wise the investment in new technology cannot give the return. Investment in modern new technology may turn riskier for the company. He had analyze past five year financial data of NTC and tried to project the financial future of the company. He found that the operating profit of NTC is slightly increasing this is due to decreasing of operating expenses. Study shows that NTC is successful to manage cost efficient. Return on assets is about 26% this means Company is able earn 26% profit in terms of total assets. He projects the future five years financial performance of NTC by using regression analysis, judgmental approach. According to his projection growth rate on return will remain around 4.69%.

2.4 Review of Thesis

A number of studies have been done by students of MBS, relating to working capital management in Nepal. This section is focused to review some of those dissertations.

S. L. Bajracharya (1990) conducted the study on *"Working Capital and Cash Management in Nepalese Public Enterprises"* by using eleven years data from 1977 to 1987. 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.

Out of different objectives, is "to 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.
2. 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,

3. His survey revealed that majority of 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,
4. Mostly most enterprises had periodic accumulation of surplus cash and corresponding cash shortage from time to time. However, none of the enterprises considered the implications of holding idle cash balance and few took into account the potential benefit of investing surplus in marketable securities. Those which did failed to consider the cost of administering such investments,
5. There have 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,
6. 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.

R. Aryal (1999). has submitted the Thesis entitled *“Working Capital Management in Nepal Telecommunication Corporation”* Objectives of the study were;

- To appraise working capital of NTC with respect to cash, receivable and inventory management.

- To know how far NTC is being able to utilize its current assets properly.
- To evaluate the credit policy of NTC and its effectiveness.
- To study the relationship between sales and different variables of working capital
- To shed light on creation and mobilization of fund in NTC.

The Major findings were.

- NTC kept its large portion of profit as retained earning. There are no systematic techniques used for managing the cash in NTC.
- The fund collected from different sources is used mainly to purchase of fixed assets. Large portion for purchase or current assets and in repayment of current liabilities some amount is used in purchasing marketable securities.
- The size of current assets were increasing rapidly than the fixed assets. Which indicates the conservative policy in current assets. Size of working capital in NTC is far greater than the industry average.
- Cash and bank balance constitute the most important and largest element of working capital in NTC. About 36%of current assets is held as cash during the study period.
- The growth trend of current assets is highly increasing than the total assets and net sales. The increasing trend of receivable seems to be consistent with the increase in net sales. But the size of cash has been increased in an inconsistent manner, which is the main cause of rapid increase in current assets.
- NTC kept excess amount of working capital. The volume of sales seems to be increasing every year. But rate of growth in working capital is higher than that of sales. Therefore, the turnover ratios are continuously decreasing every year.
- There has been excess liquidity position in NTC. The relationship between liquidity and profitability ratio does not follow any regular trend during that period. There is no correlation between liquidity and profitability. This condition does not meet the proposition that ‘Higher the liquidity lower the profitability’. Calculation of t-statistic shows that there is no significance difference between liquidity and profitability in NTC.
- There is no comprehensive long\mid term planning or control system of account receivable in the corporation. Larger amount is still due from many a last years and the amount of doubtful debt covers a significant portion of the account receivable.

D. N. Yogi (2000) conducted a study on *"A study on working Capital Management of Unilever Nepal Limited (U.N. Ltd). Nepal"* with the objective of:

- Analyze the liquidity, composition of working capital, assets utilization and profitability position.
- Analyze of the optimal level of working capital.
- Analyze the current assets and current liability policy.
- Analyze the financing pattern of working capital, liquidity position, and profitability position.
- Examine the relationship between liquidity and profitability position.

This thesis is conducted through basically secondary data. The data had been collected from annual reports and audited financial statements of the company submitted to Nepal Stock Exchange Company. The data has been directly extracted from the balance sheet and income statement of the company. The primary information has been collected through interview with the officials of U.N. Ltd. Various Ratio analysis is used to analyses the data and Karl Pearson's coefficient of correlation (r) is used to examine the relationship between liquidity position. The major findings are,

- The liquidity position of the company is fluctuation year by year.
- The proportion of current assets is affected is affected by the sales. In other words, the sales affected the management of current assets.
- The components of current assets and current liabilities are fluctuating in nature.
- The in significant relationship between liquidity and profit margin implies that there is not trade off between liquidity an profitability.

K. R. Poudel (2001) in his research *"A study on working capital management of Lumbini Sugar Factory Limited"*. He has analyzed the financial management statement of the factory for five years (2052/053-2056/057). He has also used ratio analysis and hypothesis as tools for the purpose of analysis. He has found that the current assets level with respect total assets has increasing trend. In the company inventory is the major components of current assets and has fluctuating trend. Having such large volume of inventories in the factory causes unnecessary working capital blockage is due to the miss management of inventory. He has also found effective credit collection policy but not properly utilized the current assets in the factory. Liquidity position of the factory during the study period shows fluctuating trend, net working capital in the factory is always positive. Profitability positions of Lumbini Sugar factory Limited has been analyzed form various angles. The net profit margin of the factory is decreasing trend.

B. Arrayal (2002) has study on *“An analysis on working capital management with special reference of Hetauda Textile and Balaju Textile Limited”*. The objectives of this study are as follows:

- To analyze the liquidity, solvency, utilization and profitability position.
- To analyze the optimal working capital management of both textile comparisons

The findings of this study were as follows:

- The liquidity position of Hetauda Textile Ltd was better than that of Balaju Textile Ltd, but both companies have not followed a proper working capital policy.
- Total assets turnover of both companied was not satisfactory and there was not significant difference of total assets turnover.
- Cash balances maintain by Balaju Textile Ltd. Was better then that of Hetauda Textile Ltd.
- Solvency position of Hetauda Textile was better than that of Balaju textile
- Solvency position of Hetauda Textile was better than that of Balaju Textile.
- Profitability position of Hetauda Textile was better than that of Balaju Textile, however both companies have not profitability position during the study period.

Rupes Limbu, (2004) conducted the research on the topic of *"Comparative Study of Working Capital Management of Nepal Bank Limited (NBL) and Nepal Arab Bank Limited (NABIL)”* with the objectives of:

- To review the related literature of recent development in working capital management.
- To study the current assets and current liabilities and their impact and relationship to each other of NBL and NABIL.
- To analyze the comparative study of working capital management of NBL and NABIL.
- On the basis of the analysis, to provided recommendation and suggestion for the improvement of working capital management of NBL and NABIL in future.

This thesis is conducted through basically secondary data. The data has been collected from financial statement directly from NBL and NABIL. The supplementary data and information obtained from unpublished officials records of concerned banks, Booklets, journals, other organization like security exchange center and Nepal Rastra Bank. Correlation analysis and Test Hypothesis are used to analyze the data. The major findings are:

- The company holds the largest portion of current assets. The current assets generating the negative income by the lack of investment opportunities on loan and advances.
- Current assets not constant for every year it is in the fluctuating nature.
- Theoretically the higher liquidity means the lower risk as well as lower profit but commercial banks higher liquidity means the lower risk as well as lower profit but commercial banks higher liquidity is not always the cause of lower profitability.

Many research studies have been conducted by different research about W.C management. But most of the research works I have tried to show the W.C position of leading Manufacturing company of Nepal viz. U. N. Ltd and a blending Company viz. N.L.O. Ltd. Financial statistical tools used by most of the researches were ratio analysis, test of hypothesis, correlation analysis and trend analysis. Regression analysis and primary data are rarely used by many researches. This research study will include different tools like ratio analysis, correlation analysis, regression analysis and personal interview as a primary tool of analysis. Regression analysis and interview are the specific tools used in this study.

Thapa: (2006) has conduct research on *"SWOT analysis of Investment bank limited"* The researcher has used the financial tools to make this study more effective and informative. This study has collected ten years data from 2001/02 to 2005/2006. Basically, he used the ratio analysis.

The specific objectives of his research are:

1. To analyze liquidity, leverage, profitability and ownership ratios of the bank.
2. To study the income and expenditure statements of the bank.
3. To analyze the bankruptcy score of the bank for the period of fiscal years from 2001/02 to 2005/2006
4. To provide suggestions and recommendation based on the findings of the analysis.

The researcher found the following points:

- The cash and Bank balance to current deposit is 33.48%in average. In this reason the liquidity position is high level compared to the prescribed by Nepal Rastra Bank.

- The capital Adequacy position in terms of total debt top total assets is found much more higher in average of 90.16% like wise total debt to share holders found 9.86 times and debt to net worth is 24.51 times.
- The bank has low equity capital the bank has to pay more charges which adversely affects its profitability.
- The activity ratio in terms of investment to total deposit is trickle down and reached to 21.52% in FY 20001/02/ 2006/07.
- Nepal Investment Bank Ltd is discouraging the investment of its resources.
- The analysis shows that the deposits of the bank have increased during the years 2001/02 to 2006/07.

Prabes Nepal (2007) studied on the topic of " *Inventory Management of Herbs processing and production co. Ltd"*. He set some objectives, which are given below:

- Identify present position of inventory in HPPCL.
- What types of problems faced by HPPCL in the management cost and profit that should be identified.
- Provide the appropriate recommendation and suggestion improvement of inventory management in HPPCL on the basis of above study and findings.

He found the following problems in the area of inventory management in the HPPCL like-

- What types of inventory problems do they face?
- Do they have any plan for inventory?
- What are the bases for such plan?
- Are there any plans and policies to increase profit, reduce expenditures through improving size of inventory in future, If yes, what, if no, why?

He concluded after study, if the company want to be success, it was necessary to apply the theoretical and practical methods in collection, production, distribution management, marketing, proper remuneration and rewards and punishment etc. The company had given extra facilities and inspiration to the farmer to produce the raw materials to reduce the loss of inventory expenses. Transportation high charge and loss of company would reduce if the company were able to fulfill desired raw materials from private resources.

Nitu Shrestha (2008) has conduct research on "*Working Capital Management of Nepal Telecom Limited"* She has done her research analyzing every aspect of working capital management. The objectives of this study is to insight in to the management of working capital in Nepal Telecom more specifically, following the objectives 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

Her finding and conclusion of the study are:

i. Structure of working capital

This section has dealt with the structure or composition of working capital and approximate ratio of cash, inventory and receivables of Nepal Telecom. The observation of the cash and bank to current assets ratio shows that the major portion of current assets is held by cash and bank in Nepal Telecom since the average ratio of cash and bank to current assets is calculated as 53.014%. Since this ratio is too high, it can be stated that the company is facing situations of excess cash and bank balance held idle which is unfavorable for a company. Inventory is another element of working capital which is only stores and spare parts and held a nominal part of current assets since the average inventory turnover ratio is 22.06. This indicates that there is no considerable amount tied up in inventory in Nepal Telecom. Another important element is Account Receivables which represents sundry debtors plus interest accrued on investment. The volume of receivables is fluctuating over the study period.

ii. Efficiency of working capital management

The efficiency of management of working capital is measured through the turnover ratios since the volume of sales in any business organization not only affects the size of working capital but also clearly reflects the efficiency with which assets are managed. The receivables turnover rations are moderately fluctuating and vary from the lowest 2.33 times and the highest 3.36 times. Likewise, the cash turnover ration has are moderately fluctuating and vary the lowest0.51times times from 0.89 during the study period since the rate of increase in the sales volume is lower than that of cash& bank balance. In the three years, cash & bank balance are exceeding net sales by a significant amount. Hence the result is dissatisfactory. The average net working capital turnover is 0.48 times. Since the ratio has decreased from 0.58times to 0.36 times during the study period, we can say that the company is no utilizing its net working capital effectively. The amount of working capital is exceeding net sales every year. Hence from the analysis, it is revealed that Nepal Telecom has kept excess amount of working capital in comparison to sales which can be considered as the sign of efficient working capital management.

iii. Liquidity position

Overall, the liquidity position of the firm has been found satisfactory. The current ration varies from 5.01 times to 5.34 times with a throughout the study period which are however satisfactory compared to the conventional ideal ration 2:1. Average ration is 5.21 and overall, it coincides with the conventionally accepted ration 2:1. The average quick ratio is 5.04:1 which is significantly higher than the standard quick ration 1:1. Hence it can be said that the company is holding more than enough cash balance or liquid assets to meet their current payment which indicates mismanagement of liquid assets since and optimum liquidity is the necessity of a firm. There is inverse relation between profitability and liquidity since there is negative correlation between liquidity and profitability.

CHAPTER - III
RESEARCH METHODOLOGY

3.1 Introduction:

Research is common parlance refers to a search for knowledge is composed by 're' and 'search' where 're' means repeatedly or again and again and 'search' means to investigate or find. Research methodology is a way to systematically solve the research problem.

The basic objective of this study is to make an Analysis of Working Capital Management of Nepal Telecom. To achieve this objective, the study needs to follow an appropriate methodology.

A systematic research study needs to follow a proper methodology to achieve pre-determined objectives. Research methodology is a sequential procedure and methods to be adopted in a systematic study. It is followed to achieve the basic objective and goal of the research work. The major contains of research methodology followed in course of this study are as follow:-

3.2 Research Design

Research design is a plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances. (Kotahri, 1984:43)

Research design is highlighted for ascertaining the basic objectives of the study. Research design includes definite procedures and techniques which guide in sufficient way for analyzing and evaluating the study. This study is carried out by using both quantitative and qualitative analysis methods. Mostly the secondary data has been used for analysis, but the discussion and personal interview with the concerned employees of Nepal Telecom are also used for qualitative analysis. Hence, research design or undertaking this study is based on descriptive and analytical method. Attempts have been to explore working capital management of Nepal Telecom.

3.3 Nature and Sources of Data

Secondary data have been used to fulfill the objectives of this study. Some primary data are also collected through questionnaire in Nepal Telecom. The secondary sources of data include the published documents of NTC, annual reports of NTC, booklets, similar previous dissertations and other publications. Data requisition slip from NTC in appendix and supplementary questionnaire is also given in the appendix.

3.4 Population and Sample

This research work is related with the analysis of working capital management of public enterprises in Nepal . So, the total present number of public enterprises in Nepal is the population of this study. However, due to various constraints of mine like time, resource, etc., selected only one representative public enterprise for my research work and the representative public enterprise is Nepal Telecommunications Corporation. This study covered five years period in NTC from fiscal year 2001/02to 2006/07

3.5 Tools for Analysis

The data collected from various sources are managed, annualized and presented in proper tables and formats and are interpreted and enplaned wherever necessary. Financial and statistical tools are used to analyze the collected data.

3.6 Financial tools

In this research study various financial tools are employed for the analysis. There are various ratios but in this study some selected ratios among them are used.

A) Liquidity ratio:

Liquidity ratio is employed to measure the company's ability to meet short-term obligations. These ratios provide insight into the present cash solvency in the event of adverse financial condition. This ratio is used to measure the company's short-term obligations with short-term resources available at a given point of time.

i) Current Ratio:

This ratio measures the short-term solvency, i.e. its ability to meet short-term obligation.

As a measure of creditors versus current assets, it indicates each rupee of current assets available by dividing current assets by current liabilities.

$$\text{Current ratio} = \frac{CurrentAssets}{CurrentLiabilities}$$

ii) Quick Ratio:

Quick Ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid assets. Other assets, which are considered to be relatively liquid and included in quick assets, are book debts and marketable securities. This quick ratio can be found out by dividing the total of quick assets by total current liabilities.

$$\text{Quick ratio} = \frac{Quick\,Assets}{Current\ \ Liabilities}$$

iii) Cash to Current Assets Ratio

This ratio is employed to measure whether total cash balance is sufficient to cover its current assets. It is calculated by dividing total cash balance by current assets.

$$\text{Cash Balance to Current assets ratio X} \frac{\text{Cash balance}}{Current\ Liabilities}$$

B) Turnover Ratio:

In a business concern, through these ratios, it is known whether the funds employed have been used effectively in the business activities or not. The following are the ratio employed to analyze the activeness of the concerned company.

i) Inventory Turnover ratio

Inventory turnover ratio shows the efficiency of the business concern in an inventory management. It established the relationship between cost of good sold during the given period and average amount of inventory and lower stock ratio suggests that management should management its inventory properly turnover ratio is calculated as follows:

$$\text{Inventory Turnover Ratio} = \frac{Sales}{Inventory}$$

ii) Debtors / Receivables Turnover ratio

Although there is no measurement, higher turnover of current assets is always desirable as it indicates the maximum utilization of current assets during the year. Therefore, lower ratio indicates greater volume of working capital and vice versa.

iii) Cash turnover ratio

Cash turnover ratio shows the number of times the average cash balance is turned over during the year. It measures the speed with which cash moves through the organization operations. The ratio is computed by dividing sales by cash and bank balance.

$$\text{Cash turnover ratio} = \frac{Sales}{CashBalance}$$

iv) Net working capital turnover ratio

The ratio shows the number of times the working turned over during the year. the higher ratio indicates the utilization of the working capital and vice versa. The ratios can be defined as

.

$$\text{Net working capital turnover ratio} = \frac{Sales}{NetWorkingcapital}$$

Where, net working capital = current assets – current liabilities

C) Profitability Position

Profitability is measure of efficiency of the organization; profitability of the firm can be measured by its profitability ratio. So, it plays significant role in any organization.

Generally, the profitability positions of the companies are analyzed with the help of following ratios.

i) Net profit margin ratio

The ratio measures the relationship between net profit and sales of the company. It measures the overall profitability or company's ability to earn net profit. It is computed by net profit by sales.

Net profit margin ratio = $\frac{Net\,\mathrm{Pr}\,ofit}{Sales}$

ii) Operating ratio

The overall ratio is an important ratio, which is calculated to ascertain the relationship between operating expenses and volume of sales. The ratio is computed as follows:

Operating ratio = $\frac{\text{Cost of goods sold} + \text{Operating Expenses}}{\text{Sales}} \times 100$

Operating expenses = Adm. Expenses + selling & distribution expenses + financial expenses

Higher ratio indicates the lower efficiency of the company and vice versa. Higher operating ratio means small amount of operating income to meet interest and dividends. So, it is not seems to be favorable for company while there is higher rate of operating ratio.

iii) Return on total assets ratio

Return on total assets ratio measures the profitability of the company by established relationship between net profit after taxes and total assets. It also helps to understand the utilization of assets of the company. The ratio is computed as follows:

Return on total assets = $\frac{Netprofit\ AfterTaxX\,100}{TotalAssets}$

iv) Return on net worth ratio

The ratio indicates the return to the shareholders. It shows whether the firm has earned satisfactory return for its shareholders or not. Higher return on net worth ratio indicates higher return to the shareholders and vice-versa. The ratio is computed as follows:

$$\text{Return on net worth ratio} = \frac{\text{Net Profit After tax}}{\text{Net Worth}} \times 100$$

v) Return on working capital / return on current assets ratio

The ratio measures the profitability position of the company with respect to current assets. Higher ratio indicates higher utilization of current assets to earn profit and vice-versa. The ratio is computed by dividing net profit after tax by current assets or working capital.

$$\text{Return on current assets} = \frac{\text{Net Profit After Tax}}{\text{Current Assets}} \varepsilon \; 100$$

D) Working capital cash flow cycle

The continuous flow from cash to supplier, to inventory, to account receivable and back into cash is known as working capital cash flow cycle. It continuously repeats. The cycle demonstrates the conversion of raw materials and labour to cash. Hence this concept is also called cash conversion cycle model.

Cash conversion cycle model has been applied to more complex business and it is useful when analyzing the effectiveness of a firm’s working capital management. There are following four factors of cash conversion cycle model.

1. Inventory conversion period (ICP)

The length of time required converting raw material into finished goods and then to sell these goods can be defined as inventory conversion period. This period indicates its product. Inventory turnover is calculated by dividing the cost of goods sold by average inventory. It can be said as time required for conversion inventory into cash. It can be calculated as follows:

Inventory conversion period = $\dfrac{360 days}{inventory turnover}$

Inventory turnover = $\dfrac{Cost of good sold}{Average inventory}$

2. Receivable conversion period (RCP)

Receivable conversion period indicates the number of day's debtor's turnover into cash. It analyses to determine collection of debtors and also efficiency of collection effects. It is one of the important financial tools for the measurement of cash conversion cycle. Generally, the longer the collection period, the more efficient is the management of credit receivable collection period is also known as average collection period or days sales outstanding (DSO) RCP be calculated s follows:

Receivable conversion period = $\dfrac{Sales}{\mathrm{Re}\,ceivales turnover}$

Sales Receivable turnover = $\dfrac{Sales}{Devetors}$

3. Payable deferral period (PDP)

Time required purchasing raw material and labour and the payment of cash for them is called payable deferral period. It indicates the speed of creditor payable conversion period is favorable for the creditor too much higher period also can hamper the credit worthiness of the company. The payable deferral period can be calculated using following formula:

Payable deferral period = $\dfrac{Account payable}{Purchase Per day}$

4. Cash conversion cycle (CCC)

Cash conversion cycle is an important financial tool and also a quick and convenient way to analyze the ongoing liquidity of the firm over time. It generally measures the length of time that funds tied up in working capital. Cash conversion cycle can be calculated by using following formula:

Cash conversion cycle = Inventory conversion period +Receivable conversion period – Payable deferral period

As we know that inventory and receivables are cash inflow of business and PDP is cash outflow of business. So for the calculation of conversion cycle RCP and ICP should be added and PDP should be deducted.

3.7 Statistical Tools used

The research hold varies statistical tools, which are defined as follows:

i. Mean

The most popular and widely used measure of representing the entire data by one value is known as average or mean. The value is obtained by adding together all the items and by dividing this total by the number of items. It represents the entire data, which lies almost between the two extremes. In this study is calculated as:

$$\text{Mean} = \frac{X}{n}$$

ii. Standard deviation (SD)

The standard deviation is an important and widely used measure of dispersion. The measurement of the scatters of the mass of figures in a series about in average is known as dispersion. The standard deviation (SD) is an absolute measurement of dispersion in which the drawbacks present in other measures of dispersion are removed. The high amount of dispersion reflects high standard deviation. The small standard deviation means the high degree of homogeneity of the observations. It is calculated for selected dependent and independent variables specified. It is the positive square root of the arithmetic mean of the standard deviation from arithmetic mean. It is usually denoted by (small sigma)

$$\mathrm{SD}(\pm) = \sqrt{\frac{(X \; \mathrm{Z} \overset{\mathrm{z}}{X})^{2}}{n}}$$

iii. Coefficient of variation

The coefficient of variation reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviations known as coefficient of variation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as the CV. It is used for comparing variability of two distributions; the CV is defined as,

$$\mathrm{CV} = \frac{\pm}{\overline{\overline{X}}} \; \varepsilon \; 100$$

Greater the CV, the more variable or conversely less consistent, less uniform, less stainable and homogenous than the consistent more uniform, more stable and homogenous. This nature of CV uses that actual size of working capital.

iv. Coefficient of correlation (r)

Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is liner related to another. Coefficient of correlation is the measurement of the degree of relationship between two casually related sets of figure whether positive or negative. Its values lie somewhere ranging between - 1 to +1. If the both variables are constantly changing in the similar direction, the value of coefficient will be –1, two variables take place in opposite defection. The correlation is said to be perfect negative. In this study, simple correlation is use to examine the relationship of different factors with working capital and other variable.

$$\text{Coefficient of correlation (r)} = \frac{\text{CoVariance of X \& Y}}{\pm_X \ \pm_Y}$$

v. Probable Error (PE)

Probable error of the correlation coefficient denoted by PE is measure of testing reliability of the calculated value of ‘r’

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

a) If r<6PE, it is not significant. So there is no evidence of correlation

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The main objectives of this study as mentioned in introduction chapter are to analysis the working capital management of Nepal Telecom. In order to fulfill this objectives concrete course of research methodology has been attempt to follow which is explained in chapter three, the major variables for this study are cash and bank balance, inventories and receivables / debtors. In this chapter efforts have been made to analyze the working capital management in terms of composition of working capital, liquidity position, turnover position, profitability position and working capital cycle of NTC. The compositions of working capital policy are analyzed by making relationship of each component of current assets as well as total assets. The liquidity position is analyzed through current ratio, quick ratio and cash and bank balance to current assets ratio. The turnover position is analyzed with the help of gross working capital turnover, net working capital turnover, cash receivables turnovers and inventory turnover. Moreover, the profitability position is analyzed with the help of gross profit margin, net profit margin, operating ratio, and return on total assets, return on net worth and return on working capital. The various data in respect of different headings are analyzed one by one.

4.2 Composition Working capital

To operate the business, different kinds of assets are needed. For the day-to-day business operation different types of current assets are required. The composition of current assets or the main components of currents assets at NTC are cash and bank balance, loan and advances, sundry debtors and stores & Spares. Miscellaneous current assets are also a component of current assets. Interest accrued on investment and unexpired L/C & Advances are included in miscellaneous current assets.

The following table shows the amount of cash and bank balance, inter-branch balance, Loan and advance, sundry debtors, stores & Spares and miscellaneous current assets of NTC of the study period.

Table No. 4.1

Current assets composition of NTC

Rs. '000'

Fiscal Year	Stores & Spare	Sundry Debtors	Loans & Advance	Cash & Bank Balance	Miscellaneous	Total Current Assets
2004/05	301309	2610352	401648	11797087	5815243	20925639
2005/06	309857	2825943	505656	9584469	7372428	20598353
2006/07	329315	3099496	707609	12028795	6467889	22526522
2007/08	327684	3455512	499022	14746338	7342143	26370699
2008/09	416424	3482610	414708	16134517	6786541	27234800

Source: Appendix 6

Table No.4.1, represents that the composition of current assets of NTC. Cash & bank balance is rapidly increased over the study period. Similarly loan & advance is also increased up to 2006/07 and decreased in 2007/08 and 2008/09. Sundry debtors are also increased. Store & spares are decreased in fiscal year 2007/08 and in remaining years it is increased. Miscellaneous is fluctuating trend from fiscal year 2004/05 to 2008/09. In overall, total current assets are rapidly increased in study period.

Figure No. 4.1.

Percentage Composition of Current Assets of NTC

Years	2004/05(%)	2005/06(%)	2006/07(%)	2007/08(%)	2008/09(%)
Stores & Spare	1.43	1.5	1.46	1.24	1.53
Sundry Debtors	12.47	13.73	13.75	13.10	12.79
Loans & Advance	1.92	2.45	2.67	1.89	1.52
Cash & Bank Balance	56.38	46.53	53.40	55.92	59.24
Miscellaneous	27.79	35.79	28.71	27.85	24.92
Total	100	100	100	100	100

Source: Table 4.1

Graphic Presentation of Percentage Composition of NTC

4.3 Ratio and its Trend Analysis

Ratio analysis is the powerful financial tools to measures the financial performance of NTC comparatively. As mentioned in research methodology liquidity, turnover, capital structure and profitability ratios are calculated. To find the overall performance as well as general movement of important ratios, trend analysis, correlation on least square is used.

4.3.1 Liquidity Position:

Liquidity of any business organization is directly related with working capital or current assets and current liabilities of that organization. In other words, one of the main objectives of working capital management is keeping sound liquidity position. NTC is a different organization, which is engaged in mobilization of funds. So without sound liquidity position, NTC is not able to operate its function. To measure the NTC's solvency position or ability to meet its short-term obligation, various liquidity ratios are calculated and to know the trend of liquidity, trend analysis of major ratio have been considered.

4.3.1.1 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 banks ability to meet its current obligations. It is calculated as follows:

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

The following table shows the current ratio to compare the working capital management of NTC

Table 4.2
Current ratio of NTC

Rs. in '000'

Fiscal year	Current Assets	Current liabilities	Ratio (times)
2004/05	20925639	4090353	5.16
2005/06	20598353	3858484	5.34
2006/07	22526522	4475753	5.04
2007/08	26370699	5712295	4.62
2008/09	27234800	7915501	3.44
Average	23531202.6	5210477.2	4.72
S.D.			0.76
C.V.			0.16

Source: Appendix 7

Table No. 4.2 shows that the current assets of NTC are increased in every fiscal year of study period except in 2005/06. Similarly, current liabilities of NTC are also increased every fiscal year of study period except in 2005/06. Current ratios of NTC are in decreasing trend except in 2005/06.The highest current ratio of NTC is 5.34 times in the fiscal year 2005/06, whose corresponding current assets and current liabilities are Rs.20598353 thousand and Rs.3858484 thousand respectively and the lowest current ratio of NTC is 3.44 times in fiscal year 2008/09.The standard current ratio is 2:1,but the NTC current ratio is greater than the standard ratio so, the NTC has maintained its liquidity position in proper way. However it is too high. Its S.D and C.V. are 0.76 and 0.16 respectively.

Figure No.4.2

Calculation of Current Ratio

4.3.1.2 Quick ratio

Quick ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of original value. Cash is a most liquid asset. Quick asset is equals to total current assets without Stores & Spares. This quick ratio can be found out by dividing the total of quick assets by total current liabilities.

$$\text{Quick ratio} = \frac{Quick\ Assets}{Current Liabilities}$$

For this study, except the stores & spares of total current assets are quick assets. The following table shows the quick ratio of NTC.

Table 4.3

Quick ratio of NTC

Rs. in '000'

Fiscal year	Quick Assets	Current liabilities	Ratio (times)
2004/05	20624330	4090353	5.04
2005/06	20288496	3858484	5.26
2006/07	22197207	4475753	4.96
2007/08	26043015	5712295	4.56
2008/09	26818376	7915501	3.39
Average	23194284.8	5210477.2	4.642
S.D.			0.74
C.V.			0.16

Source: Appendix 8

Above table shows that the quick ratio of NTC are also in decreasing trend except in 2005/06. The quick assets of NTC are increased every fiscal year of study period except in 2005/06. Similarly, current liabilities of NTC are also increased every fiscal year except 2005/06 of study period. The highest quick ratio of NTC is 5.26 times in the fiscal year 2005/06, whose quick assets and current liabilities are Rs.20288496 thousand and Rs.3858484 thousand respectively and the lowest quick ratio of NTC is 3.39 times in fiscal year 2008/09, whose quick assets and current liabilities are Rs.26818376 thousand and Rs.7915501thousand respectively. The standard quick ratio is 1:1, but the NTC has higher ratio than standard ratio. Its S.D and C.V are 0.74 and 0.16 respectively.

Figure No. 4.3

Quick ratio of NTC

Figure no 4.3 represents that the quick assets and current liabilities with quick ratio of NTC. Quick assets and current liabilities are rapidly increased over the study period but quick ratio is in decreasing trend except in 2005/06.

4.3.1.3 Cash & bank Balance to Current Assets

Cash & bank balance to current assets ratio establishes a relationship between cash & bank balance and current assets. This ratio can be found out by dividing the cash & bank balance by total current asset

Cash & Bank Balance to Current assets ratio = $\frac{Cash \,\&\, BankBalance}{CurrentAssets} * 100$

Table 4.4

Cash & Bank Balance to current assets

Rs. in ‘000’

Fiscal year	Cash & Bank Bal.	Current Assets	Ratio (%)
2004/05	11797087	20925639	56.38
2005/06	9584469	20598353	46.60
2006/07	12028795	22526522	53.41
2007/08	14746338	26370699	55.92
2008/09	16134517	27234800	59.24
Average	12858241.2	23531202.6	54.31
S.D.			4.78
C.V.			0.09

Source: Appendix 9

Above table shows that the cash & bank balance ratio of NTC are in increasing trend except in 2005/06 over the study period. The cash & bank balance of NTC are increased every fiscal year of study period except in 2005/06. Similarly, current assets of NTC are also increased every fiscal year of study period except in 2005/06. The highest cash & bank balance to current assets ratio of NTC is 59.24% in the fiscal year 2008/09, whose corresponding cash & bank balance and current assets are Rs.16134517 thousand and Rs.27234800 thousand respectively and the lowest ratio of NTC is 46.6% in fiscal year 2005/06, whose corresponding cash & bank balance and current assets are Rs.9584469 thousand and Rs.20598353 thousand respectively. Average ratio is 54.31. From the above data it can be concluded that NTC has high portion of cash in its current assets.NTC can use this amount in various investment sectors to maximize its return. Its S.D. and C.V. are 4.78 and 0.09 respectively.

Figure No.4.4

Cash & Bank Balance to current assets

Figure No.4.4 presents that the Cash & Bank Balance and Current assets with cash & bank balance to current assets ratio of NTC. Cash & Bank Balance and current assets are rapidly increased over the study period but cash & bank balance to current assets ratio is in increasing trend except in 2005/06.

4.3.2 Turnover Position

Activity ratios are used to evaluate the efficiency with which the firm manages and utilizes its assets. Theses ratios are also employed to evaluate the speed with which assets are being converted and turnover. These ratios moreover, help in measuring the banks ability to utilize their available resources.

4.3.2.1 Inventory turnover ratio

This ratio indicates the how effectively the firms managing inventory and the efficiency of the firm in selling its product. Inventory turnover ratio is defined as the cost of good sold or sales dividing by inventories.

$$\text{Inventory Turnover Ratio} = \frac{Costofgoodsold}{Invetories}$$

OR

$$\text{Inventory Turnover Ratio} = \frac{Sales}{Inventories}$$

Inventory turnover ratio show how rapidly the inventory is turning into receivable through sales. Generally, a high inventory turns over indicative of good inventory management. A low inventory turnover implies excessive inventory level then warranted by production and sales activities or a slow moving or obsolete inventory.

Table 4.5

Inventory Turnover Ratio

Rs. in '000'

Fiscal year	Net sales	Closing inventory	Ratio (times)
2004/05	6070423	301309	20.23
2005/06	8584144	309857	27.71
2006/07	10413655	329315	31.62
2007/08	13524368	327684	41.27
2008/09	16788360	416424	40.32
Average	11076190	336917.8	32.23
S.D.			8.83
C.V.			0.27

Source: Appendix 10

Table No.4.5 shows that the inventory turnover ratio of NTC is in increasing trend over the study period except in 2008/09. The net sales of NTC are increased every fiscal year over the study period. Closing inventory of NTC is also in increasing trend except in 2007/08. The highest inventory turnover ratio of NTC is 41.27 times in the fiscal year 2007/08, whose net sales and closing inventories are Rs.13524368 thousand and Rs.327684 thousand respectively and the lowest inventory turnover ratio of NTC is 20.23 times in fiscal year 2004/05, whose net sales and closing inventories are Rs.6070423 thousand and Rs.301309 thousand respectively. Average ratio is 32.228. This ratio is in increasing trend which is the good indication of the company as higher ratio is preferable. Its S.D and C.V. are 8.83 and 0.27 respectively.

Figure No. 4.5

Inventory Turnover Ratio

Above Figure represents that net sales and inventory with inventory turnover ratio. Net sales are increased in all the fiscal year whereas inventory are also increased in all year except fiscal year 2007/08.Inventory ratio is rapidly increased over the study period except in 2008/09.

4.3.2.2 Debtors/ Receivables turnover ratio

Debtors / Receivables turnover ratio indicates the speed with which receivable are being converted into sales. This turnover ratio is calculated as follows:

Debtors / Receivable Turnover Ratio = $\frac{NetSales}{Debtors}$

The table below shows the net sales to debtors / receivables ratio. This ratio analyzes the capacity of NTC management in utilization of fund in current assets.

Table 4.6

Debtors/Receivable Turnover Ratio

Rs. in ‘000’

Fiscal year	Net sales	Debtors	Ratio (times)
2004/05	6070423	2610352	2.33
2005/06	8584144	2825943	3.04
2006/07	10413655	3099496	3.36
2007/08	13524368	3455512	3.91
2008/09	16788360	3482610	4.82
Average	11076190	3094782.6	3.49
S.D.			0.94
C.V.			0.27

Source: Appendix 11

Above Table shows that the debtors/receivable turnover ratio of NTC is increasing trend over the study period. The net sales of NTC are increased in every fiscal year of the study period. Debtors of NTC are also in increasing trend over the study period. The highest debtors turnover ratio of NTC is 4.82 times in the fiscal year 2008/09, whose corresponding net sales and debtors are Rs.11076190 thousand and Rs.3482610 thousand respectively and the lowest debtors turnover ratio of NTC is 2.33 times in fiscal year 2004/05, whose corresponding net sales and debtors are Rs.6070423 thousand and Rs.2610352 thousand respectively. Over the study period, average ratio of Debtors/Receivable Turnover Ratio is 3.49 times and its S.D and C.V. are 0.94 and 0.27 respectively. Over the study period, average ratio of Debtors/Receivable Turnover Ratio is in increasing trend. Increasing trend is good for the company as increasing trend reduces collection time.

Figure No. 4.6

Debtors/Receivable Turnover Ratio

Above Figure shows Debtor turnover ratio is in increasing trend over the studied period.

4.3.2.3 Current assets turnover ratio

The amount of working capital is affected by sales policy. If the credit sales are increased more working capital will be required to meet the daily requirement.

The current assets turnover ratio indicates the adequacy of sales in relation to the investment in current assets. Generally a high current assets turnover ratio indicates efficient utilization of current assets. The current assets turnover ratio is calculated by dividing by net sales by current assets.

$$\text{Current assets Turnover Ratio} = \frac{Netsales}{CurrentAssets}$$

The current assets turnover position of the NTC during the period of the study is tabulated as below

Table 4.7

Current assets Turnover Ratio

Rs. in ‘000’

Fiscal Year	Net Sales	Current Assets	Ratio(times)
2004/05	6070423	20925639	0.29
2005/06	8584144	20598353	0.42
2006/07	10413655	22526522	0.46
2007/08	13524368	26370699	0.51
2008/09	16788360	27234800	0.62
Average	11076190	23531202.6	0.46
S.D.			0.12
C.V.			0.26

Source: Appendix 12

Above table shows that current assets turnover ratio are increased over the studied period. The highest current assets turnover ratio of NTC is 0.62 times in the fiscal year 2008/09, whose net sales and current assets are Rs. 16788360 thousand and Rs. 27234800 thousand respectively and the lowest current assets turnover ratio of NTC is 0.29 times in fiscal year 2004/05, whose corresponding net sales and current assets are Rs.6070423 thousand and Rs.20925639 thousand respectively. The mean ratio is 0.46 times. Its S.D. and C.V. are 0.12 and 0.26 respectively.increasing trend of ratio shows that NTC is better mobilizing it current assets in each year as increasing trend is preferable in this case.

Figure No. 4.7

Current assets Turnover Ratio

Figure No. 4.7 represents that Current assets turnover ratio is rapidly decreased over the study period.

4.3.2.4 Cash turnover ratio

Cash turnover ratio indicates the efficiency of management in application of cash it is one of the main part of current assets which has greatest value to meet the current obligations occurred in the business. Without adequate cash, business is not possible, but the excess unnecessary holding cost. So the company should try to maintain the adequate amount of cash fund, keeping in mind the risk-return trade off. It ratio is calculated as follows:

$$\text{Cash Turnover Ratio} = \frac{NetSales}{Cash\ \&\ BankBalance}$$

Table 4.8

Cash Turnover Ratio

Rs. in '000'

Fiscal year	Net sales	Cash & Bank Bal.	Ratio (times)
2004/05	6070423	11797087	0.51
2005/06	8584144	9584469	0.89
2006/07	10413655	12028795	0.87
2007/08	13524368	14746338	0.92
2008/09	16788360	16134517	1.04
Average	11076190	12858241.2	0.846
S.D.			0.20
C.V.			0.24

Source: Appendix 13

Above table shows that cash turnover ratio of NTC are in increasing trend over the study period except in 2006/07. The net sales of NTC are increased every fiscal year. Cash & bank balance of NTC is increased except in 2005/06 over the study period. The highest cash turnover ratio of NTC is 1.04 times in the fiscal year 2008/09, whose corresponding net sales and cash & bank balance are Rs 16788360 thousand and Rs 16134517 thousand respectively and the lowest cash turnover ratio of NTC is 0.51 times in fiscal year 2004/05, whose net sales and cash & bank balance are Rs.6070423 thousand and Rs.11797087 thousand respectively. The mean ratio is 0.85 and its S.D. and C.V. are 0.20 & 0.24 respectively. In creasing trend shows NTC has been better utilizing its cash for maximizing its sales in each year.

Figure No 4.8

Cash Turnover Ratio

Figure no.4.8 shows that Cash turnover ratio is increased in each year except in 2006/07 over the study period.

4.3.2.5 Net Working capital turnover ratio

Net working capital is the difference between current assets and current liabilities. This ratio explains the net working capital has been utilized to general sales in a firm. The size of working capital depends up on production cycle and business cycle.

This indicates the velocity of the utilization of working management. This ratio measures the efficiency with which the working capital is being used by NTC.

Net working capital Turnover Ratio = $\frac{NetSales}{NetWorkingCapital}$

Table 4.9

Net working capital Turnover Ratio

Rs. in '000'

Fiscal year	Net sales	Net working Capital	Ratio (Times)
2004/05	6070423	16835286	0.36
2005/06	8584144	16739869	0.51
2006/07	10413655	18050769	0.58
2007/08	13524368	20330720	0.67
2008/09	16788360	18902875	0.89
Average	11076190	18171903.8	0.60
S.D.			0.20
C.V.			0.33

Source: Appendix 14

Table No.4.9 shows that net working capital turnover ratio is in increasing trend over the studied period. Net sales of NTC are increased every fiscal year over the study period. Similarly, net working capitals of NTC are also continuously increased every fiscal year except 2004/05 and 2008/09. The highest net working capital turnover ratio of NTC is 0.89 times in the fiscal year 2008/09, whose corresponding net sales and net working capital are Rs.16788360 thousand and Rs.18902875 thousand respectively and the lowest net working capital turnover ratio of NTC is 0.36 times in fiscal year 2004/05, which net sales and net working capital are Rs.6070423 thousand and Rs.16835286 thousand respectively. The mean ratio is 0.60 and S.D. and C.V. are 0.20 & 0.33 respectively. increasing trend shows that NTC has been better utilizing its net working capital to generate maximum net sales in each year in increasing trend.

FigureNo.4.9

Net working capital Turnover Ratio

Above Figure represents that net working capital turnover ratio of NTC is in increasing trend.

4.3.3 Profitability Position

Generally profit is the difference between total revenue and total expenses over a period time. Profitability is measure a efficiency and the search for it provides and incentive to achieve efficiency. Profitability ratios are those ratios which indicate degree of success in achieving desired profit level.

Profit is an important factor that determines the firms' expansion and diversification. A required level of profit is necessary for the firms' growth and survives in the competitive environment. Various ratios can be developed upon the profit under different circumstances. Theses different ratios are called profitability ratios, which are required to support the purpose of the study.

4.3.3.1 Net profit margin

Net profit margin is the relation between net profit after taxes and net sales. It indicates management efficiency in controlling the manufacturing and administrative cost of the products. The net profit margin reflects how much amount of net profit has been earned in the sales of one rupee. A high result is favorable and otherwise vice-versa. High result insures adequate return to the owner. Net profit margin is finding out by using following formula:

Net profit margin = $\frac{Net\ \mathrm{Pr}\ ofitAfterTaxes}{NetSales}*100$

Table 4.10

Net profit margin

Rs. in ‘000’

Fiscal year	Net profit after taxes	Net sales	Ratio (%)
2004/05	2247301	6070423	37.07
2005/06	3542461	8584144	41.3
2006/07	4936647	10413655	47.4
2007/08	5652689	13524368	41.80
2008/09	7942902	16788360	47.31
Average	4864400	11076190	42.98
S.D.			4.40
C.V.			0.10

Source: Appendix 15

Table No.4.10 depicts that net profit margin ratios are in increasing trend except in fiscal year2007/08 over the study period. Net profit after taxes of NTC is also continuously increased over the study period. Similarly, Net sales of NTC are increased every fiscal year over the study period. The highest net profit margin ratio of NTC is 47.40% in the fiscal year 2006/07, whose corresponding net profit after taxes and net sales are Rs.4936647 thousand and Rs.10413655 thousand respectively and the lowest net profit margin ratio of NTC is 37.07% in fiscal year 2004/05, whose corresponding net profit after taxes and net sales are Rs.2247301 thousand and Rs.6070423 thousand respectively. The mean ratio is 42.98 and S.D. and C.V. are 4.40 & 0.10 respectively.

Table 4.10

Net profit margin

Figure No.4.10 represents that net profit margin ratio of NTC. It is in increasing trend except in 2007/08.

4.3.3.2 Operating ratio

This ratio is computed by dividing all operating expenses by net sales. The operating ratio is an important ratio that explains the change in the net profit margin ratio. A higher operating ratio is unfavorable since it will leave a small amount of operating income to meet interest as divided. Operating ratio is finding out by using following formula:

$$\text{Operating Ratio} = \frac{OperatingExpenses}{NetSales} * 100$$

Table 4.11

Operating Ratio

Rs. in '000'

Fiscal year	Operating expenses	Net sales	Ratio (%)
2004/05	3308767	6070423	54.53
2005/06	4272768	8584144	49.78
2006/07	4215188	10413655	40.48
2007/08	6153251	13524368	45.50
2008/09	7017854	16788360	41.80
Average	4993565.6	11076190	46.418
S.D.			5.80
C.V.			0.12

Source: Appendix 16

Above table shows that operating ratios are in decreasing trend except in 2007/08 and 2008/09 over the study period. Operating expenses of NTC are also increasing trend except in 2006/07 over the study period. Similarly, Net sales of NTC are also in increasing trend in every fiscal year over the study period. The highest operating ratio of NTC is 54.53% in the fiscal year 2004/05, whose corresponding operating expenses and net sales are Rs.3308767 thousand and Rs.6070423 thousand respectively and the lowest operating ratio of NTC is 40.48 % in fiscal year 2006/07, whose corresponding operating expenses and net sales are Rs.4215188 thousand and Rs.10413655 thousand respectively. The mean ratio is 46.42 and S.D. and C.V. are 5.80 & 0.12 respectively. Decreasing trend is good sign for the company it shows NTC is minimizing its operating expenses in relation to net sales in succeeding years.

Figure No.4.11

Operating Ratio

Figure 4.10 presents that operating expenses and net sales with operating ratio of NTC. Operating ratio is decreasing trend except in fiscal year 2007/08 and 2008/09 over the study period.

4.3.3.3 Return on Total assets

This ratio is useful in measuring the profitability of all financial resource invested in the firm's assets. The return on assets or profit to assets ratio is calculated by dividing the amount of net profit after taxes by the amount of total assets employed. The return on total assets is finding out by using following formula:

$$\text{Return on total assets} = \frac{Net\,\Pr ofitAfterTaxes}{TotalAssets} * 100$$

Table 4.12

Return on total Assets

Rs. In ‘000’

Fiscal year	Net profit after taxes	Total Assets	Ratio (%)
2004/05	2247301	20591636	6.89
2005/06	3542461	20850094	9.96
2006/07	4936647	23686026	12.55
2007/08	5652689	29485961	19.17
2008/09	7942902	35343894	22.47
Average	4864400	25991522.2	14.21
S.D.			6.47
C.V.			0.46

Source: Appendix 17

Table no.4.12 represents that return on total assets are in increasing trend over the study period. Net profit after taxes of NTC is continuously increased; total assets of NTC are also continuously increased every fiscal year over the study period. The highest return on total assets of NTC is 22.47% in the fiscal year 2008/09, whose corresponding net profit after taxes and total assets are Rs 7942902 thousand and Rs.35343894 thousand respectively and the lowest return on total assets of NTC is 6.89% in fiscal year 2004/05, whose corresponding net profit after taxes and total assets are Rs.2247301 thousand and Rs.32652787 thousand respectively. The mean ratio is 14.21 and S.D. and C.V. are 6.47 & 0.46 respectively. increasing trend of this ratio shows that NTC has increased it return in relation with net sales in increasing trend which is the good indication of the company for profit maximization.

Figure No.4.12

Return on total Assets

Figure No. 4.12 shows that net profit Vs total assets and return on total assets of NTC. Net profits are increased in all years. Ratios of return on total assets are in increasing trend over the study period.

4.3.3.4 Return on net worth

This ratio is measure of profitability of the firm in respect of the utilization of net worth. It is calculated by dividing net profit after taxes by net worth. The net worth includes total equity capital and total reserve & Surplus. It reflects whether the corporation has earned a satisfactory return for its equity-holders or not. So, higher ratio is favorable of the stockholders. The return on net worth is finding out by using following formula:

Return on net worth = $\frac{Net\ Profit After Taxes}{Net Worth} * 100$

Table 4.13

Return on net worth

Rs. in '000'

Fiscal year	Net profit after taxes	Net worth	Ratio (%)
2004/05	2247301	20757100	10.84
2005/06	3542461	20580387	17.21
2006/07	4936647	23686027	20.84
2007/08	5652689	28294280	19.98
2008/09	7942902	35343849	22.47
Average	4864400	25732328.6	18.27
S.D.			4.57
C.V.			0.25

Source: Appendix 18

Above table shows that return on net worth are in increasing trend over the study period. Net profit after taxes of NTC is continuously increased over the study period. Net worth of NTC is also rapidly increased every fiscal year except 2005/06 in over the study period. The highest return on net worth of NTC is 22.47 % in the fiscal year 2008/09, whose net profit after taxes and net worth are Rs.7942902 thousand and Rs.35343849 thousand respectively and the lowest return on net worth of NTC is 10.84% in fiscal year 2004/05, whose net profit after taxes and net worth are Rs. 4936647 thousand and Rs. 23686027. The mean ratio is 18.27 and S.D. and C.V. are 4.57 & 0.25 respectively. Increasing trend of ratio shows that corporation has earned a satisfactory return for its equity-holders in each year.

Figure 4.13

Return on net worth

Above Figure represents that the return on net worth of NTC. Net profits on net worth are in increasing trend except the fiscal year 2007/08 over the study period.

4.3.3.5 Return on working capital

Return on net working capital measures the profitability and also indicates the efficiency of working capital of NTC. It indicates how NTC has used its available resources. The return on net worth is finding out by using following formula:

Return on working capital = $\frac{Net \Pr ofitAfterTaxes}{WorkingCapital} * 100$

Table 4.14

Return on working capital

Rs. in ‘000’

Fiscal year	Net profit after taxes	Working capital	Ratio (%)
2004/05	2247301	16835286	13.37
2005/06	3542461	16739869	21.16
2006/07	4936647	18050769	27.35
2007/08	5652689	20330720	27.80
2008/09	7942902	18902875	42.02
Average	4864400	18171903.8	26.34
S.D.			10.54
C.V.			0.40

Source: Appendix 19

Above table shows that return on working capital is in increasing trend over the study period. Net profit after taxes of NTC is continuously increased in all fiscal year 2004/05 over the study period. Similarly working capital of NTC is also increased every fiscal year in over the study period except in 2005/06 and 2008/09. The highest return on working capital of NTC is 42.02% in the fiscal year 2008/09, whose corresponding net profit after taxes and working capital are Rs. 7942902 thousand and Rs. 18902875 thousand respectively and the lowest return on working capital of NTC is 13.37% in fiscal year 2004/05, whose net profit after taxes and working capital are Rs.2247301 thousand and Rs.16835286 thousand respectively. The mean ratio is 26.34 and S.D. and C.V. are 10.54 & 0.40 respectively. Increasing trend of this ratio shows that NTC has utilized its net working capital in proper way in each year in increasing trend to generate higher profit.

Figure No 4.14

Return on working capital

Figure No. 4.14 represents that return on working capital is rapidly increased over the study period.

4.4 Analysis of Different ratios

4.4.1 Analysis of Liquidity ratio

Table No.4.15

Analysis of Liquidity ratio

Rs in "000"

Fiscal year	Current ratio (times	Quick ratio (times)	Cash & bank Bal. to current assets ratio (%)
2004/05	5.16	5.04	56.38
2005/06	5.34	5.26	46.6
2006/07	5.04	4.96	53.4
2007/08	4.62	4.56	55.92
2008/09	3.44	3.39	59.24
Average	4.72	4.642	54.31
S.D.	0.74	0.74	4.78
C.V.	0.16	0.16	0.09

Source: Appendix 7, 8, 9

Above table represents that the Current ratio, Quick ratio and Cash & bank Balance to the NTC over the Study Period. Here we know the over the study period Current Ratio and

Quick ratio is greater then the Standard Ratio, So the Company Should Maintain its ratio. And The Cash and Bank Balance is better condition over the study period.

4.4.2 Analysis of Turnover ratio

Table 4.16

Analysis of Turnover ratio

Fiscal year	Inventory turnover ratio	Debtors turnover ratio	Current assets turnover ratio	Ratio in % Cash turnover	Net working capital turnover ratio
2004/05	2.33	2.23	0.29	0.51	0.36
2005/06	20.23	3.04	0.42	0.42	0.51
2006/07	27.7	3.36	0.46	0.46	0.58
2007/08	41.27	3.91	0.51	0.92	0.67
2008/09	40.32	4.82	0.62	1.04	0.89
Average	32.23	3.492	0.46	0.846	0.602
S.D.	8.83	0.94	0.12	0.20	0.20
C.V.	0.27	0.27	0.26	0.24	0.33

Source: Appendix 10, 11, 12, 14

Above table represents that the Inventory turnover ratio, Debtors turnover ratio, Current assets turnover ratio and Cash Turnover ratio.All these ratio are in good condition.

4.4.3 Analysis of profitability ratio

Table No.4.17

Fiscal year	Net profit margin	Operating Ratio	Return on total assets	Return on net worth	Return on working capital
2004/05	37.07	54.53	6.89	10.84	13.37
2005/06	41.3	49.78	9.96	17.21	21.16
2006/07	47.4	40.48	12.55	20.84	27.35
2007/08	41.80	45.50	19.17	19.98	27.80
2008/09	47.31	41.80	22.47	22.47	42.02
Average	42.976	46.418	14.21	18.27	26.34
S.D.	4.40	5.80	6.47	4.57	10.54
C.V.	0.10	0.12	0.46	0.25	0.40

Source: Appendix 15, 16, 17, 18, 19

Above table represents that the Net profit margin, Operating ratio, Return on total assets, Return on net worth, Return on working capital.All these ratio are in good condition.

4.5 Working capital cash flow cycle

Working capital management originated with the old Yankee peddler, who would borrow to buy inventory, sell the inventory to pay the bank loan, and then repeat the cycle. Cash conversion cycle model has been applied to more complex business and it is useful when analyzing the effectiveness of a firm's working capital management. There are following four factors of cash conversion cycle model.

1 Inventory conversion period (ICP)
2. Receivable conversion period (RCP)
3. Payable deferred period (PDP)
4. Cash Conversion Cycle (CCC)

4.5.1 Inventory conversion period (ICP):

The inventory conversion period is the average length of time required to convert material into finished goods and then to sell those goods. Inventory conversion period is calculated by dividing days in year by inventory turnover ratio.

$$\text{Inventory Conversion Period (ICP)} = \frac{Days\sin Ayear}{InventoryTurnoverratio}$$

Table No. 4.18

Inventory Conversion period

Fiscal year	Days in year	Inventory turnover	ICP (days)
2004/05	365	20.23	18.04
2005/06	365	27.7	13.17
2006/07	365	31.62	11.54
2007/08	365	41.27	8.84
2008/09	365	40.32	9.05
Average			12.13

Source: Appendix 10

4.5.2 Receivable conversion period (RCP):

The receivable conversion period is the average length of time required to convert the firm’s receivable into cash. It is also called day’s sale outstanding (DSO) and it is calculated by dividing Days in year by receivable turnover ratio.

$$\text{Re}\,ceivable\,Conversion\ Peroid\ \text{X}\frac{Days\,in\,a\,Year}{\text{Re}\,ceivable\,Turnover\ Ratio}$$

Table No. 4.19

Receivable conversion period

Fiscal Year	Days in year	Receivable Turnover	RCP (days)
2004/05	365	2.33	156.65
2005/06	365	3.04	120.06
2006/07	365	3.36	108.63
2007/08	365	3.91	93.35
2008/09	365	4.82	75.73
Average			110.88

Source: Appendix 11

4.5.3 Analysis of correlation between Return on working capital and current ratio:

Here, Karl Person's coefficient of correlation between liquidity and profitability has been analyzed. In the following analysis, Return on working capital has represented profitability ratio, and likewise, current ratio or current assets to current liabilities ratio has represented liquidity ratio.

The table below shows the listing of return on working capital ratios and current assets to current liabilities ratios for periods under study. Subsequently, Karl Pearson's coefficient of correlation between the two has been calculated.

Table No. 4.20

Working capital and current ratio:

Fiscal Year	Return on working capital (%) (Profitability ratio)	Current ratio (%) Liquidity ratio
2004/05	13.37	516.00
2005/06	21.16	534.13
2006/07	27.35	504.12
2007/08	27.80	462.00
2008/09	42.02	344.00

Source: Appendix 19, 6

Karl Pearson's coefficient of correlation (r) between return on working = -0.896

(As calculated in SPSS Program)

This indicates that there exist negative correlation between liquidity and profitability. In other words, with increase in liquidity, the profitability decreases and vice-versa.

The significance of this negative correlation has been tested as follows:

Probable Error (P. E.) = $\frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-(-0.896)^2}{\sqrt{5}}$

= 0.5438

6(P.E.) = 6×0.5438=3.2628

Now if r< 6(P.E.), it is indicative of statistically insignificant correlation.

If r>6 P.E., it is indicative of statistically significant correlation.

Here, r<6P.E. i.e. -0.896<3.2628, the two variables have insignificant correlation.

4.5.4 Analysis of correlation between Net working capital and Net profit:

Here, Karl Person's coefficient of correlation between net working capital and net profit has been analyzed. The table below shows the listing of net working capital and net profit for periods under study. Subsequently, Karl Pearson's coefficient of correlation between the two has been calculated.

Table No. 4.21

Working capital and Net Profit

Fiscal Year	Net working capital	Net profit
2004/05	16835286	2247301
2005/06	16739869	3542461
2006/07	18050769	4936647
2007/08	20330720	5652689
2008/09	18902875	7942902

Source: Appendix 14, 15

Karl Pearson's coefficient of correlation (r) between return on working = 0.718

(As calculated in SPSS Program)

This indicates that there exist negative correlation between net working capital and net profit. In other words, with increase in net working capital, the profitability also increases and vice-versa.

The significance of this positive correlation has been tested as follows:

Probable Error (P. E.) =

$$\frac{0.6745(1 Z(0.718)^2}{\sqrt{5}}$$

= 0.1461

6(P.E.) = 6×0.1461=0.8768

Now if r< 6(P.E.), it is indicative of statistically insignificant correlation.

If r>6 P.E., it is indicative of statistically significant correlation.

Here, r<6P.E. i.e. 0.718<0.8768, the two variables have insignificant correlation.

4.5.5 Analysis of correlation between Net working capital and Net sales:

Here, Karl Person's coefficient of correlation between net working capital and net sales has been analyzed. The table below shows the listing of net working capital and net sales for periods under study. Subsequently, Karl Pearson's coefficient of correlation between the two has been calculated.

Table No. 4.22

Working Capital and Net Sales

Fiscal Year	Net working capital	Net sales
2004/05	16835286	6070423
2005/06	16739869	8584144
2006/07	18050769	10413655
2007/08	20330720	13524368
2008/09	18902875	16788360

Source: Appendix 14

Karl Pearson's coefficient of correlation (r) between return on working = 0.785

(As calculated in SPSS Program)

This indicates that there exist positive correlation between net working capital and net sales. In other words, with increase in net working capital, the net sales also increases and vice-versa.

The significance of this positive correlation has been tested as follows:

Probable Error (P. E.) = $\frac{0.6745(1\,Z(0.785)^2}{\sqrt{5}}$

= 0.1158

6(P.E.) = 6×0.1158=0.6946

Now if r< 6(P.E.), it is indicative of statistically insignificant correlation.

If r>6 P.E., it is indicative of statistically significant correlation.

Here, r>6P.E. i.e. 0.785<0.6946, the two variables have insignificant correlation

4.6 Major Findings:

i. Structure of working capital

This section has dealt with the structure or composition of working capital and approximate ratio of cash, inventory and receivables of Nepal Telecom. The observation of the cash and bank to current assets ratio shows that the major portion of current assets is held by cash and bank in Nepal Telecom since the average ratio of cash and bank to current assets is calculated as 54.31%. Since this ratio is too high, it can be stated that the company is facing situations of excess cash and bank balance held idle which is unfavorable for a company. Inventory is another element of working capital which is only stores and spare parts and held a nominal part of current assets since the average inventory turnover ratio is 32.23. This indicates that there is no considerable amount tied up in inventory in Nepal Telecom. Another important element is Account Receivables which represents sundry debtors plus interest accrued on investment. The volume of receivables is fluctuating over the study period.

ii. Efficiency of working capital management

The efficiency of management of working capital is measured through the turnover ratios since the volume of sales in any business organization not only affects the size of working capital but also clearly reflects the efficiency with which assets are managed. The receivables turnover rations are moderately fluctuating and vary from the lowest 2.23 times and the highest 4.82 times. Likewise, the cash turnover ration has are moderately fluctuating and vary the lowest0.42times times from 1.04 during the study period since the rate of increase in the sales volume is lower than that of cash& bank balance. In the three years, cash & bank balance are exceeding net sales by a significant amount. Hence the result is dissatisfactory. The average net working capital turnover is 0.602 times. Since the ratio has decreased from 0.36times to 0.89 times during the study period, we can say that the company is no utilizing its net working capital effectively. The amount of working capital is exceeding net sales every year. Hence from the analysis, it is revealed that Nepal Telecom has kept excess amount of working capital in comparison to sales which can be considered as the sign of efficient working capital management.

iii. Liquidity position

Overall, the liquidity position of the firm has been found satisfactory. The current ration varies from 4.62 times to 5.34 times with a throughout the study period which are however satisfactory compared to the conventional ideal ration 2:1. Average ration is 4.72 and overall, it coincides with the conventionally accepted ration 2:1. The average quick ratio is 4.64 which is significantly higher than the standard quick ration 1:1. Hence it can be said that the company is holding more than enough cash balance or liquid assets to meet their current payment which indicates mismanagement of liquid assets since and optimum liquidity is the necessity of a firm. There is inverse relation between profitability and liquidity since there is negative correlation between liquidity and profitability.

iv. Profitability of working capital

Return on total assets is positive is in increasing trend. Average return on total assets is 14.21%. The volume of net profit after tax has increased every year but the return on total assets has fluctuating each year, which signifies that the profitability is not sufficient with compared to the increment in investment in total assets. It clarifies the less effectiveness of utilization of total assets. Another ration to measure profitability is return on net working capital. From the study, it is found that the return on working capital is continues increased over the five years. The ratio varies from 13.37to 42.02 %. The average ratio is 26.34%.From the study; it is found that Nepal Telecom has been utilizing its working effectively since the return on working capital is in increasing trend. Both NPAT and investment are increasing every year and the earning power of capital employed is increasing as well.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

As stated earlier, working capital management refers to the management of cash, receivables, inventory, and other factors of working capital. The main concern of this study was a very sensitive area of financial management i.e. working capital management of Nepal Telecom. Likewise, as stated in the introduction section of this study, the specific objectives of this study are to examine and critically analyze the working capital management NTC, examine liquidity position and profitability position of NTC, assess the size and growth of working capital, and to recommend viable suggestions to cope up with working capital management shortcomings in NTC. For the purpose of the study, the necessary data on working capital and other related variables were collected form secondary sources. The balance sheet and income statement for the period 2004/05 to 2008/09 was got from annual report of NTC. Various important financial and statistical tools and techniques were applied to analyze the available data. After the tabulation of available data in a systematic manner, various important financial and statistical tools and techniques were applied in order to accomplish the objective of the study.

The size and structure of working capital was analyzed by comparing current assets and its components with different related variables. Activity and profitability ratios were calculated to evaluate the efficient of working capital. Liquidity position was assessed by calculating different liquidity ratios like current ratio, quick ratio etc. the growth trend of working capital and its related variables were studied in trend analysis. An analysis of sources and used of fund was carried out in order to get better insight into the acquisition and application of fund. More than 50% of total assets were held in the form of current assets. The large portion of current assets was being unproductive by lying in absolute liquid from i. c. cash and bank since half of the current assets was in the form of cash and bank. More than one fifth of current assets were in the form of account receivables. Most of the components of working capital were found to be in increasing trend. The company collected fund mainly from its operation. A large portion of fund was kept in liquid from and some of them were used to purchase fixed assets and to pay long term loan.

Hence, an effort has been mad in this chapter to present major findings of the study. Thereafter, in the same pattern, recommendations have been stated. Likewise, conclusions have been drawn at the end of the chapter.

5.2. Conclusion

Conclusively, it can be stated that 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 firm 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.

5.3 Recommendation

Following viable suggestions have been recommended to improve the working capital management efficiency in NTC:

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

Study showed that besides cash and bank, other variable of current assets and current liabilities also fluctuate moderately. Optimization of this variable is therefore recommended which would maintain a sound liquidity. NTC, being a service-oriented firm, does not need so higher liquidity position. Thus it is recommended to stabilize its current ratio near 2:1. It is better for NTC to invest such excess amount of current assets in fixed assets to increase its capacity rather than tying up large amount in current assets.

2. Determine optimum level of cash balance to hold every year applying cash management techniques.

The study also revealed that the large portion of current assets is being unproductive by lying in absolute liquid from in NTC. This indicates the inefficiency of management of cash. The major portion of current assets is held by cash. Therefore, it is recommended to determine the optimum level of cash and bank balance to hold each year. It should invest its excess cash and cash equivalents in short term investments which would earn a return till the funds can be utilized in the firm.

3. Forecast current assets and current liabilities variables with reference to change in sales and profit.

One of the shortcomings of NTC is that the variables of current assets and current liabilities held under different headings are rather a haphazard guesswork, without any consideration on its impact on sales and profit of the organization. For instance, the current assets turnover ratio is in decline trend since the growth of net sales every year is very low in comparison to current assets which imply very low utilization of current assets. Hence, the suggestion is to plan current assets and current liabilities variables with respect to change in sales and profit.

4. Collected debts in time.

The study revealed the fact that NTC to fail in timely collection of debts. Among the total receivables of Nepal Telecom, the largest portion is held by sundry debtors which is nothing other than due amount on sale of service. Therefore, the recommendation is to collect debts in time to enhance liquidity position,

5. Use extensively financial and statistical tools as per required.

Extensive knowledge and use of financial tools can enhance the situation of the organization. Likewise, use of statistical tools for forecasting purpose may be used wherever applicable.

6. The financial experts should assess the financial performance timely in order to evaluate the financial strengths and weaknesses.

7. In order to maximize the sales and minimize the operating cost, long/mid planning and control system of account should be prepared and it can utilize its full installed capacity of fixed assets which also helps to improve the turnover position. It is recommended to carry out periodic research work on marked possibility, consumer's capacity, and service reliability.

8. Maintain optimum level of working capital

From the analysis, it is revealed that NTC has kept excess amount of working capital in comparison to sales since the amount of working capital is exceeding net sales every year. This can not be considered as the sigh of efficient working capital management. Hence it is recommended to NTC to maintain optimum level of working capital.

9. Manage optimum liquidity in the firm. The study revealed that the NTC holding more enough liquid assets to meet their current payment which indicates mismanagement of liquid assets since an optimum liquidity is the necessity of a firm. There is inverse

relation between profitability and liquidity since there is negative correlation between liquidity and profitability. Hence, it is recommended NTC to maintain optimum liquid assets.

Bibliography

Acharya, Sunil Kumar (2004*),"A study of working capital management of Bottlers Nepal Balaju Limited"*, Kathmandu: Shanker Dev Campus, T. U

Aryal, Bishwas Raj, (2003*),"A study on working capital management of Pharmaceutical industry of Nepal with special reference to Royal Drugs Limited"*, Kathmandu: Shanker Dev Campus, T. U.

Gadtula, Keshav (1994), *"A case study on working capital management of Nepal Tea Development Corporation"*, Kathmandu: Shanker Dev Campus, T. U.

Gautam, Purushottam (2004),*"A study on working capital management with respect to Soaltee Crown Plaza"*, Kathmandu: Shanker Dev Campus, T. U.

Gitman, Lawrence (1988), *"Principles of Managerial Finance"*, New York : Harper and Row Publishers Inc..

Gupta, S. C. (1992), *"Fundamentals of Statistics"*, Mumbai: Himalayan Publishing House.

Gupta, S. C. (1992), *"Statistical Methods"*, New Delhi: S. Chand Publishers.

Gurung, Om Bikram (2000), *"A study on working capital management of Nepal Lever Limited (NLL Ltd.)"*, Kathmandu: Central Department of Management, T. U.

Hampton, John J. (1986), *"Financial Decision Making"*, New Delhi: Prentice Hall India.

Howard, Leslie R. (1971), *"Working Capital: Its Management and Control"*, London: Mac Donald and Evans Ltd..

Jain S. P & Narang, K. L. (1989), New Delhi-Ludhiana:*"Financial Management Accounting"*, Kalyani Publishers.

Joshi, Shyam (2001), *"Economic Policy Analysis"*, Kathmandu: Taleju Prakshan.

K. C., Niraj (1998), *"A comparative study of working capital management of Nepal Bank Limited and Nepal Arab Bank Limited"*, Kathmandu: Shanker Dev Campus, T. U.

Khan, M. Y. and Jain P. K. (1992), *"Financial Management: Text and Problem"*, New Delhi: 2nd Edition, Tata McGraw Hill Publishing Company Ltd..

Khan, M. Y. and Jain P. K. (1992), *"Financial Management : Text and Problem"*, New Delhi: 3rd Edition, Tata McGraw Hill Publishing Company Ltd..

Kothari, C. R. (1994), *"Quantitative Techniques and Analysis"*, New Delhi: Vikash Publishing House.

Kucchal, S. C. (1988), *"Financial Management: An analytical and conceptual approach"*, Allahabad, India: 10th Edition, Chaitanya Publishing House.

Lamichhane, Muhesh Kumar (2004),*"An analysis of working capital management of Nepal Insurance Company"*, Kathmandu: Central Department of Management, T. U.

Lohani, Mukti Nath (2004),*"A study on working capital management of Nepal Lube Oil Ltd."* Kathmandu: Central Department of Management, T. U.

Pandey, I. M. (1992), *"Financial Management"*, New Delhi: 5th Edition, Vikash Publishing House Pvt. Ltd..

Pandey, I. M. (1992), *"Financial Management"*, New Delhi: 8th Edition, Vikash Publishing House Pvt. Ltd..

Pandey, Jitendra (2005),*"A comperative study of working capital management in a manufacturing and a blending Company."*, Kathmandu: Shanker Dev Campus, T. U.

Pathak, Pradip Kumar (1994), *"An evaluation of working capital in Nepal Lube Oil Limited"*, Kathmandu: Shanker Dev Campus, T. U.

Pradhan, Radhe Shyam (1986), *"Management of Working Capital"*, New Delhi: National Book Organization.

Shrestha, Rojina (2003),*"A study on working Capital management with respect to National Trading Limited and Salt Trading Corporation Limited"*, Kathmandu: Shanker Dev Campus, T. U.

Shrestha, Shailesh Man (1986),*"A study on working capital management o of Diary Development Corporation, Nepal"*, Kathmandu: Shanker Dev Camppus, T. U.

Shrestha, Sunity & Silwal, Dhurba Pd. (2002), *"Statistical Methods in Management"*, Kathmandu:Taleju Parkashan.

Srivastava, R. M. (1984), *"Financial Decision Making: Test Problem and Cases"*" New Delhi: Sterling Publishers Pvt. Ltd..

Srivastava, R. M. (1991), *"Financial Decision Making: Test Problem and Cases"*" New Delhi: Prentice Hall of India Pvt. Ltd..

Van Horne, James C. (1994), *"Financial Management & Policy"*, New Delhi: 9th Edition, Prentice Hall of India.

Van Horne, James C. (1994), *"Financial Management & Policy"*, New Delhi: 10th Edition, Prentice Hall of India.

Weston J. Fred & Brigham F. Eugene (1991), *"Managerial Finance"*, Tokyo: 9th Edition, Holf Sundass.

Weston J. Fred, Besley Scott & Brigham F. Eugene (1996), *"Essentials of Managerial Finance"*, Fort Worth *:* 11th Edition, The Dreyden Press.

Weston U. Fred & Copeland Thomas E. (1992), *"Managerial Finance"*, New York: 9th Edition, Dryden Press.

Wolf Howard K. & Pant Prem R. (1999), *"Social Science and Thesis Writing"*, Kathmandu: 2nd Edition, Sewa Printing Press.

Annual Reports : *Asian Thai Foods (2058/59 to 2062/063)*:

WEB SITES

www.planware.org/workingcapital.htm
www.investopedia.com/articles/fundamental/03/061803.asp
www.va-interactive.com/inbusiness/editorial/finance/ibt/ratio-analysis
www.contractingbusiness.com/25/Issue/Article/False/46149/Issue
www.sharadagroup.com