Chapter – I

Introduction

1.1 Background of the Study

Every organization is established with specific objectives. Objectives of an organization depend on the nature of an organization. Similarly an organization may change its objectives as environmental change. Organizational objectives are the desired future state of affairs of an organization. An enterprise depends on the common effort of people associated with the enterprise. It derives from the collective effort of all individuals within the organization. Organization is the form of human association having different expectations. Different people expect different things from an organization. They measure the success of business with different criteria as per their interest. For example, for the owner of the firm, the increase of wealth is the main criterion of measuring success. For the marketing manager, it may be market share and sale volume. The manufacturing manager seeks high production at the lowest possible cost. The financial manager wants to minimize the cost of funds. The organization as a whole may not be able to get synergic effect (2+2=5) by diverting individual interests. For example, if the marketing manager were to increase his sales massively over a short period of time, the manufacturing manager would give to increase his output substantially through the use of costly overtime labor. Some buying of semi finished goods from an outside supplier which would be produced much more cheaply internally, and the quick addition of some factors of production at higher than-ordinary cost. So, organizational efficiency needs to be defined as profitability for the firm as a whole. It emphases on mutual effort, co-ordination and after all importance of planning:

A motive force for business enterprise within a capitalist economy must be the achievement of profit. Profit is the primary measure of business success. According to profit maximization approach, organization earning sound profit is considered that it is achieving its goal. If a firm can not make a profit it can not obtain or hold capital for very long and can not secure and retain other resources such as manpower materials, and machines. Profit determines who can use their resources in best manner. Profit must be at least enough to attract the amount of capital required to continue to meet the goals of organization by securing and retaining the other resources. In this competitive world, the more profitable enterprises are more attractive to the capital holders.

Now, the profit maximization approach has been changed to 'wealth maximization' "Profit maximization" approach was appropriate when the market economy was dominated by proprietorship and partnership enterprises.

Now, it is the age of corporate culture where, the manager should consider and co-ordinate mutual interest of each stakeholder with excess profit in this competitive economy, so many companies have diverted their profit maximization objectives to "Wealth Maximization and Social Welfare". Certainly, firms have an ethical responsibility to provide a safe working environment, to avoid polluting the air or water, and to produce safe and socially acceptable products.

Managers have redefined the responsibility over the years. With the wider distribution of ownership and a much reduced share of the ownership by managers, there has emerged a tendency on the part of management toward satisfying several responsibilities to society, to the employees and so on. The day to day operation of the firm should be conducted by the managers balancing many claims made upon the firm. Manager's efficiency is measured by optimum utilization of firm's capacity which yields reasonable profit to operate the organization. It is profit which attracts capital. And it is capital which is necessary to obtain the manpower, materials and machines which produce profit. So, the primary objective of a business enterprise is to make a reasonable profit with optimum utilization of available resources. But, how is this best be accomplished? No one disputes that the key to success in business is sound management and sound planning.

Planning is the first function of management which consists what to do? How to do? When to do, who will do? It portrays future course of action in advance. It is always future oriented through it also considers present actions and events.

"The planning process, both short and long term, is the most crucial component of the whole system. It is both the function and the bond for the other elements because it is through the planning process that we determine what we are going to do, how we are going to do it, and who is going to do it. It operates as the brain center of an organization and like the brain, it both reasons and communications." (Welsch, Hilton & Gordon:1991:203)

Planning provides the comprehensive framework within which this process is carried out such as system encompasses all aspects of an organizational operation. It is the conscious process of selecting and developing the best course of action to

accomplish an objective. A fundamental purpose of planning is to provide each level of managers with guidelines for making operational decisions on day to day basis. Basically, there are two types of plans as follows:

A. Strategic Planning:

It is developed by top level management for the long range period. It focuses on enterprise objectives an overall strategies affects on all management functions, involves comprehensive and long-term consequences. Strategic plan is environment specific. So, it should be flexible enough to adopt environmental change.

B. Tactical Planning:

It is short run plan developed by middle and lower level mangers. It focuses on operational functions such as budgeting, developing policies and programs assigning authority and responsibility etc.

Cash planning is the sub-branch of overall budgeting (profit planning). Cash is the most liquid asset which can ready be used for any payments. Cash is the lifeblood of a business enterprise. It is the fuel that keeps a business alive. Without cash no activities can take place. So, a business must have an adequate amount of cash to operate. As such the decision makers or mangers must pay close attention to the firm's cash position as well as events and transactions that effect/cause cash position to change alternation in any resources cause change in cash. So, any decision is cash position specific. Even though cash is a "non-earning, or idle asset", it is needed to pay for labour and raw materials, buy fixed assets, pay taxes service debt, pay dividends and so on. It is a vital resource of an organization. At the same time, it is also non productive asset, if a firm holds more cash than it needs, incurs an opportunity loss that could be earned by investment. Thus, the goal of the cash manager is to minimize the amount of cash the firm must hold for use in conducting its normal business activities. It is very difficult and challenging task to determine the optimal cash balance, because it depends on the nature of business and will change with dynamic environment.

1.2 Global Telecommunication: An Overview

It is the age of information technology. Due to the rapid growth of information technology, the world how has become just as a small village. Telecommunication is the most dominate branch of information technology (IT). Today it has become integral part of human life. One can not imagine live without information technology.

In this globalization and scientific era, telecommunication is one of the important, useful and necessary media of this twenty first century. It is one of the furthest, cheaper, comfortable and reliable media of communication.

The word Telecommunication is formed by two words i.e. tele and communication, where tele- means far and communication means disseminating information. Telephone was invented by American scientist Graham Bell in 1887 A.D. with his assistant Thomas and Watson. It is a medium which is used as communication between two persons by listening and talking. Now, due to intercom system, the persons may be more than two.

From 1887 A.D. to 1980 A.D., telecommunication was only meant for telephone science. But due to drastic development and change in computer and information technology, telecommunication sector has also been developed into large sector and its structure has also grown. Now, telephone service is not only enough for economic and business point of view as there is great demand in service like internet, high speed data, mobile phone and pager, trunk ,SMS, Telex Fax etc.

"In terms of market capitalization, the telecommunication industry ranks third in the world behind health care and banking. Telecommunication as an industry has combined sales of more than US $ 800 billion world wide, of which three-quarters comes form services and one-quarter from equipment sales." (Maskey:2001:10)

1.3 Nepal Telecom

Telecommunication has become one of the key components of the infrastructure of any country. An efficient telecommunication network has become as essential part of the development of a nation. Studies and experience in many countries have shown that, business, public services, health, transportation, education, banking and insurance cannot function efficiently without a reliable telecommunication network. So, realizing the importance of telecommunications for the overall development, all the nations in the world are giving high priority for the development of telecommunication network and Nepal is not an exception.)

Nepal is a small mountainous, landlocked country. Almost 85% of the area is covered by high hills and mountains. Due to the unfavorable geographical structure, telecommunication will play significant role in developing rural areas of the country. Telecommunication is the main nervous of modern society for transmitting information. Without telecommunication facilities neither the government nor the economic activities work effectively. The importance of telecommunication is not

only limited with in the country. But also it keeps a close link with the international sector too. And efficient communication system of country as a part of the international communication system helps to link the national economic with trends and opportunities available in international trade. Tourism is one of the main sources of foreign exchange earnings for Nepal. Expansion of international and domestic communication facilities in the country is a necessity if this sector is to grow in future.

Telecommunication is one of the most rapidly developed technologies due to the development of electronics technology in the world. It is considered as one of the swift and reliable means of communication in this scientific era. Since the development of human civilization, the communication system might have played an important role in the part of their future progress. In a mountainous country like Nepal, development of land communication is bound to be expensive and difficult because of the harsh terrain. Similarly, air transportation in a mountainous and poor country also possesses numerous financial, technical and construction problems. Viewed in this context, the expansion of a modern telecommunication system became crucial for the development of a nation.

In our country telephone service started with the establishment of first telephone lines in Kathamandu in 1970 B.S. (1913 A.D.). These Services were only used by the Rana family and in some important government offices. It was not reliable and were a very few. One year after i.e. in 1914 open wire trunk link was established from Kathmandu to Raxaul (India). In 1935, 25 lines automatic telephone exchange lines were introduced in the Royal Palace. Since 1936, trunk services were extended to Birgunj, Rajbiraj, Biratnagar, Gorkha, Pokhara, Palpa etc. Due to geographical difficulties, telecom wire services were difficult to set and have link with various towns in Nepal.

100 C.B. lines were distributed in Kathmandu by private sector using one magnet telephone exchange in 1950 which was added by 50 lines in the Kathmandu in 1952.

It was in 1955 when the public were personally allowed to keep telephone in their home. Same year 300 lines capacity manual exchange was established with help of Indian Government and 120 line exchange by Sweden's L.M. Ericson Company.

Similarly, first Automatic Exchange with 1000 lines was established in Kathmandu in 1965. Introduced Telex services in 1971. Telex service was started from Kathmandu by using manual Telex exchange. Till end of 1971, 300 lines in

Biratnagar, 600 Lines in Patan were separately established and in Kathmandu overall 5000 lines were distributed.

The establishment of Earth Station Standard 'A' and 'B' types in Balambu Kathmandu was the important step in linking Nepal with the rest of the world. Form this overall telecommunication service of world was linked with Nepal by help of seven circuit joined with direct dialing. The last one decade was important for the Nepal Telecom (NTC). During this period, it introduced VSAT service, Digital link with many countries, GSM mobile service, internet service, payphone service, and GSM prepaid service, In this way, Nepal Telecom has come to the present status by facing too many challenges and obstacles.

1.3.1 Establishment of NT and its objectives

The primary objectives of any telecom are basically to provide telecom service to its customers with high quality services ensure good returns on the capital employees. In 1969 A.D., Telecommunication Department was changed into Nepal Telecommunication Board which was renamed into Nepal Telecommunication Corporation in 1975 A.D. Nepal Telecommunication Corporation was dissolved and converted to "Nepal Doorsanchar Company Limited" (Nepal Telecom) from 1st Baisakh 2061 (13th April 2004). The new company was registered with the Company Registrar Office on 2060-10-11 under company Act 2053, and the notice to this effect was published in Nepal Gazette dated 26th Chaitra 2060. However, the company shall also be known to general public by the name NEPAL TELECOM as registered Trademark.

The noble objective of the then NTC was to provide national wide low cost reliable and readily available telecommunication on services to the general Public, government and country as a whole there by supporting the unity, integrity and the economic development of the country. Its objectives are guided by the social welfare, so it has been working vigorously toward achieving the Nepal government's objectives for the Tenth National Plan (2002-2007) of serving all the VDC's of Nepal with basic telephone lines. NT (the then NTC) has been continuously expanding its communications infrastructure in rural areas to connect more VDC's to the national network, irrespective of its economical value and low prospects of return.

Expansion of telephone network and provision of services to rural and remote areas are not profitable when compared to urban areas because of huge investment per line due to long distances between settlement areas. It is because NT (Then NTC)

developed the concept of MCT (Multipurpose Community Telecasts) these rural areas and poverty alleviation.

According to (Mr. Sugat Ratna Kansakar) first Managing Director of Nepal Telecom.: "NEPAL TELECOM management and total workforce of more then 4000 staff is thriving ahead with the single objective of serving the nation by becoming one of the best run enterprises in the country there by giving latest high tech services to urban population as well as taking care of demand for telecom services from the vast majority of the rural population living in one of the roughest terrains in the World." (Nepal Telecom, Annual Report 2067/68.)

The objectives of NT also are cleared by its mission and vision statement as follows.

NT MISSION:

"Nepal Telecom, as progressive, customer-spirited and consumer responsive entity, is committed to provide nation-wide reliable telecommunication services to serve as an impetus to the social, political and economic development of the country."

NT VISION:

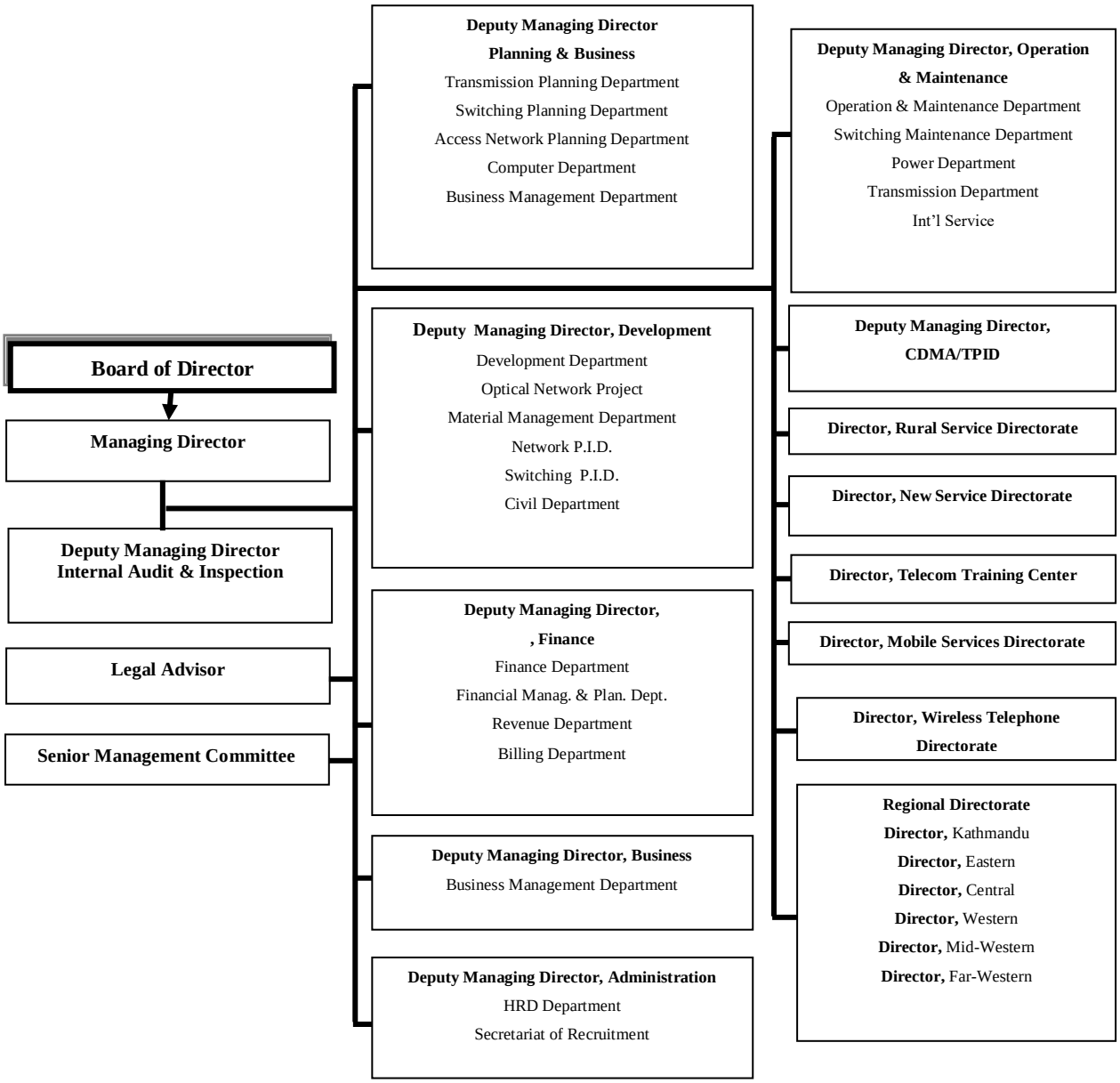
"Vision of Nepal Telecom is to remain a dominant player in telecommunication sector in the country while also extending reliable and cost effective services to all." (Nepal Telecom, Annual Report 2067/68.)

1.3.2 Organization Structure:

The board of director is the governing body of Nepal Telecom. The Managing director is the senior post of the organization. There are 18 members in the BOD excluding regional director. It can be presented as follows:

NEPAL TELECOM

Organization Chart



Sources: Nepal Telecom, Annual Report-2067/68

Figure no. 1

1.3.3 Capital Structure:

The Capital structure shows the composition long term financing. Nepal Telecom is fully government owned organization which has been converted into company from corporation. Its capital structure as at July 16,2005 is as follows:

Share Capital	In thousand of Rs.
Issued/ Subscribed/Paid up share	15,000,000.00
Loan Fund:	
Loan from Govt. of Nepal against:	
Belgium state loan	24,239.00

1.3.4 Telecom Training Centre:

In this competitive age, all the persons within an organization must able to cope with the changing environment. The explosion of technology, increasing shortage of skills and labor, perjures from the competition seeks effective performance. So, training is the essential part of the 21st century. "It is a learning experience in that it seeks a relatively permanent change in an individual that will improve his/her ability to perform on the job." (Adhikari:2001:136)

Nepal Telecom has separate unit of training i.e. Telecom Training Centre (TTC). The main objective of TTC is to develop highly competent, skilled and efficient human resources necessary for management of telecommunication networks and services in the country. TTC has been playing a vital role in conducting various training programme every year. It has helped to enhance skills of the staffs of the organization. It has also helped to disseminate views, ideas, methodologies and technologies in the field of telecommunications.

Training development showed the real need and the environment in which it is going to be carried out, in an effective and efficient manner.

"All the decisions regarding training strategy should be bared on 2 systematic analyses of training needs, available resources and the learning characteristics of the trainees rather on subjective judgment or tradition."(Sapkota:1999:48)

Realizing this, TTC has been conducting training in different fields of telecommunication such as switching, power and air conditioning, computer, traffic, external plant, administration and account, transmission etc. The courses are designed into different modules which consist of theoretical as well as practical lessons conducted by different instructors.

The following table shows training status of Nepal Telecom.(The then Nepal Telecommunication corporation).

Table:1

Year wise Training Status

Year	No of Training	No of Trainees	Man week
2055/56	42	580	4200
2056/57	63	1336	5481
2057/58	67	1119	4363
2058/59	55	801	2500
2059/60	43	723	3500
2060/61	51	865	3093
2061/62	58	1059	2928
2062/63	58	1075	2714.33

Source: Telecom Training Center-2063-64

The above Table shows that NT takes training as a critical component to cope with the environmental changer. A well organized training will result in higher productivity, reduced fault –rate, increased revenues and reduction of customer complainers.

1.3.5. Service Provided by Nepal Telecom

Telecommunication network has become an integral part of economic development of any country. It is because the government of Nepal has given proper attention for expansion of telecommunication network in the rural areas in its various five year plan. It is said to believe that only 25 years ago one had to travel days to get to the nearest telephone to make a call. It was even more difficult to make an international call. Now, due to the introduction of satellite technology in its international sector and launching of mobile communication by NT (the then NTC), one can connect to any corner of the global at any time in a matter of seconds. Using VSAT System, V.H.F./U.H.F. Technology, MARTS, CDOT Exchange, Inmarsat, WLL, Pay card System, NT has been able to provide telephone facilities to 2599 VDCs covering all 75 district headquarters.

The different types of Telephone Services provided by Nepal Telecom are as follows.

Table: 2

Nepal Telecom

Types of Telephone Service provided by Nepal Telecom

S. N.	Title	Chaitra 2063	Baisakh 2064
1	**Total Telephone Distribution**(PSTN+Post & Pre-Paid Mobile+C-Phone+HFCL WLL)	**1493019**	**1510482**
	Total Telehone Penetration of (PSTN+ Mobile+ C-Phone)	5.66	5.72
A	GSM Mobile Telephone Subs (Post +Pre-Paid)	870675	877931
	a.Post-Paid Mobile Telephone Subsriber	119699	120775
	b. Pre-Paid Mobile Telephone Subsriber	750976	757156
	c. Telephone Penetration of GSM Mobile Tel.	3.3	3.33
B.	Overall CDMA Lines Distributed	118951	127207
	a. CDMA C-Phone (Distributed Lines)	41939	42199
	b. SKY Phone	22781	25606
	c. CDMA Pre-Paid Mobile Telephone	53986	59030
	d. CDMA SKY Data	245	372
	e. Telephone Penetration of CDMA Telephone	0.45	0.48
C.	HFCL WLL Telephone		
D.	PSTN Telephone (Local)		
	a. Installed capacity	638340	643281
	b. Distributed Lines	503393	505344
2.	Telephone Penetration of PSTN Telephone		
	a. Overall	1.91	1.92
	b. Rural	0.32	0.32
	c. Urban	11.71	11.75
3.	Telephone Exchanges in Operation (PSTN)		
	a. Locations	219	219
	b. Districts	72	72
	c. Number of exchanges	229	229
4.	Target of Tel. Distribution within this fiscal year of PSTN Telephone	59957	59957
	a. Tel. Distribution up to this Month(F.Y)	17396	19347

	b. tel. line Distribution on this Month only	2255	1951
	e. Achievement of Tel. Distribution (F.Y)	29.01	32.27
5.	Total Subscribers complaints	32583	46336
6.	a. Total No. of pay-cardphone	448	455
	b. No. of card phone installed in KTM only-sets	362	368
	c. Total no of smart card sold (Rs. 200/-) (pcs)	341406	341406
	d. Total no of smart card sold (Rs. 300/-) (pcs)	50000	50000
	e. Total no. of Smartcard sold (Rs. 500/-) (pcs)	19084	19084
7.	a. No of PCC calls of this month	360122	378105
	b. Total No of PCC Calls in this month	10867115	11245220
	c. Total call cost of PCC calls in this month only	7921835	8100651
	d. Total call cost of PCC calls upto this month	236919218.81	245019869.70
8.	a. No. of PCL Subscribers	170	177
	b. Total no. calls of PSTN credit Limit upto this Months	25921	27760
	c. Total no call cost of (PCL) Upto this Month	623453	659565
9.	a. No. of AFS subscribers	36	37
	b. No of AFS call upto this month	359563	409863
	c. Total call cost of AFS upto this month	2556113	3584326
10.	Voice Mail Box (PSTN)	3087	4301
	Fax Mail Box (PSTN)	9	9
	VMS- call Diverted to 1614	19385	55097
	VMS-Missed called (hooked off before beep tone)	35753	108833
11.	Home Country Direct Service Available Country	6	6
12.	STD and ISD Services Available		
	a. Zone	14	14
	b. Districts	75	75
13.	Internet Customer	6965	7093
	Email Customer	3825	3830
14.	a. Total V-SAT Operation Telephone Lines	835	849
	b. V-SAT Terminal	414	425
15.	Rural Telecommunications Services		
	a. Rural Stations (JICA)	6	6
	b. JICA subscriber	107	107

	c. Total Marts Terminals	179	179
	i. SEL Marts Terminals	141	141
	ii. NEC Marts Terminals	38	38
	d. Total Marts Telephone subscribers	2322	2322
	e. VHF Telephone subscriber	914	914
	f. VDC Coverage by Telephone Service from NT	2599	2599
16.	International Telephone Circuits in Operation (Including Microwave circuits)	3424	3424
17.	Telegraph Services Available Stations	7	7
18.	Telex Services Available		
	a. Districts with Telex facility (Nepal Telecom P.C.O)	8	8
	b. Telex capacity	256	256
	c. Telex Distributions	76	76
	d. International Telex Circuits Available Ckts	55	55
	e. International Telex Circuits in Operation	49	49
19	F- Wireless Services Available	4	4
	a. Electric Power	1	1
	b. Solar Power	3	3
20	Outgoing Collect Call Services Available		
	a. countries	3	3

Source:Nepal Telecom (Management Information System):- Baisakh-2064 pp.1-2

1.4 Statement of the Problem:

Nepal Telecom (the then NTC) was established as a corporation. Now, it has been converted into company. The objectives of public enterprises are to create necessary infrastructure for developing the economy, stabilizing prices, maintaining a regular supply of essential commodities, import substitution, export promotion and employment generation. Basically, public enterprises were established with service oriented but since last quarter of 20th century, the public enterprises were considered that they have to make profit by marketing their products and services, many public enterprises were and even how fail to make even break-even profit, the subsidization is considered unjust in the course of entrepreneurship development. They simply become burden for the national economy according to the government report 2055/56 the aggregate return on net capital employed shown @ 1.62% only." (Agrawal:2001:14)

Various economic surveys conducted by Nepal Govt. Ministry of Finance show that the most of Nepalese public enterprises have been operating under heavy financial losses due to the lack of proper and adequate financial management and programme implementation techniques.

Nepal Telecom (the then NTC) is operating under the net profitability is the major indicator or criteria of the financial performance. For this view, Nepal Telecom can be considered as a successful enterprise. The NT is assisting the country by paying a huge amount of tax and solving unemployment problem to a certain extent. It is essential to study the overall financial and non financial indicators to provide an insight view of the true financial position.

The researcher had identified the following major issues of NTC:

1. The current ratio varies from 1.93:1 (2067/68) to 1.5 (2063/64) and most of fiscal year the ratios are less than 2:1 which is minimum liquidity ratio must be maintain in every organization so, NT ratio shows that there is no proper management of liquidity which means their may be risk to operate regular works in proper ways.
2. Nepal Telecom has been facing serious problem on account receivable management due to the lack of proper debt collection policy. Debtors to sales ratio lies between 40.4% (2063/64) to 53.7% (2067/68) and average debtors ratio is comes to 49.6% of total sales. The figure shows maximum of debtors which cause huge opportunity loss. Also average collection period reach up to 67.97 days ACP= Debtors X 365/total income (in 2067/68, taking total income as sales amount).
3. The NT has been utilizing the huge amount of loan and donation from the foreign government and donor agencies to fulfill its funds requirement. There is contradiction between its cash balance and foreign fund. The company is employing huge amount of foreign contribution and loan, at the same time there is excess cash balance in the company. It shows there is deficit in managing cash position within the company.
4. Nepal Telecom's debt to equity ratio (44% average) shows NTC has no more risk or benefit. It must be maintain properly other wise NT cannot earn more in future. So, there is lacking of appropriate blend of debt and equity capital. In a nutshell, the this thesis report is going to explore the following basic problems.
    1. What is the present status of NEPAL TELECOM?
    2. What is the present condition and trend of cash position of NEPAL TELECOM?

3. Is there any relationship of cash with other financial and non-financial variables?
4. Has the company followed optimum cash planning? Is there any space for further improvement?

1.5. Significance of the study.

Cash is the central point of every business organization. Every organization is operated with basic aim of making cash. In fact, the world is revolving around cash. It is needed our daily life as well as organizational life. Capital is needed to run business enterprises, Working capital is essential for daily operation of enterprises. Cash is reflected in terms of capital or expenses or profit or time. It is cash which affects all other resources of an organization. Most of Nepalese public enterprises do not give sufficient importance on cash management and depends on Nepal Government. Thus, the existing problem in the area of cash planning rather than in any other area. It is essential to plan cash, At the same time, it is challenging task in this changing environment.

This study has focused on effective cash planning. So, the study would be valuable to persons and parties such as management, financial institutions, customers, investors and other stakeholders of the company.

1.6 Objectives of the Study.

Nepal Telecom is operating under profit. But today it is cash flow not profit which measures the company's strength. So the main objective of the present study is to identify and analyze the factors or variables which affect and are affected by cash. The specific objectives of this study are as follows:

1. To review the existing financial scenario of Nepal Telecom.
2. To study the existing cash position, sources and uses of available fund.
3. To analyze and evaluate other financial indicators by applying various financial and statistical tools.
4. To recommend the appropriate suggestions to the management for improve cash positions.

1.7 Limitations of the Study.

The researcher is going to analyze only one part of the overall financial performance of cash planning. Even the study is important, It has following limitations.

1. The study is mainly based on secondary data. So, findings and conclusions are reliable to the extent of the availability of data.
2. The study has analyzed specially 5 fiscal years data (2063/64 to 2067/68), but the researcher is trying to cover more data as far as possible.
3. All the figures are in nearest rounding number.
4. Time and resource constraints may limit the areas covered by the study.

1.8 Organization of the Study

This study has been organized into five chapters as follows.

Chapter 1: Introduction
Chapter 2: Review of literature
Chapter 3: Research Methodology
Chapter 4: Presentation and Analysis of Data
Chapter 5: Summery, Conclusion and Recommendations.

1. Introduction:

This chapter includes background of the study, brief historical background of Nepal Telecom, statement of the research problems, objectives of the study and limitation of the study.

2. Review of literature:

This chapter deals with the basic concept of cash planning and its components. It highlights upon the existing literature and research related to the present studies with a view of finding out what had already been explains and how the present research adds to this dimension.

3. Research Methodology

Under this chapter, the research methodology employed for the study has been described. It includes introduction, research design, data collection and sources, period covered, research variables, statistical tools etc.

4. Presentation and analysis of data:

The researcher has presented the collected data in a standard format such as tabulation, pie- chart, histogram, graph, chart etc. Different statistical financial tools are used to analysis interpret for attaining the stated objectives of the study.

5. Summary, conclusion and recommendation.

At last the summary of findings, conclusions and some recommendations have been presented. Bibliography and appendix have also been included in the last part of the study.

Chapter- II

Review of Literature

2.1. Conceptual Frame-work

2.1.1. Planning

Planning is a cornerstone of effective management. It begins from the fixation of objectives and ends with the preparation of budget. Planning is the determination of future course of actions for achievement of desired results. It is first and important function of management. Every management function begins from planning. It is the foundation of whole management functions that help to take right decision affectively.

"Planning is the process of developing enterprise objectives and selecting a future course of action to accomplish them. It includes.

a. Establishing enterprise objectives.
b. Developing premises about the environment in which they are to be accomplished.
c. Selecting a course of action for accomplishing the objectives.
d. Initialing activities, necessary to translate plans into action.
e. Current re-planning to correct current deficiencies." (Welsch, Hilton and Gordon:1991:03)

Management is mainly concerned with planning. Planning is one of the primary functions of management. It involves forecasting, setting goals, framing policies, determining alternative course of action and deciding on the programmer of activities to be undertaken. It is the process of translating goals and objectives into the specific activities and resources required for achieving those goals and objectives. Planning reduces future uncertainty and provides direction to the management for determining the course of actions in advance.

"Planning involves the formulation of what is to be done, how when and where is to be done, who is to do it and how results are to be evaluated. As a preliminary activity, planning results in the development of framework within co-ordination, motivation and controlling can be undertaken." (Lundy:1994:4) So, planning is an intellectual process, the conscious determination of a course of action, leasing decision on purpose and facts.

The following table shows planning inflows and outflows of an enterprise.

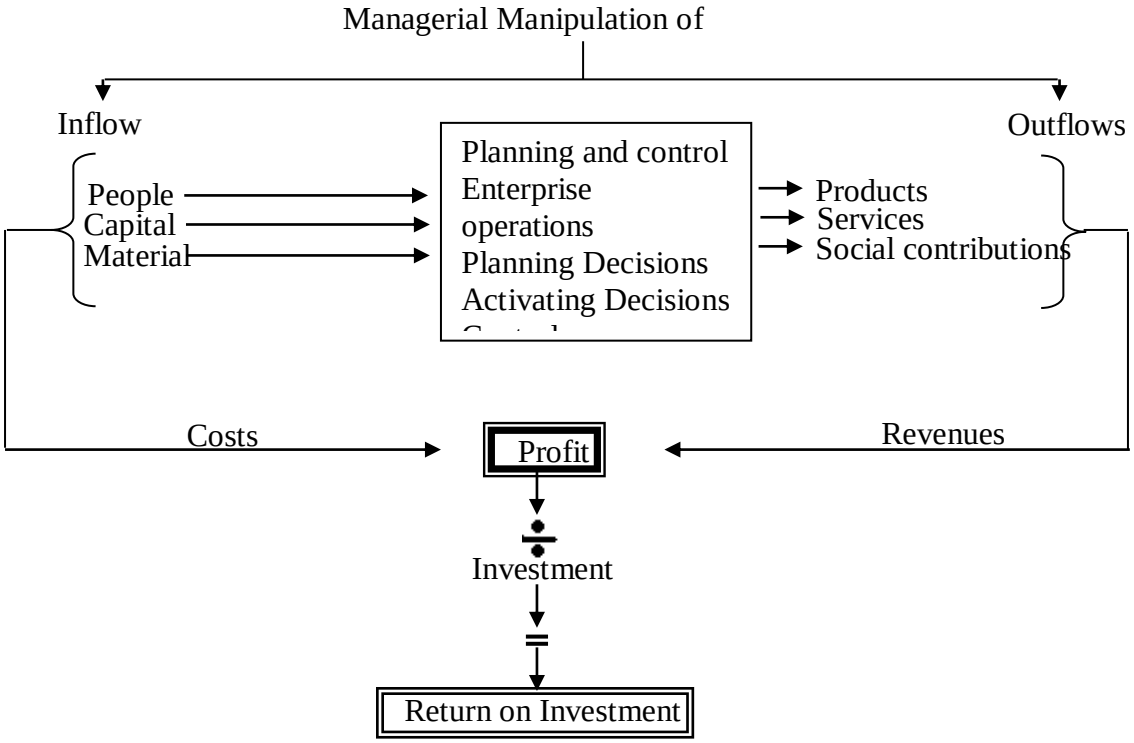


Figure no. 2

Planning is a continuous process because a planned projection can never be considered as the final and ultimate product. It should be flexible enough to cope with the environmental changes.

2.1.2. Levels of Planning

According to the time horizon, planning can be classified into following three categories.

A. Strategic long range planning

Strategic plan is of long duration and generally covers the time horizon of 5 to 10 years. It is developed by top management which focuses on enterprise objectives, mission and strategies. It is difficult to set strategic plan but it is most important for present completive and dynamic age. Long range planning is clearly concerned with the concept of the corporation as a long living institution. It provides the long-term direction to the organization. Basically, it is more important for broad and long living enterprises. The planner must include probable future opportunity uncertainty and challenges in his plan from the analysis of available information. The main purpose of this plan is to serve primarily as a sense of strategy motivation and direction. The best long range plan is one that establishes broad flexible objectives to serve as guidelines for subordination plan and that is not likely to become absolute as a result of rapidity changes technology. According to Peter Drucker " It is the continuous process of

making present entrepreneurial (risk taking) decision systematically and with the best possible organizing system the effort needed to carry out these decision and measuring the result of these decision against the expectation through organized systematic feedback. It is more than organization and analysis of information. It is a decision making process." (Drucker:1964:12)

Such decisions may be related about:

1. Determination of goals, objectives and strategies.
2. The level and direction of capital expenditure.
3. The accession of new source of funds.
4. Organization design and structure etc.

B. Medium Term Planning

Medium term planning mainly used to determine the allocation of resources among several activities and revise long range plans in view of more recent developments. It includes a time span of above 3 years. The main purpose of such planning is to establish interim objectives between long-term goals and for use in the development of annual program and budget. Program development, structuring and budget allocation etc. are the main areas of medium term planning.

C. Short- term planning

It is a tactical or operational planning. It is prepared by participate all management levels. Simply it is designed for short time period i.e. below 1 year. Such courses are outlines for the medium range plan which does not concern implementation. According to Koontz Z. and Cyric O. Donnell, "The short range planning is to confirm to fiscal quarters of years. Because of the practical needed for confirming plan to accounting periods and the same what arbitrary limitation of the long range to three to five years is usually based as has been indicated on the prevailing belief that the degree of uncertainty over long period makes planning of questionable value."

2.1.3 Profit Planning and Control

Profit planning is a comprehensive statement of intentions expressed in financial terms, for the operation of the firm of both short and long period. It is used as a basis for measuring the actual performance of mangers and their units. Profit is the fundamental factor for success of any enterprises and profit planning of such entity. Profit is outcome of effective and efficient management, which is effected by various factors. Profit planning is that tool, which manages all factors efficiently and effectively. Modern profit planning encourages desirable action and recognizes the divisional and departmental autonomy and responsibility

of manages moving them to strike for attainment of their personal objectives congruence with organizations objectives.

"A profit plan's a financial and narrative expression of the expected results from the planning decision. It is called the profit plan (or the budget) because it explicitly states the goals in terms of time expectations and expected financial results (return on investment, profit and cost) for each major segment of the entity. Typical profit plans establish the content and format of the internal control reports with respect to operations, inputs, outputs and financial position developed by the entity for monthly performance reporting to the various levels of management."(Welsch, Hilton and Gordon:1991:34)

According to Fremgen "Profit plan as an estimation and predetermination of revenues and expenses that estimates how much income will be generated and how it should be repent in order to meet investment and profits requirement. In the case of institutional operations, it presents a plan for spending income in a manner that does not result in loss."(Fremgen:1973:144)

Profit planning is now an important responsibility of the finance manger. While activities of this short require an accounting background, they also rest heavily upon the knowledge of business principles, economics, statistics and mathematics. Profit planning is the means of achieving organizational goals with in acceptable time.

Welseh, Glenn A. summarizes the broad concept of profit planning and control in few words as "The profit planning and control means the development and acceptance of objectives and goals and moving an organization efficiently to achieve the objectives and goals."(Welsch:1991:44)

Profit planning represents an overall plan of preparation over a definite period of time and formulates the planning, decisions of management. It consists of the operation budget, the financial budget and the appropriation budget.

In order to gain depth understanding of the concept profit planning must recognize that it is not a separate technique that can be thought of operated independently of the total management process and it is an integral part of management by the help of which every enterprise should earn realistic profit.

In summery, profit planning means the development of objectives, goals and moving an organization efficiently to achieve the objectives and goals. Profit plan is flexible and depends upon the size of the firms. So profit plan varies according size of the firms, according to the nature of business organization.

Cash planning is the major component of overall 'Profit planning and control' (PPC). A PPC program should have all its components that are required to fulfill the objectives, which are supposed to be fulfilled by PPC program. Welsch Hilton and Gordon have presented the following six components of a PPC program.

Outline of the Components of a Typical PPC Program (for a given year) (Welsch, Hilton and Gordon:1991:74)

A. Substantive Plan:

1. Board objectives of the enterprise
2. Specific enterprise goals
3. Enterprise Strategies
4. Executive management planning instructions (Planning premises)

B. Financial Plan:

1. Strategic long-range profit plan:
   - a Sale, cost, and profit projections
   - b Major projects and capital additions
   - c Cash flow and financing
   - d Personnel requirements
2. Tactical short-range (annual) profit plan:
   - a Operating plan:[Planned income statement]
     - (1). Sales plan
     - (2). Production (or merchandise purchases) plan
     - (3). Administrative expense budget
     - (4). Distribution expense budget
     - (5). Appropriation-type budgets (e.g., research and development, promotion, advertising)
   - b Financial-position plan (Planned balance sheet)
     - (1). Assets
     - (2). Liabilities
     - (3). Owners' equity
   - c Cash flow plan

C. Variable Expense budgets:

Output-expense formulas

D. Supplementary Data:

(e.g. Cost-volume profit analyses, Ratio analyses)

E. Performance Reports (including any special reports)—each month-end and as needed.

F. Follow-up, Corrective Action, and Re-planning Reports

2.1.4 Cash

Cash is the most liquid asset, which can be used without any substitution. Cash is the very important current asset of any business organization. The term 'cash' includes coins, currency and cheques held by the firm and balance in its bank accounts. Sometimes near cash items, such as marketable securities or bank deposits, are also included in cash. It is also non earning assets. Therefore, the firm should keep sufficient cash neither more nor less. Excessive cash balances reduce the rate of return on equity and hence the value of a firm's stock. It is also the ultimate output expected to be realized by selling the service or product manufactured by the firm.

Planning the use of any resource will result in a change in cash. Some exchanges of cash for owned resources are directly reflected in the position statement i.e. Balance sheet. For example, planned purchases of raw materials would produce decreases in cash and comparable increase in raw materials inventory. Planned acquisitions of equipment would produce decreases in cash and comparable increase in fixed assets. In the case of productive labor, the type and quantity a firm intends to use will influence cash as it pays for the use of that input. The cost of labor does not appear directly in the balance sheet. But its use is reflected in cash decreases. Perhaps also in finished goods inventory and in the income statement in cost of goods sold. So the planned use of all resources, whether or not contained in the balance sheet, has a direct impact on cash. Thus, cash becomes, for planning purposes the key resource. All expected resource changes will ultimately affect the cash balance.

Planning cash assumes more importance than other resources because cash is the most significant and least productive assets than a firm holds. It is important because cash can be used to pay the firm's obligation immediately without any restriction. It is because firms now a days giving keen attention to manage its cash affairs in such a way as to keep cash balance at a minimum level and to invest the surplus cash funds in profitable opportunities.

2.1.4.1 Cash Flow Cycle

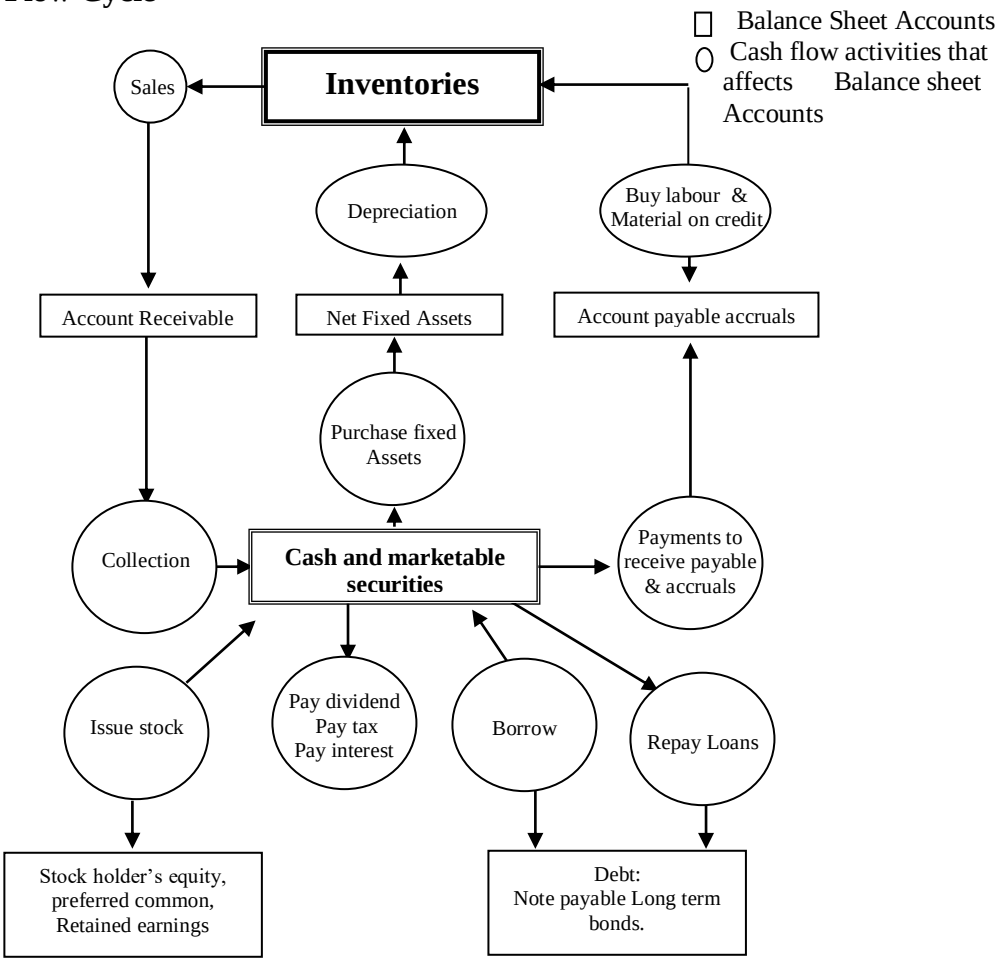


Figure no. 3

The above figure shows general outline of cash flow cycle. The cash account is the focal point of the figure. Credit sales cash account receives which finally collected and converted into cash .Similar borrowing money from bank and issuing stock will cause the cash account to increase, while paying taxes, interest, dividends and account payable will cash to decline. It briefly summarizes the causes of changes in cash position but does not show time consumed for cash activities.

2.1.4.2 Motives for holding cash

Since investments in cash and marketable securities represent assets with loan risk than products or projects. They may be expected to have returns less than the weighted average return on all of the assets of a firm. In general, given the highly competition and efficient nature of financial markets the firms can not yield positive NPV in investing marketable securities .Even business organization should hold sufficient cash and marketable securities. There are following four primary motives for holding cash and cash backup in the form of marketable securities.

A. Transaction motive
B. Precautionary motive
C. Speculative motive

D. Compensation balance requirements

A. Transaction motive

The transaction motive requires a firm to hold cash to conduct its business in the ordinary course. The firm needs cash primarily to make payments for purchase, wages and salaries other operation expenses, taxes, dividends etc. The needs to hold cash would not arise if there were perfect synchronization between cash receipts and payment i.e. enough cash is received when the payment has to be made. In cash flows can be scheduled and synchronized with the need for the cash outflows. The optional cash balance may differ according to the nature of business. Similarly, level of cash balance may vary as per seasonal variation. For example, raw materials may be available only during a harvest season and may be perishables as in the food-canning business. The transaction motive mainly refers to holding cash to meet anticipated payments whose timing is not perfectly matched with cash receipts.

B. Precautionary motive

The precautionary motive is the need to hold cash to meet contingencies in future. The precautionary amount of cash depends upon the predictability of cash flows. If the predictability is high less cash is needed to be held against an emergency or any other contingency. It provides a cushion or buffer to withstand some unexpected emergency. Another factor that strongly influences the precautionary motive is the ability to borrow additional cash on short notice less the need for precautionary balance.

C. Speculative motive.

Sometimes cash balances are held to enable the firm to take advantage of bargain purchase that might arise. These funds are called speculative balances. So, speculative motive relates to the holding of cash for investing in profit-making opportunities as and when they arise. The firm will hold cash, when it is expected that interest rates will rise and security prices will fall. Securities can be purchased when the interest rate is expected to fall; the firm will benefit by the subsequent fall in interest rates and increase in security prices. The firm may also speculate on materials process. If it is expected that materials' prices will fall, the firm can postpone materials' purchasing and make purchases in future when price actually falls. There may be other different areas of speculate but the primary motive to hold cash and marketable securities are: The Transactions and the precautionary motives.

D. Compensating Balance Requirements:

The commercial banking system performs many functions for business firms. Business firms pay for there services in part by direct fess and sometimes in part by maintaining compensating balance at the bank. If a bank is providing services to a customer, it might require the customer to leave a minimum balance on deposit to help offset the costs of providing the services. This minimum balance that the firm agrees to maintain in its checking account with the bank is called compensating balance. The amount may differ according to each banking policy and transaction volume of the business firm.

2.1.5 Cash Planning

Cash flows are inseparable parts of the business operations of all firms. The firm needs cash to invest in inventories, receivable and fixed assets and to make payment for operating expenses in order to maintain growth in sales and earnings. It is possible that a firm may be making adequate profit, but may suffer from the shortage of cash as its growing needs may be consuming cash very fast. Deficit cash position of the firm can be corrected if its cash needs are planned in advance. At times, a firm can have excess cash with it if its cash inflows exceed cash outflows. Such excess cash may remain idle. Again such excess cash flows can be anticipated and properly invested if cash planning is resorted. Thus, cash planning can help to anticipate future cash flows and needs of the firm and reduces the possibility of idle cash balances (which lowers firm's profitability) and cash deficits (which can cause the firm's failure).

Cash planning is the foremost need in cash management, which can't be ignored since it involves consideration of alternative courses of action so as to synchronize cash flows with the liquidity position of the firm. "Cash planning can be defined as the process of estimating all future cash inflows and outflows for a specific period of time and determining the level of cash the business would require for future operations with the dexterity to manage cash shortage and surpluses, if any during execution." (Bajracharya:1990:34)

Cash planning is a technique to plan and control the use of cash. It protects the financial condition of the firm by developing a projected cash statement form a forecast of expected cash inflows and outflows for a given period. The forecasts may be based on the present operations or the anticipated future operations. Cash plans are very critical in developing the overall operating plans of their firms.

Cash plan helps the management to formulate and implement business plans. Cash plans contribute to managerial efficiency by assisting management to identify the possible

future cash problems in advance and decide on policies and procedures to solve then, if and when they arises. It is expected to provide answers to the following questions: Is the enterprise in a position to meet seasonal and cyclical demand for cash? Can the maturing short and long-term obligations be met on time? Is the relationship with bankers and creditors maintained at a stable level? Is the investment if surplus cash possible to get a return without hampering the normal operation? Ultimately, a crucial question answered by cash planning is whether an enterprise is in a position to meet its unexpected cash needs or not?

2.1.5.1 Forecasting Techniques

A number of forecasting techniques are now available as precise cash forecasting tools. However, all the methods developed so far are inter-related and supplementary to each other. An enterprise may thus use one or more techniques simultaneously to forecast the future cash needs. Some of the techniques are described:

A. Cash receipts and disbursement method.

This method is based on a detailed analysis of the increases and decreases in the budgeted cash account that would reflect all cash inflows and outflows from such budgets as sales, expenses and capital expenditures. It is often used for short-term cash planning as a part of the annual profit plan. The under-laying plans (i.e. budgets) that cause cash inflows and outflows are carefully analyzed to translate them from an accrual basis to cash basis. This method requires elimination of non cash items, such as depreciation, amortization of goodwill and preliminarily expenses. Under this method all the items of cash receipts and disbursements are listed to exercise close control over the changes in cash flows. As a result, it provides absolutes magnitudes of expected cash flows within the enterprise. The process of forecasting cash receipts and disbursements is generally undertaken after finalization of the sales budget, production budget, relevant expenses budget. The aggregate cash affect of these budgets form the basis of this forecasting technique. This method requires identification of lags, environmental scanning and ensuring the co-operation of the operating departments.

Cash sales generate immediate cash; therefore, there is no lag between point of sale and realization of cash. In case of credit sales, the lag between point of sale and realization of cash causes a problem. Similarly time lag between the incurrence of accounts payable and subsequent cash payment also create problem in cash planning. These lags must be identified and provided for to develop realistic forecasts of cash flows.

B. Adjusted Net Income Method

The adjusted net income method of forecasting cash is based on the movement of working capital item between two points of time. Under this method a projected income statement is prepared which contains basically three elements- the source of funds, its

application, and the adjusted cash balance. All the transactions which affect the income statement and cash flows are recorded for a particular period of time, which may be quarterly, semi-annually, annually or more, in order to determine the effect of net income on the statement. The sources of cash for forecasting includes net income, depreciation and other non-cash items, changes in working capital items and non-operating cash transactions.

This method of forecasting is generally used by large enterprises with stable cash flows and adequate cash balances. The principal advantage of this method of forecasting cash is that it provides accurate estimates at a given point in time, which can be used for profit planning and control. Since this technique doesn't trace out the actual movement of cash form day to day, this method can't be used to forecast operational cash needs of the enterprises.

C. Projected Balance Sheet Method.

Under this method a projected balance sheet is prepared for a specific period, generally at the end of fiscal year, to determine the real value of balance sheet items in cash term. Each item is then forecasted with the help of balance sheet equations or with the ratios of the various items to sales.

The positive or negative differences are estimated in actual cash term so as to enable investment decision to be made if surplus cash balance is projected. Similarly the internal and external sources of financing are resolved before hand if a negative cash balance is projected. Since this method of forecasting doesn't consider the seasonal and cyclical fluctuations of business transactions and the timing of cash flows, it is not useful for forecasting operational cash needs. It is more often used for long-term cash forecasting since it provides a short-cut to the projection of cash position of the enterprise.

2.1.5.2. Time horizons in cash planning

Time horizons in any planning are important. It shows the time segment or time internal of planning within which certain activities will be done in scientific manner to get specific objectives. Planning cash inflows and outflows gives the planned beginning and ending cash position for the budget period. The Characteristics and importance of the continuing inflows and outflows of cash in a business indicate that cash planning and control should usually involve three different time horizons- long term, short term, and immediate term.

"The long-term cash horizon should be consistent with the time dimensions of the (a).Strategic long-term profit plan and (b) Capital expenditures projects. Planning long-range

cash inflows (Such as sales, services, financing) and long-range cash outflows (primarily for expenses, capital expenditures, and payment of debt) is fundamental to sound financial decisions and to the optimum use of cash and long-term credit. Long range cash planning focuses on the major outflows and inflows.

The short-term cash horizon should be consistent with the tactical short-term profit plan. Cash planning for this time horizon requires detailed plans for cash inflows and outflows that are directly related to the annual profit plan (e.g. Cash form sales and cash to pay for new equipment).

The immediate time horizon is used in many enterprises primarily to assess, control, and manage cash inflows and outflows, often on a continuing daily basis. Its primary focus is to ensure that cash shortages and excessive cash balances don't occur. It minimizes interest cost by taking all cash discount on payables and meeting cash-payment deadlines. It minimizes the opportunity cost of excess cash balances by allowing timely investments if cash accumulates." (Welsch, Hilton and Gordon:1991:435)

2.1.5.3 Cash Budgeting

The most critical ingredient to proper cash planning is the ability to estimate the cash flows of the firm so the firm can make plans to borrow when cash is deficient or to invest when cash is in excess of what is needed. Cash budgeting is defined as an exercise to arrange cash receipts and disbursements in porter form so as to level the cash flows, minimize excess cash holding and protect the liquidity of the firm. Indeed the appropriate system of cash management is based on the preparation of cash budget. So, it is the ground work for cash management. Cash budget is the most significant to plan and control cash receipts and payments. "A cash budget is a summery statement of the firm's expected cash inflows and outflows over a projected time period. It gives information on the timing and magnitude of expected cash flows and cash balances over the projected period. This information helps the financial manager to determine the financing of these needs and exercise control over the cash and liquidity of the firm."(Pandey:1998:768)

The cash budget is an analysis of the flow of cash in a business over a future short or long period of time. It is a forecast of expected cash intake and outlay. This technique of cash budgeting is applied by most enterprises. It has been defined in different ways to include the functions envisaged by different enterprises. However, the common definition given for cash budget is that it is a master plan to control the cash flows of a firm. Cash budget is the financial blue-print of all the elements of management, without which the functioning of the enterprise is virtually impossible. Therefore, the provision of cash needs in the cash budget is

based on the sales forecast, production budget, inventory levels, credit policy and various expense budgets. These functional budgets provide the detailed information regarding cash inflows and outflows. Since, cash budget has multidimensional characteristics, the master budget without cash budget is inconceivable.

Before preparing a cash budget, one should clearly define its premises as regards the time horizon to be covered, the terms of sales, the average collection period, average volume of raw material-consumed, average inventory turnover, lead time before delivery, maximum level of inventory, the level of cash balance to be hold, the cash cycle period, the compensatory balance required and the dividend policy.

Cash budget can be made over various time horizon, these horizons are divided into periods for which cash balances are calculated. The time horizon of a cash budget may differ from firm to firm. It depends upon the nature and policy of the business unit. Generally, cash budgeting covering periods of one year or less are considered short-term: those extending beyond one year considered long-term. In many companies a weekly budget is prepared for the immediate future, say, three months, then a monthly budget up to say twenty-four months, with a quarterly forecast thereafter. The adoption of such a procedure is useful for two main reason: firstly, more detailed forecast are needed in the short-period, and secondly, the short term cash flows can be more accurately forecast and so weekly budgets become tenable.

With regard to the horizon of cash budget Orgler (1970) stated "Even if a short-run cash budget is unlikely to extend beyond one year, there remains the problem of defining the length of its horizon. We have to remember that a cash budget, like any other budget, is only a plan meant to be executed over a specified period. However, due to changes in information and the passage of time, the plan is revised periodically and only the first period decisions are actually executed. For example, in making cash management decisions for a certain week, the cash flows over a six month horizon many be taken into consideration. At the beginning of the next week the horizon is extended by one week, the information about cash flows is updated, and a new set of decisions is made for one week thus, a meaning-full test for the length of the horizon is its effect on first period decisions. According to this approach, the horizon can be defined as the closest period in the future beyond which additional information will not change first-stage decisions. The difficulty in applying this criterion adds another complication to the cash management problem." (Bajracharya:1990:46)

Estimating the corporate cash need is an integral part of financial management. It is essential to prepare cash budget, but the preparation of cash budget is not an easy job. The variables and premises should define clearly so as to arrive less deviation from actual figures.

The cash budget variance is generally caused by the fluctuations in cash flows which in turn may be due to seasonal and cyclical factors. The long-term cash budget can't take care of the fluctuations resulting from the above reasons. However, the long-term cash budget for a five year period may be prepared as a simple guide to facilitate long-term financial planning.

The cash budget can be divided into several categories. E.g.: Simple, flexible, fixed or rolling. If the cash budget is formulated for particular activities, it is considered as a single budget. Similarly, if the activities are increased by more than one the cash budget is called flexible cash budget, whereas a rolling cash budget is one formulated for the entire budget period with fixed intervals. Lastly, a fixed cash budget is that, which is formulated once for the entire budget period.

The overall objective of cash budget is to enable the firm to meet all its commitments in time and at the same time prevent accumulations of unnecessary large balance with it. The cash budget focuses exclusively on the amounts and timing of cash inflows and outflows. "The primary purposes of the cash budget are to:

1. Give the probable cash position at the end of each period as a result of planned operations.
2. Identify cash excesses or shortages by time periods.
3. Establish the need for financing and or the availability of idle cash for investment.
4. Coordinate cash with (a). Total working capital, (b). Sales revenue, (c) expenses, (d) investments and (e) liabilities.
5. Establish a sound basis for continuous monitoring of the cash position." (Welsch, Hilton and Gordon:1991:434)

2.1.5.4 Preparation of Cash Budget

Cash budgets can be prepared for any interval but firms typically use a monthly cash budget for the coming year, a weekly budget for the coming month and a daily budget for the coming week, or something similar. The monthly cash budgets are used for planning purposes and the daily or weekly budgets for actual cash control. Cash budget is mostly prepared on cash receipts and payments basis. In this method the cash receipts from various sources and cash requirement of all functional budgets including capital expenditure budget are takes into account. All anticipated receipts are added to the opening deducted from the total of this to arrive at the closing balance of cash for the period. The receipts and payments can be divided into two specific categories as follows.

Receipts may be:

A. Capital receipts which includes:

- Sales proceeds from capital assets.
- Proceeds from issue of shares and debenture.
- Loan from financial institutions.

B. Revenue Receipts which includes:

- Cash sales, collection from debtors and bills receivable.
- Interest on loans and advances, investments.
- Dividend receipts.
- Others

Payments may be:

A. Capital payments which includes:

- Redemption of redeemable preference shares and debentures.
- Payment of long-term loans.
- Purchase of fixed assets etc.

B. Revenue payments which includes:

- Cash purchase payments to creditors.
- Payments of wages and salaries.
- Payments of overheads.
- Payments of selling and distribution expenses.
- Payments of interest, bonus, dividend and donations.
- Payments of short-term bank loans.
- Payment of taxes of others.

If the ending cash balance is in excess of desired ending cash balance, the loan may be repaid or temporary investment may be made. And if ending cash balance is negative or less than desired one, then borrowing will be made. A typical cash budget model is presented below:

Table: 3

……..Company

Cash budget, by month

For the year……..

Months / Items	Jan (Rs)	Feb(Rs.)	March(Rs)
Opening balance	XXX	XXX	XXX
Add Cash Received			
Cash Sales	XXX	XXX	XXX
Collection from debtors			
Current month sales	XXX	XXX	XXX
Previous month Sales (1Moth ago)	XXX	XXX	XXX

Pre-previous months sales (2 month ago)	XXX	XXX	XXX
Sale of fixed assets	XXX	XXX	XXX
Sales of investment	XXX	XXX	XXX
Interest, Dividend received from investment	XXX	XXX	XXX
Issue of share or debenture	XXX	XXX	XXX
Total received	**XXX**	**XXX**	**XXX**
Less:- Payment			
Cash purchase	XXX	XXX	XXX
Payment to creditors			
Current month purchase	XXX	XXX	XXX
Previous month purchase	XXX	XXX	XXX
Pre-Previous month purchase	XXX	XXX	XXX
Interest payment to debenture holders	XXX	XXX	XXX
Dividend payment to Shareholders	XXX	XXX	XXX
Redemption of share and debenture	XXX	XXX	XXX
Purchase of fixed assets/investments	XXX	XXX	XXX
Total payment	**XXX**	**XXX**	**XXX**
Difference in cash balance	XXX	XXX	XXX
Borrowing	XXX	XXX	XXX
Repayment	XXX	XXX	XXX
Interest payment	XXX	XXX	XXX
Closing balance	**XXX**	**XXX**	**XXX**

2.1.5.5 Cash Flow Statement:

A cash flow statement is a statement of company's ability to generate cash from various activities such as operating, investing and financing and their need of cash. Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generation. A cash flow statement when used in conjunction with the rest of the financial statements provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the amount and timing of cash flows in order to adapt to changing circumstances and opportunities. It is useful in assessing the ability of the enterprise to generate cash and cash equivalents and

enables users to develop models to assess and compare the present value of the future cash flows of different enterprises. It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminated the effects of using different accounting treatments for the same transactions and events.

Enterprises need cash for conducting their operations, to pay their obligations, and to provide returns to their investors. Users of an enterprise's financial statement are interested in how the enterprises generates and used cash and cash equivalents. So cash flow statement is important to different stakeholders of an enterprise. Due to increasing importance of cash flow analysis to the decision makers (i.e. investors creditors, management), The Financial Accounting Standard Board (FASB) stated that the financial statement of the company should include information about. (Munankarmi:2002:510)

- ❒ How a business obtains and spends Cash?
- ❒ Its borrowing and repayment activities.
- ❒ The sales and repurchase of its ownership securities.
- ❒ Dividend payments and other distributions to its owners , and
- ❒ Other factors that affect a company's liquidity and solvency.

2.1.5.6 Preparation of Cash flow statement:

The cash flow statement should report cash flows during the period classified by operating, investing and financing activities. The cash flow statement is prepared on the basis of cash basis of accounting. The statement is prepared by taking the opening balance of cash, adding to this net cash from different activities, i.e. operating activities, investing activities and financing activities. An enterprise may present its cash flow from operating, investing and financing activities in a manner which is most appropriate to its business. Classification by activity provides information that allows users to assess the impact of these activities on the financial position of the enterprise and the amount of its cash and cash equivalents. This information may also be used to evaluate the relationship among those activities. Cash flow from different activities can be presented as follows: (Ibid:518)

Cash flow from different activities

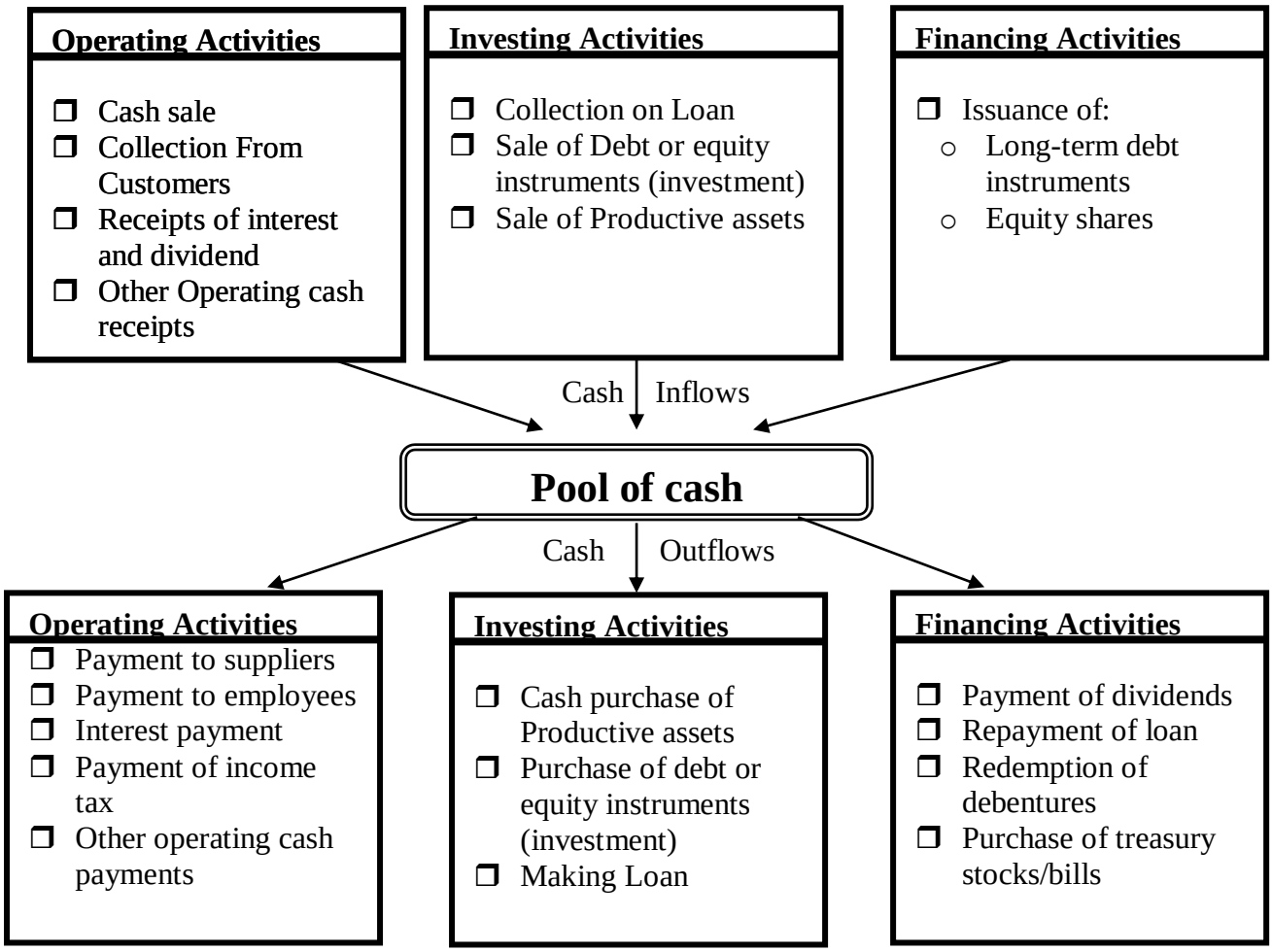


Figure no. 4

A cash flow statement is usually a report of cash activities of past period which shows company's ability to generate cash from various activities and their need of cash as already mention above. There are following three activities under cash flow statement.

a. Operating Activities.

b. Investing Activities.

c. Financing Activities.

a. Operating activities.

Cash flows from operating activities are primarily derived from the principal revenue producing activities of the enterprise. It is the single major continuing source of cash. Operating activities are always within the management control and they provide base for management estimation of fund needed to rise from available sources. Examples of cash flows from operating activities are:

a. Cash receipts from the sale of goods and the rendering of services.

b. Cash receipts form royalties, fees, commissions and other revenue.

c. Cash payments to suppliers for goods and service.

d. Cash payments to and on behalf of employees.
e. Cash receipts and claims, annuities and other policy benefits.
f. Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities and
g. Cash receipts and payments for contracts held for dealing or trading purposes.

Cash from operating activities are generally the cash effects of transactions and economic events included in the determination of income.

b. Investing Activities.

Investment activities include lending money and collecting on those loans, buying and selling productive assets that are expected to generate revenues in future periods, and buying and selling securities not classified as cash equivalent. Examples of cash flows arising from investing activities are:

a. Cash payment to acquire property, plant and equipment, intangibles and other long-term assets. These payments include those relating to capital development cost and self-constructed property, plant and equipments.
b. Cash receipts from sales of property, plant and equipment, intangibles and other long-term.
c. Cash payments to acquire equity or debt instruments of other enterprises and interests in joint ventures (other than payments for those instruments considered to be cash equivalents or those held for dealing or trading purposes)
d. Cash receipts from sales of equity or debts instruments of other enterprises and interests in joint ventures (other than receipts for these instruments considered to be cash equivalents and those help for dealing or trading purposes)
e. Cash advances and loans made to other parties (other than advances and loans made by a financial institution)
f. Cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a financial institution)
g. Cash payments for futures contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes or the receipts are classified an financing activities.
h. Cash receipts from future contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes or the receipts are classified as financing activities.

C. Financing Activities:

Financing activities include borrowing money from creditors, and repaying the amounts to borrower, and obtaining resources from owners, repayment of borrowed funds and payment of dividend to owners. Examples of cash flows arising from financing activities are:

a. Cash proceeds from issuing shares or other equity instruments.
b. Cash payments to owners to acquire or redeem the enterprises shares.
c. Cash proceeds from issuing debentures, loans, notes, bonds and mortgages and other short or long-term borrowings.
d. Cash repayments of amounts borrowed and
e. Cash payments by a lessee for the reduction of the outstanding liability relating to a finance lease.

There are two methods of preparing cash flow statements as follows:

a. Indirect method to cash flow statement
b. Direct method to cash flow statement.

a. Indirect method to cash flow statement

Under this method, net profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments and items of income or expenses associated with investing or financing cash flows: "The indirect method to cash flow statement is much harder to understand than the direct method. But the direct method is not the one used by most companies because it doesn't clearly show why the year's net income differs from the year's net operating cash flow. They prefer a presentation that helps the user to understand the reasons for the difference between the period's net income and the period's net cash from operations the reconciliation, or indirect method." (Ibid:517)

Table: 4

Cash Flow Format under Indirect Approach

A. Cash From Operating Activities (CFOA)	
Provision for dividend of the year (dividend Payable)	
Interim dividend …..	
Profit transfer (This year profit-last year profit) to Balance Sheet:	
- Profit and Loss a/c	
- General Reserve	
- Retained Earning	
- Fund etc. ….	
Net Profit after Tax	……

Add: Non Cash and non operating items:	
Depreciation of tangible fixed assets	…..
Amortization of intangible fixed assets	…..
(i.e. goodwill, patent, copyright, trademark etc.)	
Amortization of fictitious assets	
(i.e. Preliminary exp., Profit and loss dr. Balance, discount on share/deb. etc)	
Loss on revaluation or sales of fixed assets or investment	…..
Premium on redemption of preference shares or debentures	…..
Discount on issue of shares or debentures	…..
Total	**…..**
Less: Non operating income/gains:	
Gain on revaluation or sales of fixed assets or investment	…
Discount on redemption of preferences share and debentures	….
Premium on issue of shares or debentures	….
Tax Refund	…..
Interest/ dividend received on other investment	…..
Extra income (if any)	**…..**
Fund from operation (FFO)	**…..**
(+) Decrease in working capital except cash (item wise)	….
(i.e. decrease in current assets and increase in current liabilities)	
(-) Increase in working capital except cash (item wise)	….
(i.e. increase in current assets and decrease in current liabilities)	
Cash From Operating Activities (CFOA)	**…..**
B. Cash From Investing Activities (CFIA)	
Purchase of Fixed assets (Individually as per ledger)	(……)
Purchase of investment (as per ledger if any)	(…..)
Sale of fixed assets (individually)	…..
Dividend or interest received from other investment if any	…..
Cash From investing Activities (CFIA)	…..
C. Cash From Financing Activities (CFFA)	
Issue share/ debenture with premium or discount	….
Redemption of Pre. Share/ debenture at premium or discount	(….)
Payment of dividend (provision of dividend last year)	(….)
Interim Dividend (if any)	(….)
Cash From Financing Activities (CFFA)	**…..**
Net cash increase/ decrease (A+B+C)	…..
(+) Opening Cash/ Bank Balance	…..
Closing Cash/ Bank Balance	**…..**

b. Direct Approach to Cash Flow Statement:

"The method summaries the operating inflows and outflows. It results in a straight forward presentation that is intuitively understandable by users with little or no accounting training. But it does not reveal why the years net operating cash flow differed from the year's net income. However, one of the FASB's stated purposes of a statement of cash flow is to help users understand the difference between net income and the associated cash receipts and payments. So, if the direct method is used, then a reconciliation of net income and net cash flow from operating activities must be provided in a separate schedule"--- R.N. Anothony (Ibid:521)

In this method, cash collection from customers and other sources are added and cash used for various expenses are deducted in related activities. The direct method provides information which is useful in estimating future cash flows, and which is not available under the indirect method.

Table: 5

Cash Flow Format under Direct Approach:

A. Cash From Operating Activities (CFOA)	
(a) Cash sales and collection from customers:	
Total net sale (less return)	XXX
(+)Decrease in debtors (sundry debtors, A/R and B/R)	XXX
(-) Increase in debtors (Sundry debtors, A/R and B/R)	XXX
(+) Decrease in bad debt provision (Bad debt recover)	XXX
(-) Increase in bad debt provision	XXX
(-) Bad debt written off	XXX
a	**XXX**
(b) Cash purchase and payment to creditors	
Total cost of goods sold	XXX
(+) increase in inventory	XXX
(-)Decrease in inventory	XXX
(+) Decrease in creditors (sundry creditors, A/P and B/P)	XXX
(-) Increase in creditors (Sundry creditors, A/P and B/P)	XXX
b.	**XXX**
(c) Cash operating expenses and other warranty services:	
Total cash operating expenses (Selling, distribution, Administrative etc)	XXX
(+)Decrease in outstanding expenses	XXX

(-) Increase in outstanding expenses		XXX
(+) Increase in prepaid expenses		XXX
(-)Decrease in prepaid expenses		XXX
(d) Interest expenses:		
Interest expenses		XXX
(+) Decrease in interest payable		XXX
(-)Increase in interest payable		XXX
(+)Increase in prepaid interest		XXX
(-)Decrease in prepaid interest		XXX
(e). Income tax payments:		
Tax Paid (or provision of taxation as per P/L A/C		XXX
(+) Decrease in provision for tax or tax payable		XXX
(-)Increase in provision for tax or tax payable		XXX
(+) Increase in prepaid tax		XXX
(-) Decrease in prepaid tax		XXX
	e.	**XXX**
Cash from operating activities before extra ordinary items (a-b-c-d-e)		**XXXX**
(+)Increase in bank over draft		XXX
(-)Decrease in bank over draft		XXX
(+)Decrease in marketable securities		XXX
(-)Increase in marketable securities		XXX
Cash From Operating Activities (CFOA)	**A.**	**XXX**
B. Cash From Investing Activities (CFIA)		
Purchase of fixed assets (individually as per ledger)		XXX
Purchase of investment (as per ledger if any)		XXX
Sale of fixed assets (individually)		XXX
Interest or dividend received from other investment if any		XXX
Cash From Investing Activities (CFIA)	**B.**	**XXX**
C. Cash from Financing Activities (CFIA)		
Issue of share/ debenture with premium or discount		XXX
Redemption of pre. Share/ debenture at premium or discount		XXX
Payment of dividend (Provision for dividend last year)		XXX

Interim dividend paid if any		XXX
Cash From Financing Activities (CFFA)	**C.**	**XXX**
Net cash increase/ decrease (A+B+C)		XXX
(+) Opening cash/bank balance		XXX
Closing cash/bank balance		XXX

2.1.6 Cash Management models.

Optimal cash balance is environment specific. It depends upon the nature of business, scale of business both rising and falling costs are associated with maintaining various levels of cash balance. That is there are costs associated with levels that are both too high and too low, and thus some optimal level exists at which these costs are balanced. In cash management the basic stock is the minimum cash balance, which may be determined, in part, by bank compensating balance requirements. This cash stock must be sufficient to cover at least the transactions needs of the firm. Inflows comes principally firm receipts, borrowing, and sales of securities, outflows are represented by cash disbursements. The marketable securities portfolio act as a reserve, or safety stock, against anticipated (or unanticipated) future needs and opportunities.

Several types of mathematical models have been developed to help determine optimal cash balances. The researcher is going to deal following two basic models of cash management.

a Baumol's Model

b Mioller-Orr Model

a. Baumol's Model

William Baumol first recognized that the trade off between cash and marketable securities is similar to the one firms face when setting the optional inventory level. It is an economic model that determines the optimal cash balance by using Economic Order Quantity concepts of inventory Management. In this model, it is assumed that the firm on average is growing and is a net user of cash. The purpose of this model is to determine the minimum cost amount of cash obtain by converting securities to cash.

There are two type of cost as follows:

I. Conversion Cost:

It is the cost of converting marketable securities into cash which includes the fixed cost of placing and receiving an order for cash in the amount conversion size.

II. Opportunity Cost:

It is the interest foregone on cash balances held in a non-interest earning cash account rather than having them invested in interest earning marketable securities.

Mathematically, the optimal conversion size (C*) which minimizes total cost can be found from the following equation.

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

Where, C*= the optimal size of the cash transfer

T= The total cash usage for the period of time involved

b= The cost of the transaction in the purchase or sale of marketable securities.

i= The applicable interest rate on marketable securities.

Computation of Total Cost:

Total Cost = Conversion cost + Opportunity Cost

$$= \frac{T}{C}(b) + \frac{C}{2}(i)$$

Where, T = Total cost usage for the period of time involved.

C = Cash size of the transfer, which may be optimal too.

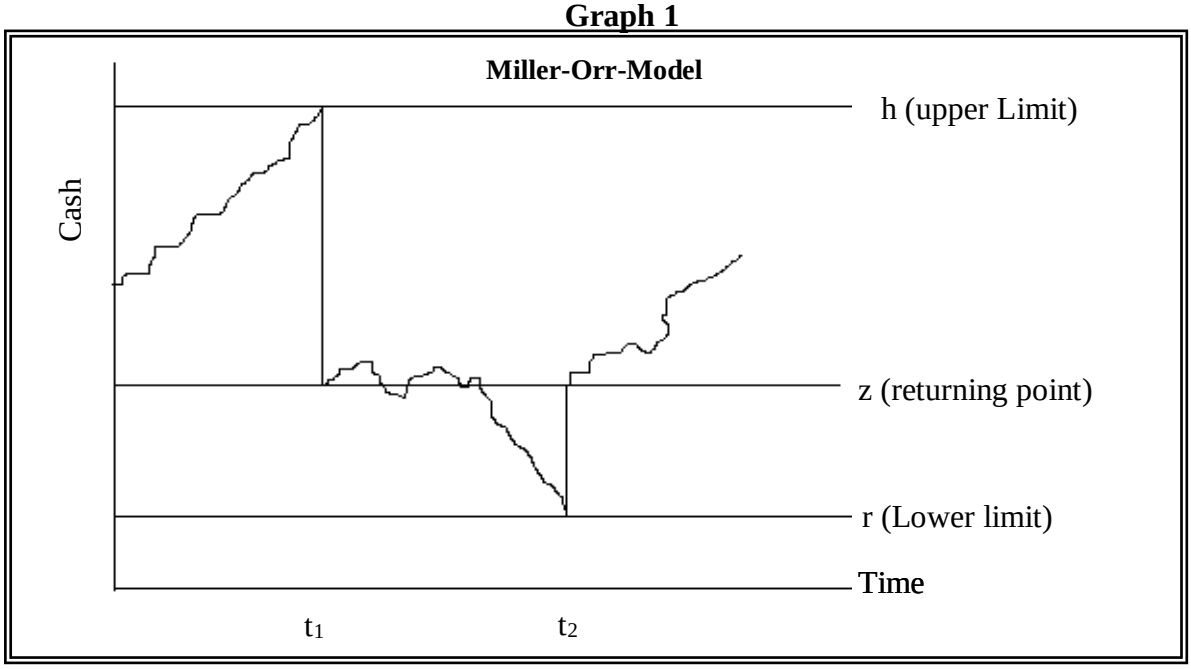
b = Conversion cost per transaction

i = Opportunity Cost

b. Miller-orr-Model

This model is the expanded form of Baumol model. In contrast to the completely deterministic assumption of the Baumol model, Miller-Orr-Model assumes that net cash flows behave as if they were generated by a "Stationary random walk". This means that changes in the cash balance over a given period are random in both size and direction and that they form a normal distribution as the number of periods observed increases. The model is presented in graphical form to describe the upper limit, lower limit and returning point of the cash balance at different time periods.

Graph 1



The Miller-Orr model is designed to determine the time and size of transfers between an investment account and the cash account according to a decision process as in the above figure. At above figure, the upper balance of cash is shown by 'h' cash balance are allowed to go up until the upper limit 'h' and then reduce to level 'z' i.e. returning point by investing (h-z) amount in the investment portfolio. Similarly cash balances are allowed to reduce until the lower limit (i.e. r) and then sell the securities to increase the cash balance up to 'z' i.e. returning point. The figure also shows time horizon, t_1 and t_2…… The time interval may vary of reaching upper limit or lower limit.

The cost function for the Miller- Orrr model can be stated as (Weston and Copeland:1978:786)

E(C) = bE(N)/T +iE(m)

Where, E (N) = The expected number of transfers between cash and the investment portfolio during the planning period.

b = The cost per transfer

T = The number of days in the planning period.

E(m) = The expected average daily cash balance

i = The daily rate of interest earned on the investments.

The optimum cash balance i.e. the returning point is derived as follows:

$$z^* = \left(\frac{3b\sigma^2}{4i} \right)^{1/3}$$

Where, σ^2 = Variance of the daily changes in cash balances

b = Transfer cost

i = Daily applicable interest rate

z*= Optimal cash balance [returning Point]

The Miller-Orr model has a valuable element of flexibility. Expectations that cash balances are more likely to either increase or decrease over a given period can be incorporated into the calculation of the optimal values for the decision variables. The model is not intended to be applied blindly. Difficulties often arise in estimating parameters and probabilities. Despite such restrictive assumption, decision model perform effectively if they capture the essential elements in a decision problem.

2.1.7 The Velocity Concept

The concept of velocity relates to the amount of time required by the business firm to complete one round of the operating cycle- that is, the average number of days required between the time cost is spent for the purchase of inventory and the time when the inventory has been sold and the cash collected from the sale. The operating cycle starts when some of the available cash is used to purchase inventory. The next step is the sale of inventory, which results in an account receivable (assuming that the firm sales on credit). The final step is the collection of the account receivable, which completes the cycle by bringing the firm back to cash. The cycle started with cash out and is completed by coming back to cash. On completion of the cycle, of course, the firm should have more cash than when it started. If not, it suffers from poor business management. The following figure shows the operating cycle.

Operating Cycle

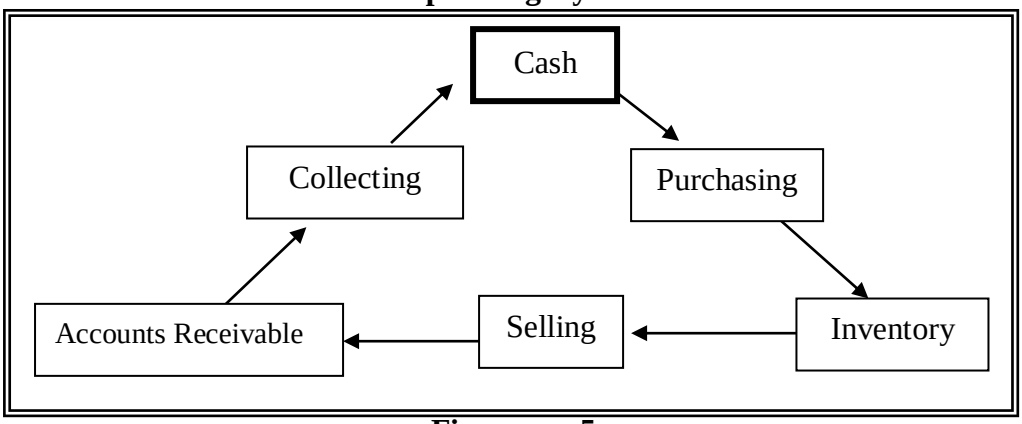


Figure no. 5

This cycle incicates the length of time the firm has tied up its fund in working capital. The above figure shows the general cycle of non- manufacturing concern which doesn't shows inventory concversion period. It is noted that greater the velocity, lesser will be the cash conversion cycle (CCC) which results less working capital requirement. A cash conversion cycle depends on following elements.

a. Inventory convesion period
b. Receivable collection period
c. Payable deferral period

a. Inventory Concversion period

The length of time between purchase of raw materials and the conversion of raw materials into finished goods is called inventory conversion period. It is the amount of time the product remains in inventory in various stages of completion . the inventory conversion period is calculated by dividinng inventory by the cost of goods sold per day as follows:

$$\text{Inventory conversion period (ICP)} = \frac{Inventory}{Costofgoodssold} \times 360$$

b. Receivable Collection Period

The receivable collection period is average length of time required to convert the firm's receivables into cash that is to collect cash following a sale. The length of receivable collection period depends on the credit policy of the firm. It is also called the days sales outstanding (DSO), and is calculated by dividing accounts receivable by the average credit sales per day as follows:

$$\text{Receivable collection period} = \text{DSO} = \frac{\text{Re}\,ceivables}{sales/360}$$

c. Payable deferral Period

It is the average length of time between the purchase of raw materials and labour and the payment of cash for them. The length of payable defferred period depends on the credit facilities provided by the supplier and wages payment system. The payable defferal period is computed by using following equation.

$$\text{Payable deferral period} = \frac{Accountpayable}{Creditpurchase/360} = \frac{Accountpayable}{Costofgoodssold/360}$$

Cash conversion cycle : It is the length of time between the actual cash disbursement or purchases and labour etc and cash receipt from the sale of finished product. It can be expressed in the following equation.

Cash conversion cycle (CCC) = Inventory conversion period + Receivable conversion period –payable deferred period.

The firm's goal should be to shorten its cash conversion cycle as much as possible without hurting operations. This would improve profits because the longer the cash conversion cycle, the greater the need for external financing and such financing has a cost.

The cash conversion cycle can be shortened by : (Weston and Brigham:2000:343)

I. Reducing the inventory conversion period by processing and selling goods more quickly.
II. reducing the recivables collection period by speeding up collections.
III. lengthening the payables deferral period by slowing down its own payments.

2.2 Review of Previous Research studies

2.2.1 Review of dissertations

Number of Research studies have been conducted in the different areas of Nepal Telecom (The then Nepal Telecommunication Corporation). The main purpose of this sub-unit is to find out what works have been done in the area of the research problem under study and what has not been done in the field of the research study being undertake. An attempt is made here to review some research works at different topic of Nepal Telecom.

a. Laxmi Parajulu (2003)

Laxmi Parajuli has conducted a research on the topic "Profit Planning in Nepal Telecommunication Corporation" converting 5 fiscal years (2051/52-2055/56). Both primary and secondary sources of data were used. Different analysis, cost-volume profit analysis, ratio analysis, flexible budgets, standard deviation, coefficient of co-relation, regression, F-test etc were used in course of her study.

The research was conducted to answer the following research question.

1. What is the trend of overall profit planning of NTC?
2. What are the fundamental principles adopted by NTC in short term and long term planning?
3. What is the situation of sales activities?
4. What are the major problems faced by the enterprises in developing and implementing profit?
5. What step should be taken to improve the profit planning system in public utilities enterprises?

The researcher found that there was lack of systematic profit plan and unable to maintain periodic performance on time. The Corporation completely ignored variance analysis and overheads are not classified systematically. The corporation could not able to utilize the assets properly as well as it is suffering from fixed cost.

The researcher has also provided some recommendations as follows:

1. Participative management should be introduced in formulation of Plans and policies of the corporation. Profit planning manuals should also be communicated to lower level of management. Effective education should be provided to improve profit planning system in NTC.
2. NTC should stress on efficient utilization of fixed assets.
3. Periodic performance reporting system should be followed to take corrective action and to improve the performance.

b. Anu Raj Thapa (2000)

The researcher had submitted a thesis on the topic "A Study on Financial Performance Analysis of Nepal Telecommunication Corporation." The main objectives of the study were as follows:

1. To highlight the function, growth and development of NTC in different aspects.
2. To analyze the existing financial Position of NTC on the available financial data.
3. To find out the different major issues, problems and weaknesses of the financial management in the corporation.

Even-though the corporation has got a success in making profit, the researcher had found out following facts issues:

a. NTC couldn't have generated sufficient return in comparison with the total investment on fixed assets, which shows the poor utilization of fixed assets.
b. A huge problem of outstanding bill has immerged in NTC due to have longer debt collection period since the beginning of the study period.
c. The operating expenses of the corporation has highly affected by continue increment on bad debts written-off, provision for doubtful debts and operation and maintenance items.
d. The company could not take major decisions independently and freely due to unnecessary government intervention.

Based on the above major issues and facts the researcher has provide the valuable suggestions as follows:

- ❒ The NTC should manage liquidity position properly. Excess funds should be invested in marketable securities.
- ❒ The NTC should utilize the full installed capacity of fixed assets.
- ❒ The NTC should accelerate on collecting outstanding bills. It should make appropriate decisions regarding the credit terms, credit standard and collection policy.
- ❒ The NTC should employ the budgetary cost control technique and standard cost control techniques.

c. Bhloa Nepal (2003)

Bhola Nepal has conducted a research on the topic "Financial Performance evaluation of Nepal Telecommunication Corporation" is basically concerned with the financial analysis of corporation. The basic objective of this study was to evaluate the financial performance of the enterprise. Beside this following specific objectives were also mentioned.

1 To determine whether the financial performance is satisfactory or not.

2 Based on the findings of analyze to provide some suggestions for improving the financial performance.

On the basis of the research, the researcher came to the conclusion that the financial performance of the enterprise has satisfactory from the results. This study shows that the NTC is maintaining the good liquidity position and the financial capacity of the firm to repay current liabilities. The quick ratios are sound in specific time period, this indicates that current liabilities can early be covered by quick assets and current liabilities are in increasing trend. The range of the inventory turnover ratio is sound from the viewpoint of liquidity. The NTC debtor turnover ratio is lower which reflects the debtors are not being collected rapidly.

Form the study, the average collection period of NTC is not satisfactory so it should make effective strategy to collect the receivables. The sales revenue has increased by each year, the fixed assets in generation of sales in a constant proportion. The fixed assets ratio refers the NTC is in increasing trend but not satisfactory. It means the NTC has lack of efficiency in proper utilization of fixed assets in generating sales. Based on the major findings of the study of financial performance evaluation of the NTC, some suggestions were recommended:

1. There should be healthy working environment.
2. The board of directors of the corporation should be free in setting strategic plans.
3. There should be continuous flow of information among various level of management and various groups of employee. The goal, objectives, strategies should be carefully communicated to lower level management.
4. The NTC should have in depth analysis of its strength and weakness.
5. The financial portion of the corporation should be timely evaluated.

2.2.2 Review of other reports

a. DR. Radhe S. Pradhan. (2003)

The researcher conducted the research study on the topic "Demand for cash by Corporations". In this research, the researcher tested the models that will either support or reject the Baumol-Tobin hypothesis. The researcher selected nine manufacturing public corporations as sample which represents about 80 % of Nepalese public corporation in manufacturing sector.

Section –I of this paper describes the models that attempt to explain firm's demand for cash and the nature and sources of data used in the statistical analysis. The regression results are presented and interpreted in section-II. Finally, the empirical findings are summarized and the conclusions are indicated in section-III.

The major conclusion indicated by this paper is the empirical evidence in support of the presence of the economies of scale in cash holdings, significant effect of interest cost on investment in cash and the slow speed of adjustment between actual and desired level of cash.

The MODEL:

The decision about the aggregate level of cash to be held may be regarded as subject to the constraint of wealth and the cost of holding cash. As a first approximation to the theory, the function is presented as follows:

$$Y^* = \int (W, i) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where, "Y^*" is real desired level of cash, 'W' is the real desired wealth defined in terms of sales (S), and 'i' is the short term interest rate.

Specification of Explanatory variables:

Wealth: Nearly almost all the studies on demand for cash have used sales as a proxy for wealth. It is postulated have that expected sales are some function of past sales, i.e. , $S_t=S_{t-1}$. This specification seems to have provided the best fit in most of the cases.

Cost of Holding Cash:

The studies on demand for cash indicated that short term interest rate, among others seems to be a popular measure of the opportunity cost of funds invested in cash. However, it has always been difficult to find a suitable measure. There is also no clear cut case for using a particular measure. Hence, this paper uses short-term interest-rates of commercial banks as a proxy for the opportunity cost of holding cash.

Capacity Utilization:

The capacity utilization rate (CU) has also been introduced as an explanatory variable in the estimated equations. The actual rates of capacity utilization for the selected corporations were not available of the study period included in this paper. Hence, the industry wise capacity utilization rate has been used as a proxy for the selected corporations. This is consistent in view of the fact that these corporations dominate largely if not wholly in their respective industries.

Nature and Source of Data

The data on cash balances and sales have been collected from profit and loss accounts and balance sheets as presented in the "Reports of the Auditor General" published by the "Office of the Auditor General", His Majesty's Government of Nepal (HMG/N). Besides, the information has also been supplemented from "Quarterly Economic Bulletin" published by the central Bank of Nepal i.e., Nepal Rastra Bank. Similarly, capacity utilization rates have

been taken from the "Economic Survey" brought out by the Ministry of Finance, HMG/N. these data are collected for nine manufacturing public corporation for ten years from 1973 to 1982. The nine selected corporations are Agriculture Tools Factory, Brick and Tile Factory, Balaju Textile Ltd., Dairy Development Corporation, Janakpur Cigarette Factory, Nepal Tea Development Corporation, and Royal Drugs Limited. These corporations represent about 80 Percent of Nepalese public corporations in the manufacturing sector for which data are supposed to be available form 1973 to 1982. The number of corporations and study period could not be extended due to the unavailability of data.

EMPIRICAL RESULTS

The regression of cash on sales produced the following results:

In Y_t=-0.36+.076 in S_{t-1} (12.97^{*})……(12)

R-bar square=0.653, F=168.25, DW=1.59

In the regression equations presented throughout this paper, t-values are indicated by figures in parentheses. Similarly, the asterisk sign (*) indicates that the result is significant at 5 % level of significance.

Equation (12) shows that the sales coefficient is significant with a priori expected sign. The elasticity of sales with respect to cash is less then unity. It all shows the evidence of economies of scales with respect to the demand for cash by manufacturing public corporations of Nepal.

Similarly the researcher has shown the significant of cost of holding cash and capacity utilization on investment on cash from different equations. There are all together eighteen equations on this research paper. The researcher has shown individual as well as collective effect of explanatory variable on holding cash. The major conclusion of the research is as follows:

1. the estimated results showed that the inclusion of capacity utilization variable in the model seems to have not contributed much to the demand function for cash thus, the capacity utilization as a significant variable affecting the demand for cash in doubtful.
2. The sales and interest cost elasticity with respect to cash fluctuated widely especially the interest cost elasticity. The average values of sales and interest cost elasticity are observed to be 0.64 and 1.64 respectively. It indicates that holding the interest rate constant, a one percentage point increase in interest cost led on the average to about a 1.64 % decline in cash holdings. It all shows that the average

elasticity of sales with respect to cash can be regarded as less than unity while the average elasticity of interest cost is more than unity.

2.3 Research gaps (Difference between previous research and this research)

All the research studies mentioned above basically related to the profit planning and financial performance of the corporation. The findings and recommendations of the above research studies are more or less the same. The review of dissertations focuses only on financial performance. The research paper could not able to show the actual cash position, variance between actual and estimated cash position, its relation with other factors in depth. None of previous study has attempted to analyze the variance between actual and estimated cash flows, actual and estimated cash budget.

More over there is very little research work on cash planning. Now, the researcher had conducted research focusing on cash planning of the selected company. The researcher has presented cash related ratios such as quick ratio, current ratio, cash to current liabilities ratio, cash to current assets ratio, cash to total assets ratio, cash to turnover ratio to show the actual cash position of the company. Similarly, it also finds the relationship of cash with other variables such as relationship between (a).actual cash collection and forecasted cash collection, (b).operating revenue and cash flow from operating activities, (c).actual cash collection and total income, (d).forecasted cash collection from debtors and actual cash collection from debtors etc. The researcher has attempted to present in depth analysis of variance by showing source-wise, region-wise deviation in amount as well as in percentage. So, the present research is able to present the actual cash position, problems and appropriate solution for better cash planning of the company.

Chapter- III

Research methodology

3.1 Introduction

Research is considered to be the more formal systematic, intensive process of carrying on the scientific method of analysis. It is scientific method of analysis. It involves a more systematic structure of investigation usually resulting in some sort of formal record of procedure and a report of conclusion.

Research methodology is the way to solve systematically about the research problems. The research methodology is followed to achieve the basic objective goals of this research work. This research paper is designed to solve the problem of cash planning taking it as a major component of overall profit planning & cannot. It also examines or the relationship of cash with other variables with the help of various financial statements, statistical tools, non financial statements and various accounting tools. The research methodology includes research design, period covered, Nature & sources of data. Research variables and tools use.

3.2 Research Design

Research design is the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The design of this study is analytical as well as descriptive approaches. Generally research design means definite procedure & technique which guide to study & propound ways for research viability. Research designs are invested to enables the researcher to answer research question as validly, objectively, accurately & economically as possible. Research design sets up the framework for adequate tests of the relations among variables.

The main objective of this design is to highlight the degree of application of cash planning concept in Nepal Telecom with respect to many aspects such as sales plan, administration expanse plan, & different financial statements. The research has also tried to show the relationship between different variables.

3.3 Period covered

Cash planning has two time dimensions long rang and short range. The long range cash planning of the study covers a time period of 5 years from FY 2063/64 to 2067/68 & short range period covers one year duration.

3.4 Nature Sources of Data

To attain the objective of this study, mostly secondary data were used & other information was based on discussions with the staffs of Nepal Telecom. The secondary data were collected from the following sources.

(i) Income Expenditure of different fiscal years.

(ii) Annual Reports of different years

(iii) Management Information system of Nepal Telecom

(iv) Anniversary souvenir of Nepal Telecom

3.5 Research variable

The research variable of the study are mainly related with the accounting & financial statement of Nepal Telecom. Sales (Operating Revenues) Telephone line generation (Installed), capacity utilization, operating profit, total capital employed, capital expenditures, cash flow, total cash collection, cash collection from debtors other financial statement & time period are the main research variables of the study .

3.6 Research Tools used

Necessary data collected from various sources are analyzed and presented in table & formats. To analyze the collected data, statistical as well as financial tools are used. Statistical tools are mean, standard deviation, coefficient of variation, correlation, probable error, regression and trend analysis. And financial tools used are financial ratios, variation analysis.

Chapter- IV

Presentation and Analysis of Data

4.1 Introduction

The previous chapters incorporated introduction of the study, review of literature and the research methodology employed in the study respectively. This chapter of the study will examine the various aspects of cash planning and their accomplishment system in NEPAL TELECOM through analyzing and interpreting the data and information gathered form different sources. The data and information collected from different sources are presented, analyzed and interpreted for attaining the stated objectives of the study.

Cash planning is the focus point of overall profit planning. Cash planning is the part of tactical planning. The researcher is using different analytical tools such as ratio analysis, statistical analysis, variance analysis etc mentioned in the research methodology chapter. The analysis and interpretation of data are not only the ideological debates. It helps the investigator to come into the certain destiny. The budgeting, P/L account, cash flow statements, balance sheet of different years are the main sources of data. They are presented in tables, graphs at standard format so as to make easy for interpretation.

4.2 Brief Introduction of Nepal Telecom

Telecommunication is a means of communication among the various types of communication media. Telecommunication is a means of communicational distance. It included that all forms of electrical transmission of intelligence as telegraph, telephone, radio telegraphy and television, listen in their chronological order of development. Data transmission between a computing system and remotely located device via unit that performs the necessary format conversion and control the rate of transmission.

Since the invention of satellites, there have been coming various kinds of development in the telecommunication sector. Without having rapid progress in communication system, a country cannot be developed. So, it is also a basic infrastructure for the development of any country.

In Nepal, telecommunication services started in 1931 A.D. Since the days of Rana Regime with the establishment of a telephone system in Kathmandu as a luxury for the then Rana Rulers. At that time government was directly involved in the development and distribution of telecommunication services. In the year 1959 under the Ministry of Workers, Transport and Communication a separate Telecommunication Department was established to

develop the country's telecommunication service in a systematic manner under the telecommunication expansion program undertake with the help of the international development association (IDA). Further more, Nepal telecommunication board was establishment in year 1969 and its ability to handle modern telecommunications technology for the establishment of new telecommunication facilities in Nepal. Later, in 1975 the telecommunication board was converted into Nepal Telecommunication Corporation (NTC) under the 'Communication corporation Act, 1971' as a government statutory corporation.

Now, 'Nepal Telecommunication Corporation' was dissolved and converted to Nepal Doorsanchar Company Limited from 1St Baishakh 2061 (13th April 2004). The new company was registered with the company registrar office on 2061-10-11 under company act 2053. However, the company shall also be known to general public by the name Nepal Telecom as registered trademark.

4.3 Telephone Line Status

Nepal Telecom has been providing a number of services and facilities for transmission of written messages, voice communication and verity of other communications. It provides telecommunications services both within the country and overseas. Nepal Telecom has been providing basic telephone service from the beginning of its establishment. In its continued effort to satisfy the ever growing demand for telephone lines. Nepal Telecom has been augmenting its telephone exchange line capacity for the best interest of its valued customers up to Jestha 2062. Nepal Telecom has total installed capacity of 53768 lines of which 448639 lines are distributed. The capacity is projected to reach 750000 lines at the end of current tenth plan (2002/03-2006/07). The total capacity is the sum total of the capacities of all the exchange, Rural exchanges, Rural Stations, Marts, VHF/UHF lines and VSAT circuits spread throughout the country. It now has 202 operational exchanges in 71 districts and service is available in all the 75 districts.

Table: 6

NEPAL TELECOM

General Telephone Lines Status

Particulars / Fiscal Years	Installed capacity	Distributed lines	Capacity utilization	National Penetration (per 100 Pop)
2063/64	656070	509873	78%	1.93%
2064/65	684942	532391	78%	1.98%
2065/66	726980	562162	77%	2.04%

2066/67	749205	583542	78%	2.07%
2067/68	761903	603291	79%	2.14%

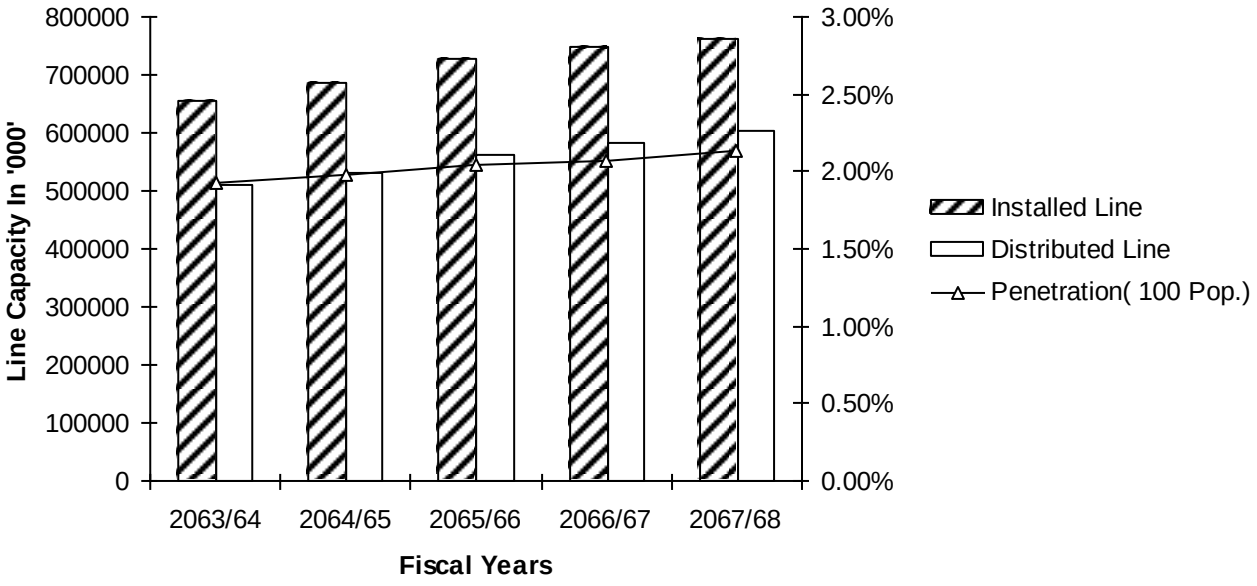
Source: Annual Report 2067/68.

The above table no. 8 shows that the variables are in increasing and decreasing trend. Capacity utilization lies between 78% to 79% which indicates consistency of utilization rate. The average utility rate is 78% which is satisfactory on itself. The figure also shows, the capacity utilized by the company not full so, company can't meet the increasing demand. There is sufficient market, if Nepal Telecom can expand its utility, so utilization rate can't be assumed to be satisfactory with respect to the increasing market demand. National penetration shows number of telephone users per 100 populations. The figure is in constant on fiscal year 063/64 and 064/65.and then decrease by 1% and increasing gradually upto 067/68. There is vast scope for expansion. It is essential to expand it capacity both installed and utilization.

The above figure can better be presented with the help of following graph.

Graph no. 2

General Telephone Lines Status of NT



The figure clearly shows highest installed capacity and distributed lines in up to 2067/68. The lines are gradually increasing. It also shows the difference between installed capacity and distributed lines. National penetration is also increasing which indicates that growth rate if telephone users are more than that if population growth with respect to the total population.

4.4 Sales (Operating Revenue) Plan

Sales plan is the most important and principle plan and forms the basic on which all other plans or budgets are built up. Sales plan provides basic management decision about marketing. It is an organized approach for developing organizational plan. Since the sales planning is foundation of overall plan, it should be realistic. If it is not realistic, other plans such as production plan, human resource plan, marketing plan, cash plan etc will lead wrong direction. So management should develop a realistic sales plan.

Sales plan is a forecast of quantities and values of sales to be achieved in a budget period. It is the primary source of cash and other functional budgets are prepared on the basis of sales budget. A comprehensive sales plan incorporates such management decision as objectives, goals and strategies and premises. The primary purpose of a sales plan are to reduce uncertainty about future revenues to incorporate management judgments and decisions into the planning process to provide necessary information for developing other elements of a comprehensive budgeting and to facilitate management's control of sales activities.

Generally, there are two types of sale plan i.e. long-term sales plan, which covers time horizon of 3 to 5 years and the other, short –term sales plan covering the time period of one accounting year.

4.4.1 Long-term Sales Plan

Long-term sales plan is prepared on annual basis. It is prepared by revenue department in Nepal Telecom. Following table shows the long-term forecast sales and actual sales tend of Nepal Telecom from fiscal year 2063/64 to 2067/68.

Table: 7

Actual and forecast Sales of NT

(Million)

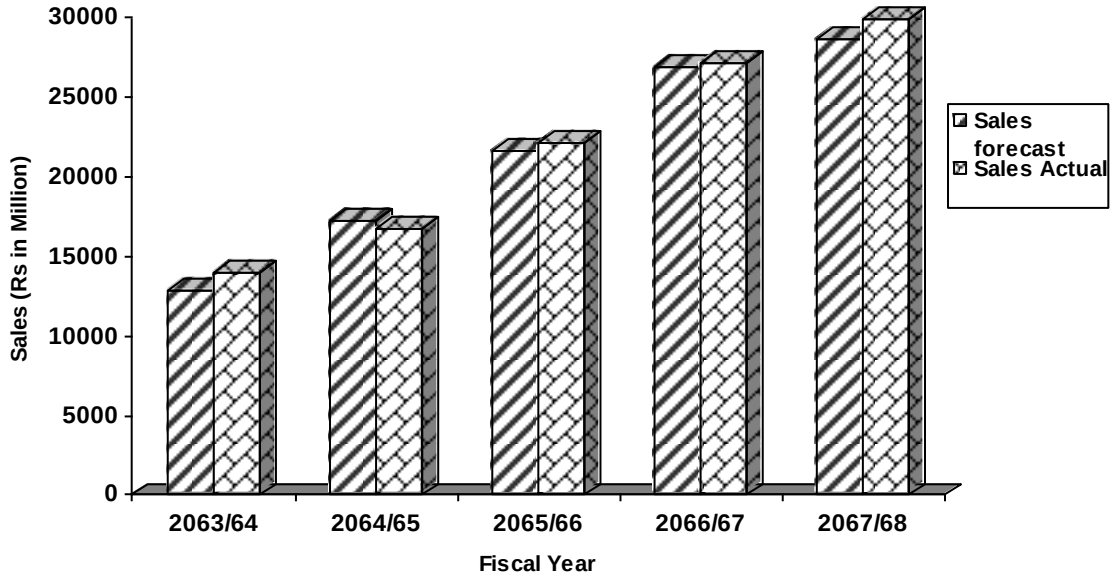
Fiscal years	Sales forecast(Rs.)	Sales actual (Rs.)	Achievement (%)
Reference	1	2	3=(2/1) ×100
2003/64	12909.46	13524.36	104.76%
2064/65	17272.99	16788.36	97.19%
2065/66	21708.429	22147.582	102.02%
2066/67	26963.91	27221.068	100.95%
2067/68	28645.77	29987.443	104.68%
		Average	101.92%

Source: Annual Report of NTC, Income and expenditure of NTC.

The above table 7 shows the forecast sales and actual sales for the time period form FY 2063/64 to 20067/68. It shows the comparison between forecast and actual sales. Both forecast sales and actual sales have been increasing. Achievement record shows it is satisfactory achievement which is near to 100% sales. The average achievement is about 101.92%. The result shows the company must be applied promotional work to meet forecast sales. The deviation between actual and forecast knows underestimation of forecast figures. So, sales forecasting is not based on the realistic ground.

The figure below will clears more about the same result of forecast and actual sales.

Graph: 3



The right hand side of figure shows fiscal years and left hand side measures forecast and actual sales figures. The figure clearly displays forecast and actual sales figure of each fiscal year.

To find out the nature of variability, Arithmetic mean, standard deviation and coefficient of variation of the forecast and actual sales figures of Nepal Telecom are calculated. Summarized and results of these statistical analysis are presented below from the detailed calculation made in Appendix 2.

Statistical Tools Used	Forecast sales(X)	Actual sales (Y)
Mean	$\overline{X} = 21500.1118$	$\overline{Y} = 21933.763$
Standard Deviation	$\sigma_x = 5875.7939$	$\sigma_y = 6165.32732$
Coefficient of variation	CV_x=27.33%	CV_y=28.11%

Where, X is independent and Y is dependent variable.

The above analysis shows that the mean and standard deviation of actual sales (Y) is greater than that of forecast sales (X). Similarly, coefficient of variance of forecast sales is lower than that of actual sales. So, the results shows the actual sales are more variable than forecast sales.

Correlation Analysis

To measure the relationship between forecast sales and actual sales figures, correlation analysis is applied. Correlation analysis is the statistical tool used to describe the degree and direction of linear relationship between variables. For this purpose, Karl Pearson's coefficient of correlation (r) is determined.

Karl Pearson's coefficient of correlation between forecast (X) and actual sales (Y) is given by:

$$r=\frac{\sum xy}{\sqrt{\sum x^2.\sum y^2}}$$ from Appendix 2

$$r=\frac{180474652.46}{\sqrt{(172624775)(190056305.12)}}$$ Where: $\sum xy=180474652.46$

r=0.99

$\sum x^2=172624775$

$\sum y^2=190056305.12$

Since, the value of r is 0.99, it can be said that there is high degree of positive correlation between forecast sales and actual sales. The actual sales will change in the same direction of the change in budgeted (forecast) sales. It shows the good future of the company. Similarly, reliability of correlation coefficient can be tested through probable error.

Probable Error (P.E) = $0.6745 \text{ x } \frac{1-r^2}{\sqrt{n}} = 0.6745\times\frac{\left[1-(0.99)^2\right]}{\sqrt{5}} = 0.002182$

And 6 x P.E=6 x.002182 =0.01309

Since, r> 6.P.E., So, correlation coefficient (r) between forecast sales (X) and actual sales (Y) is highly significant. It means that there is evidence of correlation between forecast and actual sales.

Regression Analysis

The regression line can also be used to show the degree of relationship between target sales and actual sales. Regression line is a statistical device used to estimate or predict the variable of interest from the known values of other variable. There are two types of variables in a regression analysis. The variable which is used to predict the variable of interest is called

the independent variable. And the variable whose value is to be predicted is called the dependent variable.

In this study, forecast sales and actual sales have been assumed to be independent and dependent variable respectively. Then, the regression line of actual sales (Y) on forecast sales (X) is given by:

$Y-\bar{Y} = b_{yx}\left(X - \bar{X}\right)$ Where, b_{yx}= Regression coefficient of Y on X.=$r\,\sigma_y / \sigma_x$

$$Y - \bar{Y} = r\frac{\sigma_y}{\sigma_x}(X - \bar{X})$$

$$\text{or , } y - 21933.763 = 0.99\frac{6165.3273}{5875.7939}(X - 21500.1118)$$

or , y – 21933.763=1.3878X – 22333.947

or , y = 1.3878X – 400.1847

Hence, the regression equation of Y on X is y = 1.3878X – 400.1847

The above regression equation shows the positive relationship between forecast and actual sales. From the above equation, value of Y increases by Rs.1.3878 per rupee increased in X by keeping (400.1847) as constant.

From above equation, the actual sales can be obtained for any forecast sales.

4.4.2. Operating Revenue (Sales) Structure

Operating revenue refers to the receipts from regular business transactions such as sale of goods and services, interest, rent commission etc. The major sources of operating revenue of Nepal Telecom are telephone service, telegraph, telex, circuits, mobile services and others.

The following table shows operating revenue (sales) structure.

Table: 8

Nepal Telecom

Total Revenue Structure of Fiscal Year 2067/68

(Rs in million)

Sources	Amount	Share %
1.General Telephone	4871.927	16%
2.GSM Mobile service	13300.413	45%
3. CDMA services	2431.311	8%
4. Inter-administrative income	5805.846	19%
5.Interest income	3206.697	11%
6.Income from sale of asset and	(2.505)	0%

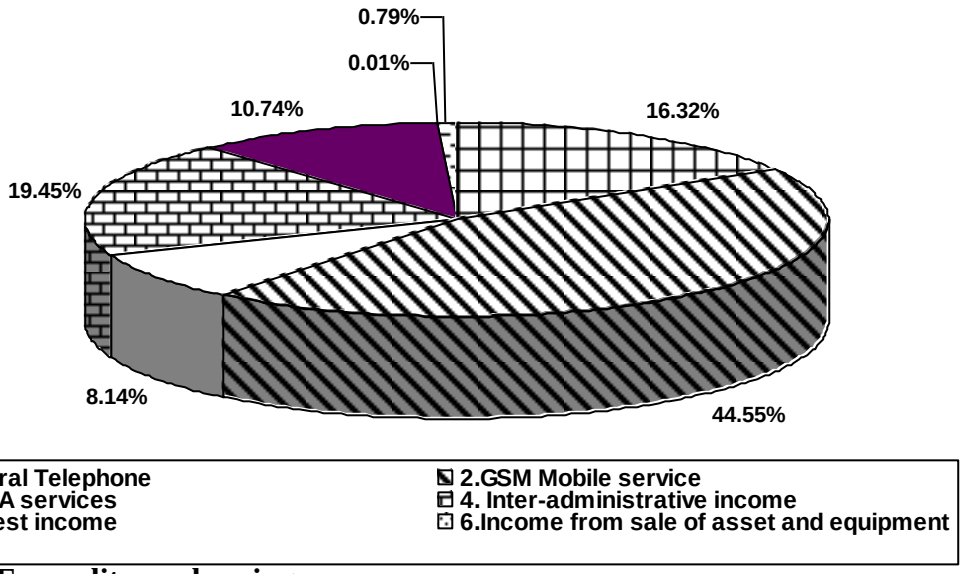
equipment		
7. Other	235.470	1%
Total	**29849.16**	**100**

Source Annual report 2067/68

From the above table 8, mobile services revenue contributes almost 45% of the total revenue. Similarly 19 % of the total revenue comes from inter-administrative income and 16% from general telephone in fiscal year 2067/68. Now, the revenue from mobile service is increasing day by day. The above structure can better be presented in pie-chart form as follows:

Graph no. 4

Total Operating Revenue of Nepal Telecom
(29849.16 Million)



4.5 Capital Expenditure planning

Capital expenditure planning is the process of making decision on capital allocation (Investment decision). It consists investing and controlling of the long-term and short term expenditure for expansion, replacement and contraction of fixed assets. It is useful to earn future profit and to reduce future costs. Investment in property, plant and equipment building and plants are the examples of capital expenditure. An advertising or promotion campaign or a research and development programme is also likely to have an impact beyond one year, so they too can be classified as capital expenditure. It involves decision to commit the firm's fund to long-term assets. Such decision is of considerable importance to the firm since they tend to determine its value and size by influencing its growth, profitability and risk.

Nepal TELECOM prepares both short term and long term capital expenditure budget in detail. Only concerned company analyzes this long term capital expenditure budget and is

not published for external use. But short-term capital expenditure is published for external use.

The following table represents the short-term capital expenditure budget of Nepal Telecom.

Table: 9

Nepal Telecom

Capital Expenditure Budget of Fiscal year 2067/68

(Rs in Million)

S.N.	Code No.	Description	Yearly Budgeted	Revised Estimate	Achievement (%)
1	0101	Land	1651.25	32.376	2%
2	0102	Building	391.05	124.143	32%
3	0103	Plant and Machinery	7542.44	217.548	3%
4	0104	Heating and lighting	12.304	4.981	40%
5.	0105	Furniture and fixture	23.173	21.420	92%
6.	0106	Office equipment	250.063	98.404	39%
7.	0107	Vehicles	67.427	56.513	84%
8.	0301	Spare Parts	220.83	0	0%
9	0304	Tools	57.742	0	0%
Total			**10216.279**	**555.385**	**32.44%**

From the above table, the achievement (%) figure shows very far dereference between budgeted and revised estimated figures. NT has highest expenses of capital on plant and machinery. The average achievement stands at 32.44%, so the capital expenditure budget is not sound. It has been prepared on unrealistic and hunch basis. Further more, Nepal Telecom has no practice to use modern techniques of capital budgeting take NPV, IRR, MIRR which take time value of money into consideration. Evaluations are made by plenty managers with the help of Finance Department and Accounts Department.

4.6 Administration expenses planning

Administrative expenses include those expenses other than manufacturing and distribution. A large number of administrative expenses are fixed rather than variable. Past experience, adjustment for anticipated changes in management policy and general economic conditions are helpful in the administrative expenses planning. The following table shows variance between approved budget and actual expenditure.

Table: 10

Nepal Telecom

Administrative Expenses Budget

(Rs in Million)

Year	Approved Budget	Actual expenses	Variance		Remark
			Amount	%	
2063/64	503.456	383.409	120.047	23.8%	F
2064/65	722.429	643.185	79.244	11.0%	F
2065/66	942.263	840.580	101.683	10.8%	F
2066/67	1102.467	1004.443	98.024	8.9%	F
2067/68	1634.549	1,528.097	106.452	6.5%	F

Source: Annual Report of NTC F= favourable

The administrative expenses budget seems realistic. The actual expenses are less than the budgeted expenses. The variance figures are favorable in all the fiscal years. It is concluded that there is proper budgeting standard and cost control system in Nepal Telecom. So, the company should maintain budgeting standard laying realistic ground. The company needs instantly effective management control system to reduce and control these unexpected variances.

4.7 Profit and loss Account

One of the aims of accountancy is to ascertain how much profit the firm earned at the end of year. This is done by preparing an account called profit and loss account. Profit and loss account is such a tool in accounting system, which comprehensively represents the operating efficiency of the organization in the relevant period. A budgeted profit and loss account can be prepared after preparing all functional budgets. It shows the financial condition of the company and final conclusion of operation in an accounting year.

Nepal Telecom does not use projected profit and loss account in advance, but it process income statement at end of each accounting year. The company also prepares forecasted income statement in advance. Profit is necessary for any enterprises to survive and grow. Nepal Telecom (the then NTC) has been enjoying profits from the very beginning of its establishment. All the financial statements (i.e. Income and expenditure B/S, Profit and loss A/C, Cash flow statements) are presented in the appendices.

The following table shows annual net profit after tax of each fiscal year form 2063/64 to 2067/68.

Table no. 11

Nepal Telecom

Net Profit

(Rs in Million)

Fiscal Year	Net Profit	Profit % Based on Previous Year
2063/64	5,652.69	
2064/65	7,741.14	37%
2065/66	9974.25	29%
2066/67	9973.18	0%
2067/68	12871.9	29%

Sources: Annual Report of NTC

The growth rate of net profit is skewed. The highest growth is in fiscal year 2064/65, at which it reaches to 37% of the previous year profit. So it can conclude that on the basis of profitability, the performance is only satisfactory not so sound. But relatively it may be wrong conclusion because the profit margin for such a monopoly market seems low as well as other overall dimension should be analyzed and compared come to the final conclusion.

Trend Line analysis

The trend analysis shows the straight line growth (i.e. average) pattern of the given variables. The least square method is employed to analyze the trend of Net profit to estimate the possible future profit for given year. It shows the relationship between time and net profit (the variable may vary).

Table: 12

Nepal Telecom

Computation of Trend Line of Net profit after tax

By Least square Method

(Rs in Million)

Fiscal Year (X)	Net profit After tax (Y)	x	X^2	xy	Trend Value(Y_c)	Short term fluctuation
2063/64	5,652.69	-2	4	-11305.4	1828.9138	39.5512
2064/65	7,741.14	-1	1	-7741.14	2102.32	-476.66
2065/66	9974.25	0	0	0	2375.7304	-93.733
2066/67	9973.18	1	1	9973.18	2649.1387	-181.2087
2067/68	12871.9	2	4	25743.8	2922.547	165.234

Total	46,213.16	$\sum 0$	10	16670.44		

Source: Annual Report

Fiscal year 2065/66 is assumed based year.

Let the trend line be

$Y = a + bx$ ……(1)

where, x=X-based year

Since, $\sum x = 0$, $\sum Y = 46213.16$ $a = \frac{\sum Y}{n} = \frac{46213.16}{5} = 9242.632$

$$b = \frac{\sum xy}{\sum x^2} = \frac{16670.44}{10} = 1667.044$$

Substituting the above values on equation (1) we get required trend line as follows:

Y=9242.632+1667.044x…… (2)

The trend value (y_c) can be obtained by substituting x=-2,-1, 0, 1, 2 in equation (2) as follows:

When x=-2, Y=9242.632+1667.044(-2) = 5908.544

x =-1, Y=9242.632+1667.044(-1) = 7575.588

x = 0, Y=9242.632+1667.044x0 = 9242.632

x = 1, Y=9242.632+1667.044x1=10909.676

x = 2, Y=9242.632+1667.044 x 2 = 12576.72

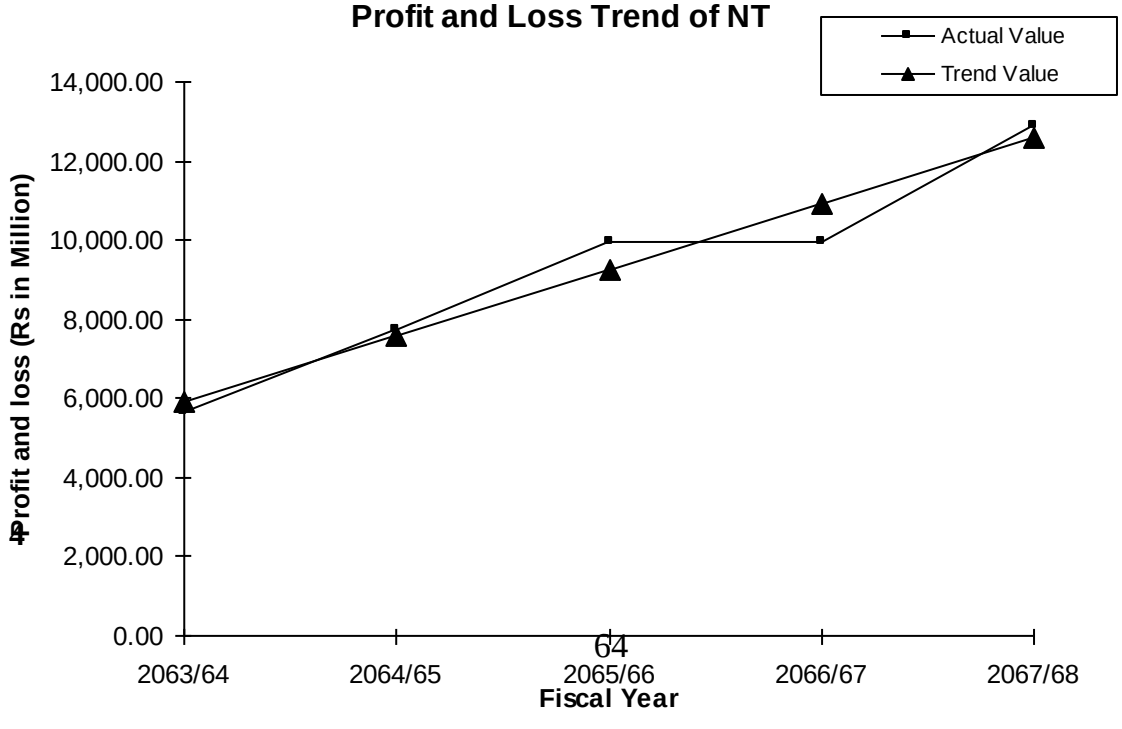
The estimated net profit after tax for 2068/69 can be obtained as follows

$Y_c = a + bx$

$Y_{2068/69}$ =9242.632+1667.044(3) [for 2068/69, x = +3] = 14243.764

The above figures can be presented more effectively in the following graph:

Graph: 5
Profit and Loss Trend of NT



4.8 Balance sheet

The statement showing the financial state of affairs is called the balance sheet. It shows the current status of Assets, capital and liabilities. Studying the balance sheet, one can easily judge whether the firm or institution is financially sound of not. It is prepared at the end of the fiscal year by showing residual values of assets, capital and liabilities. In conclusion, the balance sheet shows the overall financial condition of a firm.

Nepal Telecom prepares balance sheet at the end of each fiscal year. It presents the position of assets, liabilities, investment share capital, capital reserve, reserve funds, provisions etc. In assets side, it includes fixed assets, current assets, investment and capital work-in-progress. In liabilities side, it includes equity capital, reserve and surplus, loan, current liabilities and provisions. The company also prepares forecast balance for coming fiscal year.

The summarized balance sheet of Nepal Telecom from fiscal year 2063/64 to 2067/68 is presented below.

Table: 13

Nepal Telecom

Summarized Balance Sheet

(Rs. in Million)

B.S.	2063/64	2064/65	2065/66	2066/67	2067/68
Assets					
Land	203.93	204.23			
Building	1,005.76	1,073.92			
Plant & Machinery	21,76	24,446.93			
Heating & Lighting12,446,946	151.73	155.11			
Furniture	86.13	99.53			
Office Equipment	608.11	734.72			
Vehicles	417.82	527.53			
Total Fixed Assets	**2,570.48**	**27,241.97**	**31319.85**	**34596.637**	**35231.328**
Less: Depreciation	12,873.12	14,344.29	16223.48	20452.728	24067.588
Net Fixed Assets	**11361.00**	**12897.71**	**15096.37**	**14143.909**	**11163.740**
Capital Work-in Progress					
Work-in-Progress	1,138.20	2,013,38			
Capital Stock	2,405.81	1,436.75			
Advance, Claims etc.	220.64	472.57			
Capital Work-in-	**3,764.65**	**3,922.70**	**4388.19**	**3972.222**	**7823.591**

Progess					
Investments					
Pension Fund for citizen invst. fund	264.15	828.69			
Government Securities	12.50	90.98			
Fixed deposit at bank	4,587.20	7,218.20			
Treasury bills	0				
Debenture and bond	20,	232.32			
Intelsat	0	0			
Investment	**4,883.86**	**8,370.18**	**4388.19**	**13034.215**	**24364.702**
Current Assets, Loan and Advances					
Stores & Spares	327.69	416.42	478.89	172.271	155.210
Sundry Debtors	3,455.51	3,482.61	4239.16	4295.998	5021.024
Interest Accrued on Inv.	35.33	72.93	0		
Unexpired L/C & Advances	4196.07	3017.80	5183.89	------	
Advances & Loans to Employees	738.26	919.23	0		7779.668
Branch Account	20.56	0	0		
Bank Account	14,503.31	16,038.06	17935.03	21611.536	16783.363
Cash Account	243.03	96.45	0		
Pre-paid expenses	0	137.12	0	6959.843	
Current Asset, Loan and advances	23,519.76	24,180.62	27836.97		
Deferred Expenditure	**131.82**	**0**	**0**	**1975.713**	**2640.189**
Total Assets	**43661.11**	**50358.33**	**57110.20**	**66165.707**	**75731.487**
Capital & Liabilities					
Equity Capital					
Authorized Capital	25000	25000	25000	25000	25000
Issued /subscribe/Paid-up Shares	15000	15000	15000	15000	15000
Reserve & Surplus					
Capital Reserve	83.67	83.67	83.66	83.658	
Sinking Fund for Repayment of Loans	0	0	0	0	

Retained Earning	11,710.62	20,260.24	28484.48	32065.941	
Reserve and Surplus	**11,794.28**	**20,343.90**	**43568.14**	**32149.599**	**39021..534**
Loan from Govt. of Nepal Against					
Belgium Grant	0	0	0	0	
Loan	1,191.68	0	0	0	
Middle and long term loan	**1,191.68**	**0**	**0**	**0**	6316.411
Current Liabilities					
Sundry Creditors	1618.59	2633.21	2398.14	3269.65	
Interest Accrued & Dues	0	245.20	0	220.153	
Other Liabilities	149.80	252.34	1915.13	446.738	
Deposits & Advances	3677.04	3495.75	3419.98	2947.716	
VAT and other	266.86	127.87	0		
Defers income	0	153.82	0	117.141	
Total Current Liabilities	**5,712.30**	**6908.20**	**7733.25**	**7001.398**	**7800.351**
Provisions					
Income Tax	4,237.71	3,130.32	--	4467.919	
Proposed Divided	1,500.24	0	--		
Pension & Gratuity	1,882.67	2,166.60	--	3978.403	
Accumulated Leave	250.73	309.61	--	472.370	
Bonus Provision	623.89	692.45	-	643.718	
Incentive Provision	464.27	799.96	-	943.718	
Royalty Provision	1,003.35	1,007.30		1503.498	
Total Provision	**9,962.86**	**8106.24**	**7808.83**	**12009.626**	**7593.192**
Total capital and Liabilities	**43661.11**	**50358.33**	**57110.20**	**66165.707**	**75731.487**

Source: Annual Report

The summarized balance sheet revels that total current assets occupies major place in total assets. It stands more than 45% of the total assets throughout the all fiscal year and reaches about 39.26% in the fiscal year 2067/68.

The main reason for heavy current assets share is due to lack of proper cash management i.e. due to lack of cash investment. A large portion of bank balance can take as evidence for that. Fixed assets and investment is in increasing trend. Loan amount is in decreasing trend, so the total debt ratio reaches to 35.98% in fiscal year 2067/68.

Similarly, in capital and liabilities side, reserve and surplus occupies dominant place in total liabilities. It stands more than 40% in total capital and liabilities in an average and reaches up to 51.52% in the fiscal year 2067/68. The major source of capital employment is internal i.e. form equity and reserve. The internal source is in increasing trend throughout the stated fiscal years. It records about 71.33% in fiscal year 2067/68. The more facts can be obtained from ratio analysis which is going to start. The balance sheet of Nepal Telecom from fiscal year 2063/64 to 2067/68 has been presented in Appendix 8.

4.9 Financial Ratio Analysis

Ratio refers to the quantitative relationship between two items or variables. In simple language, ratio is one number expressed in terms of another and can be worked out by dividing the number to the other. In financial analysis, ratio is used as an index of yardstick for evaluating the financial position and performance of the firm. The financial ratio is an arithmetical relationship between two figures of financial statement. To evaluate the financial performances of an organization by creating the ratios from the figures of different account consisting in balance sheet and income statement is done by the analysis of financial ratio.

The financial ratio is the most essential factor to know the performance of the organization which presents actual situation of the organization. It is a helpful tool which helps for measuring the financial efficiency which is one of the significant elements to achieve the goals and objectives of any enterprises. It is necessary to maintain financial strength and minimized or reduces financial weakness of any enterprises to encourage financial efficiency. Since, financial efficiency or soundness is vital element to achieve the goal, the management of the organization should known in which condition the organization is running.

The following table shows the various financial ratios of Nepal Telecom for five years from fiscal year 2063/64 to 2067/68.

Table: 14

Nepal Telecom

Financial Ratios

S.N.	Ratios	Average	2063/64	2064/65	2065/66	2066/67	2067/68
1.	Current Ratio	1.85:1	1.5:1	1.61:1	1.79:1	= 2.42 : 1	= 1.93 : 1
2.	Quick Ratio	1.53:1	1.21:1	1.37:1	1.76:1	1.89 : 1	1.42 : 1
3.	Cash Ratio	1.68:1	0.94:1	1.07:1	1.15:1	3.12 : 1	2.15 : 1
4.	Cash to current assets Ratio	0.95:1	0.63	0.67	0.64	0.65	2.15 : 1

5.	Cash to total assets ratio	0.39:1	0.53:1	0.46:1	0.43:1	0.33	0.22:1
6.	Cash Journal Ratio	1.18 times	0.95 times	1.04 times	1.12 times	1.16*times*	1.61*times*
7.	Debtors turnover Ratio	4.96 times	4.04 time	4.82times	4.73 times	5.83*times*	5.37*times*
8.	Stock turnover Ratio	88.84 times	42.62 times	40.32 times	41.88 times	145.46*times*	173.92*times*
9.	Fixed Assets turnover Ratio	1.61 times	1.23 times	1.03times	1.33 times	1.77*times*	2.42*times*
10.	Capital Employed turnover Ratio	0.47 time	0.47 times	0.48 times	0.448 times	0.48*times*	0.45*times*
11.	Working capital turnover Ratio	1.68 time	1.78 times	1.83 times	1.63times	1.29 times	1.88 times
12.	Total Debt. Ratio	41.60%	57%	42%	37%	36%	35.98%
13.	Debt-equity Ratio	44%	59.61%	42.48%	37.39%	40.33%	40.19%
14.	Net Profit Ratio	41.96%	38.32%	44.40%	44.58%	39.58%	42.92%
15.	Return on fixed asset	73.99%	49.76%	61.58%	67.14%	76.18%	115.30%
16.	Average collection period	74.71days	90days	76days	77days	= 62.60*days*	67.97*days*

Source Appendix: 2

Interpretation of Ratios

1. Current Ratio:

The current ratio measures the firm's solvency. It indicates the availability of current assets in rupees for everyone rupee of current liabilities. The standard current ratio can be taken 2:1 which means an enterprises should have the current assets equal to two times to pay current liabilities. The above table depicts that current ratios were below in fiscal year 2063/64. 2064/65, 2065/66, 2067/68 and above in fiscal year 2066/67. The average ratio stands at 1.85:1 which also below the standard ratio. It means the company has not enough liquidity to pay liabilities. Which causes company gets liquidity crisis in future so, essential to address the quality aspect of the figure. One should aware about the structure of total current assets, if large amount of current assets occupies from sundry debtors and stock, the company may not able to meet current liabilities even it maintains standard ratios.

Relatively, service oriented enterprises do not require more current assets. It is desirable the current ratio not more than 1.5 times in order to remove blockage of funds. To conclude this interpretation, it can be said that the liquidity position of Nepal Telecom is satisfactory. (Interpretation and explanation from Table: 14)

2. Quick Ratio:

Quick ratio measures the relationship between quick assets and current liabilities and shows that better picture of the company's ability to meet its short-term liability out of short-term assets. The standard quick ratio can be taken 1:1 which means enterprises should have quick assets equal to liquid assets. It is a more saver indicator of short-term liquidity in that it tries to access current creditor coverage without counting on the sales of existing stocks. Higher the quick ratio better be the liquidity position. The above table depicts that in all the fiscal year, the general standard 1:1 is maintained as well as mean value ratio also cross that standard. For the liquidity point of view it is better to have higher quick ratio but it will less opportunity profit which could be achieved by utilizing its excess funds. (Interpretation and explanation from Table: 14)

3. Cash to current liabilities ratio

This ratio indicates the amount of cash percentage available to pay the current obligation of the firm. There is no hard and fast rule of standardization of this ratio. Traditionally a hundred percentages of cash to current liabilities may be regarded as a favorable indicator. Nowadays, the firm or company which able to run with minimum cash balance is supposed to be sound one. The table shows that the ratio is in increasing trend for the first three fiscal years and then slightly decreases for next two fiscal years. The increasing trend indicates that cash fund is increased much more than that of current liabilities and vice versa. The average figures stands at 1.68:1 that is all the current liabilities can be covered or paid from cash and bank balance in aggregate. The cash position of the company is very sound. Although, the company does not maintain the standard ratio. So, it is difficult to compare and conclude. (Interpretation and explanation from Table:14)

4. Cash to current assets Ratio

It shows the portion of cash in each rupee of current assets. The ratio is in increasing trend throughout the study period. The figure is more than 60% in every fiscal year which indicates that cash fund is increased much more than other current assets. Almost 95% of total current assets is occupied from cash fund. (Interpretation and explanation from Table: 14)

5. Cash to total Assets Ratio

This ratio shows the cash fund share on total asset as cash to current assets ratio shows cash fund share on current assets. This ratio is decreasing throughout the study period. The decreasing trend of this ratio shows the company's cash occupancy in total asset is being low. In an average the share of cash fund to total assets stands at 39%. (Interpretation and explanation from Table: 14)

6. Cash Turnover Ratio

Cash turnover ratio expresses the relationship between sale and cash of an enterprise. The ratio indicates the number of times the cash in turnover during the year. It is defined as sales divided by total cash. The ratio is in increasing trend which shows that increase rate in sales is higher than that of cash fund. (Interpretation and explanation from Table: 14)

7. Debtors turnover ratio.

The ratio indicates the velocity of collecting credit sales. It is a test of the liquidity of the debtors of a firm because liquidity position of the firm depends on the quality of debtors to a great extent. It indicates how rapidly debts are collected. The higher the ratio the more efficient is the management on collecting the debtors. It indicates that within a short period, the firm or enterprise is collecting the cash from debtors. A low ratio shows that debtors are not being collected rapidly. (Interpretation and explanation from Table:14)

From the table we observe that debtors turnover ratio of NT is low. Even the ratio gradually increases 4.04 times (2063/64) to 5.37 times (2067/68) in the study periods. This means the company's collection is increasing trend. The average ratio is also not more than 4.96 times. The result indicates that, the management of Nepal Telecom has not effective debt collecting system and policy. Large amount of sales are in credit and to be collected. So the company is loosing opportunity benefit which could be earned investing other assets instead of in debtors.

8. Stock Turnover Ratio

It indicates how fast the goods or services are sold. The ratio will get by dividing sales by stock. It measures the efficiency of inventory utilization. Increasing ratio is favourable which shows that the firm is very efficient on inventory management and vice versa. The stock turnover ratio of Nepal Telecom is in increasing trend which is the sign of success. In fiscal year 2063/64 the figure stands at 42.62 times and reaches to 173.92 times in fiscal year 2067/68. (Interpretation and explanation from Table: 14)

9. Fixed Assets Turnover Ratio

Fixed assets turnover ratio is a indicator of the efficiency concerning the profitable use of fixed assets. This ratio indicates the number of times, the fixed assets in turnover

during the year. This ratio is defined as sales divided by fixed assets. It measures how well the firm uses its long term (fixed) assets and shows how many rupees of sales are supported by one rupee of fixed assets. The higher the ratio the more efficient is the management on utilization of fixed assets and vice versa.

From the above table it is shown that the highest ratio is 2.42 times in 2067/68 the lowest ratio is 1.03 times in fiscal year 2064/65. The average ratio is 1.61 times which indicates that the company is earning Rs. 1.61 for every rupee of fixed assets invested. The increasing trend of fixed assets turnover ratio proves that Nepal Telecom is enriching its utilization of fixed assets. (Interpretation and explanation from Table: 14)

10. Capital Employed turnover Ratio.

Capital employed is the amount entrusted by the owners and long-term loan financiers to the firm. It includes the amount of owner's equity and debenture, bond and long-term loan. Capital employed turnover ratio is calculated to know the effectiveness in utilizing the capital-employed. The higher the capital-employed turnover ratio the more efficient the utilization of owner's and long-term creditors' fund.

The capital employed turnover ratio of Nepal Telecom seems constant. The figure ranges from 0.44 times in fiscal year 2065/66 to 0.48 times in fiscal year 2066/67. The ratio is slightly in increasing trend and average ratio comes to 0.47 times. In conclusion it can be said that it is satisfactory in terms of consistency but the ratio is very slow in growth rate. (Interpretation and explanation from Table: 14)

11. Working Capital Turnover Ratio:

Working capital refers to the current assets in gross concept and it also refers to the difference between current assets and current liabilities in net concept. The ratio shows the efficiency of working capital utilization. Increasing ratio is favourable which shows the company is efficient on working capital management.

The above table shows that the working capital turnover ratio of Nepal Telecom is volatile. The highest ratio is 1.88 times in fiscal year 2067/68 and which average ratio is 1.68 times. Similarly the lower ratio is 1.29 times in fiscal year 2066/67.which is relatively far from the average ratio. This shows the management of working capital is not proper. (Interpretation and explanation from Table:14)

12. Total Debt Ratio

Total debt to total capital ratio falls under leverage ratio. It is calculated by dividing long-term debt by total capitalization i.e. permanent capital which includes shareholder's

equity and long-term debts. This ratio helps to establish a link between funded debt and total long-term funds available in the business. A low ratio represents security to creditors in extending fund. On the other hand, a high ratio represents a greater risk to creditors and also to shareholders under depression. If the ratio is very low the company can't get the benefit of trading on equity.

The above table depict that the decreasing tendency of debt that total capital employed. It is 57% in fiscal year 2063/64 and gradually decreasing which reaches to 35.98% in fiscal year 2067/68. The decreasing figure is good in the sense that it reduces degree of risk and also less the interest payment on hiring long-term debt. But there is vast declining rate and it is already stated that company is unable to enjoy trading on equity. (Interpretation and explanation from Table: 14)

13. Dept-Equity Ratio:

Debt-equity ratio measures the relative claims of creditors and owners against the assets of the firm. This ratio indicates the relationship between debt and equity i.e. outsiders' funds and shareholders' funds. It relates to shareholder's fund indicating the degree of protection enjoyed by the long-term creditors. It is calculated to measure the extent of debt financing used in the business.

The above table depicts that the debt-equity ratio is decreasing form 59.61% (2063/64) to 37.39% (2065/66). And then increase up-to 40.19% (2067/68) in study period. The mean value of ratio is 44%. To conclude, the debt-equity ratio is in favour of both investors and lenders. The increasing rate of debt indicates that the high risk and high gain. (Interpretation and explanation from Table:14)

14. Net Profit Ratio:

It shows the relationship between net profit and total income. It shows the amount of net profit per rupee of total income. Higher the ratio betters the efficiency. This ratio provides considerable insight into the overall efficiency of business. The above table shows that the average ratio is 41.96 % the net profit ratio ranges between 38.32% to 44.58%. It should be noted that here net profit means profit after tax and total income means operating as well as non operating income. The net profit ratio seems relatively consistent and the last fiscal year of the study period shows higher ratio than that of average ratio. So it can conclude that the company's profitability ratio is satisfactory. (Interpretation and explanation from Table: 14)

15. Net Profit to Fixed Assets Ratio

The ratio indicates the net profit after tax earned per rupee of fixed assets. It is used to test the effectiveness on utilization of fixed assets. The higher ratio show better performance (utilization) and vice versa. From the above table it is observed that the ratio of Nepal

Telecom has increased continue during the study period i.e. from 2063/64 to 2067/68. The figure stands 49.76% in the fiscal year 2063/64 and reaches to 115% in fiscal year 2067/68. The increasing trend of net profit to fixed assets ratio shows increasing efficiency of the utilization of fixed assets. So it is concluded to be satisfactory with respect to this ratio. (Interpretation and explanation from Table: 14)

16. Average Collection Period

It represents the average number of days for collecting the cash from debtors. Minimum collection period is preferable which show that the firm is collecting cash from debtors within a short period. The above table shows that the average collection period is high. It lies between 90 days in fiscal year 2063/64 and 62.60 days in fiscal year 2066/67. The average collection period comes to 74.71 days. The higher collection period sows that the Nepal Telecom is not able to manage credit collection policy. The days should be lowered as far as possible to get the foregone opportunity benefits. (Interpretation and explanation from Table: 14)

4.10 Cash Planning

Cash is the most liquid asset. It is one major responsibility of management to plan, control and safeguard cash of the enterprise. The cash planning is directly related to other plans. Such as the sale plan, production plan, material and direct labor plan, overhead plan and capital expenditure plan. Cash flow statement (or projected cash flow statement) and cash budgeting are the major devices of cash planning and effective way to plan and control the cash flows, access cash needs and effectively use excess cash. Planning of cash inflows and outflows gives the planned beginning and ending cash position for the budget period. The primary objective of cash planning is also to know the cash position and trend so as to determine future borrowing and future investments.

In this sub unit, the research writer is going to analyze the cash position, trend, relationship between different variables of Nepal Telecom. For this purpose, balance sheet, income statement, cash flow statements, cash budgets, debtors' budgets of different years have been used.

4.10.1 Total Cash Collection Trend

The total cash of Nepal Telecom consists of operating as well as non-operating cash collection. The major source of total cash collection is collection from debtors which contributes more than 50% of total collection on an average. The other sources of cash collection are from international sharing, subscribers deposits, government tax, maturation of

government securities etc. The following table shows that actual total cash collection and share of cash collection from debtors.

Table: 15

Nepal Telecom

Total Actual Cash Collection and Share from debtors

(Rs in Million)

Fiscal Year	Total cash	Cash from debtors	Ratio %	(Increased/ decreased)%
2063/64	8,052.325	11319.93	71%	0
2064/65	9,799.160	13960.25	70%	-1%
2065/66	11,755.235	16942.48	69%	-1%
2066/67	13,250.123	19544.23	68%	-2%
2067/68	21,342.112	23455.67	91%	23%

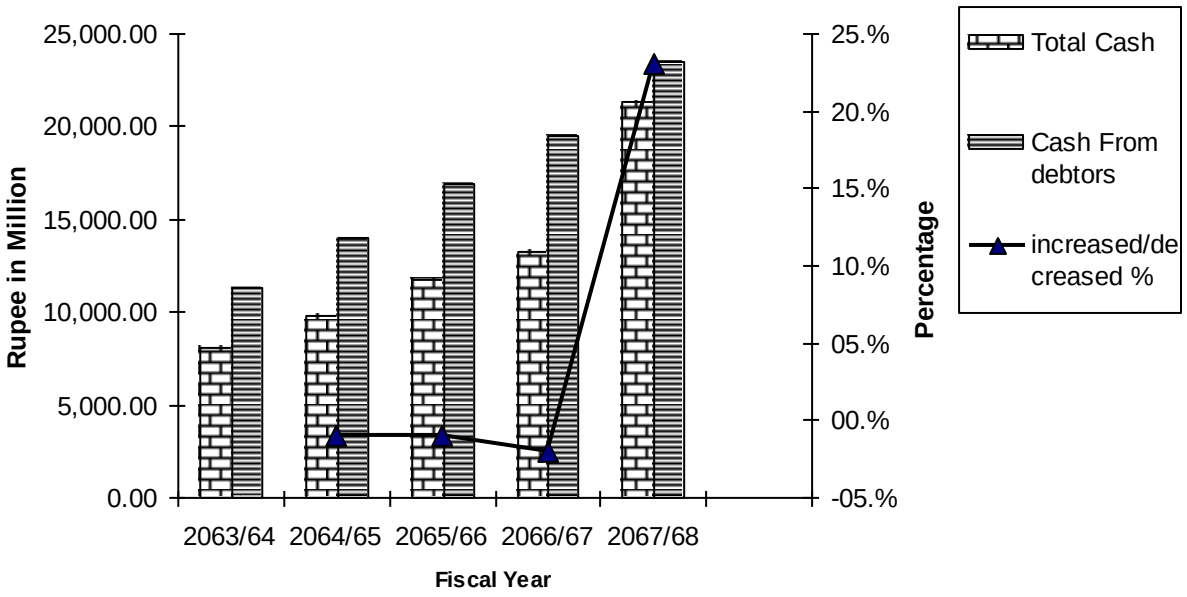
Source: Annual Report

It is clearly shown from the above table that total cash collection is in increasing trend. Similarly, cash collection from debtors is also in increasing trend throughout the study period. The ratio percentage represents the share of cash collection from debtors. The figure is gradually decreased by 71% to 68% from fiscal year 2063/64 to 2066/67 and increased by 91% (2067/68). It can be conclude that the trend of ratio % fluctuated as the passage of time.

The figure of above table can better be presented in following graph.

Graph: 6

Total Actual cash collection and share from debtors of NT



To analyze the trend of actual total cash collection and to estimate the future cash collection, least square method can be used. A straight-line trend of the least square shows the relationship between years (time) and actual total cash collection.

Table: 16

Nepal Telecom

Fitting Straight Line trend by Least Square Trend line of actual Cash Collection

(Rs in Million)

Year(X)	Total Cash Collection (Y)	x	x^2	xy	Trend Values (Y_c)	Short-term fluctuation ($Y-Y_c$)
2063/64	8052.325	-2	4	-16104.65	6833.685	1218.64
2064/65	9799.16	-1	1	-9799.16	9836.738	-37.578
2065/66	11755.235	0	0	0	12839.791	-1084.556
2066/67	13250.123	1	1	13250.123	15842.844	-2592.721
2067/68	21342.112	2	4	42684.224	18845.897	2496.215
Total	64198.955	0	10	30030.537		

Source: Annual Report

Let, the trend line be

Y=a + bx …… (i).

x= X-based year

(Where fiscal year 2065/66 is assumed based year)

Since, $\sum x = 0,\ \sum Y = 64198.955 \quad a = \frac{\sum Y}{n} = \frac{64198.955}{5} = 12839.791$

$$b = \frac{\sum xy}{\sum x^2} = \frac{30030.537}{10} = 3003.053$$

Substituting the above values on equation.1.

We get the required trend line as

Y_c=12839.791+3003.053x……. (ii)

Trend values substituting x=-2, -1, 0, 1, 2 subsequently in equation (ii) we get the trend values as follows.

When, x=-2, Y_c=12839.791+3003.053x = 7395.706+877.492(-2) =6833.685

When, x=-1 Y_c=12839.791+3003.053(-1) = 9836.738

When, x=0 Y_c=12839.791+3003.053(0) = 12839.79

When, x=1 Y_c=12839.791+3003.053(1) = 15842.84

When, x=2 Y_c=12839.791+3003.053(2) = 18845.98

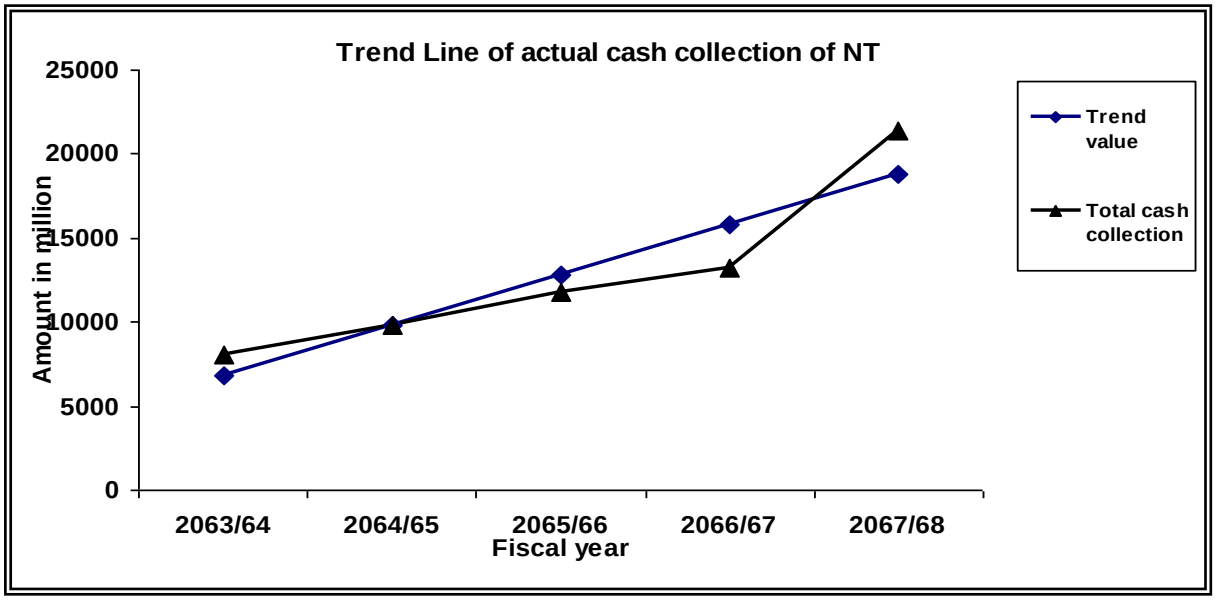
The estimated total cash collection for 2068/69 can be obtained as follows

Y_c=a+bx

=12839.791+3003.053(3)=21848.95 [for 2068/69, x=+3]

This trend line shows that future total cash collection will increase by Rs. 21848.95 million every year, if collection trend of past years continuous in future. The short-term fluctuation shows deviation of actual from its trend values. The same deviation can be presented in the graph as follows:

Graph: 7



The above analysis shows that total actual cash collection of each fiscal year under study and general trend line of the figure.

4.10.1.1 Variance and statistical Analysis: total cash collection and forecasted cash collection.

The deviation of actual from the standard is known as "Variance". Normally, variance can take two forms i.e. favourable variance and unfavourable variance. When actual results are better than expected, favourable (F) variances arise and vice versa. The main purpose of variance analysis is to provide practical points to the causes of off-standard performance So, the management can improve operation, increase efficiency, utilize resources more effectively and reduce costs.

The following table gives actual and forecasted total cash collection of Nepal

Table: 17

Nepal Telecom

Actual and Forecasted Cash Collection (Rs in Million)

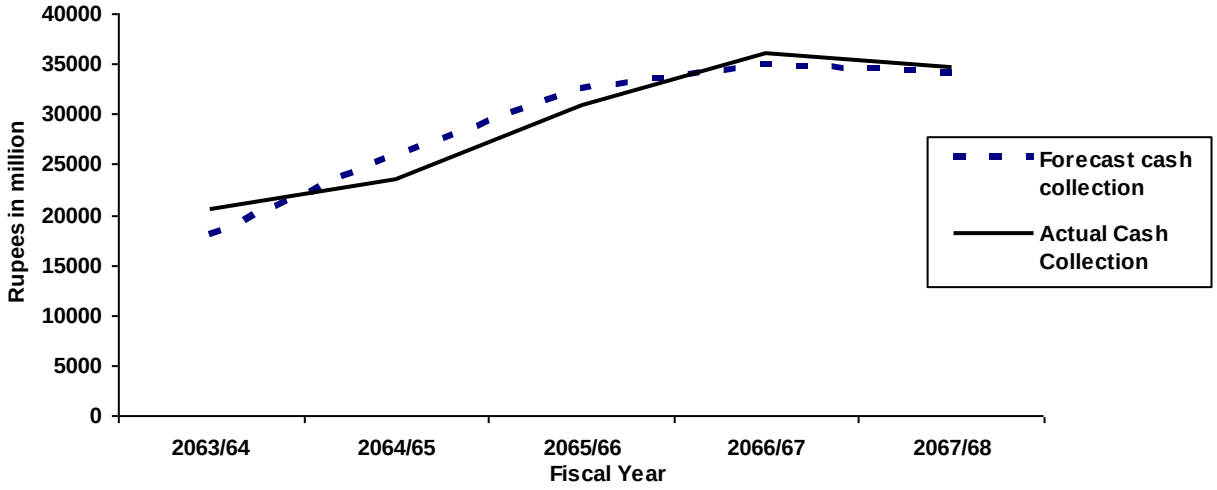
Fiscal Year	Forecasted Cash collection	Actual Cash Collection	Variance		Remark
			Amount	%	
2063/64	17858.091	20482.552	-2624.461	-15	U
2064/65	25847.492	23576.892	2270.6	9	F
2065/66	32519.319	30792.047	1727.272	5	F
2066/67	34922.351	35964.33	-1041.979	-3	U
2067/68	33972.671	34562.784	-590.113	-2	U
Total	145119.924	145378.605	-258.681	-5	U

Source: Annual Report 'F' Indicates Favourable U' indicates Unfavourable

There are two fiscal years having favourable variance i.e. fiscal year 2064/65 and 2065/66. The rest fiscal years have unfavourable variances. The overall variance comes to -5% unfavourable variance. Since there is no far difference between forecast and actual cash collection, it is some how satisfactory result.The above figure is presented in graph to show the better picture as follows:

Graph: 8

Forecasted and Actual Total Cash Collection of NT



Arithmetic mean, standard deviation and coefficient of variation of forecasted and actual total cash collection of the company are calculated to find out the nature of variability. The summarized results of this statistical analysis are presented below from detailed calculation made in Appendix: 4.

Statistical Tools Used	**Forecast cash (X)**	**Actual Cash (Y)**
Mean	$\bar{X}$ =29023.9848	$\bar{Y}$ = 29075.721
Standard deviation	σ_x = 6422.847	σ_y = 6075..9566
Coefficient of Variation	CV_x = 22.12%	CV_Y = 20.89%

From the above results, it can conclude that actual cash collection is not variable than that of forecast cash collection, because standard deviation as well as coefficient of variation both is smaller than forecasted results.

Correlation Analysis:

It shows the degree of relationship between two variables. The coefficient of correlation between forecast and actual cash collection is as follows:

$$r = \frac{\sum xy}{\sqrt{\sum x^2 . \sum y^2}}$$ [from appendix.: 4]

$$= \frac{187201827.59}{\sqrt{(206264870.97)(184586243.09)}}$$

= 0.9593

i.e. r= 0.9593

The value of 'r' shows that there is highly positive co-relation between actual and forecasted total cash collection. The significance of value of 'r' is tested through probable error.

P.E. (r) = $0.6745\frac{1-r^2}{\sqrt{n}}$ $=0.6745\ \frac{[1-(0.9593)^2]}{\sqrt{5}} = 0.02405$

again, $6\times P.E.(r) = 6\times 0.02405 = 0.1443$

Since, r>$6\times P.E.(r)$, the value of 'r' is definitely significant. It cans be concluded that forecasted total cash collection and actual total cash collection have same direction of variation trend.

Regression Analysis:

This statistical tool is used to predict one variable (i.e. dependent) on the basis of other variables (i.e. Independent). It shows the cause and effect relationship between different variables. The regression equation of actual cash collection (y) on forecasted cash collection (X) is given by:

Y-$\bar{Y} = b_{yx}(X - \bar{X})$ [From appendix: 4]

Or, $Y - \bar{Y} = r\frac{\sigma_y}{\sigma_x}\left(X - \bar{X}\right)$

Or, Y – 29075.721 = $0.9593\frac{6075.9566}{6422.847}(X - 29023.9848)$

or, Y- 29075.721 = 0.90748X- 26338.956

or , Y = 2736.7642+0.90748X

The above equation also shows the positive relationship between two variables under study. Here it is should be noted that actual cash collection (y) is taken as dependent variable and forecasted cash collection (X) is taken as independent variable. Now, we can predict actual cash collection for any amount of forecasted one.

4.10.2 Cash Flow Statement Analysis:

Every organization needs cash to conduct their operation, to pay their obligations and to provide returns to their investors. Without cash no activities can take place. So it is important to pay close attention to the organization's cash position and events and

transactions that affect cash position to change. The analysis of the events and transactions that affect the cash position of the company is termed as cash flow analysis. Similarly cash flow statement is a statement of company's ability to generate cash from various activities such as operating, investing and financing and their need of cash.

It is important to the management to explain the situation of sufficient cash balance in hand despite the business incurred loss or short of cash balance even if the business is making huge amount of profit. It gives the causes of changes in the cash position which helps to make policy and decisions regarding the redemption of debenture, purchase of fixed assets and so on.

There are two basic approaches of computing cash flow statement i.e. 1. Cash receipts and disbursement approach and 2. Financial Accounting Approach

The Nepal Telecom has been adopting financial accounting approach. It requires less supporting details and useful for making long-range cash plan. Nepal Telecom prepares the cash flow statement each year. The company firstly convert net income from accrual basis to a cash basis and then adjust working capital changes to get net cash from operating activities. In Nepal Telecom the major components of cash flow statements are: a. Cash Flow from Operating Activities b. Cash Flow from Investing Activities c. Cash Flow from Financing Activities, d. Cash Flow from Foreign Exchange Adjustment Gain/Loss.

Table: 18

Nepal Telecom

Cash Flow Statement For the Year ended 32nd Ashad (16th July)

Rs in million

B.S	2063/64	2064/65	2065/66	2066/67	2067/68
Net Profit Before Tax	**7,983.32**	**10,871.46**	**13633.989**	**14441.095**	**16,389.639**
Adjustment					
Non-Cash/non- Operating Expenses and Losses	3,965.15	2,751.13	3972.961	6106.754	4290.139
Non-Cash/non-operating Income and Profit	(701.83)	(1,331.60)	(2507.64)	(2738.526)	(12737.51)
Fund From Operation	**11,246.64**	**12,290.98**	**15099.31**	**17809.32**	**7942.268**
Working Capital Adjustment	(3,194.32)	2,491.82	(4382.459)	(5447.824)	1554.251
A.Cash From Operating Activities	**8,052.33**	**9,799.16**	**10716.850**	**12361.499**	**12,943.078**
Cash From Investing Activities					
Inflow:					
Sales of Fixed Assets and	701.83	903.77	1989.54	2014.558	3,206.697

Investment					
Outflow:					
Purchases of Fixed Assets and Investment	(4028.25)	(6613.27)	(6944.904)	(5729.616)	(15029.289)
B.Cash From Investing Activities	**(3,326.42)**	**(5709.50)**	**(4955.364)**	**(3715.058)**	**(11,822.592)**
Cash From Financing Activities					
Inflow:					
Issue of Share Capital	0	0	0	0	
Issue of Debenture	0		0	0	
Long Term Loan Borrowing	0	0	0	0	
Outflow:			0	0	
Loan interest Paid	0	(10.30)	0	0	
Dividend Paid	(664.16)	(1,499.50)	(3704.945)	(5225.960)	(5,962.817)
Previous years' dividend Paid	(811.00)	0			
Payment through Retained earning	0	0			
Retained earning transfer from Capital reserve	0	0			
Long term loan Paid	0	(1,191.68)			
C.Cash From Financing Activities	**(1,475.16)**	**(2,701.48)**	**(3704.945)**	**(5225.960)**	**(5,962.817)**
Cash Increase Or (Decrease) A+B+C	**3,250.74**	**1,388.18**	**2056.541**	**3420.478**	**4,842.331**
Opening Cash Balance	**12,021.62**	**14,746.34**	**16134.516**	**18191.058**	**21,611.536**
Gain/(Loss) from Foreign Currency Exchange	(526.03)	0	0		
Closing Cash Balance	**14,746.34**	**16,134.52**	**18191.058**	**21611.536**	**16,769.204**

The above table describes that the net increment in cash (A+B+C) is always positive. i.e. there is no cash deficit in the company throughout the study period. The ending cash balance is in increasing trend except fiscal year 2067/68 but the rate of increasing trend is skewed i.e. not uniform. The net cash from operating activities are increasing trend up to the study period from 8052.33million to 12943.078 million So, it can be said that, there is positive in generating cash from operating activities. The highly volatile figure generally indicates low efficiency of management i.e. under control over operating activities. There is heavy investment in fiscal year 2067/68 (Rs.11822.59 million). But the figure dose not represents comparative analysis, it needs budgeted figure to compare and come to the final conclusion. The cash inflow from financing activities is heavy in fiscal year 2067/68. From the above analysis, the company is able to generate enough cash from operating activities to meet the investing as well as financing activities, but there is no uniformity in generating cash from operation and other activities.

For the better analysis of cash flow the actual cash flow should be compared with the projected cash flow. For convenience, summarized budgeted and actual cash flow statement is presented below.

Table: 19

Nepal Telecom

Summarized Budgeted and Actual Cash Flow Statement

For Fiscal Year 2063/64 to 2067/68

(Rs in million)

Activities	Year 2065/66				Year 2066/67				Year 2067/68			
	Budgeted	Actual	Deviation	Deviation %	Budgeted	Actual	Deviation	Deviation %	Budgeted	Actual	Deviation	Deviation %
Cash form Operating	9678.23	10716.85	1038.62	10.73	10481.72	12361.50	1879.78	15.21	11886.23	12943.08	1056.85	8.17
Cash From Investing	-3012.70	-4955.36	-1942.66	64.48	-2682.05	-3715.06	-1033.01	27.81	-9453.77	-11822.59	-2368.82	20.04
Cash From Financing	-4327.55	-3704.95	622.61	-14.39	-4967.97	-5225.96	-257.99	4.94	-4333.27	-5962.82	-1629.55	27.33
Net Increase	2337.98	2056.54	-281.44	60.83	2831.70	3420.48	588.78	47.95	-1900.81	-4842.33	-2941.52	55.53
Cash at the beginning of Year	17023.44	16134.52	306.58		17450.54	18191.06	552.99	8.49	20673.78	21611.54	-340.31	-3.76
Foreign Exchange adjustment	--		--	---	--		--	--	--		--	--
Cash at the end of the year	19361.42	18191.06	25.14	60.83	20282.24	21611.54	1141.77	56.44	18772.97	16769.21	-3281.83	51.77

Source: Financial Report and annual Report

The table no. shows the budgeted and actual cash flow statement for three fiscal year i.e. fiscal year 2063/64 to 2067/68. The budgeted figures are extract from financial report of different fiscal years and actual figures are from different annual reports of the Nepal Telecom.

The cash from operating activities are in favourable condition through out the study period. The deviation between actual and budgeted is positive by 1038.62, 1879.78 and 1056.85 respectively in fiscal years 2065/66, 2066/67 and 2067/68. The more deviation percentage refers to unrealistic decision at the budget. The actual cash from investment activities is also far difference from budgeted figures. The analysis shows that actual investment is less than budgeted investment. i.e. the company is not able to invest sufficient amount as it is estimated to be invested. There is less investment by 64.48%, 27.81% and 20.04% with respect to budgeted investment in fiscal year 2065/66, 2066/67 and 2067/68 respectively.

Similarly actual cash outflow from financing activities in fiscal year 2065/66 higher by 60.83% than budgeted figure. The actual cash outflow from financing activities is lower by 47.95% than budgeted amount in fiscal year 2066/67. It is because of large amount of

long-term borrowing and less repayment of long term loan with respect to previous years. The analysis depicts that the company has no consistent cash flow policy from different activities. The budgeted cash flow statement is totally based on hunch and unrealistic foundation. The above three components are the major determinants of closing cash balances. The deviation of actual and budgeted closing cash balance also shows the same conclusion. So, the company should revised its budgeted cash flow statement with changing environment. Appropriate corrective actions should be adopted immediately to find the causes of being vast deviation so as to minimize the gap between estimated and actual figures.

4.10.2.1. Relationship Analysis: (Operating Revenue and cash flow from operating Activities.)

Operating revenue is that revenue which is generated form normal or regular operation of an organization. The main sources of operating revenue of Nepal Telecom are Local Telephone, International Telephone, Domestic and International Telegraph, Telex, leased circuits, mobile service etc. There revenues are reflected in income and expenditure of company. Similarly, cash from Operating activities are generally the cash effects of transaction of economic events included in the determination of income. Nepal Telecom shows operating cash flow under financial accounting approach starting from net operating profit before tax. The following table gives trend and shares of operating revenue and cash from operating activities.

Table: 20

Nepal Telecom

Operating Revenue and Cash from operating activities

(Rs in million)

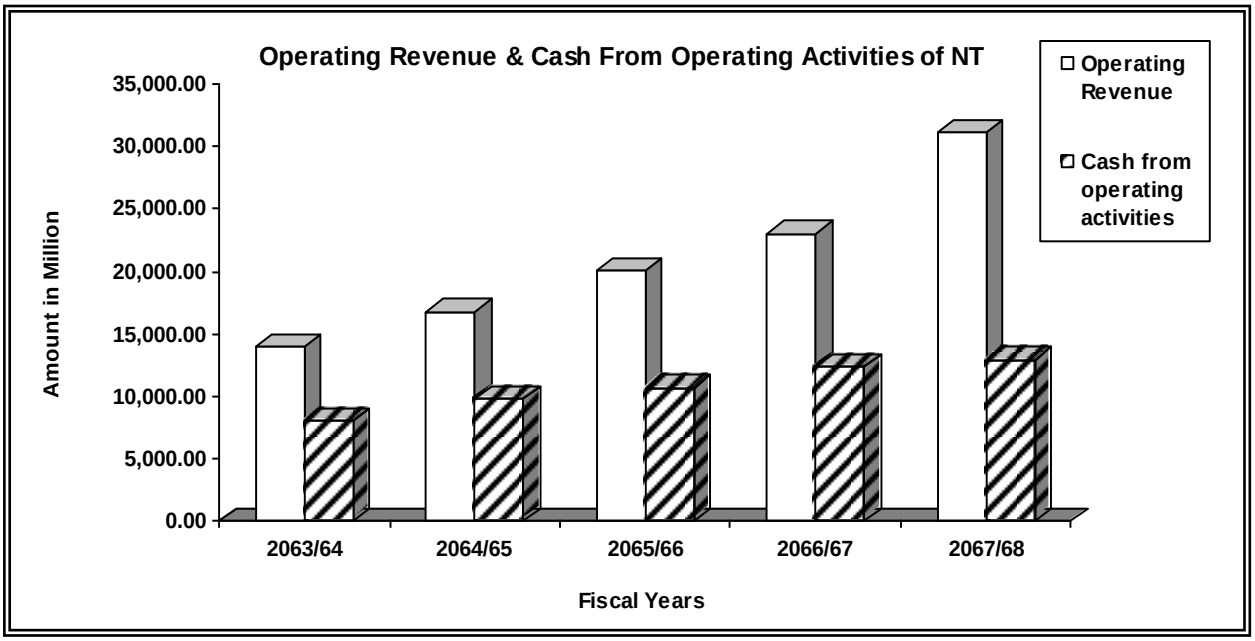
Fiscal Year	Operating Revenue		Cash from operating activities		Cash Revenue ratio %
	Amount	(decrease) %	Amount	Increased (decreased)%	
2063/64	13,967.32	0	8,052.33	0	95
2064/65	16,788.36	20	9,799.16	22	104
2065/66	20,057.10	19	10716.85	9	112
2066/67	23012.45	15	12361.499	15	116
2067/68	31126.12	35	12943.078	5	161
				Average	**118**

Source: Income and Expenditure of NTC for the fiscal year (2063/64 – 2067/68)

From the table no. shows that operating revenue is increasing both in amount but skewed in relative (%) figure throughout study period. But cash from operating activities are highly skewed. There is no consistency in operating cash activities. The highest cash / revenue ratio is 161% shows in fiscal year 2067/68. The average cash collection stands at 118% which tells that there is more than 100% of operating revenue yields actual cash. The

cash /revenue ratio is also variable which ranges from 95% to 161% . The figure of above table can be shown in following graph.

Graph: 9



For further analysis, statistical results extracted from appendix 5 are presented below:

Statistical Tools used	Operating Revenue (X)	Cash from Operating activities(Y)
Mean	$\bar{X} = 20990.270$	$\bar{Y} = 12839.79$
Standard deviation	$\sigma_x = 5910.556$	$\sigma_y = 2057.176$
Coefficient of Variation	$C.V_x = 28.15\%$	$C.V_y = 16.02\%$

The above result shows that cash from operating activities is more deviate from its mean value for its standard value and coefficient of variation both are higher than that of operating revenue.

Karl person's correlation coefficient between forecasted cash collection (X) & Actual Total Cash collection (Y)

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} = \frac{134,418,683.79}{\sqrt{(174,673,364.77)(105,799,359.29)}} = 0.9887$$

Probable Error of the correlation coefficient (r)

$$P.E.(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}} = 0.6745 \times \frac{[1-(0.9887)^2]}{\sqrt{5}} = 0.006778$$

$6 \times$ P.E. (r) = $6 \times 0.006778 = 0.04067$

From the same appendix 5 the coefficient of correlation (r=0.9887) shows that there is low degree of positive relationship between operating revenue and cash from operating activities. Since r>6x P.E.(r) , the value of 'r' is highly significant to come to the final conclusion.

The regression equation of cash from operating activities (y) on operating Revenue (x) is as follows:

or $Y - \overline{Y} = r\frac{\sigma_y}{\sigma_x}(X - \overline{X})$

or , $Y - 12839.7911 = 0.9887\frac{2057.176}{5910.556}(X - 20990.27025)$

or, Y- 12839.7911 = 0.34411X- 7223.134

or , Y = 5616.657+0.34411X (From Appendix 5)

The above equation tells that for every rupee increase in operating revenue (X) results Rs. 0.34411 in cash from operating activities (Y). The line also shows positive co-relation between two variables (i.e. x and y).

4.10.3 Cash Budget Analysis

The cash budget is a forecast of expected cash receipts and payments for a future period. A cash budget shows the planned cash inflows, outflows and ending position by interim period for specific time Span. The cash budget is always prepared for expected results for future period's cash transactions .It is usually broken into monthly segments showing in detail the cash flows expected from each department. It emphasis on the financial pattern to meet seasonal to temporary cash needs. A typical cash budget consists of three sections as follows:

a. Sources of cash received
b. Applications of cash payment
c. Cash position (Ending balance)

Nepal Telecom also prepares estimate as well as actual cash budget in each year. The major sources of cash are collection of revenue, inter-administration, subscribers deposit, government tax, maturation of government securities and other income, similarly major sources of application are construction and purchases, operating expenses, repayment of liabilities, tax and investment. The estimated cash budget of Nepal Telecom is presented below:

Table: 21

Nepal Telecom

Estimated Cash Budget From FY 2063/64 to 2067/68

Source and application **(Rs in Million)**

Description	2063/64	2064/65	2065/66	2066/67	2067/68
Sources					
1. Internal sources					
a. Domestic Debtors	11319.92	13960.24	16942.47	23386.79	26459.56
b. Deposit Adj. Against bill amount	---	----		----	----
c. Inter-Administration	1932.39	3208.35	3361.16	3397.27	3451.33
d. Subscriber deposit	196.41	262.41	134.14	210.36	305.56
e. Advance income	---	----	----	----	---
f. Government Tax, VAT, service charge	2807.19	3518.47	4770.94	6234.07	8458.70
g. Maturity of Government securities	3442.32	1526.45	7205.	8989.20	9567.24
h. Other income	78.305	1100.95	1539.35	1582.82	1595.77
Total Internal sources	**20482.55**	**23576.89**	**33953.07**	**43800.54**	**49838.16**
2. External Sources	----	-----	----	---	
Total Sources(1+2)	**20482.55**	**23576.89**	**33953.07**	**43800.54**	**49838.16**
B. Application					
a Revenue Expenditure	2147.52	2744.20	4156.15	5985.23	6344.55
b Capital Expenditure (Internal sources)	3783.60	1615.56	4543.35	10598.88	13785.09
c Payment to government	5581.45	6920.69	8938.10	12253.90	13595.74
d Payment to shareholder	1500	1499.50	3750	4500	5125
e Payment to employees	285.63	356.52	874.86	1597.44	2045.19
f Payment to inter- administrator	62.23	609.70	653.53	653.53	653.53
g Payment of Loan and interest	---	1186.64	---	----	----
h Repayment of subscriber's deposit	---	---	---	1	---
i Other liabilities	84.41	25.79	1.50	69.10	70.45
j Financial Investments	4312.95	7065/85	9021.59	10300	11439.94
Total application	**17757.83**	**22024.50**	**32300.33**	**45959.12**	**53059.49**
C. Cash Position					
Opening Balance	12021.62	14746.33	16134.52	17787.25	18112.45
Surplus/(Deficit)	2724.71	1388.17	1652.74	(2158.57)	(3221.33)

Outstanding Expenses	-	-	-	-	-
Closing balance	**14746.33**	**16134.51**	**17787.26**	**15628.68**	**14891.12**

Source: Income and Expenditure of NTC

The above estimated cash budget shows that most of source comes from internal one. Among internal sources collection of Revenue, Inter-administration, Government Tax, VAT, etc. are the dominant contributors on the total internal sources. External sources are not available in study period. Similarly , revenue expenditure, repayment of liabilities, operating expenses occupies large place on total application side. The estimated closing cash balance is fluctuations over the study period. i.e. increasing 14746.33 million to 17787.26 million in fiscal year 2063/64 to 2065/66 and then after decreasing trend in following years.

For actual comparison, relative terms should be applied. So variance between estimated and actual cash budget is analyze for further comparative study. The analysis gives favorable or unfavorable variances which can be applied for further improvement by corrective actions. For the convenience point of view, the researcher analyze only two fiscal years i.e. FY 2066/67 and FY 2067/68 as follows:

Table: 22

Nepal Telecom

Estimate and Actual Cash Budget For fiscal year (2066/67) and (2067/68)

(Rs in Million)

Source and applications

Descriptions	Estimated (2066/67)	Actual (2066/67)	Variance		Remark	Estimated (2067/68)	Actual (2067/68)	Variance		Remark
			Amount	%				Amount	%	
A. Sources										
1. Internal sources										
a. Domestic Debtors	19876.25	23386.79	3510.54	18	F	2478.45	26459.56	2381.11	10	F
b. Deposit Adj. Against bill amount	0	0	0	0	U	0	0	0	0	U
c. Inter-Administration	3178.34	3397.27	-181.07	-5	U	2678.34	3451.33	-227.01	-6	U
d. Subscriber deposit	194.36	210.36	16	8	F	203.95	305.56	101.61	50	F
e. Advance income	0	0	0	0	U	0	0	0	0	U
f. Government Tax, VAT, service charge	4329.01	6234.07	1905.06	44	F	7563.45	8458.70	895.25	12	F
g. Maturity of Government securities	**7694.57**	8989.20	1294.63	17	F	**9087.23**	9567.24	480.01	5	F
h. Other income	**1356.81**	1582.82	-773.99	-33	U	**1043.26**	1595.77	552.51	53	F

Total Internal sources		**43800.54**	5771.2	15	F		**49838.16**	4183.48	9	F
2. External Sources		---						0	0	U
Total Sources (1+2)		**43800.54**					**49838.16**	4183.48	9	F
B. Application										
a Revenue Expenditure	4756.93	5985.23	1228.3	26	F	5376.43	6344.55	968.12	18	F
b Capital Expenditure (Internal sources)	9984.55	10598.88	614.33	6	F	56891.26	13785.09	-43106.17	-76	U
c Payment to government	10348.32	12253.9	1905.58	18	F	12798.37	13595.74	797.37	6	F
d Payment to shareholder	4724	4500	-224	-5	U	4782	5125	343	7	F
e Payment to employees	1553	1597.44	44.44	3	F	1195.505	2045.19	849.685	71	F
f Payment to inter-administrator	683.24	653.53	-29.71	-4	U	503	653.53	150.53	30	F
g Payment of Loan and interest	0	0	0	0	U	0	0	0		U
h Repayment of subscriber's deposit	**0.92**	1	0.08	9	F	**0**	0	0	0	U
i Other liabilities	53.23	69.1	15.87	30	F	69.26	70.45	1.19	2	F
j Financial Investments	9652.11	10300	647.89	7	F	9234.91	11439.94	2205.03	24	F
Total application	41756.3	**45959.12**	4202.82	10	F	90850.735	**53059.5**	-37791.245	-42	U
C. Cash Position	0	0	0	0	0	0	0	0	0	0
Opening Balance	**17762.23**	17787.25	25.02	0	**F**	**18012.409**	18112.45	100.041	1	F
Surplus/(Deficit)	-3726.96	-2158.57	1568.39	-42	**F**	**-45196.055**	-3221.33	41974.725	-93	U
Outstanding Expenses	0	0	0	0	**F**	**0**	0	0	0	0
Closing balance	14035.27	**15628.68**	1593.41	11	**F**	**-27183.646**	**14891.1**	42074.766	-155	U

Source: Income and expenditure of fiscal year 2066/67, 2067/68.

The above table shows estimated and actual cash budget of two fiscal years i.e. 2066/67 and 2067/68. There are three major parts of the budget i.e. source, Application and cash position. It is to be noted that total external sources has been shown in aggregate. The table also shows total variance in amount, in percentage and as well as indicator favourable (f) and Unfavourable (U) condition.

The major source of cash of both estimated and actual is internal source. The variance is analyzed assuming that sources are the revenue generating activities, capable Nature application as investment activities which finally yields revenue and the rest of items as cost incurring activities. The above analysis shows that there is favourable condition on total internal source in fiscal year 2066/67 (i.e.15.%) and also favourable in the fiscal year 2067/68 by 9%. There is unfavourable variance by (5%) and (6%) in fiscal years 2066/67 and 2067/68 under inter-administration heading.

The cash in flow from maturity of investment is higher by 17% than that of estimated figure in fiscal year 2066/67. The same figure stands at 5% favourable in fiscal year 2067/68.

The operating expenses shows favourable condition in both fiscal years. The company is able to control operating expenses. Similarly the closing cash balance is favourable in fiscal year 2066/67 by 11% but unfavourable in fiscal year 2067/68 by 155%. For the other items, interpretation can be made, but the figure itself is expressive.

4.10.3.1 Relationship analysis: total Revenue and net cash collection (total cash collection without from debtors)

The total revenue consists of two major sources of income i.e. income from operate and income from non-operation. Here the total revenue indicates total income of respective fiscal year. In case of Nepal Telecom more than 90% revenue comes from operating and rest from non-operating activities. The net cash collection indicates total cash collected after deducting cash collected from debtors. It is deducted so as to obtain actual total cash collection of the same fiscal years only.

The following table shows total revenue and total net cash collection of Nepal Telecom:

Table: 23

Nepal Telecom

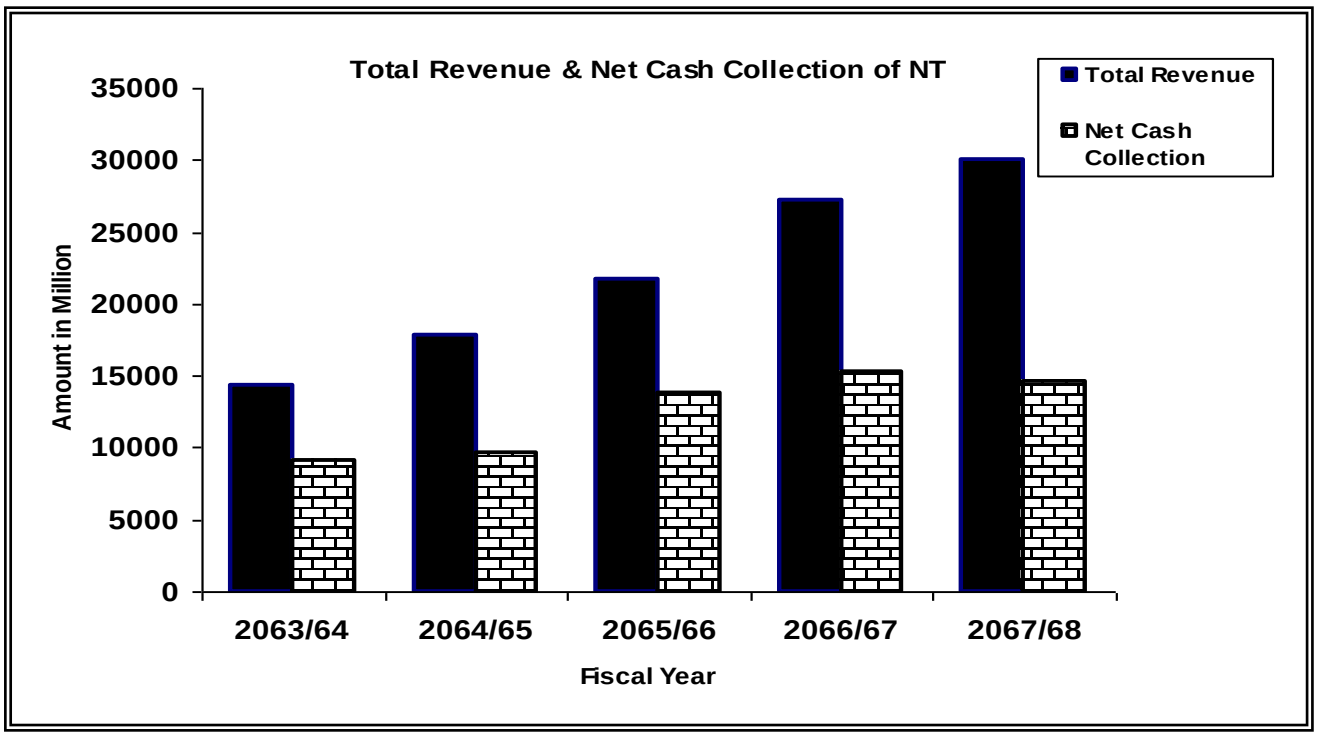
Total Revenue and net cash collection

(Rs in million)

Fiscal Year	Total Revenue (X)	Net cash collection (Y)	Ratio %
2063/64	14308.67	9162.62	64
2064/65	17889.31	9616.64	54
2065/66	21758.64	13849.57	64
2066/67	27221.068	15224.43	56
2067/68	29987.443	14673.54	49
		Average	57

From above table it shows that total revenue is in increasing trend but the net cash collection is increasing for the first four fiscal years and then after decreases the figure in subsequent years. The ratio indicates the proportion of cash collection over total revenue. The highest ratio is 64% in the fiscal year 2063/64 and that is lowest in fiscal year 2067/68 by 49%. For service oriented organization the cash collection is not satisfactory. The average collection ratio stands at 57% which is above than half of the total revenue. The above figures are presented in following graph:

Graph: 10



Computation of other statistical analysis is presented in Appendix 6. The final results are extract for further analysis. (Appendix 6)

Statistical Tools used	Total Income (X)	Net cash collection (Y)

Mean	$\bar{x}$ = 22233.026	$\bar{y}$ = 12505.36
Standard deviation	σ_x = 5777.539	σ_y = 2585.337
Coefficient of variation	CVx = 25.98%	CV_y = 20.67%
Co-relation coefficient (r_{xy})	0.9204	

Calculation of probable error

P.E. (r)= $0.6745 \times \frac{1-r^2}{\sqrt{n}} = 0.6745 \times \frac{1-(0.9204)^2}{\sqrt{5}} = 0.04607$

6× P.E. (r) = 6 × 0.04607= 0.276

Regression equation of cash collection (Y) on total Income (X)

$Y - \bar{Y} = b_{yx}(X - \bar{X})$ or, $Y - \bar{Y} = r\frac{\sigma_y}{\sigma_x}(X - \bar{X})$

or , $Y-12505.36=0.9204\frac{2585.337}{5777.539}(X - 22233.0266)$

or , Y- 12505.36=0.4118X-9156.921

or ,Y= 3348.43+0.4118X

From above results it can conclude that standard deviation as well as coefficient of variation of Total Income (X) is higher than that of cash collection . So, in relative term it can conclude the total income is fluctuate much more than that of net cash collection.

The value 'r' shows there is high degree of positive co-relation between the above two variable, the value of correlation coefficient r (i.e 0.9204) is higher than P.E. (r) (i.e 0.0.4607), It is concluded that the value of 'r' is significant and there is positive co-relation between total revenues (x) & actual Net cash collection(y) .

4.11 Receivable (Debtors) Analysis

Sales are made either on credit or on cash. If such one mad on cash, cash will generated immediately & there is no question of account receivable. In this competitive market, it is impossible for an organization to sell all its goods and service on cash i.e. competitive pressure forces the enterpriser to offer credit. Account Receivable is the amount of money owed to a firm by customers who bought goods or service on credit. It represented credit sales they have not been collected which is also known as book debts or debtors. There are two main factors which affects the total amount of accounts Receivable as follows:

(a) The volume of credit sales.

(b) Average collection period or days sales outstanding.

It is very difficult task to determine the optimum level investment in receivable. Too little investment may reduce firm's benefits from loosing market share. Too much investment may expose the firm to excessive costs by tying up valuable cash. Flow concepts of receivable emphasis on the planning of receivable. The financial manager or the planning department must determine how much cash will be collected from debtors? How much sales will make on credit? Is there any deviation between forecast (budgeted) cash collection and actual cash collection from debtors?

The answer of above questions will get by preparing appropriate debtors budget. The budget should be based on realistic. The following table shows forecast cash collection from debtors & actual cash collection from debtors of the company.

Table: 24

Nepal Telecom

Forecasted & actual cash collection from debtors

(Rs in Million)

Fiscal Years	Forecast	Actual	% of achievement
Reference	**1**	**2**	**3 = (2/1) X 100**
2063/64	8836.25	11319.93	128.11
2064/65	14700.78	13960.25	94.96
2065/66	19404.93	16942.48	87.31
2066/67	24322.33	19544.23	80.36
2067/68	29706.54	23455.67	78.96

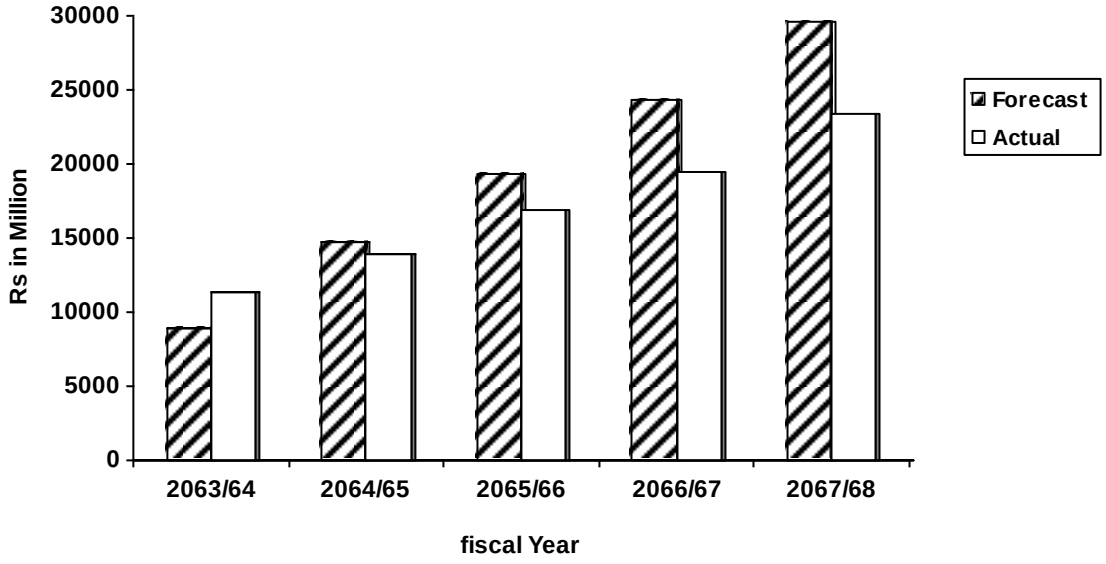
Source: Annual Report

The actual cash collection is more than 75% that of forecasted cash collection from debtors throughout all the fiscal years under study. So it can be considered to be satisfactory condition.

The actual cash collections from debtors are also not so far deviate from forecasted figure in all fiscal year of study period. But decreasing trend in achievement from 128.11% to 78.96% in study period. so, the overall achievement is even satisfactory but the company should bring strong policy for fast collection of debtors. The above figure can better be presented on following graph.

Graph no. 11

Forecasted & actual cash collection from debtor of NT



The arithmetic mean, standard deviation of coefficient of variation of Nepal Telecom's forecast & Actual cash collection for all fiscal years should be computed to find out the nature of variability of the above two variables.

Forecasted cash collection & actual cash collection from debtors are represented by X & Y respectively. Now the statistical results are presented as follows.

From Appendix 7

Statistical Tools used	Forecast cash (X)	Actual cash (Y)
Mean	$\overline{X}$ = 19394.166	$\overline{Y}$ = 17044.512
Standard deviation	σ_x = 2286.01	σ_y = 1338.99
Coefficient of variation	CVx = 11.78%	CV_y = 7.85%

The above results shows that average actual cash collection ($\overline{Y}$) is greater than the average forecast cash collection ($\overline{X}$). The standard deviation & coefficient of variation of actual cash collection greater than forecasted cash collection cash collection is more volatile than that of forecasted cash collection form debtors.

Correlation analysis:

This statistical tool shows the relationship between the variables. Here the forecast cash (x) is taken as in dependent variable & the actual cash (y) is assumed to be dependent variable. The coefficient of correlation is extracted from appendix 7 as follows:

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

$$= \frac{153347469}{\sqrt{264129436.2 \times 89645458.67}} = 0.996$$

The value of 'r' is 0.996, which shows that there is positive correlation between actual & forecasted cash collection from debtors. It needs to test the vale of 'r' through probable error. Probable error is the measure of testing the reliability of the calculated value of r. It is given by.:

P.E. (r)= $0.6745 \times \frac{1-r^2}{\sqrt{n}} = 0.6745 \times \frac{1-(0.996)^2}{\sqrt{5}} = 0.00240$

Now, 6 P.E. (r) = $6 \times 0.00240 = 0.01445$

Since r> $6 \times$ PE(r), the value of r is highly significant i.e. there is defiantly positive co-relation between two variables.

Regression analysis:

The Regression analysis shows the degree of relationship with cause & effect between two variables. The analysis also used to predict dependent variable on the basis of independent variable. The regression equation of actual cash collection (y) on forecasted cash collection (x) is given by: (From Appendix 7)

$$Y - \overline{Y} = b_{yx}(X - \overline{X})$$

or $$Y - \overline{Y} = r\frac{\sigma_y}{\sigma_x}(X - \overline{X})$$

or , Y- $17044.512 = 0.996\frac{1338.99}{2286.01}(X - 19394.166)$

or, Y-17044.512=0.5833X -11314.35

or , Y=5730.162+ 0.5833X

The regression equation shows that each rupees increase in forecast cash collection (X) results Rs. 0.5833 increase in actual cash collection (Y)

4.11.1 Relationship analysis: Total Revenue & debtor balance

Total revenue of Nepal Telecom is consisting of opening as well as non operating revenue. The figure can be obtained from appendix 8 the debtors balance represents the closing debtors shown in balance sheet of each fiscal year. The following figure shows Total Income, debtors balance, their trend & Ratio of debtors balance on Total revenue (Income)

Table: 25

Nepal Telecom

Total Revenue & Debtors balance

(Rs in Million)

FY	Total Revenue		Debtors Balance		Ratio % Debtors/total Rev X 100
	Amount	Trend (%)	Amount	Trend (%)	
2063/64	14308.67		2300.937		16.08
2064/65	17889.31	25.02	2771.432	20.45	15.49
2065/66	21758.64	21.63	3108.437	12.16	14.29
2066/67	27221.068	25.10	1760.771	-43.36	6.47
2067/68	29987.443	10.16	2468.080	40.17	8.23
				Average	12.11

Source: Annual Report

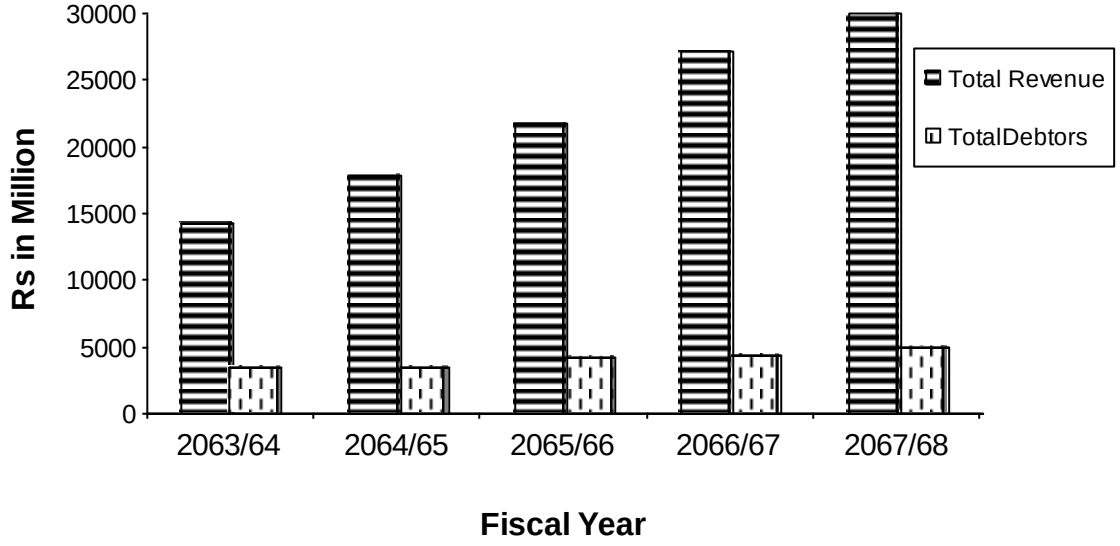
The total revenue is in increasing trend throughout study period but the increasing trend is not uniform. The debtors balance is also in increasing trend except in fiscal year 2066/67.The highest debtors ratio is 16.08% in fiscal year 2063/64.The ratio shows that the minor parts of total revenue is represented by debtors. Simply, higher Ratio show greater credit sale & large amount of cash to be collected. So less ratio is favourable and shows effeteness on collecting cash from credit sales.

The above figures are presented in following graph.

Graph 12

Nepal Telecom

Total Revenue & Debtors Balance of NT



The figure also represents the same facts as above i.e. total Revenue is in increasing trend & reaches up to 29987.44 million in FY 2067/68. The debtors balance figure is also increasing but decrease in FY 2066/67 & again comes to increasing trend. So it more fluctuates than that of total revenue.

For further analysis & interpretation statistical tools are applied. The summarized results of there statistical analysis are presented below from detailed calculation made in Appendix 8

Statistical Tools used	Table Revenue (X)	Debtors (Y)
Mean	$\bar{x}$ = 22233.02	$\bar{y}$ = 4098.86
Standard deviation	σ_x = 5777.54	σ_y = 583.54
Coefficient of variation	CVx = 25.98%	CV_y = 14.23%

The presented result shows that standard devotions & means of total Revenue is greater than that of debtors. But the coefficient of variation of debtors (CV_y) is higher than that of Total Revenue. So it is concluded that debtors balance is much more variable then total income trend.

The co-relation coefficient between two variable (r_{xy}) is +0.939 which indicator very low degrees of positive co-relation between Total Revenue & Debtors Balance. Since the value of r>P.E.(r). The result is defiantly significant. So we can say definitely that there is positive co-relation between above two variables.

The Regression equation of Debtors (y) on Total Revenue is extracted from the appendix no. 7 as follows.

Y=14935.92+ 0.09484X

Where , y = dependent variable

X = independent variable

The regression equation also shows positive relationship between the debtors of Total Revenue. The equation tells that the debtors will increase by Rs. 0.09484 for each Rupee increased in Total Revenues.

4.12 Major findings

1. Nepal Telecom can not operate in full capacity. The company provide service only for 23.95% of public.
2. High degree of deviation between actual & forecasted figures that there is lack of proper coordination & communication on between the different level of management & management has no commitment on the goals & objectives of the company.

3. Effective cost control measure are not adopted by the company, its operating expenses are far higher then estimated one. Costs are not classified scientifically so as to minimize the cost.
4. Variance analysis is totally ignored by the company.
5. Nepal Telecom has no in depth analysis of its strengths & weakness because of absence of the competitors. It has become monopolistic concern & hence it is not alert towards its possible threats & opportunities till now.
6. There is no separate costing department & also lack of dynamic & effective cost control program.
7. Long term capital expenditure budget is not published for external use. Capital expenditure plans are not adequately prepared. Total amount is budgeted for whole year & capital addition are made according to necessity, discounted as well and traditional techniques are used to evaluate the capital expenditures.
8. The total profit earned by the company is in increasing trend even it is not sufficient to make Nepal Telecom self – reliance in its activation.
9. The balance sheet of Nepal Telecom shows the huge amount of cash & bank balance lying idle. The average cash to total assets Ratio stands at 0.39:1 throughout the study period. It is the symbol of deficiency of the company to utilize its liquid assets. Although the ratio is better at the liquidity point of view. But the company has to foregone the opportunity benefit from inverting idle cash.
10. The debtor turnover ratio is lower (the average ratio is 4.96 times) which reflects that the debtors are not being collected rapidly.
11. Debt equity ratio is in decreasing trend, so, the company is unable to get benefit from trading on equity.
12. Planning department of Nepal Telecom has no adequate authority to decide & create no ideal to formulate various plans.
13. The total cash collection trend is decreasing trend. The average cash collection base on total revenue stand on 57% only.
14. Almost 22.20% of total actual cash collection comes from Kathmandu RDO only, which shows that the service of Nepal Telecom is highly concentrated on urban area only.
15. There is highly positive co-rrelation between actual & forecast total cash collection *r =0.996) It indicates that increase in forecasted cash collection will also increase actual cash collection & vice versa.
16. The ending cash balance of Nepal Telecom is in increasing trend but the rate of increasing trend is skewed. Similarly, cash from operating activities is fluctuating

year after year. The highly volatile figure shows poor efficiency of management to control operating activities.

17. Cash flow statement shows positive increment cash balance in the company throughout the study period.
18. The cash collection Ratio with respect to total revenue is very low (the average ratio is 57%)
19. The actual cash collection from debtors is satisfactory. The actual cash collection is higher then that of forecasted cash collection from debtors throughout the study period. There is also positive co-relation between actual & forecasted cash collection form debtors. (r = 0.996)
20. This is no well developed system of reward and punishment to employees on the basis of their work performance. Generally fixed salaries are given to the employees; hence qualified and creative personnel are frosted.
21. There is lack of proper documentation. Budgets and other financial records are prepared just to fulfill formalities. These records are not use strategically for future planning process.

Chapter-V

Summary, Conclusion & Recommendations

5.1 Summary

Nepal Telecom (the then NTC) is a public utility concern entity which is a leading company in the sector of telecommunication. It was established under the communication corporation act 2028 which has just been converted into Nepal Doorsanchar Company (Limited Nepal Telecom) under company Act 2053. The main objective of the company is to provide essential nation wide low cost, reliable & readily available Telecommunication services to the general public, government offices. Business organization & the country as a whole thereby supporting of the unity, integrate & the economy of the country. It's head office is situated in Bhadrakali, Kathmandu & has six regional offices as Kathamndu, Biratnager, Birjung, Bhairawa, Nepalgung, & Dhangadhi in the country

Most of the Nepalese public utilities enterprisers are facing the ambiguity upon their goals & objectives. Lower level management perception & participation both are ignored by most of Nepalese Enterprise in developing plans, goals, objectives & strategies. Similarly, there is the lack of proper coordination &communication between the different level of management & management has no commitment on the goals & objectives of the enterprises. Nepal Telecom's (the then NTC) planning policy making system is also affected by the regular changed in the government of the country Most of the executive have direct link & affiliation with political trade unions and they want to manipulate in the interest of their concerned political party. These problems are the common feature of the Nepalese enterprises and Nepal Telecom can't be exception of this.

The main objective of planning to increase the opportunity of making profit in business. The management is continuously involved in planning, organisating & controlling the operation of business organization. Profit planning &control is the most important management tool used to plan & control business operations. The effective operation of a business concern resulting into the excess of income over expenditure fully depends upon as to what extent the management follows proper planning effective co-ordination & dynamic control. Without proper planning of profit & their implementation no organization can achieve its goal & objective more efficiently. Profit Panning can be broadly divided into two groups as follows:

1. Functional Plan: It includes sales plan, production plan, raw material plan, direct labor plan and expenses plan.
2. Financial plan: It includes cash flow plan capital expenditure plan, projected income statement and projected balance sheet.

This research paper has tried to examine the application of cash planning which is the subunit of overall profit planning and controlling system. It also shows the relationship of cash with other variables. The practices and effectiveness of cash planning is reviewed in the company with the help of functional and financial plan. Although financial plan has been emphasized in this research paper because cash planning is the sub-unit of financial plan. Data and information collected specially from secondary sources and informal discussion with personnel of Nepal Telecom. Statistical and financial tools such as percentage, mean, standard deviation, coefficient of variation, co-relation coefficient, ratio analysis, variance analysis, trend analysis are used. Analytical and descriptive research design is followed.

Related literatures have been reviewed, which consist about books, annual reports, anniversary souvenir, MIS etc. The study has been organized into five main chapters, which are 1. Introduction, 2. Review of literature, 3. Research methodology, 4. Presentation and analysis of data, 5. Summary, Conclusion and recommendations.

5.2 Conclusion

After analyzing in details the practices of cash planning in Nepal Telecom, this study concludes the following:

1. Nepal Telecom can not operate in full capacity. The company provide service only for 23.95% of public.
2. High degree of deviation between actual & forecasted figures that there is lack of proper coordination & communication on between the different level of management & management has no commitment on the goals & objectives of the company.
3. Effective cost control measure are not adopted by the company, its operating expenses are far higher then estimated one. Costs are not classified scientifically so as to minimize the cost.
4. Variance analysis is totally ignored by the company.
5. Nepal Telecom has no in depth analysis of its strengths & weakness because of absence of the competitors. It has become monopolistic concern & hence it is not alert towards its possible threats & opportunities till now.

6. There is no separate costing department & also lack of dynamic & effective cost control program.
7. Long term capital expenditure budget is not published for external use. Capital expenditure plans are not adequately prepared. Total amount is budgeted for whole year & capital addition are made according to necessity, discounted as well and traditional techniques are used to evaluate the capital expenditures.
8. The total profit earned by the company is in increasing trend even it is not sufficient to make Nepal Telecom self – reliance in its activation.
9. The balance sheet of Nepal Telecom shows the huge amount of cash & bank balance lying idle. The average cash to total assets Ratio stands at 0.39:1 throughout the study period. It is the symbol of deficiency of the company to utilize its liquid assets. Although the ratio is better at the liquidity point of view. But the company has to foregone the opportunity benefit from inverting idle cash.
10. The debtor turnover ratio is lower (the average ratio is 4.96 times) which reflects that the debtors are not being collected rapidly.
11. Debt equity ratio is in decreasing trend, so, the company is unable to get benefit from trading on equity.
12. Planning department of Nepal Telecom has no adequate authority to decide & create no ideal to formulate various plans.
13. The total cash collection trend is decreasing trend. The average cash collection base on total revenue stand on 57% only.
14. Almost 22.20% of total actual cash collection comes from Kathmandu RDO only, which shows that the service of Nepal Telecom is highly concentrated on urban area only.
15. There is highly positive co-rrelation between actual & forecast total cash collection *r =0.996) It indicates that increase in forecasted cash collection will also increase actual cash collection & vice versa.
16. The ending cash balance of Nepal Telecom is in increasing trend but the rate of increasing trend is skewed. Similarly, cash from operating activities is fluctuating year after year. The highly volatile figure shows poor efficiency of management to control operating activities.
17. Cash flow statement shows positive increment cash balance in the company throughout the study period.
18. The cash collection Ratio with respect to total revenue is very low (the average ratio is 57%)

19. The actual cash collection from debtors is satisfactory. The actual cash collection is higher then that of forecasted cash collection from debtors throughout the study period. There is also positive co-relation between actual & forecasted cash collection form debtors. (r = 0.996)
20. This is no well developed system of reward and punishment to employees on the basis of their work performance. Generally fixed salaries are given to the employees; hence qualified and creative personnel are frosted.
21. There is lack of proper documentation. Budgets and other financial records are prepared just to fulfill formalities. These records are not use strategically for future planning process.
22. There is lack of standardization to compare the financial indicators. Similarly lack of comparable competitors in the country effectiveness and efficiency of the company can't be measure relatively.
23. Competitive environment is totally ignored by the company. The prevailing Company Act 2053, Communication Act 2053 enables all sectors to enter in this field.

5.3 Recommendations

After the detail analysis of cash planning of Nepal Telecom. Some suggestions have been recommended to improve the performance of the Nepal Telecom. These following recommendations prove to be useful to the management of the company, other concerned offices, individuals, institutions & donor agency.

1. Nepal Telecom should operate its full capacity to meet the ever increasing demand of the customers.
2. Participative management should be introduced in formulation of plans & policies of the company. Major plans, polities, and objective should be communicated to lower level of management. It should develop major programs to accomplish the formulated objectives & goals.
3. Effective cost control device should be developed. Cost should be separate costing department for effective cost control program.
4. The concept of variance analysis should be accepted & applied as effective management total.
5. To make capital expenditure, time adjusted criteria like, NPV. IRR, MIRR method should be followed.
6. The company's liquidity position is satisfactory. However it is important for these companies to behave like entrepreneur to make the best use of liquid

funds. Excess funds should be invested in marketable securities to get opportunity cost.

7. Collection of outstanding bills is a serious problem of Nepal Telecom. The company should start effective collection policy to accelerate the debt collection. Discount should be given for those customers who pay the bill on time & should changed higher penalty for late paying customers.
8. Periodic performance report should be strictly followed to be continuous towards poor performance & take corrective action timely. So documentation should be systematically kept.
9. Cash budget can be made monthly, half yearly too to control cash balance. Various cash management technique such as EOQ model, MILLER - ORR model should be applied to predict the optimum cash balance.
10. Incentive plan should be initiated to improve employee moral & productivity on the basis of work performance. Reward &punishment system should be applied so that efficient staffs are encourages & motivated to increase their productivity.
11. The company has excess cash fund lying idle, at the same time heavy interest expenses has to be paid on borrowed funds. So the company should arrange to refund loan from internal sources.
12. Diversification policy should be adopted so that revenue can be generated from all regional development equally.
13. New areas of investment should be searched to maintain the market share.
14. Standardization should be developed to compare the operating activation & financial indicators.
15. The concept of privatization & liberalization has been come into existence in the Telecommunication sector. The Nepal Telecom should keep into mind the entry of private invertors into the Telecommunication sector. The company should be aware of effective corporate planning, systematic & strategic management to cope with the ever changing competitive environment.

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