CHAPTER - I
INTRODUCTION

1.1 Background of Study

Nepal is an underdeveloped country. It has no long history of development of commercial banks as compared to other South Asian as well as other developed countries of world. Nepal is a landlocked country and most of its economy is based on agriculture up to now also. Economic status of country is growing slowly, more than 38% people are still below poverty line and per capita income of Nepalese people is only US $ 470. The structure of GDP is 40% from agriculture, 20% from industry and 40% from service sector. Agriculture is playing dominant role in Nepalese economy. Although being an agro based country, the non-agricultural sectors are also given top priority.

Capital is the main thing necessary for the development of country. Capital mobilization plays the vital role to run and develop the national economy. Although the practices of banking activities are relatively lower in developing countries, it is slowly increasing in our country. The banking system of every nation plays consequential role in the smooth functioning of the economy.

Accounting system plays the vital role in the functioning of any corporate organization. It provides the guidelines for better utilization of available resources so that success can be achieved in this competitive age. Management accounting tools have proved beneficial in every aspect of management activities from planning to decision making. It helps managers in overall managerial activities by providing information and helping them in planning, controlling and decision making.

Although banking business is in growing stage in our country, it is becoming more complex because of cut throat competition. For the smooth running of banking sectors and to make the banking sector successful, good management is the only one option. The performance of well-managed organization is high as compared with the organizations which have poor management. Management accounting is the term used to describe the accounting methods, systems and techniques, which coupled with special knowledge and ability. It consist management in maximizing profit or minimizing losses.

1.2 Evolution of Banking System in Nepal

The history of banking in Nepal may be described as a component of gradual and ordinary evolution in the financial and economic sphere in the Nepalese life. Even now the financial system is still in the evolutionary phase. The establishment of " Kausi Toshi Khana" as a banking agency during the time of king Prithvi Narayan Shah and "Tejaratha Adda" can be regarded as the initial steps in the direction of start of banking development in Nepal. In the context of Nepal, the development of banks can be summarized in three phases:

Phases 1

The establishment of 'Tejaratha Adda' during the tenure of Prime Minister Ranoddip Singh in 1933 B.S. was the first step towards the institutional development of banking in Nepal. It was fully subscribed by the government in Kathmandu. Tejarath provided credit loans to the general public at 5 percent interest rate on securities i.e. gold, silver and other ornaments. Its objectives was to provide credit or loans to the general public but it failed to accept deposits from public.

Phase 2

During the time of Chandra Shamsher(1901-1929), credit facilities of 'Tejaratha' were extended by operating its branches. Later, 'Tejaratha' was replaced by the

first commercial bank, Nepal Bank Limited established on 30th Kartik 1994 B.S. is the first commercial bank in Nepal with authorized capital of 10 million rupees. Then Nepal Rastra Bank was established on B.S. 2013.01.14 as the central bank under the Nepal Rastra Bank Act 2012 B.S. Its function was to supervise commercial banks and to guide the basic monetary policy of the nation. In 2013 B.S., industrial Development Center was established and later it was converted into Nepal industrial development Center was established and later it was converted into Nepal industrial Development Corporation (NIDC) in 2016B.S. As the monetary transaction got more and more complicated on 2022.10.10, Rastriya Banijya Bank was established as a fully government owned commercial bank. Agricultural development bank was then established in 2024.10.07 to help the agricultural side of the nation.

Phase 3

To operate all commercial banks uniformly under single act. "Commercial Bank Act 2031" was enacted. According to the Nepal Commercial Bank act of 2031 B.S. "Commercial banks are banks that deal with money exchange, accepting deposits, advancing loans and other commercial transactions except some special functions done by specified cooperative, agriculture and industrial banks". In 2041 B.S., Nepal Government established five rural development banks under the control and supervision of Nepal Rastra Bank. The establishment of these banks helped in spreading the banking services to both urban and rural areas but banking services to the customer satisfaction was still far.

After the reestablishment of democracy, the government has taken liberal policy in banking sector so different private banks are getting permission to establish with the joint venture of other countries. Nabil Bank is the first joint venture bank as Nepal Arab Bank. Similarly, two foreign commercial banks Nepal Indosuez Bank Ltd and Nepal Grind lays Bank Ltd. Entered in Nepal in the form of joint venture

and the trend is continuing till today as many Nepalese owned banks are also running. Today, there are altogether 27 commercial banks are operating in Nepal.

1.3 Statement of the Problem

The joint venture banks have been operating well from their very establishment. Because of their experience on international banking, prompt and computerized services, qualified and trained professionals are the factors for their success. These banks have succeeded to capture a remarkable market share of Nepalese banking sector in a relatively short period of time because of weakness and inefficiency of domestic commercial banks.

Every activity must be planned and managed to achieve success. Management accounting provides techniques to aid management functions. Poor performance is the outcome of poor planning, controlling and decision making. Do they practice management accounting tools and techniques to carry out planning, decision making and controlling functions?

We find the practice is not sufficient therefore the research questions will help to study the scenarios of management accounting tools being used in joint venture banks:

1. How far joint venture banks are practicing management accounting tools?
2. Which management accounting tools are mostly practiced and which aren't practiced till now?
3. What are the major difficulties in the application and implementation of management accounting tools?
4. In which areas of the joint venture bank, management accounting tools can be applied to improve the efficiency and competitiveness?

1.4 Objectives of the Study

The main objective of this research is to examine and study the practice of management accounting tools in joint venture banks in Nepal. The specific objectives are:

1. To study and analysis the present practice of management accounting tools in the joint venture banks of Nepal.
2. To identify the areas where management accounting tools can be applied to strengthen the banks in commercial activities.
3. To make recommendations to overcome the difficulties in applying management accounting tools in joint venture banks.

1.5 Importance of the Study

The research work is the study of the practice of management accounting tools in joint venture banks in Nepal. This study will be important in the following ways.

1. It analyzes the use of management accounting tools in banking sectors.
2. It explores the problems and potentialities of the joint venture banks. It will be useful to the potential investors, lenders, managers, policy makers and stakeholders of the banks.
3. It provides information on the application of the tools under different situations and encourages the use of management accounting tools in decision-making.
4. It provides literature to the researcher who wants to carry on further research in this field.

1.6 Limitations of the Study

The present research has the following limitations.

1. The study is concerned with management accounting practice and doesn't consider the economic aspects of the banks.

2. This study is focused only on joint venture banks, thus the findings might not be applicable to other sectors, banks and financial institutions.
3. The study pays attention to the practice of management accounting tools only.
4. The research doesn't concern on the human resource aspects of the joint venture banks.

1.7 Organization of the Study

This thesis has been divided into five chapters, they are:

Chapter – I Introduction

The introduction chapter covers role of management accounting, statement of problem, research hypothesis, and objectives of study, importance of the study and limitations of the study.

Chapter – II Review of literature

The second chapter focuses on review of literature. It contains the conceptual framework and past research literature on profit planning and control area of management accounting.

Chapter – III Research Methodology

The third chapter deals with the research methodology to be adopted for the study consisting research design, sources of data, data gathering procedure, population and sample, research variables and data processing procedure.

Chapter – IV Data Presentation and Analysis

The fourth chapter deals with presentation, analysis, and interpretation of data. It consists testing of hypothesis, analysis of questionnaires, and analysis of open-end opinions and major findings of the research.

Chapter – V Summary, Conclusion and Recommendation

The last chapter covers summary, conclusions and recommendations.

CHAPTER - II

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 Meaning of Management Accounting

Accounting refers to the process of identifying, recording, classifying, summarizing, analysis, interpretation and communication of the financial transactions in terms of money. Therefore, accounting is an art of recording, classifying and summarizing the transactions in financial terms. Primarily, the main objective of accounting is to ascertain the result and financial position of the business activities of particular period but its scope has been increased with increase in the competition and business complexities.

Users of Accounting Information

Accounting information is used by both external as well as internal users for decision making.

External User

The following external parties like government, suppliers, creditors, customer, etc uses generally accounting information.

Internal User

Departmental managers, employees and workers are the internal user of accounting information.

Management accounting is the presentation of formulates the policies to be adopted by the management and assists its day to day activities. It helps the management to perform all its functions including planning, organizing, staffing,

directing and control. It presents to management the accounting information in the form of processed data which if collects from financial accounting *(Paul; 1990:1).*

Management accounting is the branch of accounting, which is concern with supplying relevant information to various users at appropriate time to enable them to take right decision in the organization. Some of the important definitions of management accounting are as follows:

"Management Accounting is that branch of accounting discipline, which facilitates management by communicating necessary information to carry out management functions smoothly. Planning, organizing, staffing, leading and controlling are the routine functions of management. Management accounting is an accounting discipline that provides essential information to every hierarchy of management to perform management functions" (*Singh et.al; 2004:1.10).*

From the above definitions, we can conclude that management accounting is the process of identifying, measuring, analyzing, interpreting and communicating accounting information to different concern user and department to meet organizational goals and objectives.

2.1.1 Origin and Evolution of Management Accounting

"So far as the question of origin of management accounting is concerned, there is not a definite answer. There is no such commonly accepted father and the date assigned to the beginning of managerial accounting discipline unlike the double entry system which is said to be introduced by the venous merchant, Luca Pacioli, in 1494. Management accounting covers the areas of revenues and expenditures, which need to be planned and controlled for the optimization of available resources. Management of revenuer and expenditure has become a prime concern since the early stage of human civilization. But in business sector, the origin of

modern cost management system goes back to the nineteen century. The application of management accounting ideas for cost minimization and revenue maximization is a recent development, which can be attributed to the time only after the 1900's industrial revolution. Factory system, mass production, competition and consumerism compelled to think about some new ideas for cost reduction, qualify conformation, and customer satisfaction for survival in cutthroat competition in business. Management accounting was thought of as a sure shot to help in this regard" *(Bajracharya, et.al; 2004:4:8).*

"The period from 1900 to 1950 was the high time in the development of management accounting because ample resources were conducted to evolve new techniques in this discipline during that time. The wide use of management accounting has come into practice recently. Precisely speaking, it has been developed between 1930's and 1960's. A new school of management accounting thinking that has come to be known as the information economic approach extended the user- decision model approach. This new approach viewed management accounting systems as representative's far new information. Recent development in the theory of the firm and of economic equilibrium with private information have led to new insights into the central role of accounting information when designing contracts between owners and managers and between senior managers and subordinate managers. The traditional tools of management accounting like product costing budgeting and performance evaluation have been augmented and updated with contemporary approaches such as activity base costing, customer profitability analysis, value-chain analysis, target costing and strategic cost management" *(Kaplan and Atkinson, 1998:4-10).*

2.1.2 Functions of Management Accounting

The major functions of management accounting are as follows:

The Controllership Function

The controllership functions are discharged by the controller by applying budgetary control techniques, standard costing technique, and internal control technique. Then only evaluation of performance will be possible.

The Stewardship Function

Stewardship function is a traditional approach of accounting that places an obligation on stewards or agents, such as directors to provide relevant and reliable financial information relating to resources over which they have control but which are owned by others, such as shareholders. Stewardship functions follow proper accounting procedures, which satisfy legal and commercial needs but are less rigorous and detailed then the professional practices of management of financial accounting. Not only stewards are responsible for providing information but they must also submit to an audit *(Bajracharya, et.al; 2004:11).*

The Treasurer Ship Function

Treasurer is a financial manager in a staff position that is responsible for managing an organization's relationship with inventors and creditors and maintaining custody of the organization's cash, investments and other assets. Management of capital and investment is distinct area of treasure-ship functions. It consists of major activities like financial planning, dealing with capital and money markets, investment decisions, cash management, credit management and so on. Value maximization of the organization is its prime objectives (*Bajracharya, et.al; 2004:11).*

2.1.3 Objectives of Management Accounting

The main objective of management accounting is to provide relevant economic information to the top-level management to make strategic plans and decisions more competitive. These objectives are listed below:

- Providing information for planning and decision-making
- Budgeting
- Controlling
- Motivating managers and employees
- Measuring the performance
- Assessing the organizations competitive position
- Monitoring

2.1.4 Role of Management Accounting

A business enterprise today operates in a dynamic environment, which involves many new form of management problem. Management has to carry out its basic functions of cost minimization and maximization of profit in an atmosphere of uncertainty. Due to the complex environment the old technique of management by inspection is no longer considered dependable in a situation in which the modern management has realized that even slight error in policy decision may mean either loosing a lot of business opportunities or going out of competition. A second chance may not come or even if it does, it may be costly or risky, it, therefore constantly staves to reduce the risk of mistakes in decision making by keeping a breast of such quantitative information which would help, analyze, its administrative action in order to reach judicious decision management, therefore, constantly staves to reduce the risk of making mistakes by looking for and analyzing relevant information's by means of which it hopes to take judicious decision and direct the administration in better manner *(Shrestha;1997:1).*

Management accounting is concerned with providing both financial and non-financial information that will help decision-makers to make good decisions. An understanding of accounting therefore requires an understanding of the decision-making process and an awareness of the users of accounting *(Drury; 2000:1).*

Management accounting is the process of identifying, measuring, and analyzing, interpreting and communicating information for searching the goals of the company. Managerial accounting is an integral part of the management process and managerial accountants are important strategic partners in the company's management team *(Hilton; 2002:5-6).*

The role of management accounting now is very different from that of a decade ago. In the past it operated in strictly staff capacity but now it serves as internal source of business consultants. In many organizations management accountants take on leadership roles in their teams and are sought out for the ramble information they provide. Therefore, the goal of learning managerial accounting is not to be an accountant, rather of aims to produce confident entrepreneurs and capable managers *(Bajarcharya, et.al; 2004:3).*

Managerial accounting concept emerged because of the complexity that exists in today's business decision making process. The main theme of developing this technique is to support the managers in handling managerial problems and to help in the decision making process.

The whole idea of managerial accounting is to assist strategic managers to perform management functions more effectively by providing relevant economic information. Management is the process of planning, decision making and control. An organization is the common place, where different physical resources, people and activities get managed by the system force. It is an integrative function

directed towards achieving organizational goals. It is the management, which plans, decides, implements and has a control over different activities of the organization *(Bajarcharya, et.al; 2004:4*).

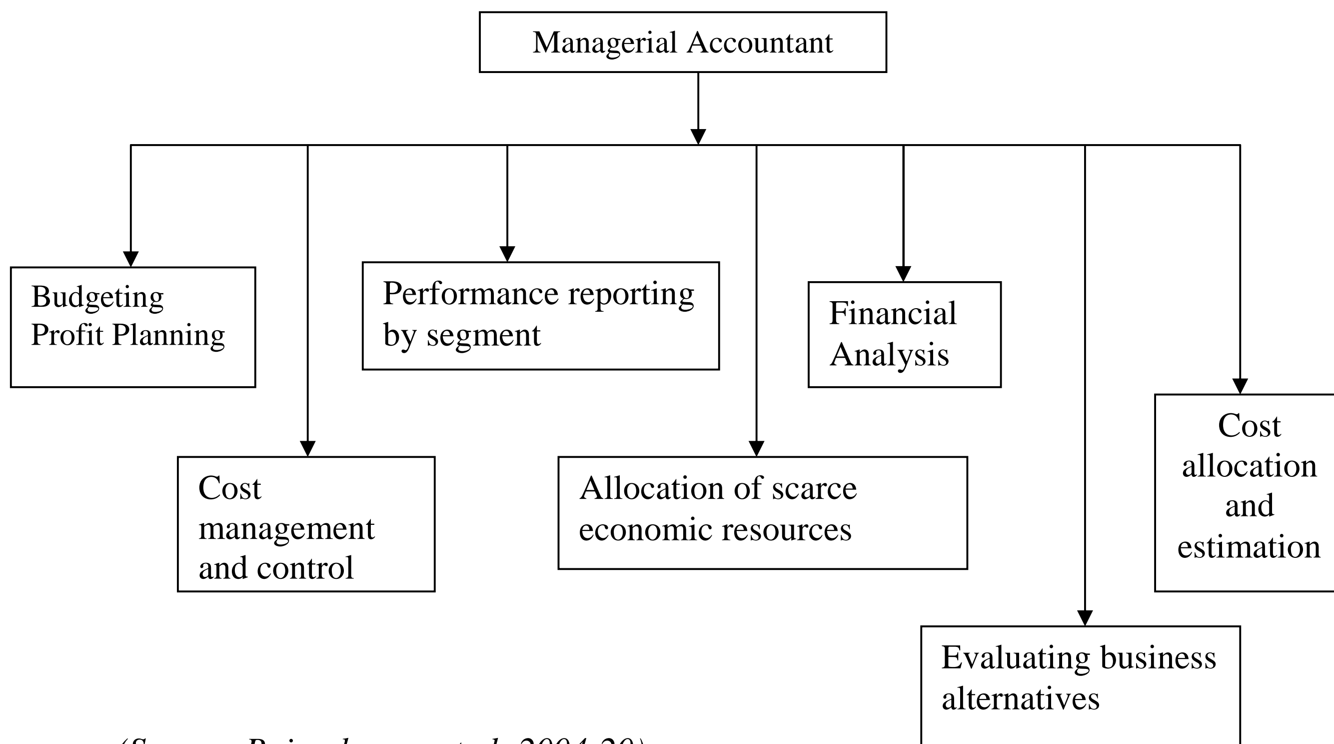
Role of Management Accountant as a Staff Position

Managers who are only indirectly involved in operational activities hold staff positions. Ace institutes staff positions include the advisory board, the public relation manager, and the chief officer among others.

The management accounting in organizational chart plays an advisory role. Therefore, management accounting is a staff function. Main responsibility of the management accountant is to keep economic information and to provide the relevant information to the strategic manager to make the business plans and decisions more economically rational. Therefore, the management accountant plays a key role in planning, decision-making, and cost control. Management accountant acts as a business partner of the firm.

Figure: 2.1

Role of Management Accountant as a Staff Position



(Source: Bajracharya, et.al; 2004:20)

2.1.5 Career Opportunity in Management Accounting

Now a day's organizations are facing lots of problem. Management accounting is not a mandatory function in organization but the assumption is that an organization operated in accordance with the advice of management accountants will add more value to the firm by maximizing profits or by minimizing risks.

A competent managerial accountant can begin his/her career in any of the following fields,

- Profit planning manager in business organization
- Financial analyst and consultant
- Cost-management researcher
- Teacher and trainer

To keep up with the new development is their field managerial accountant often belongs to one or more professional organizations. The largest of these is the institute of management accountants (IMA) in keeping with the importance of their role and the specialized knowledge they must have, management accountants can earn a professional certification in the United States, the IMA administers the certified management accountant (CMA) program. The requirements for becoming a CMA include meaning specified educational requirements and passing the CMA examination *(Hilton; 2000:15).*

2.1.6 Management Accounting in Nepalese Perspective

Nepal being a small landlocked country situated between two large countries with huge and growing economy has been creeping and trying to develop its economy. However due to many problem, such as political instability, security etc the government of Nepal has not achieved success. Due to these problems multinational companies are hesitating to establish their subsidiaries here, many Nepalese companies have been collapsed. Nepalese companies are facing technology problem which is changing rapidly. Even than as the people and the investors have been able to understand the opportunity and the huge market availability in the neighboring countries and throughout the global after the country's entry into the WTO, functions and importance of management accounting has been realized by the business people and companies. So it has almost become mandatory to understand and use management accounting tools to grow and sustain oneself in today's rapidly changing and competitive global market.

Although management accounting is new in Nepal its importance and role has been realized by Nepalese corporations. Thus there is lots of scope of management accounting in Nepalese context.

2.1.7 Background and Meaning of Commercial Banks

Banking activities was run in Italy around the middle of the twelve century and the bank of Venice, founded in 1157 was the public banking institution. Then the bank of Barcelona and the bank of Genoa were established in 1401 and 1407 respectively. These banks run their activities until the end of the eighteenth century. With the expansion of commercial activities in northern Europe there sprang up a number of private banking houses and slowly it spread throughout the world. In Nepal modern banking starts from the establishment of Nepal Bank ltd.

Earlier banks were different from modern commercial banks in many aspects. The bank which were operated in past used to perform both operations of central bank and commercial banking activities like issue of currency, accepting deposits and financing business. But now a day these practices are abandoned. Only central bank can issue currency and commercial banks can accept and mobilize deposit.

The development of banking sector is recent in Nepal. Due to which the development of financial economy is slow here. Involvement of landlords, rich merchants, shopkeepers and other individual moneylender has acted as fence to institutional credit in presence of unorganized market.

Although banking history is not so far but some crude banking operations were in practice even in the ancient times. In the Nepalese chronicle it was recorded that the new era known as Nepal sambat was introduced by Shakhadhar, a Sudra merchant of Kantipur in 879 A.D after having paid all the outstanding debts in the country. Towards the end of 8th century, Gunkam dev had burrowed money to rebuild the Katmandu valley. In 11th century, during Malla regime there was an evidence of professional moneylenders and bankers. It is further believed that money lending business, particularly for financing the foreign trade with Tibet,

became quite popular during reign of Mallas. However in the absence of regulatory measures, the unscrupulous moneylenders were known to have charged exorbitant rates of interest and other extra dues on loans advanced.

The commercial bank of Nepal, Nepal bank limited (NBL) was established in 1937 under Nepal bank act, 1937. Before the establishment of NBL a government financial institution called Tejarath operated in the country. It used to extend credit to the people but it didn't accept deposits from them. With the establishment of NBL, Tejarath was abolished and inconveniences caused by the absence of formal banking sector were finally removed. Then Rastriya Banijya Bank (RBB) was established as second commercial bank which plays a major role in the economy. These two banks have played great role in the development of economy due to which they are still in existence.

As per commercial bank act 1974 "A commercial bank means bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transaction." Commercial banks are the major component in the financial system. Commercial banks are playing important role in the development of economy by working s intermediary between depositors and lenders. It has played important role in industrial development. It utilizes the fund scattered in the economy and mobilizes them to the productive sector.

Principally speaking a commercial bank accepts deposits and provides loans primarily to business firms there by facilitating the transfer of funds in the economy *(Abrol and Gupta; 1987:01).*

A commercial bank is a dealer, which deals with money as well as the substitutes for money such as cheques and bills of exchange. It also provides variety of financial services *(American Institute of Banking).*

The main objective of commercial banks is to collect funds, mobilizing them into productive sector and causing an overall economic development. A sound banking system is important because of the key roles it plays in the economy. Intermediation, maturity transformation, facilitating payment flows, credit allocation and maintaining financial discipline among burrowers, banks are the gathers of saving, the allocators of resources and providers of liquidity and payment services.

The banking sector in Nepal started with the establishment of Nepal bank limited. Today there are 27 commercial banks in operation. These commercial banks are categorized into two types in Nepal, public sector and private sector. Public sector banks are NBL and RBB. Private sector compromises the others 25 banks including 7 joint venture banks.

2.1.8 Joint Venture Banks of Nepal

Before the establishment of joint venture banks, there were few banks operating in Nepal. After the establishment of Nepal Bank Ltd in 1937 A.D, Nepal industrial development centre (NIDC) in 1957, Employees provident fund in 1963, Rastriya Banijya Bank in 1964, Agricultural development bank in 1968, Nepal national insurance corporation in 1968 and small industries development corporation (SIDC) in 1971.

The government of Nepal made the policy to open the market for joint venture banks. Then from the time the number of JVB’S is performing in Nepal. After the establishment of JVB’S competition, efficiency and modernization to provide prompt service to customer is improving.

All the Nepalese JVB’S have been established and operated under the rules, regulation and guidance of central bank, Nepal Rastra Bank (NRB). These banks are formed under the company Act 2021 B.S operated under the Banijya Bank Act 2031 B.S.

Because of the new commercial banks act and liberalization policy of 1980, there are operating 6 joint venture banks in Nepal. They have been established with a view to encourage efficient banking service to increase foreign investment in Nepal and to bring healthy competition.

NABIL bank ltd was the first joint venture bank in the country. The bank was established in 1984 and operated on July 12, 1984 sharing 50% from Dubai bank ltd, which was registered in United Arab Emirates, sharing by 20% from financial institution of Nepal and sharing by 30% from general people.

Similarly the second bank established in joint investment was the Standard Chartered bank ltd. The bank was originally established as a joint venture of Grid lays bank PLC and Nepal bank ltd in 2043(1986) with the shareholder ratio of ANZ Grind lays bank limited 50%, Nepal bank limited 33.34% & general public 16.66%. Alory with the change of ownership to Standard Chartered, the banking area of SCBNL saw the rise of a new dawn changing the general image of the bank with this acquisition, Standard Chartered bank how owns 50% shares of Nepal Grind Lays bank limited(NGBL) previously owned by ANG Grind Lays.

Himalayan Bank limited (HBL) is the third joint venture bank established in 1992. It is established to maintain the economic welfare of the general people to facilitate loan for agriculture, industry and commerce to provide the banking services to the country and the people. It has been financed by founder shareholders (A class) sharing 51%, Habib bank of Pakistan 20%, Karmachari

Sanchaya Kosh 14% and public 15%. The bank has RS 120 million authorized and RS 60 million issued capital. It is the first JVB having domestic ownership more than 50%.

Fourth JVB established in 1993 is Nepal SBI Bank limited, which is the first Nepal-India joint venture in the financial sector. Three institutional promoters, namely, State bank of India, Karmachari Sanchaya Kosh and Agricultural Development Bank are the main sponsor. The main objective of NSBIBL are to play an important role in facilitating growing Indo-Nepal trade, to provide a whole range of banking services of international standard and to effectively participate in the process of economic development of Nepal.

Fifth JVB Nepal Bangladesh Bank limited is another joint venture bank in Nepal. It started its operation on June6, 1994. The bank established with the joint collaboration of International Finance Investment and Commerce Bank Ltd (IFIC) of Bangladesh has Rs 240 Million authorized and 60 million paid up capitals. IFIC 50%, Nepalese promoters 20% and 30% by general public.

Another joint venture bank Everest Bank limited started its operation from October 18, 1994. The total paid-up capital was Rs 60 million, 50% share is held by the promoters, 20% share by the Punjab National Bank of India and rest 30% share by the general public.

Nepal Bank of Ceylon is another joint venture which started its operation from October 14, 1996. The bank established with the joint collaboration of bank of Ceylon (Srilanka) has Rs 500 million paid up capital, 40% share by Bank of Ceylon and the rest 55% by the public. Srilankan investors have sold their shares to the NB group of Nepal and its name has been change to Nepal Credit and Commerce Bank.

Another bank established in joint investment was the Nepal Indosuez bank limited. It was established in 2042(1985). But now its name is Nepal Investment Bank Limited. It has played great role in the development of banking system. At present there is no foreign investment on it. All shares are owned by the Nepalese shareholders.

Bank of Kathmandu Limited began its operation since March 12, 1995. The bank was established with the joint collaboration of SIAM Commercial bank PCl, Thailand. It has paid up capital of Rs 90 million, of this 45% share is held by the Nepalese promoter, 30% by the collaborating bank and the rest 25% by the general public. But later the collaborating bank sold their share to Nepalese promoter and fully owned by Nepalese investors.

Another bank established in joint investment was NMB bank limited. It was established in 2065 BS. The bank was established with the joint collaboration of Young Lien Reality SDNBHD, Malaysia. It has paid up capital of Rs 1000 million.

2.1.9 Contribution of Banking Sector in Economic Development of Nepal

Nepal is a least developed land-locked country. It is a mountainous country. About 83% of the total land area of 147181 Sq.km is covered by rugged hills and mountains. Nepal has a late start in development. Service is getting important in Nepal's economic environment. They contribute more than 40% in Nepal's gross domestic product (GDP) *(Agrawal; 2005: 163).*

Financial institutions are an important source of employment in Nepal; more than 75000 persons are employed in this sector representing 0.8% of economically active population.

The total assets/liabilities of commercial banks in the first 9 months of 2008/2009 went up by 24.9% in comparison to previous year increment 11.1% (report of NRB). The responsible factors for the higher growth in total assets/liabilities are due to increase in number of commercial banks and due to increase in credit flow of commercial banks.

Based on the first month's data of 2009/10 by NRB, deposit mobilization of commercial banks increased by Rs 5.0 billion in the first month of 2009/10 amounting to Rs 554.8 billion. Deposit mobilization of commercial banks had increased by Rs. 12.5 billion in the corresponding period of the previous year. Similarly, credit to the private sector expanded by 0.9 percent (Rs 3.5 billion) in the review period as against an increase of 2.2 % (Rs. 6.7 billion) during the same period in the previous year.

The review period witnessed a lower growth of private sector credit from commercial banks compared to that of the previous year. In the review period, credit to the private sector from commercial banks expanded by 17.9% compared to a growth of 19.9% in the corresponding period of the previous year of the credit disbursed to the private sector, the growth of credit to production, construction, metal production, machinery and electrical tools, transportation, communication and public services, wholesale and retail business and service sectors declined in the review period. Credit to the production and construction sector increased by 14% and 27.2% in the review period compared to an increase of 17.6 and 43.9% in the corresponding period of the previous year. Likewise, credit to wholesale and retail business and service sector increased by 14% and 4.3% respectively compared to an increase by 14.8 and 14.7% in the previous year. The credit growth to the real sector also declined in the review period. However, consumable loan increased by 33.3% (Rs 3.2 billion) in the review period (Current Macro Economic Situation, NRB 2008/09).

2.1.10 A Brief Review of Management Accounting Tools

"Management accounting refers to accounting information developed for managers with in an organization in other words; management accounting is the process of identifying, measuring, accumulating, analyzing, preparing, interpreting and communicating information that helps managers fulfill organizational objectives" *(Hongren; 2002:5).* The main management accounting tools are cost classification and cost estimation, cost allocation, product/service costing method, cost-volume profit analysis, budgeting for planning and control, management control systems and responsibility accounting, standard costing: control of direct material and direct labor cost, flexible budgeting and overhead cost control, decision regarding alternatives in business operation, pricing decisions of product/service, long term investment decisions and management use of financial statement analysis.

2.1.11 Cost Classification and Cost Estimation

The term cost is a frequently used word that reflects a monetary measure of the resources sacrificed or forgone to achieve a specific objective, such as acquiring a good or service. However, the term must be defined more precisely before "the cost" can be determined. You will find that word cost is rarely used without a preceding adjective to specify the type of cost being considered *(Drury; 2000:96-120).*

Payment means giving money while acquiring something. Payment is expenses, expenditure or cost. For example a manufacturing firm pays money for labor, materials, electricity, rent, repair and so on.

Classification means to put an item or thing under a certain category. Likewise cost classification is the process of grouping cost according to their common

characteristics. The same cost is grouped in different heading depending upon the purpose to be achieved and requirements of particular concern.

Take an example of depreciation expenses; this is the amortization of a fixed asset for the wear and tear owing to the use during a period. It is a non-cash expense. But is it variable or fixed? Avoidable or unavoidable? Relevant or irrvalant? The answer is not definite. It depends on the purpose, methods, nature and so on. So it is noted that the same elements of cost could be of varied category depending upon the purpose.

A manager of a profit-planning department should have and in-depth knowledge regarding the nature of casts that lie on each category, otherwise planning and control of cost is not possible *(Bajracharya, et.al; 2004:43-44).*

Cost classification is the process of grouping costs according to their common characteristics. The same cost figure some time can be classified according to different ways of costing depending upon the purpose to be achieved and requirements of particular concern *(Jain & Narang; 1992:1.48).*

The costs can be classified different way for different purpose. The major classifications are: *(Singh, et.al; 2004:2.24).*

1. Classification according to the element of costs.
    a. Prime costs: Direct material: Direct labor: Direct expenses
    b. Overhead costs: Indirect Material: Indirect Labor: Indirect expenses
2. Classification according to the functions of costs.
    a. Manufacturing costs
    b. Administrative costs
    c. Marketing or selling costs

3. Classification according to the behavior of costs.
    a. Variable costs
    b. Fixed costs
    c. semi variable costs (Mixed)
4. Classification of costs for decision-making.
    a. Relevant costs
    b. Irrelevant costs
5. Classification of costs can be as:
    a. Avoidable costs
    b. Unavoidable costs
6. Costs can be classified as:
    a. Out of pocket costs
    b. opportunity costs
    c. Sunk costs
7. Differential costs are:
    a. Incremental costs
    b. Detrimental costs
8. Classification of costs for control
    a. Controllable costs
    b. Non-controllable costs
9. Costs can classified as
    a. Product costs
    b. Period costs

Managers of profit planning should have an in-depth knowledge regarding the nature of cost and category in which category it lies. Otherwise planning and controlling of cost is impossible.

2.1.12 Cost Estimation for Planning and Decision Making

One measure area of management for profit planning is cost estimation. Cost estimation is the process of determining how a particular cost behaves. It is the process of determining the cost for certain level of output. It helps to predications of future cost at present on the basis of relevant information. It is the prime step for planning, decision-making and control with a wide range of application in management accounting.

Method for Cost as well as Revenue Estimation

- Visual fit method (scatter diagram)
- High low point method
- Engineering estimate method
- Accounting estimate method
- Statistical estimate method (*Hilton; 1997:320)*

2.1.13 Cost Allocation

Cost allocation is the process of assigning costs when a direct measure does not exist for the quality of resources consumed by a particular cost object. Cost allocations involve the use of some apportionment bases rather than direct measures.

Assignment of direct costs remains similar under any of the allocation system except the cases of joint products. Therefore the term 'cost allocation' in other than the joint product, directly implies the indirect or overhead costs. Cost allocation, then, may be defined as the distribution of indirect or overhead costs to cost centers and the cost objects in a most appropriate basis.

Method of Allocation

1. Primary Allocation

In the first stage each element of overheads is assigned to cost enters in some appropriate basis. These cost centers comprise of the production departments and the service departments.

2. Secondary Allocation

The second step is to reallocate the costs assigned to service departments to production department. Service departments are those departments that exist to provide services of various kinds to other units within the organization.

Three Methods of Reallocating the Costs of Service Departments are:

1. Direct Allocation Method

The direct allocation method (often called the direct method) is the most widely used method of allocating support department costs. The benefit of the direct method is its simplicity. There is no need to predict the usage of support department services by other support departments.

2. Step-down Allocation Method

Some organizations use the step-down allocation method, which allows for partial recognition of the services rendered by support departments to other support departments. This method requires the support departments to be ranked in the order the step-down allocation is to be proceeding. Different sequences will result in different allocations of support department cost to operating departments. A popular step-down sequence begins with the support department that renders the highest percentage of its total services to other support departments.

3. Reciprocal Allocation Method

The reciprocal allocation method allocates costs by explicitly including the mutual services provided among all support departments. Conceptually, the direct method and the step-down method are less accurate than the reciprocal method when support departments provide services to one another reciprocally.

2.1.14 Product/Service Costing Method

Finished and semi-finished products in the firm need a time and fair valuation for the purpose of profit determination in business. Value of the output is known as the inventorial product cost. This inventorial product cost becomes an asset in the balance sheet when the outputs are manufactured and these become expenses in income statement when the outputs are sold. Therefore, the system of product cost determination affects the size of asset and the size of income both. Two popular methods for product costing are absorption costing and variable costing. These are the tools or techniques of product costing.

1. Variable-Costing Method

Variable costing is more accurately perceived as direct costing or marginal costing as it applies only the variable production cost to the product variable costing approach also known as contribution approach. Variable costing system treats fixed manufacturing overhead (fixed factory overhead) as a period cost to be immediately charged against sales-not as a product cost to be counted as inventory and charged against sales as cost of good sold when the inventory is sold more that the only difference between variable and absorption costing is the accounting for fixed manufacturing overhead. Variable costing is sometimes called direct costing. However variable costing is a more descriptive term, so we will use if exclusively in this text *(Horngren, et.al; 2004:598).*

Variable costing is that method of inventories costing in which all variable manufacturing costs are included as inventorial costs. All fixed manufacturing cost

is excluded from inventor able costs. They are instead treated as costs of period in which they are incurred. Variable costing is a method of recording and reporting costs, which regards as product costs only those manufacturing costs, which tend to vary directly with the volume of activity.

2. Absorption Costing

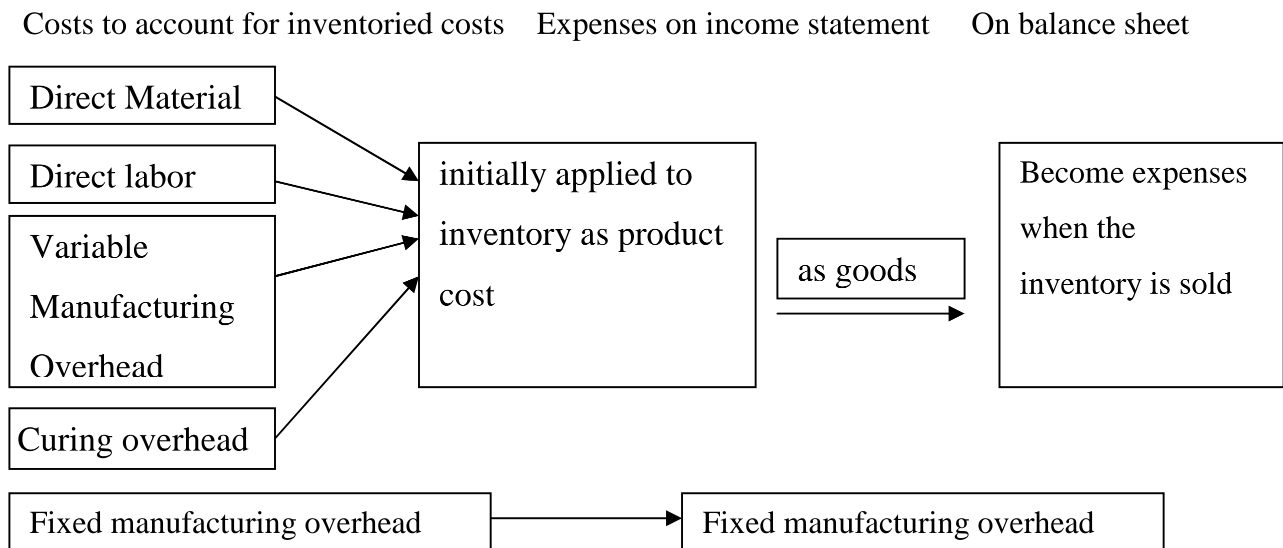
Absorption costing is also known as full costing, since all types of manufacturing costs are included as product costs. Absorption costing assumes that fixed along with the variable cost constitutes the product cost. It absorbs all costs necessary for production. It considers fixed manufacturing overheads as a part of product cost *(Horngren, et.al; 2004).*

Comparison of Flow Costs

a) **Variable Costing**

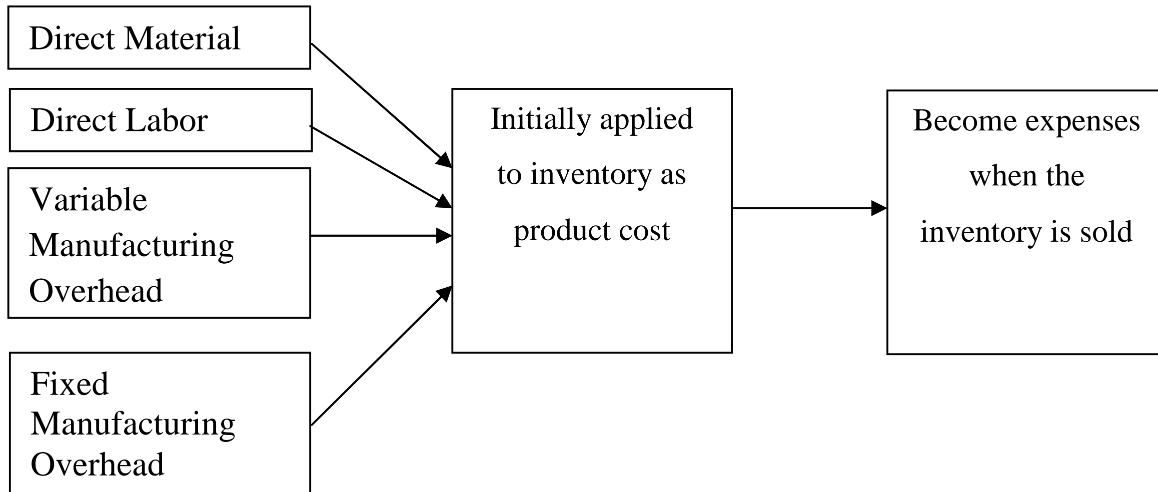
Figure 2.2

Variable Costing



b) **Absorption Costing**

Cost to Account for Inventoried Costs Expenses on Income Statement On Balance Sheet



(Source: Horngren; 2004:299)

2.1.15 Cost-Volume-Profit Analysis

Managers often classify costs as fixed or variable while making decisions. The managers want to know such decisions will affect costs and revenues. Many factors affect the cost. Yet a useful starting point in their decision process is to specify the relationship between the volume of output and cost and revenues.

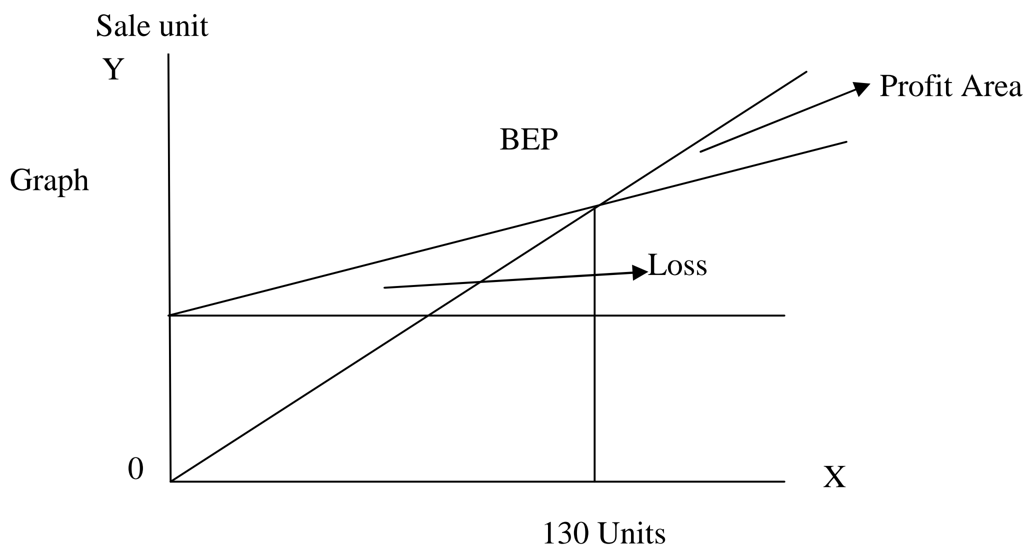
The managers of profit-seeking organizations usually study the effects of output, volume of revenue (Sales), expense(cost) and net income (net profit).This study is commonly called cost-volume-profit(CVP) analysis. The managers of non profit organizations also benefit from the study of CVP relationship, why? No organization has unlimited resources, and knowledge of how costs fluctuate as volume changes help managers to understand how to control costs *(Horngren; et.al; 2004:470).*

CVP analysis is such a tool which shows the relationship between the elements of profit planning. Profit planning is the function of selling price of product, demand, variable costs, fixed costs, faxes etc. A popular technique to study cost-volume profit relationship is break-even analysis. It is concerned with the study of revenues and costs in relation to sales at which the firm's revenue and total costs will be exactly equal or the net income will be zero.

Break-even analysis is a 'No profit no loss' situation. This point is a corner stone of profit planning. This can be explained through cost-volume-profit graph as follows.

Figure 2.3

Cost-Volume-Profit Analysis



CVP analysis is a supplementary tool of profit planning, it tells many things about the relationship between the business variables. Total variable costs are proportionate to the sales volume; where as the total fixed costs remain unchanged within the relevant range of output levels. One can assess the profit at forecasted sales volume by knowing that net incomes are not in proportion to sales.

Contribution margin means sales revenue minus variable costs. After covering variable expenses contribution margin is used to cover fixed expenses, and then whatever remains goes toward profit. If the CM is not sufficient to cover fixed expenses, then loss will occur for that period.

BEP analysis is a branch of cost volume profit concept. Yet it is an important branch because the planner can know many things from this. Profit planning of each firm begins with BEP analysis. Up to the breakeven point sales volume, firm earns nothing, there is no profit no loss situation, but after the BEP, each unit sold contributes towards profit. Beyond BEP, fixed cost does not increase. Therefore each unit sold beyond BEP gives profit equal to CMPU.

The margin of safety (MOS) is the excess of budgeted (or actual) sales over the break even sales volume. It states the amount by which sales can be drop, before losses begin to incur in an organization. MOS indicates how safe the future of firm is. Higher the MOS ratio, safer is the firm. For example, 25% MOS ratio of a firm states that the sales can be drop by 25% of the budgeted sales for next year before the loss begin to incur.

2.1.16 Budgeting for Planning and Control

A budget is a detailed plan expressed in quantitative terms that specifies how resources will be acquired and used during a specific period of time. The procedures used to develop a budget constitute a budgeting system *(Hilton; 2000:74).*

Planning is a primary function of the management process. Planning is the process of setting goals and objectives and translating them into activities and resources required for the accomplishment within a specified time horizon. A budget is a quantitative expansion of a plan of action and an aid to co-ordination and control.

Budgets may be formulated for the organization as a whole or for a subunit. Budgets, basically, are furcated financial statements-formal expression of managerial plans. They are targets that encompass all phases of operations including sates, production, purchasing, and manpower & financing. The annual budgets may be broken down into months, weeks and days of operation *(Bajracharya, et.al; 2005: 403).*

So, forecasting, planning and budgeting are often the most focused things in the mind of an entrepreneur struggling to keep his company going. Planning is the process of developing, enterprise objectives and selecting future courses of action to accomplish them. Planning mean establishing enterprise objectives, selecting a course of action to accomplish the objectives, initiating activities necessary to translate plans into action and re-planning to correct current deficiencies.

2.1.16.1 The Budgeting Process

Every business firm wants to maximize profit. But there are no magic formulas of boosting the figure of profit overnight. Budgeting, if followed properly, can increase the chances of making profits with in the given environment. A systematic budgeting should encompass the following procedures.

1. Evaluating the business environment
2. Setting objectives
3. Setting specific goals
4. Identify potential strategies
   - Market penetration
   - Market development
   - Product development
5. Communicating the planning guidelines
6. Developing the long term and short term plans
7. Implementation of budgets

8. Periodic performance reporting and follow up.

2.1.16.2 Elements of Budget

The essential elements of budgets are:

- **Plan**

The first ingredient of a budget is its plan. A plan is an expansion partly of what the management expects to happen and partly of what the management intends to happen *(Fregmen; 1976:157).*

- **Operations and Resource**

A budget is a mechanism to plan for the firm's operations and resources. The operations are reflected in revenues and expenses. The planning of the various assets and the sources of capital to finance these assets *(Khan & Jain; 1993:57).*

- **Financial Terms**

Budgets are prepared in financial terms i.e. in terms of monetary value such as the rupee, dollar and so on it is because monetary unit is a common denominator *(Welsch; 1992:84).*

- **Specified Future Period**

A budget relates to a specified period time, usually one year. If it is not relating time horizon, it is will be meaning less. Planning merely for a given amount will not constitute a budget unless a time dimension is added *(Welsch; 1992).*

- **Comprehensiveness**

A budget is comprehensive. It includes all the activities and operations of an organization. It covers the organization as a whole and not only some segment and these are integrated into an overall budget for the entire organization. The overall budget is referred as master budget *(Garrison; 1985:303).*

- **Co-ordination**

Budgets are prepared for the different components, segments, divisions, facts, activities of an organization so as to take care of the situation and problems of each component. The budget for each of the components is prepared in harmony with each another. This is called co-ordination *(Copeland and Dascher; 1978:35).*

2.1.16.3 The Master Budget: A Network of Inter-relationship

A complete set of financial plan for a business firm is often called the master budget. The master budget is compilation of all functional budgets. It consists of many functional budgets including sales budget, production budget, direct material budget, raw material purchase budget, direct labor budget, direct labor hour budget, manufacturing overhead budget, selling and distribution expenses budget, administrative expenses budget, cost of goods sold budget, cash budget pro-forma income statement, pro-forma balance sheet. The budgeted profit and loss account and balance sheet provide the overall picture of the planned performance for the budget period. A master budget normally covers three areas: operational sectors budget, cash budget and budgeted financial statements.

1. Operating Budget

Operating budget relates to the physical activities/operations of a firm such as sales, production, purchasing, debtors collection and creditors payment schedule. In specific term an operating budget has the following term.

2. Sales Budget

Sales budget is the starting point in the preparation of the comprehensive master budget. All the other plans and budgets are dependent upon the sales budget. The budget is usually presented both in units and dollars of the sales revenue or sales volumes. The preparation of a sales budget is based upon the sales forecast. A

variety of methods are used to forecast the sales for the planning period *(Bajracharya, et.al; 2005: 363).*

3. Production Budget

Production planning is the second step of budgeting. Production budget is concern with determining the quantity of the product to be produced and unit of time production budget is prepared to coordinate the sales budget and inventory policy of organization. Production on budget can be expressed in following formula.

Production Unit = Planned Sales + Closing Stock – Opening Stock

4. Direct Material Budget

After production budget have been computed, a direct material budget should be prepared to show the materials that will be required in the production process. Sufficient raw materials will have to be available to meet production needs and to provide for the desired ending raw material inventory. But there may be some inventory in the organization as beginning inventory. The remainders necessary for the organization have to be purchased from a supplier. This budget specifies the planned quantities of each material by time, by product and by using responsibility.

Planned Material Consumption = Planned Production Units × Standard Raw Material Usage Per Unit of Output

5. Material Purchase Budget

Purchase budget is the process of determining the quantity of raw materials and to be purchase to meet materials consumption and inventory. In other words, purchase budget determines the quantity and price of materials that should be purchased to meet the raw materials for production and inventory level for

seasonal variation. It can be expressed in equation of follows *(Gyawali, et.al; 2065:5.5).*

Material Purchase Budget = Material Usages + Closing Store of Raw Materials – Opening Stock of Raw Materials

6. Labor Budget

Effective planning and control of labor cost are essential ingredients in an overall program of profit planning and control. Labor cost includes all expenditure for employees, from top executives to down unskilled laborers. Direct labor costs include the wages paid to employees who work directly on the company's product, while indirect labor costs refer to the costs of other employees who do not work directly on the product. In budgeting direct labor costs, it is necessary to estimate both the quantity of labor that will be required and the rate that will be paid per hour for the various classes of labor (*Welsch, et.al;, 2000:289).*

7. Direct Labor Hour Budget

Total DLH Required = Planned Production × Standard Time Required Per Unit of Output

No of Labors = Total Labor Hours Required/ Working Hours Per Person Per Month

Total Direct Labor Cost = Total Direct Labor Hours Needed ×Wage Rate Per Hour

8. Manufacturing Overhead Budget

Manufacturing overheads are the part of the total production cost, which is not directly identifiable with specific products or jobs. The manufacturing overhead budget provides a schedule of all costs of production other than direct material and direct labor. These costs should be broken down by cost behavior for budgeting purpose and predetermined overhead rate. This rate will be used to apply

manufacturing overheads to the units of production through the budget period. Overhead may be variable or fixed. Both costs should be considered as a part of manufacturing cost *(Bajracharya, et.al; 2004:374).*

9. Selling, Distribution, Administrative Expenses Budget

This budget includes both administrative as well as selling and distribution expenses. As per the nature of expenses, separate budget should be prepared. The budget of all these expenses can be prepared jointly or severally by various persons having different responsibility of cost center.

10. Cost of Goods Sold Budget

The cost of goods sold is the marking cost of sold units. Cost of goods sold budget is to be prepared after completion of the cost of goods manufactured budget. This budget determines the manufacturing cost of the sales quantity. It includes direct material, direct labor and manufacturing overhead, cost of sold units of goods by time and product *(Gyawali, et.al; 2003:5.7).*

11. Cash Budget

Cash budget is a most significant device for planning and control of cash. The cash budget is a plan of future cash receipts and payments. In other word, a summary statement of the firms expected cash inflows and outflows over the projected time period is known as cash budget. The forecast of cash flow is made on the basis of past behavior of cash flows as modified and adjusted to likely changes during the coming period. This information helps the manager to determine the future cash needs of the firm, plan for the financing of these needs and exercise, control over the cash and liquidity of the firm *(Sharma; 2002:264).*

A cash budget shows the planned cash inflow, outflows and ending position by interim periods for a specific time span. Most companies should develop both long

term and short term plans about their cash flows. A cash budget, basically includes two parts,

- The planned cash receipts
- The planned cash disbursements.

Planning cash inflows and outflows gives the planned beginning and ending cash position for the budget period. Planning the cash inflows and outflows will include 1) the need for financing probable cash deficits or 2) the need for investment planning to put excess cash to profitable use.

The primary purpose of the cash budget is to; *(Welsch, et.al; 2000:434)*

- Give the probable cash position at the end of each period as a result of planned operations
- Identify cash excess or shortages by time period
- Establishing the need for financing and/ or the availability of idle cash for investment
- Co-ordinate cash with a) total working capital, b) sales revenue, c) expenses, d) investments and , e) liabilities
- Establish a sound basis for continuous monitoring of the cash position.

12. Pro-forma Income Statement

Planned income statement is concerned with determining the total income of the planned period. It is to be prepared under accrual basis rather then cash basis on the basis of other preceding budget

Planned income statement is concerned with determining the total income of the planned period. It is to be prepaid under accrual basis rather that cash basis of other preceding budgets *(Gyawali, et.al; 2006:5.8).*

13. Budgeted Balance Sheet

The projected balance sheet is a statement of assets and liabilities prepared after the preparation of functional and financial budgets. It is based on functional budgets, cash budget, projected income statement and the previous year's assets and liabilities. It can be prepared either in horizontal or vertical format *(Munakarmi; 2002: 234).* The balance sheet is the final document in the master budget and even financial record keeping. It shows the final or ending balances of all the account titles.

2.1.16.4 Zero Based Budgeting

"Under zero bases budgeting, the budget for virtually every activity in the organization is initially set to zero. To receive funding during the budgeting process, each activity must be justified in terms of its continued usefulness. The zero base budgeting approach forces management to rethink each phase of an organization's operations before allocating *(Hilton; 1997:427).*

Zero-base budgeting has received great attention recently as a new approach to the budget process. It is a method of budgeting in which manager are required to start from zero level every year and to justify all costs as if the programs involved were being initiated for the first time. By this, it means that no costs are viewed as being ongoing in nature: The manger must start at the ground level each year and present justification for all costs in the proposed budget, regardless of the type of cost involve. This is done in a series of "decision packages" in which manager rank all the activities in the department according to relative importance, going form essential to least importance. Presumably, this allows top management to evaluate each decision package independently and to pare back in those areas that appear less critical or that do not appear to be justified in terms of the cost involved. So, it is also known as priority based budget *(Goet, et.al; 2005:14:1).*

2.1.16.5 Activity-Based Budgeting

Widely practiced method of allocating overhead cost is traditional costing method and activity based costing (ABC). Traditional costing relies on arbitrary cost allocation and allocate indirect cost object using single overhead rate. It tends to over cost high volume and under cost low volume products. Activity based budgeting has been evolved to overcome many draw backs of traditional costing. It uses cause and effect cost allocation and multi bases. In the words of T.Lucy, "ABC seeks not only to allocate to product cost on a more realistic basis than simple production volume but also attempts to show relationship between overhead costs and activities that cause them."

Under the ABC system, the activity-cost pools are allocated to products on the basis of activity cost drivers. Activity cost drivers form the cost allocation base, which is chosen so that there is cause and effect relationship between it and the costs, in the activity cost pool. Therefore, identification of cost allocation base or the cost driver for each activity is the most crucial and determining stage in the ABC system. A rate per unit is calculated for each cost driver. Indirect costs are allocated to products on the ratio of the total quantity of the cost driver for each activity used by the product *(Bajracharya; 2004:107).*

Four key steps in activity-based budgeting are:

- Determine the budgeted costs of performing each unit of activity at each activity area.
- Determine the demand for each individual activity based on the budgeted production.
- Compute the costs of performing each activity
- Describe that budget as the costs of performing various activities.

ABB involves the following stages:

- Estimate the production and sales volume by individual products and customer.
- Estimate the demand for organizational activities.
- Determine the resources that are required to perform organizational activities.
- Estimate for each resource the quantity that must be supplied to meet the demand.

2.1.17 Management Control Systems and Responsibility Accounting

2.1.17.1 Management Accounting Control System

Management consists of the basic functions of planning, decision making and control. Control is the function of management that ensures the proper implementation of plans and policies to achieve to organizational objective. Management control systems focus on motivating managers for the sake of enhancing total profitability of the organization.

Control involves the process of establishing results and performance targets, measuring performance and providing rewards or punishments based on an employee's ability to achieve the performance targets. A management control system is a logical integration of techniques to gather and use information to make planning and control decisions, to motivate employee behavior, and to evaluate performance. The purpose of a management control system is;

- To clearly communicate the organizations goals
- To ensure that managers and employees understand the specific actions required of them to achieve organizational goals.
- To communicate results of actions across the organization and
- To ensure that the management control system adjusts to changes in the environment *(Horngren et.al; 2004).*

2.1.17.2 Responsibility Accounting

In today's complex and dynamic world, all organization can not be managed and controlled centrally. Decentralization is the must. Responsibility accounting is a form and process of decentralization. Whole organization is divided into smaller units: division, segments, department, branches, product line etc. Every unit is controlled and managed by responsible person, manager. Authority and responsibility are delegated to the respective manager making him/her accountable. The manager should report the performance of the unit to the top management.

Responsibility accounting refers to the various concepts and tools used by managerial accountants to measure the performance of people and departments in order to ensure the achievements of the goals set by top management *(Bajracharya & et.al; 2004:459).*

Traditionally responsibility accounting refers only to financial performance (cost, revenue and profit) of subunits. But now days it measures overall performance of the unit.

Process of responsibility accounting:

1. Identifying the responsibility centers
2. Delegation of authority and responsibility or decentralization
3. Controllability of the object
4. Establishing performance evaluation criteria.

2.1.18 Standard Costing Control of Direct Material and Direct Labor Cost

Standard costing is a system before starting the production and then comparing this with the actual cost of the job after completing the production. The difference between the predetermined or standard costs and the actual costs is termed 'the

variance.' Standard costing is the process of the preparation and use of standard cost, their comparison with actual costs and the analysis of variance to their causes and points of incidence. A standard cost is measure of acceptable performance, established by management as a guide to certain economic decisions *(Bajracharya, et.al; 2005:545).*

Standard cost is a predetermined cost, which is calculated from management's standards of efficient operation and the relevant necessary expenditure. It may be used as a basis for price fixing and for cost control through variable analysis. (CIMA) standard is a pce determined set of objects based on usual, normal ideal of technical parameters. A standard is always futuristic. Standard costing is the process of the preparation and the use of standard costs, their comparison with actual costs and the analysis of variance to their causes and points of incidence. (CIMA)

Standard costing is a system before starting the production and then comparing this worth the actual costs of the job after completing the production, the difference between the predetermined or standard costs and the actual costs is termed ' the variance'.

Standard costing is a management accounting tool for management control. Controlling is the process of comparing actual results with the planned objectives and determining where adjustment should be made. The management control process encompasses the following steps.

1. Setting Standards

The first step in management control process is to set performance standards. Especially in cost control, the estimated cost to manufacture a single unit of product or to perform a service is called the standard cost. Standards are

establishes for each component of product cost covering the material, labor and overhead elements. Developing standard cost means identifying the types of material and labor to be used in their related quantities and prices. Developing standards for overheads requires that the costs be appropriately classified as variable and fixed in appropriate allocation bases, and a reasonable level of capacity.

2. Actual Performance Measurement

After setting the costs standards, the actual result of material, labor and overhead costs of a batch of production are collected. Information is most important for actual performance measurement. Such information is available with the related cost centre.

3. Variance Analysis

Variance analysis is a task of comparing the actual performance with the predetermined performance standards to determine how well the targets have been met. Variance is the deviations or the differences between what should be (the standard) and what has happened (the actual). If actual performance meets the standards, the achievement is considered good, if it didn't meet the standard, then the performance is poor. The difference between standard cost and actual cost is called variable.

Variance = Actual Costs – Standard Costs

4. Compute Variances for Each Reason

For example, the material cost variance might be arising due to more or less quantity consumed and due to more or fewer prices paid. It might also arise if the ratio of mixture is changed.

5. Point out the Reason of Variances

Variance might be arising due to the controllable factors. The internal reasons can control by the respective responsibility centre. Variances might also arise due to the uncontrollable factors such as the market factors.

6. Corrective Action

If a deviation between the actual performance and the standard performance is significant, understanding the causes is crucial to determine whether it should be changed or some other remedy should be attempted. One main occupation of standard costing system is to measure the performance of different cost centers. Though the past is not much relevant as if has already passed. The purpose of corrective action is to ensure that the past mistakes will not be repeated in future.

The following management functions would be quite tough or just subjective in the absence of standard data. *(Bajracharya, et.al; 2004:504)*

- Budgeting
- Economic decisions
- Pricing Decisions
- Cost control

2.1.19 Flexible Budgeting

A flexible budget is a set of alternative budgets for different expected levels of activities. I.e. Production and sales on the cost-volume profit relationship. It can be used to evaluate the efficiency of a department through out the business activity differs from the management's original estimates *(Singh, et.al; 2004:19.3).*

In contrast to the performance report based only on comparing the master budget to actual results, a more helpful benchmark for analysis is the flexible budget. A flexible budget (Sometimes called variable budget) is a budget that adjusts for

changes in sales volume and other cost driver activities. The flexible budget is identical to the master budget in format, but managers may prepare it for many level of activity. For performance evaluation, the flexible budget would be prepared at the actual levels of activity achieved. In contrast, the master budget is kept fixed or static to serve as the primary benchmark for evaluating performance. It shows revenues and costs at only the originally planned levels of activity *(Horngren, et.al; 1998:295).*

Since some of the factory overhead cost elements remains constant per activity and others remain constant per period. We can simplify the flexible cost statement by summarizing all factory overhead costs in general formula, known as flexible budget formula,

Total Factory Overheads (Y) = Fixed Costs (Per Period) + Variable Cost (Per Activity) × Activity (X)

$Y = FC + UVC \times LA$

2.1.20 Decision Regarding Alternatives in Business Operation

One of the major functions of management is decision making. Decision making is a process of selecting the best alternative from among the various courses of action available. The main goal of decision making is to select wisely one course of action amongst the alternatives plans of action, which is expected to optimize the objective of the decision makers concerning area. Decision making is concerned with the future and involves a choice between alternatives. It is an important as well as difficult task of management. Managerial account is a subject matter, which provides some logical tools and techniques to the management for rational decision-making process.

When managers make a choice from among a number of alternatives, all relevant costs and revenue associated with each alternative should be considered. Relevant information supports decision making. Information is relevant when it is logically related to the decision.

2.1.20.1 Process of Decision Making

Decision making is the art of selecting the best alternative among the various alternatives available to solve a given problem in case of business. The best alternative is one, which is likely to provide maximum profits and involve a minimum cost without violating the social responsibilities. This process involves the following steps:

1. Recognize and define the problem.
2. Identify the appropriate alternatives to solve the problem.
3. Collect the relevant information of alternatives.
4. Make differential revenue/ cost analysis.
5. Consider the opportunity costs and qualitative factors.
6. Select the best alternative.
7. Implement the selected alternatives.
8. Evaluation and follow up the decision

2.1.20.2 Decision Situation

Various sort of decision situation, which manager has to make are;

1. Decision to Drop or Continue a Product Line

When a firm or company is divided into many departments, divisions, sections, branches and product lines to produce and sell various types of product, it is not necessary for earning profit by each product line, division, department, and branch. Incase of loss or low profit from one or more, management should taken decision whether to drop or continue product line in the future. While taking drop

or continue product line decision, it is very important to consider various points i.e. alternative utilization of idle capacity like machine, labor, land etc.: continuity of constant cost/fixed cost, department or traceable fixed cost, opportunity cost, government rules and regulation regarding drooping product, union activity, Effect on other product lines, Responses of material suppliers and regular customer etc.

2. Decision to Accept a Special Order/Offer

A special order is one that has been offered for a bulk volume at a reduced price. Opportunity to consider order for a quantity of its regular product at a special price, usually less than that charged to regular customers, frequently arises for a management. When there is idle capacity such an offer may be attractive. The basis of decision-making should be the difference that if will make in the overall profit of the company. Essentially, if there is idle capacity, the special order is advantageous if the price amounts exceed out of pocket costs and the opportunity costs *(Bajracharya, et.al; 2004:633).*

3. Decision to Make or Buy

Buying or outsourcing is the process of obtaining goods or providing from outside suppliers instead of producing the same goods or providing the same services with in the organization. Decisions on whether to produce components or provide services within the organization or to acquire them form outside suppliers are called make-or buy decisions. Many organizations buy some of their activities such as their payroll and purchasing functions or the purchase of specially components. Outsourcing is considered only when if will give financial advantages over making things within the company with no inferior quality.

4. Replacement of Assets Decision

There may be many outdated equipment in the business or organization. So manager has to take an important decision regarding the replacement of existing

machine or not by a new and more sophisticated equipment. Generally, the economic advantages offered by such an investment is the realization of operating cost savings, which are translated into increased profits. A decision regarding the replacement of assets is long term capital investment decision required the use of discounted cash flow techniques. The main thing that should be understood here is how to treat the book value of old equipment. This is a problem that has been known to cause difficulty, but the correct approach is to apply relevant cost principles. As the past or sunk costs are irrelevant for decision-making, the book value of old assets does not matter in asset replacement decision.

5. Decision to Further Process Joint Products

A decision to be made by the management is whether to sell joint outputs at the spilt off point or to process them further. The decision criterion should be to choose the alternative, which will maximize the total contribution of the various joint products to the common processing costs. As the common processing costs before the split-off point are sunk costs that have already been incurred to create the joint products, they are irrelevant and will not be considered in the decision making process. The only relevant cost will be the additional common processing costs. A related short-term decision involves selecting an alternative processing plan for joint products when the proportion of the output from the common processing cost can be varied *(Hongren, et.al; 2004).*

6. Decision of Leasing vs. Buying

Leasing is a contract between an owner (Lesson) and a hirer (Lessee) for the hiring of a specific asset. In exchange for the lease rentals, the lessee obtains possession and use of the asset, while the lesson retains legal ownership. The lessee has no right to acquire exercise right over the assets during the period of the contract. Leasing is an important source of financing for long lived assets. Some assets are financed for intermediate- term and some are for long-term.

Undertaking a contract to lease on asset is quite similar to borrowing money. There is an immediate cash inflow, because the lessee does not have to pay for the asset, followed by future cash outflows consisting of the payments specified in the lease contract. Alternatively, the user could have borrowed the full purchase price of the asset by accepting a binding obligation to make interest and principal repayments to the lender. Therefore, the cash flow consequence of leasing and borrowing is similar; consequently, leasing and borrowing should be compared as financing alternatives that are dependent on the investment decision. In other words, we assume that investments have been evaluated as part of a company's capital budgeting process and are profitable *(Bajracharaya, et.al; 2004:655).*

2.1.21 Pricing Decisions of Product/Services

Price has determinant role in market success and the success of any business firm mainly depends on the market success. Once the product gets success or failure in the market, it establishes a corner stone for the firm's future. So, one of the most important long-run strategic decisions management must make is the setting of prices for the company's product and services. This decision has a direct impact on financial position, profitability and cash flow of the company.

Price is the value of goods and services. Setting price for goods or service is an important function of the manager of an organization. It is the most crucial and difficult decision of a manger. Pricing is always determined for making profit. There is some technique for pricing of product which is described as follows:

1. Variable Cost Pricing

Some firms use variable cost pricing system for determination of selling price of the products. Under this system, mark up is added either on total variable manufacturing cost or total variable costs. This method is also known as marginal cost pricing system or contribution margin pricing system. Using variable cost

pricing system, the firm sets its price to maximize contribution to cover fixed cost and profit margin. *(Gyawali, et.al; 2006: 9.5-9.6).*

Calculated price under this system is,

Selling Price = Total variable Cost Per Unit + (Mark Up% | Total Variable Cost Per Unit)

Mark Up% =

$$\frac{\text{Total Profit } \Gamma \text{ Fixed Manufacturing Cost } \Gamma \text{ Fixed Selling and Administrative Cost}}{\text{Total Variable Cost}} \,|\, 100\%$$

Target Profit = Capita Employed | Return on Investment (ROI)

2. Full Cost Pricing /Absorption Cost Pricing

Under this system of pricing, selling price is determined by adding certain percentage of mark up on total production cost of goods and service. The total cost includes all variable manufacturing cost as well as fixed manufacturing cost for determination of selling price. In long run, price must cover all costs and normal profit margin. Full cost pricing system covers all variable costs, fixed cost as well as required level of mark up. It provides a just able price that tends to be perceived as equitable by all parties. Consumers generally understand that a company must make a profit on its product or service in order to remain in business. Justifying a price as total case of production, sales and administrative activities plus a reasonable profit margin, seems reasonable to buyers. The selling price is determined under full cost pricing system as follows *(Gyawali, et.al; 2006: 9.2).*

Selling Price = Total Cost Per Unit + (Mark Up% | Total Cost Per Unit)

$$\text{Mark Up\% X} \frac{\text{Target Profit}}{\text{Total Cost}} \,|\, 100\%$$

Target Profit = Capital Employed | Return on Investment (ROI)

3. Activity Based Cost Pricing

It is a technique of allocating manufacturing overheads to products using multiple application rates and variety of costs drivers in multi product firm. It maintains the relationship between overhead costs and the activities that causes them. The manufacturing costs are based up on certain costs drivers and the increasing and decreasing ratio of costs depends upon the quantity of cost drivers. The following steps are taken for making pricing decision under ABC pricing system:

a. Identifying the major activities in the organization
b. Determine the cost driver for each major activity
c. Determine the cost driver rate
d. Calculate total cost based on cost driver
e. Add mark up total cost and determine selling price

(Gyawali, et.al; 2006: 9.13).

4. Transfer Cost Pricing

A transfer price is the price on submit of an organization charges for products or services supplied to another subunit of the same organization. The transfer price creates revenue for the selling subunit and a purchase cost for the buying subunit, affecting operation income numbers for both subunits. The operating income can be used to evaluate the performance of each subunit and to motivate managers *(Horngren, et.al; 1999: 377).*

The transfer pricing methods are broadly classified cost pricing are as follows *(Fago, et.al; 2006:9.31).*

a. Market based transfer pricing
b. Cost based transfer pricing
   i. Full cost transfer pricing
   ii. Variable cost transfer pricing
c. Negotiable transfer pricing
d. General formula approach transfer pricing

Transferred Pricing Methods

The transferred pricing methods are broadly classified into following three categories.

1. Market Based Transferred Pricing

Transfer pricing based on market value of the product or service is known as market based transferred pricing. Generally market price is used for determination of transfer pricing of the product. Market based transfer pricing is appropriate when both buying and selling divisions are operating at full capacity. Both the buying and selling divisions can buy and sell at market price. The internal transfer price may be then external market price less marketing cost *(Fago, et.al; 2003:9.33).*

Transfer Price = Market Price – Selling and Distribution Expenses

2. Cost Based Transferred Pricing

Most of the companies transfer its price based on cost. Cost based transferred pricing is used when 1) market price is not available like for semi finished goods. 2) It is difficulty for determining the market price. 3) Product manufactured is of secret nature *(Fago, et.al; 2003:9.33).* Cost based transferred pricing should be considered two types of costs while making the pricing decision.

1. Variable cost based transferred pricing (marginal costing).
2. Full cost based transferred pricing (Absorption costing).

3. Negotiated Transfer Pricing

Negotiation means to bargain or to discuss with a view to reaching an agreement. The divisions within a company may follow the negotiated transfer prices. Under this approach, the division managers make a critical discussion, to set a reasonable transfer price in the best interest of the divisions and the company as a whole, they

must start with external market price first. Then they may try, to explore the economies or cost saving under inters company transfers *(Bajrachraya, et.al; 2004:736).*

General formula of Transferred Pricing:

Minimum Transfer Price = Outlay Cost (Variable Cost) Per Unit + Opportunity Cost Per Units to the company as a whole.

2.1.22 Long-Term Investment Decisions

A capital investment decision, also known s a capital budgeting decision, is related to the concerned organizations long term bulk expenditures. It involves the process of planning future net cash flows over the life of the project and of selecting the best course of action that yields positive net present values capital investment decision means evaluating business opportunities that involve a current outlay, but that are likely to produce benefits over a period of time. A capital investment (or capital budgeting) should have the following characteristics;

- Long term investment
- Bulk amount of investment
- Effect of time value of money
- Risk and uncertainty

Capital budgeting process involves the following three major stages:

- Estimating the project's net cash flows.
- Measurement of benefit of the investment.
- Evaluation of risks associated with the investment.

2.1.22.1 Relevant Information for Investment Decisions

Investment analysis decisions require information relating to initial investment costs, terminal cash flows, annual revenues, annual operating expenses and tax

rate. All these cash flows should be the incremental due to the project in consideration. The cost flows, which do not affect the present cash flows, either in terms of outlays or benefits, are irrelevant.

- Sunk cost are irrelevant
- Don't forget cannibalization effects
- Don't forget the incidental effects
- Take care of the overhead costs
- Don't count interest expenses twice
- Take cash flows not net income
- Only the differential cash flows are relevant
- Depreciation expenses is relevant
- Working capital is relevant
- Cash flows in replacement cases

2.1.22.2 Investment Projects Evaluation Techniques

More proposes for projects are at the threshold of the business firm comparing to its ability and willingness to finance some proposals are good, other are different and yet other poor. A screening process has to be devised for finding out the real content of such proposals method of differentiating them should be developed *(Goyal and Man Mohan, 1997:29).*

For this purpose numerous methods of measuring the economic value of an investment can be found. The method of appraising capital expenditure proposal can be classified into two broad categories.

1. Unsophisticated or traditional methods.
2. Sophisticated or time adjusted methods.

The latter are, more popularly known as discounted cash flow techniques as they take the time factor into account.

The first category includes

1. Pay back period method (PBP)
2. Average rate of return (ARR)

The second category includes

1. Net present value method (NPV)
2. Internal rate of return (IRR)
3. Profitability index (PI)

1. Pay Back Period (PBP)

This method is the traditional method of capital budgeting. It is the simplest and perhaps the most widely employed quantitative method for appraising capital expenditure decisions. This method answers questions: how many years will it take for the cash benefit to pay the original cost of an investment, normally disregarding salvage value? Cash benefit here represents CFAT, ignoring interest payment. Thus PBP measures the number of years required for the CFAT to pay back the original outlay required in an investment proposal.

PBP = Investment/ Constant Annual Cash Flow

One of the most commonly used methods of capital budgeting is the payback technique. This method poses the question: 'How long will it take to recover the investment?'

PBP Decision Rule

Accept if PBP < Maximum acceptable PBP

Reject if PBP> Maximum acceptable PBP

Independent projects: lower payback period than standard payback period should be accepted.

Mutually Exclusive Projects: lower payback period should be accepted.

Rationale of Payback

The payback period is important to a company experiencing liquidity problems. A long pay back period usually means a low rate of return. Pay back is measure of risk because the longer it takes to get your money back, the greater the risk that you may not get the money.

Limitation of Payback

- Payback has two very serious errors. The first is that it tells nothing about the profitability of the investment. It ignores the size of cash flows after the payback period.
- The second serious error of the payback method is that it ignores the timing of the expected future cash flows and so ignores the time value of money. This can lead to poor decisions.

2. Accounting Rate of Return (ARR)

The accounting rate of return (ARR) method of evaluating a proposed capital expenditure is also known as the average rate of return method. It is based upon accounting information rather than on cash flow. There is no unanimity regarding the definition of the rate of return. There are a number of alternative methods for calculating the ARR.

$$\text{Accounting Rate of Return} = \frac{\text{Average Annual Expected Income}}{\text{Average Book Investment}}$$

ARR Decision Rule

Accept if ARR > Minimum acceptable rate of return

Reject if ARR < Minimum acceptable rate of return

Independent projects. Higher average rate of return than standard average rate of return should be accepted.

Mutually exclusive projects: Higher average rate of return should be accepted.

3. Net Present Value (NPV)

Net present value (NPV) method is a discounted cash flow approach to capital budgeting that discounts all expected future cash flows to the present using a minimal desired rate of return. To apply the net present value (NPV) method to a proposed investment proposal a manager first determines some minimum desired rate of return. The minimum rate is called the required rate of return, hurdle rate, discount rate or cost of capital. Then all expected cash flows from the project are discounted to the present, using this minimum desired rate. If the sum of the present values of the cash flow is zero or positive, the project is desirable and if negative it is undesirable. When choosing from among several investments, the one with the largest net present value is the most desirable *(Hongren, et.al; 1998:415).*

This method requires the determination of three items for a project

3.1 Initial cash outflow

3.2 Future net cash inflow and

3.3 Minimum required rate of return

NPV Decision Rule

Accept if NPV > O

Reject If NPV < O

Independent projects: Positive NPV should be accept and negative NPV should be rejected.

Mutually exclusive projects: Higher positive NPV should be chosen.

4. Discounted Pay Back

A major limitation of pay back is that it does not take the time value of money into account. However, this limitation can be overcome through the use of a discounted payback. The NPV criterion leads to an acceptance of a project as long as its NPV is at least zero. Thus the discounted payback is not more than a shortened version of NPV. Instead of calculating the project's NPV over the whole of its life, the NPV is effectively calculated up to some specified cut off point.

5. Internal Rate of Return (IRR)

The internal rate of return (IRR) is an alternative technique for use in making capital investment decisions that also takes into account the time value of money. The internal rate of return represents the true interest rate earned on and investment over the course of its economic life. This measure is sometimes renewed to as the discounted rate of return. The internal rate return is the interest rate K that when used to discount all cash flows resulting from an investment, will equate the present value of the cash outlays, In other words, it is the discount rate that will cause the net present value of an investment to be zero. Alternatively, the internal rate of return can be described as the maximum cost of capital that can be

applied to finance a project without causing harm to the shareholders *(Drury; 2000: 462-463).*

The IRR is computing two method i.e. trial and error method of interpolation which formula is following under.

For Trial and Error Method

PV inflows = PV investment cost

Or, $\frac{CF^1}{(1+k)^1} + \frac{CF^2}{(1+k)^2} + \ldots\ldots\ldots + \frac{CF^n}{(1+k)^n} - I_o = 0$

Method of Interpolation

$$IRR = Lr + \frac{NPV_{LR}}{NPV_{LR} - NPV_{HR}} \times \Delta Rate$$

Where,

LR = Lower rate

HR= Higher rate

NPV_{LR}= Net Present value of lower rate

NPV_{HR}= Net Present value of Higher rate

IRR Decision Rule

Accept if IRR > required rate of return

Reject if IRR < Required rate of return

Independent projects: If the IRR is greater than cost of cost of capital, the value of the firm increase and project should be accepted. If it is equal to cost of capital, the firm breaks even and if IRR is less than cost of capital, the project should be rejected.

Mutually exclusive projects: the projects one with the higher IRR should be accepted.

6. Profitability Index (PI)

The profitability index (PI) or benefit cost ratio is a time adjusted capital budgeting technique. It is similar to the NPV approach. The PI approach measures the present value of return per rupee invested, while the NPV is based on the difference between the present value of future cash inflows and the present value of cash outlays. Profitability index may be defined as a ratio, which is obtained by dividing the present value of future cash inflows by the present value of cash outlays.

$$PI = \frac{\text{Present Value of Cash Inflow (TPV)}}{\text{Present Value of Cash Outflow (NCO)}}$$

PI Decision Rule

Accept If PI > 1

Reject if PI< 1

Independent projects: PI greater than i should be accepted.

Mutually exclusive projects: PI greater than 1 should be accepted.

2.1.22.3 Capital Budgeting Under Risk and Uncertainty

Risk is only condition a decision maker may force uncertainty and risk describing the condition most financial manager face. Probability and statistics proved useful methods for describing such situations can be described as certainty. If more than one outcome is possible but the probabilities of these states of nature are unknown, decisions are made under conditions of uncertainty. Different decision rules are followed in each decision situation. Decision making under risk is different from

decision making that considers the degree of risk or uncertainty. Capital budgeting analysis that incorporates consideration of risk may do so either traditional techniques or statistical techniques.

Risk exists when the decision maker is in a position to assign probabilities to various outcomes. Uncertainty exists when the decision maker has no historical data from which to develop a probability distribution, and must make intelligent guesses in order to develop a subjective probability distribution.

The capital budgeting decision for starting a new product will have more uncertain returns than the one involving the expansion of an existing one. Further, the estimates of returns from cost-reduction type of capital budgeting will be subject to a lower degree of risk, than the revenue expanding capital budgeting project.

Measure of Risk

- Sensitivity analysis
- Risk adjusted discount rate
- Certainty equivalent co-efficient
- Probability distribution approach
- Standard deviation
- Coefficient of variation
- Normal probability distribution
- Decision tree-approach

2.1.23 Managerial Use of Financial Statement Analysis

Before discussing about financial analysis it is necessary to discuss about financial statement and report. A report issued annually by a corporation to its stockholders. Its capital based financial statements as well as management's option of past

year's operations and the firm's prospects. The income statement, the balance sheet, the statement of retained earnings and the statement of cash flows are four basic financial statements.

1. The Income Statement

That statement which shows the firm revenue and expenses over an accounting period, generally or a year. The income statement is also known as profit and loss account.

2. The Balance Sheet

A statement of the firm's financial position of a specific point of time.

3. The Statement of Retained Earning

That portion of the firm's earning that has been saved rather than paid out as dividend.

4. The Statement of Cash Flows

A statement reporting the impact of a firm's operating, investing and financing activities on cash flow over an accounting period.

The above statement and report are required for different person for different purpose according to statement. It is necessary to analysis the statement and report to know the positive and negative, strength or weakness of business. So that financial analysis indicates the analysis of financial statement and report to know the financial reality and work performance of business in short the financial analysis tries to analysis the following question.

- Is the firm in paying condition for current liabilities?

- Which sources invest for long terms financial statement in firm? Or what is the capital structure of firm?
- Does the firm utilize its assets fully effectively?
- Is the earning of the firm enough?
- Do the investors realize the profit of the firm?
- Do they want to purchase the share of the firm?

2.1.23.1 The Statement of Cash Flows

Preparing a statement of cash flows is simple; it is intended to show all the cash inflows and outflows of a firm during a period. However, as the cash flow statement must combine cash flows that are recognized in the balance sheet (for example, change in account receivable) and the income statement (for example, the sales revenue), it is sometimes complicated to prepare this statement. The accrual process (income statement recognition) is subject to management judgment, assumptions and various estimates that affect both time series and cross-sectional analysis.

The main objective of a statement of cash flows is to convey information about the cash receipts and cash payments of a firm during the accounting period. Though the same information comes through the cash book already prepared in the course of posting in ledger.

1. Stockholders Use

Stockholders can see whether net cash provided by operations comfortably covers the dividend payment. The company should be able to invest in its future by making capital expenditures to modernize its productive facilities.

2. Creditors Use

Creditors might be interested to know whether the firm would be able to pay its due obligations from the cash obtained form operating activities. Creditors see the cash flow liquidity position in the regard.

2.1.23.2 Presentation of Cash Flow Statement

The cash flow statement should report cash flows during the period classified by operating, investing and financing activities. Cash flows, however exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an enterprise rather than part of its operating, investing and financing activities. Cash management includes the investment of excess cash in cash equivalents.

1. Operating Activities

Cash flows from operating activities are primarily derived from the principal revenue producing activities of the enterprise. Therefore they generally result from the transactions and other events that enter into the determination of net profit and loss. Examples of cash flows from operating activities are:

1. Cash receipts from royalties, fees, commission and other revenue.
2. Cash receipts from the sale of goods and the rendering of services.
3. Cash payment to suppliers for goods and services.
4. Cash receipts and cash payment of an insurance enterprise for premiums and claims, annuities and other policy benefits.
5. Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities.

2. Investing Activities

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditure has been made

for resources intended to generate future income and cash flows. Examples of cash flows arising from investing activities are:

1. Cash receipts from sales of property, plant and equipment, intangibles and other long-term assets.
2. Cash payments to acquire property, plant and equipment, intangible and other long-term assets. These payments include those relating to capitalized development costs and self constructed property, plant and equipment.

3. Financing Activities

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the enterprise. Examples of cash flows arising from financing activities are:

1. Cash proceeds from issuing shares or other equity instruments,
2. Cash payments to owners to acquire or redeem the enterprises shares.
3. Cash proceeds from issuing debenture, loans notes, bonds, mortgages and other short or long-term borrowings.
4. Cash repayments of amounts borrowed.

2.1.23.3 Ratio Analysis

An analysis of financial statement with the help of ratio may be termed as ratio analysis. It is a mathematical relationship between two related items express in quantitative form. When this definition of ratio is explained with reference to the items shows in financial statement, then it is called accounting ratio. So, the ratio is the measurement of quantitative relationship between two or more items of financial statements connected with each others. The quantitative relationship may be expressed in terms of proportion, in rate, in time, in percentage or coefficient. There are different types of ratios analysis which is listed under.

1. Liquidity Analysis

It measures the adequacy of a firm's cash resources to meet its near term cash obligations. Short-term lenders such as suppliers and creditors use liquidity analysis to assess the risk level and ability of a firm to meet its current obligations. Satisfying these obligations requires the use of the cash resources available as of the balance sheet date and the cash to be generated through the operating cycle of the firm. Under liquidity analysis, therefore calculate the current ratio and quick ratio.

2. Long Term Debt and Solvency Analysis

It examines the firm's capital structure in terms of the mix its financing sources and the ability of the firm to satisfy its long-term debt and investment obligations. This analysis contains the debt equity ratio and debt to total capital ratio.

3. Activity Analysis

To carryout one's operations, a firm needs to invest in both short-term (inventory and accounts receivable) and long-term (property, plan and equipment) assets. Activity analysis describes the relationship between the firm's level of operations (usually defined as sales) and the assets needed to sustain the activity. This analysis contains the investor turnover, daily sales outstanding, fixed assets turnover, total assets turnover and capital employed turnover ratios.

4. Profitability Analysis

Profitability is an indicator of efficiency of the business organization. Profitability ratio measures the management overall efficiency as show by the return generated from sales and investment. Higher the profitability ratio shows the efficiency of the management. Profitability is compare in relation to sales as well as investment. So, profitability analysis consists of some ratio i.e., Net Profit Margin, Gross

Profit Margin, Operating Cash Flow Margin, Return on Assets (ROI) and Return on Common Stockholders Equity.

2.1.24 Practicing of Management Accounting Tools Around the Globe

2.1.24.1 Different Pricing Practice and Cost Management Methods in Various Countries

Surveys of financial officers of the largest industrial companies in several countries indicate similarities and differences in pricing practices across the globe. The use of cost-based pricing appears to be more prevalent in the United States than in Ireland, Japan and United Kingdom.

Some Japanese survey data indicate that market-based target pricing practices vary considerable among industries. While a majority of Japanese companies in assembly type operation (for example, chemicals, oil and steel). Japanese companies use value engineering more frequently and involve designers more often when estimating costs. When costs are used for pricing decisions, the pattern in consistent overwhelmingly, companies across the globe use full costs rather than variable costs *(Hongren, et.al; 1999:455).*

	United States	**Australia**	**Canada**	**United Kingdom**	**Taiwan**	**Poland**
Sensitivity analysis	29%	57%	59%	63%	-	10%
Increase the required rate of return	18%	-	31%	42%	61%	13%
Shorten payback period	17%	-	24%	34%	72%	25%
Estimate probability distribution of future cash flows	12%	11%	18%	15%	-	13%

Compare optimistic and pessimistic forecasts	-	63%	-	-	-	-
Make subjective non quantitative assessment	54%	37%	29%	22%	69%	4%
Make no adjustments	37%	-	10%	-	-	-

(Source: Adapted from Sullivan and Smith, 1998)

The surveys indicate that the specific methods managers use vary among countries. A common feature, however, is that managers appear to favor simpler methods (for example, sensitivity analysis, shortening, the pay back period, increasing the required rate of return, and subjective, no quantitative assessments) rather than more sophisticated techniques (for example, estimating the probability of future cash flows: *(Hongren, et.al; 1999:841).*

2.2 Review of Thesis

Profit planning and control is important part of management accounting. Without profit planning and control management accounting is not sufficient. So, profit planning and control is backbone of management accounting. Researches in the area of profit planning and control practices have been made many but researches in the area of management accounting practices have not made many in Nepalese context. An attempt is made here to review some of the researches, which have been submitted in profit planning & control as well management accounting practices in the context of Nepal are following one by one respectively.

K.C., A.K. (2006), had conducted a research on the topic *"Management Accounting Tools in Public Enterprise"* an unpublished master level thesis submitted to Faculty of Management, T.U. He had focused his study to examine the practice of Management Accounting Tools in public enterprises. K.C.'s research was based on only primary sources of data. In his research, he had

pointed out various objectives & findings. Some remarkable objectives were as follows:

- To study and examine the present practice of management accounting tools in public enterprises in Nepal.
- To identify the areas where management accounting tools can be applied to strengthen the public enterprises.
- To identify difficulties in applying management accounting tools in Nepalese public enterprises.
- To make recommendations to overcome the difficulties in applying management accounting tools in Nepalese public enterprises.

Some major findings were as follow:

- Different types of management accounting tools, which are tough in the colleges, are not found applied by public enterprises.
- Management Accounting is help to mangers to formulate organizational strategies as well as policy. PE's as practicing Management Accounting tools such as Capital Budgeting, Annual Budgeting, Cash Flows and Ratio Analysis. And not practicing Management Accounting Tools such as Zero Base Budgeting, Activity Based Budgeting, Activity Based Costing, Target Costing and Value engineering.
- In PE's hiring outside experts for carrying out different activities are almost nil because of high cost.
- PE's are with the concept that Management Accounting is similar to financial Accounting tools.

Karki, K.B. (2006), had conducted a research study of *"Management accounting practice in Joint Venture Banks of Nepal"* an unpublished master level thesis submitted to Faculty of Management, T.U. He had focused his study to examine

the practice of Management Accounting tools in Joint Venture Banks of Nepal. Karki's research study was based on only primary sources of data collection. In his research, he had pointed out various objectives & Findings. Some remarkable objectives were as follows:

- To study and analyses the present practice of management accounting tools in the Joint Venture Banks of Nepal.

- To identify the areas where management accounting tools can be applied to strengthen the banks in commercial activities.
- To make recommendations to overcome the difficulties in applying management accounting tools in Joint Venture Banks.

Some major findings were as follow:

- Different types of Management Accounting tools, which are tough in the colleagues are not found applied by the Joint Venture Banks.
- Management accounting help to managers to formulate organizational strategies as well policy for decision making.
- In NJVBs, practice of hirings outside expert almost nil. Thus it can be concluded that NJVB's are in infant stage in practicing of Management Accounting tools. Now, here in the bank cannot find Management Accounting experts.
- In NJVBs practicing the Management Accounting tools such as Capital Budgeting, Annual Budget, Ratio Analysis and Cash Flow. And not practicing Management Accounting tools such as Zero Base Budgeting, Activity Based Costing, Target Costing value engineering.
- They are with concept that TIA is similar to financial accounting.
- Lack of information and cognizance about Management Accounting tools are the main factors causing problem in the application of such tools.

Acharya, N.P. (2006), had conducted research study on topic *"Management Accounting practice in Nepalese Public Enterprises"* an unpublished master level thesis submitted to Faculty of Management, T.U. He had focused his study to examine the practices of Management Accounting tools in NPE's. Acharya's research study was based on only primary sources of data collection. In his research, he had pointed out various objectives & findings. Some remarkable objectives were as follows:

- To study and examine the extent of practice of Management Accounting tools and techniques made in Nepalese PEs.
- To identify the business sector, where Management Accounting tools can be applied to strengthen the PEs.
- To identify the major difficulties for applying the Management Accounting tools in Nepalese companies.
- To make recommendation to overcome the difficulties in applying Management Accounting tools and techniques in Nepalese PEs and other business companies.

Some major findings were as follow:

- Different types of Management Accounting tools, while are tough in the colleges are not found applied by the NPE's. So, it shows gap between the theory and practice. Managerial Accounting is a new discipline and still in developing stage in the context of modern business organization.
- In NPE's not practicing Management Accounting tools such as Standard Costing, Cost Segregation and allocation activity based costing. The use of overall Master Budgets was very low. Activity Based Budgeting and Zero Base Budgeting were not proper practicing to prepare the budget. The pricing Strategy was completely based on cost of production and government's decision.

- The traditional inventory valuation technique FIFO was widely practiced.
- NPE's overall performances are fully measure by profit & loss account.
- In NPE's past trend was most used technique to forecast the future cost and revenue.
- Government's policy was affecting to more than half of NPE's for making the account related decisions.
- Role of Management Accounting tools and technique were found negligible for making Management Accounting related decision.

Shrestha, D.K. (2008), had conducted a research on the topic *"Management Accounting Practices in the Public Trade Companies of Nepal"* an unpublished master level thesis submitted to Faculty of Management, T.U. He had focused his study to examine the practice of Management Accounting tools in Public Trade Companies in Nepal. Shrestha's research was based on only primary sources of data. In this thesis he had pointed out various objectives and findings. Some remarkable objectives were as follows:

- To find out the Management Accounting tools and techniques in PTCs in Nepal.
- To identify the process of planning, controlling and decision making process of PTCs in Nepal.
- To identify the management policy towards the Management Accounting tools and techniques.
- To identify the major difficulties in using Management Accounting tools and techniques in PTC's in Nepal.
- To make suggestions to overcome the difficulties in practicing Management Accounting tools and techniques in PTCs in Nepal.

Some major findings were as follows:

- Management Accounting helps to managers to formulate organizational strategies as well as policy. PE's as practicing Management Accounting tools such as Capital Budgeting, Annual Budgeting, Cash Flows and Ratio Analysis.
- Management Accounting is help to managers to formulate organizational strategies as well policy for decision making.
- Lack of information and cognizance about Management Accounting tools are the main factors causing problem in the application of such tools.
- Nepalese Public Trade Companies were prepared budget by committee, planning department and chief of finance division mostly. It is also recommended to take outside expert’s service for budget prepared.
- Nepalese Public Trade Companies should practice not only full cost pricing and transfer costing pricing but also activity base cost pricing and variable cost pricing.
- Nepalese Public Trade Companies should use not only profit and loss account but also use/practice Standard Costing, Budgetary Control, Ratio Analysis, Cash Flow Analysis and Activity Based Costing for evaluation of overall performance of companies at the end of the accounting year.

Dallakoti, N. (2008), had conducted a research on the topic *"A Study on Management Accounting Practices in Civil Aviation Authority of Nepal"* an unpublished master level thesis submitted to Faculty of Management, T.U. He had focused his study to examine the Management Accounting tools practiced in CAAN. Dallakoti's research was based on primary and secondary data collection. In his research, he had pointed out various objectives and findings. Some of remarkable objectives were as follows:

- To study and examine the Management Accounting tools practiced in CAAN.

- To identify the difficulties in applying Management Accounting tools in CAAN.
- To identify the Management Accounting tools not in use.
- To recommend the areas where Management Accounting tools can be applied to strengthen the organization.
- To make recommendation to over come the difficulties in applying Management Accounting tools in CAAN.

Some major findings were as follows:

- CAAN was facing challenges in collection of the overdue/outstanding revenues from airlines and other clients. A substantial proportion of due was with Nepal Airlines Corporation, NECON air and COSMIC air etc.
- It is the ground reality that the transportation service through out the nation is quite difficult due to its geographical structure. So that in most part of the country the only assess of transportation is possible through air services. The construction of aerodromes and its regular operation is very much expensive than others. Even in huge loss, CAAN was operating large numbers of airports for its public responsibilities as a service provider but due to that government was not providing any subsidies to CAAN.
- In some cases, the aerodromes were constructed, on the interest of political leaders and parties even the future perspective is very poor. Such airports were made on grants or loan from different sectors and transferred all the responsibilities to CAAN.
- Civil Aviation Academy was functioning as a sole institution to train manpower required for CAAN in various disciplines like air traffic services, rescue and fire fighting services, radio maintenance, aviation safety, computer etc.

- There was no such faculty on the academy to provide trainings concentrating managerial and accounting disciplines. For these trainings, huge amount was paying to outside training centers.

Thebe, T. (2009), had conducted a research on the topic *"The Balance Scorecard: Measuring total Business unit Performance (A Comparative Study of Commercial Banks)"* an unpublished master level thesis submitted to Faculty of Management, T.U. The main objective of her study is comparison of Nepal Investment Bank Limited and Kumari Bank Limited by using balance scorecard a tool of strategic Management Accounting. The specific objectives of this study are as follows:

- To assess the total business performance of each company from financial, customer, internal business process and learning and growth perspectives.
- To compare the two companies on the basis of above four perspectives and identify the one company stronger than others on various factors.
- To determine the relationship between financial indicators with non financial indicators.

Some major findings were as follow:

- With the help of rank correlation, it h as found that the weight given by both banks on financial, customer, internal business process and learning and growth perspectives are highly associated.
- After the test of cause effect model, out nine objects, five objects developed by KBL have zero correlation while only one object with NIBL has zero correlation.
- Among four perspectives three perspectives favour NIBL. It shows the better performance of NIBL through BSC approach.

Shrestha, D.K. (2009), had conducted a research on the topic *“Management Accounting Practices in the Public Financial Sector in Nepal"* an unpublished master level thesis submitted to Faculty of Management, T.U. The main objective of his study is the state of practices of Management Accounting Tools in financial sectors in Nepal. Shrestha's research was based on only primary collection. In his research, he had pointed out various objectives and findings.

Some of remarkable objectives were as follows:

- To evaluate the process of planning controlling and decision making process of Public Financial Sector in Nepal.
- To identify the major difficulties for practicing the Management Accounting tools in Public financial Sectors Nepal.
- To make suggestion and recommendation to overcome the difficulties in Public Financial Sector in Nepal.

Some major findings were as follow:

- The types of budget practiced in PES's of Nepal were operational budget, Cash Budget, Master Budget and Program Budget. Almost PFS's of Nepal practiced operational budget while some prepared master budget. Cash budget and Program Budget were practiced too and most of PES's of Nepal practiced operational budget only for carryout operational activities.
- Reasons for not practicing Management Accounting Tools were lack of expertise, high cost/quite expensive, no information about the tools and governmental policy.
- The past budget estimate of historical expenses were the basis used for preparation of budget. Zero base budgeting was not practiced because of government policy and unwilling of the management

Research Gap

There is gap between the present research and previous research. Previous research works was conducted on management accounting practice in public financial sector, public limited companies and commercial banks by just taking few samples out of total population. But this research work has been done by taking all 7 Joint Venture Banks which are listed in Nepal stock exchange Ltd. by June, 2010. With all population samples, research work could get actual results. This research examines the present practice of management accounting tools in joint venture banks of Nepal and disclose the reason about the management accounting tools which were not practiced for planning, controlling

CHAPTER – III
RESEARCH METHODOLOGY

3.1. Introduction

Human nature is always curious to find out something new, to learn, understand or investigate the phenomenon raising the question like why, how, what, when etc. The knowledge has something to do with knowing. Knowing may be through acquaintance or through the description of the characteristics of certain things. The things with which we can be acquainted are the things of which we are directly aware. Direct awareness may come through perception and sensation.

Human knowledge takes the form of beliefs or judgment about a particular phenomenon. Some beliefs may be supported by evidences based on perception and experiences, the beliefs supported by evidences are termed as justified beliefs. Research is essentially a systematic inquiry seeking facts through objectives verifiable methods in order to discover the relationship among them and to deduce from them broad principles or laws. It is really a method of critical thinking by defining and redefining problems, formulating hypothesis or suggested solution, collecting, organizing and evaluating data, making deductions and making conclusions to determine whether they fit the formulated hypothesis.

In this chapter, efforts have been made to present and explain the specific research design for the sake of attaining the research objectives. It includes research design, nature of data, data gathering procedure, population and sample and data processing procedures.

3.2 Research Design

Decision regarding what, where, when, how much, by what means concerning an enquiry or a research study constitute a research. "A research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to the purpose with economy in procedure" In fact the research constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes in outlines of what researcher will do from writing the hypothesis and its operational implications to the find analysis of data.

'After the research study has been formulated, the next logical steps are to construe the research design which refers to the entire process of planning and carrying out a research study. The research design asks what approach to the problem should be taken? What methods will be used? ; What strategies will be most effective? Identification, selection and formulation of a problem may be considered as the planning stage of a research. The remaining activities refer to the designs, operation and completion of the research study" *(Wolf and Pant; 2005:53).*

Design is the overall plan of any future activity. The research design is the specification of methods and procedures required to conduct and complete the study. So, the research design implies procedures, techniques and method.

3.3 Sources of Data

Data were mainly collected from the primary sources. Primary data were collected through questionnaire, interview and discussion. Secondary data were also used as per required.

3.4 Population and Samples

All the commercial banks of Nepal were considered as the total population. Out of them seven joint venture banks which are in existence till now and head office located in Kathmandu valley were considered as the target population for the research study.

3.5 Data Collecting Procedure

As the study was based on primary data, most of the information was collected developing a scheduled questionnaire and distributing it to managers and finance chief that were available. 'Tick mark' and open-end questions were included in the questionnaire. To check whether questions could be understood or not by the respondents, questionnaires were distributed to four different banks for pre-test. As positive responses were received, questionnaires were distributed to rest of the banks after wards.

3.6 Data Processing Procedure

Those data which were collected were in raw form. They were classified and tabulated in the required form. Simple arithmetical percentage tools were used for analysis. Statistical tool like chi-square ($X2$) was used to test the hypothesis major findings were based on the analysis and interpretation of data.

3.7 Major Management Accounting Tools

Budgeting, standard costing, cost-volume-profit analysis, ratio analysis, capital budgeting, activity based budgeting, zero based budgeting, responsibility accounting cash flow statement and pricing techniques were the major research available.

3.8 Statistical Procedure

Simple percentages were used as an arithmetical tool to interpret data. Chi-square test was used as statistical tool to test much hypothesis.

Hypothesis 1: Null Hypothesis Ho: There is no significant relationship between the use of pay back period and net present value. (Use of pay back period and net present value are independent)

Alternative Hypothesis H1: There is significant relationship between the use of pay back period and net present value. (Use of Pay back period and net present value are dependent)

Hypothesis 2:Null Hypothesis Ho: There is no significant relationship between the use of cost volume profit analysis and cash flow analysis. (Use of cost volume profit analysis and cash flow analysis are independent)

Alternative Hypothesis H1: There is significant relationship between the use of cost volume profit analysis and cash flow analysis. (Use of cost volume profit analysis and cash flow analysis are dependent)

Standard chartered bank, NABIL bank, Himalayan bank ltd, Nepal SBI bank, Everest bank, Nepal Bangladesh bank and NMB bank was put under joint venture banks.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

The basic objective of the study is to examine the present practice of management accounting tools in the Joint Venture bank of Nepal and to identify the area where management accounting tools could be applied to strengthen the bank. This chapter presents the analysis and interpretation of the data.

To meet the objectives, all the joint venture banks with head office in Kathmandu valley are taken as target population.

Questionnaires were distributed to more than 14 banks out of which responses could be received from 10 banks. Besides questionnaires, discussions were also made with General Manager, Finance Chief and account chief of the banks to get more information about the present practice of management accounting tools. Views of Managers, Accountants and Finance chief are also included in this chapter.

Raw data were properly processed, tabulated and analyzed. They are resented in sixteen tables. Tables were developed based on question asked; open-ended questions were arranged in a descriptive way. Hypothesis was tested with chi-square statistical tools.

4.2 Percentage Analysis of Management Accounting Practice

Table 4.1

Practice of Management Accounting Tools in the Joint Venture Banks of Nepal

S.N.	Tools	No. of Population	No. of Practioner	Percentage %
1	Cost Segregation into fixed and variable	7	3	42
2	Cost-Volume-Profit Analysis	7	5	71
3	Responsibility Accounting	7	3	42
4	Capital Budgeting	7	7	100
5	Ratio Analysis	7	7	100
6	Cash Flow Analysis	7	7	100
7	Standard Costing	7	1	14
8	Zero Based Budgeting	7	1	14
9	Flexible Budgeting	7	3	42

Sourc: Field Survey

The above table 4.1 shows the practice of management accounting tools in Joint Venture Banks of Nepal. Practicing the tools like: capital budgeting, cash flow, ratio analysis and budgeting to carry out different managerial activities while 71% of the Joint Venture Banks were found practicing of cost-volume-profit analysis, 42% practicing cost segregation into fixed and variable, 42% practicing responsibility accounting, 14% practicing zero based budgeting and 42% practicing flexible budgeting.

MA tools are needed to be carried out for planning, controlling and decision making process. Practicing of capital budgeting, ratio analysis and cash flow

analysis were common in every bank where as practice of standard costing and zero based budgeting is very low.

Table 4.2

Base for not Practicing any Management Accounting Tools in JVB'S of Nepal

S.N.	Tools	No. of Respondents	No. of Practitioner	Percentage
1	Lack of Expertise	7	-	-
2	High cost	7	-	-
3	No information about the tools	7	-	-
4	Others	7	7	100

Sourc: Field Survey

The above table 4.2 shows reasons for not practicing MA tools in Joint Venture Banks of Nepal. All JVB'S mentioned that some MA tools could not be used in bank due to they are applicable only in manufacturing concern and not applicable in service sector.

Table 4.3

Budget Preparation System in JVB'S of Nepal

S.N.	Budget prepared By	No of respondents	No of practitioner	Percentage%
1	Finance Department	7	6	85
2	Planning Department	7	3	42
3	Budget Committee	7	6	85
4	Outside Experts	7	-	-
5	Others	7	-	-

Sourc: Field Survey

The above table 4.3 shows that budget preparation system practiced in JVB'S of Nepal. It is clear that 85% banks practiced budget preparation by finance department and also 85% of JVB'S prepared budget by budget committee. 42% of JVB'S planning departments are also involved in preparation of budget. None of JVB'S of Nepal practiced preparation of budget by outside experts and others.

Finance department and budget committee were mostly used in the preparation of budget.

Table 4.4

Budget Practice in JVB'S of Nepal

S.N.	Types of Budget	No of Respondents	No of Practitioner	Percentage%
1	Cash budget	7	1	14
2	Operation budget	7	4	57
3	Master budget	7	6	85
4	Annual budgeting	7	7	100
5	Other	7	-	-

Sourc: Field Survey

The above table 4.4 shows the practice of types of budget in the JVB'S of Nepal. From the table it is obvious that 85% of the banks practiced master budget, 57% of the banks practiced operation budget to carry out their operational activities while 14% practiced cash budget where as 100% banks practiced annual budget.

Table 4.5

Types of Budget Practice in Joint Venture Banks of Nepal

S.N.	Budget Period	No. of Respondent	No. of Practitioner	Percentage
1	Short term budget(1 year or less)	7	7	100
2	Medium term budget(3 years)	7	1	14
3	Long term budget(5 years or more)	7	-	-
4	Others	7	-	-

Sourc: Field Survey

The above table 4.5 shows the types of budget practice in JVB'S of Nepal. From the table it is clear that 100% of the JVB'S practiced short term budget (1 yr or less). 14% of JVB'S practiced medium term budget (3 years). Banks were not found interested in preparing long-term budget because at one hand, it was time

consuming and need lot of exercises. On the other hand, future was so uncertain that budget might not lead the activities all the time.

Table 4.6

Base for Budget Preparation in JVB'S of Nepal

S.N.	Base Tools	No. of Respondents	No. of Practitioner	%
1	Past budget estimates	7	3	42
2	Based on past actual expenses/ historical expenses	7	6	85
3	Zero base budgeting	7	2	28
4	Activity based budgeting	7	1	14
5	Others	7	-	-

Sourc: Field Survey

The above table 4.6 shows the base of budget preparation in the JVB'S of Nepal. From the table it is obvious that 85% of the JVB'S practiced 'past actual expenses' as base to prepare budget, 42% of the bank practiced 'past budget estimates' while 28% practiced zero base budgeting and 14 % practiced activity based budgeting as base of budget preparation.

The practice of 'past actual expenses' as the base for budget preparation is earning wider popularity among the JVB'S of Nepal.

Table 4.7

Capital Budgeting or long-term Investment Decision Practiced in JVB's of Nepal

S.N.	Tools	No. of respondent	No. of practitioner	%
1	Payback period	7	5	71
2	Average Rate of Return	7	2	28
3	Net present value	7	7	100
4	Internal rate of return	7	3	42
5	Profitability Index	7	7	100

6	Modified internal rate of return	7	-	-
7	Others	7	-	-

Sourc: Field Survey

The above table 4.7 shows the capital or long term investment decision in JVB's of Nepal. The table revealed that 71% banks used payback period. Average rate of return were used by 28% banks. While 100% banks practiced net present value (NPV) and profitability index tools.42% of banks practice internal rate of return. None of JVB's of Nepal practiced modified internal rate of return.

Therefore, from the above table it was clear that payback period, average rate of return, net present value, internal rate of return and profitability index mostly practiced tools of capital budgeting.

Table 4.8

Basis for Alternative Decision Practiced in JVB's of Nepal

S.N.	Base	No. of Respondent	No. of practitioner	%
1	Quotation process	7	6	85
2	Special order decision	7	2	28
3	Tender process	7	2	28
4	Lease or Purchase decision	7	5	71
5	Others	7	-	-

Sourc: Field Survey

The above table 4.8 shows the alternative decision making practiced in JVB's of Nepal. It is clear that 85% JVB's of Nepal practiced quotation process, special order decision and tender process was practiced by 28%, and lease or purchase decision was used by 71% a JVB's of Nepal.

From above table it is clear that quotation process and lease or purchase decision was mostly used by all JVB's of Nepal and special order decision, tender process were practiced by less than 50% banks.

Table 4.9

Practice of Pricing Service in JVB's of Nepal

S.N.	Pricing Technique	No. of Respondent	No. of practitioner	%
1	Full cost pricing	7	4	57
2	Variable cost base pricing	7	-	-
3	Target return on investment	7	3	42
4	Activity Based cost pricing	7	-	-
5	others	7	-	-

Sourc: Field Survey

The above table 4.9 shows the service pricing technique practiced in JVB's of Nepal. It is clear that 57% JVB's of Nepal practiced full cost pricing and 42% JVB's practiced target return on investment pricing method. None bank practiced variable cost based and activity based cost pricing method. Therefore, full cost pricing and target return on investment pricing methods were practiced by majority of the JVB's of Nepal.

Table 4.10

Method of Segregation Mixed Cost into Fixed and Variable in JVB's of Nepal

S.N.	Tools	No. of respondent	No. of practitioner	%
1	High-Low point method	7	-	-
2	Regression method	7	-	-
3	Average method	7	3	42
4	Analysis method	7	3	42
5	Others	7	-	-

Sourc: Field Survey

The above table 4.10 shows the practice of segregating mixed cost into fixed and variable in JVB’s of Nepal. From the table it is clear that 42% of the JVB’s practiced average and analysis method to segregate mixed cost into fixed and variable.

Table 4.11

Cost and Revenue Estimation Practice in JVB's of Nepal

S.N.	Cost and Revenue Estimation Technique	No. of Respondent	No. of practitioner	%
1	Past Trend analysis	7	6	85
2	Zero Base budgeting	7	-	-
3	Market Survey	7	3	42
4	Judgmental Analysis	7	2	28
5	Others	7	-	-

Sourc: Field Survey

The above table 4.11 shows the practice of cost and revenue estimation in JVB's of Nepal. From the table it is clear that 85% of the banks practiced past-trend analysis while 42% of the banks practiced market survey and 28% of the banks practiced judgmental analysis to forecast cost and revenue of the banks. From the survey, it was found that 'past trend analysis' was the most widely used technique by the banks and zero base budgeting is not used by any JVB's.

Table 4.12

Risk Adjustment Practice used while Evaluating Capital Investment in JVB's of Nepal

S.N.	Tools	No. of Respondent	No. of Practitioner	%
1	Sensitivity analysis	7	3	42
2	Required rate of return	7	-	-
3	Short payback period	7	2	28
4	Higher IRR	7	4	57
5	Estimated for cash flow	7	6	85
6	others	7	-	-

Sourc: Field Survey

The above table 4.12 shows risk adjustment practice used while evaluating capital investment in JVB's in Nepal. It shows that 42% of Joint Venture Banks used sensitivity analysis while 28% of them used short payback period technique.

Similarly, 57% and 85% of them also used higher IRR and estimated for cash flow technique respectively to adjust risk while evaluating capital investment.

Table 4.13

Tools used for Evaluation of Overall Performance at the end of the Accounting Year in JVB's of Nepal

S.N.	Tools	No. of Respondent	No. of practitioner	%
1	P/L made by company	7	7	100
2	Budgetary control	7	2	28
3	Standard costing	7	-	-
4	Ratio Analysis	7	4	57
5	Cash flow analysis	7	5	71
6	Others	7	-	-

Sourc: Field Survey

The above table 4.13 shows that the tools used for evaluation of overall performance at the end of accounting year in JVB's of Nepal. It is clear that 100% banks practiced profit and loss accounting tools. 57% banks practiced ratio analysis while cash flow analysis was used by 71%. But standard costing was not practiced by any banks and budgetary control practiced exactly by 28% JVB's. Therefore, profit and loss criteria, ratio analysis and cash flow analysis were mostly practiced and used in JVB's of Nepal than other tools.

Table 4.14

Practicing of Pricing for the issue of Inventory in the JVB's of Nepal for Perpetual

S.N.	Technique/method	No. of Respondent	No. of practitioner	%
1	LIFO	7	-	-
2	FIFO	7	-	-
3	Weighted average	7	-	-
4	Specific Identification	7	4	57
5	Others	7	-	-

Sourc: Field Survey

For Periodic

S.N.	Technique/method	No. of Respondent	No. of Practitioner	%
1	LIFO	7	-	-
2	FIFO	7	-	-
3	Weighted average	7	-	-
4	Specific Identification	7	4	57
5	Others	7	-	-

Sourc: Field Survey

The above table 4.14 shows the practice of pricing for the issue of inventory in the JVB's of Nepal. From the table it is clear that 57% of banks 'perpetual as well as periodic items pricing.'

Table 4.15

Joint Cost Allocation in the JVB's of Nepal

S.N.	Tools	No. of Respondent	No. of Practitioner	%
1	Sales value method	7	-	-
2	Negotiated basis	7	3	42
3	Others	7	-	-

Source: Field Survey

The above table 4.15 shows the practice of joint cost allocation in the JVB's of Nepal. From the table it is obvious that none of the banks use joint cost allocation. On going through interview with bank manager and accountant in chief, it was known that the major expenditure for banking companies was operating expenditure and administrative expenditure. There was no occurrence of joint cost, so no question arose of allocating joint cost among the departments. Besides, department wise expenditure were included under administrative head so allocation of joint cost did not keep any meaning in banks.

Table 4.16

The Main Factor that Affect the Decision Making Process in JVB's of Nepal

S.N.	Main Factors	No. of Respondent	No. of Practitioner	%
1	Management accounting technique	7	4	57
2	Government policy	7	7	100
3	Objective of the bank	7	3	42
4	Discretion of management	7	2	28
5	others	7	-	-

Sourc: Field Survey

The above table 4.16 shows the main factors that affect the decision making process in JVB's of Nepal. The table shows that 100% banks' decisions were affected by government policy. Management accounting tools and discretion of management affect 57% and 28% JVB's of Nepal respectively. 42% banks decision were affected by objective of bank. Therefore, decision was mostly affected by government policy.

4.3 Hypothesis Test

Hypothesis -1

Null Hypothesis Ho: There is no significant relationship between the use of payback period and net present value.(Use of payback period and net present value are independent)

Alternative Hypothesis, H 1: There is significant relationship between the use of payback period and net present value. (Use of payback period and Net present value are dependent.)

Result

Since the calculated value of X^2 = 2.332 is less than tabulated value of X^2 at 5% level of significance for 1 d. f = 3.842. The null hypothesis Ho is accepted and hence the alternative hypothesis H_1 is rejected ,it means that the use of pay back period and net present value are independent *(Appendix - II)*.

Hypothesis; 2

Null hypothesis H_o: There is no significant relationship between the use of cost volume profit analysis and cash flow analysis (use of cost volume profit analysis and cash flow analysis are independent).

Alternative hypothesis H_1: There is significant relationship between the use of volume profit analysis and cash flow analysis (use of cost volume profit analysis and cash flow analysis are dependent.)

Results

Since the calculated value of o^2 = 0.582 is less than tabulated value of $\square^2$at 5% level of significance for 1 d. f = 3.841. the null hypothesis Ho is accepted and hence the alternative hypothesis H_1 is rejected ,it means practicing of cost volume profit analysis and cash flow analysis are independent *(Appendix - III)*.

4.4 Major Findings

On the basis of the above comprehensive analysis of data and information, the following findings have been identified:-

- While analyzing the application of management accounting tools practiced in Nepalese Joint Venture Banks for planning, controlling and decision making, it was found that ratio analysis, cash flow analysis and capital budgeting are widely practiced representing 100%, 100% and 100% respectively. Similarly,

cost-volume-profit analysis, responsibility accounting and cost segregation into fixed and variable tools were practiced representing 71%, 42% and 42% respectively. Zero base budgeting and flexible budgeting were practiced by 14% and 42% respectively.

- In the case of budget preparation system in JVB'S of Nepal, it was found that 85% joint venture banks' budget was prepared by finance department, 85% by budget committee and 42% by planning department. But banks are not using outside experts for budget preparation.
- Types of budget practiced in JVB's of Nepal were cash budget, operational budget, master budget and annual budgeting. Almost 57% JVB's of Nepal practiced operational budget while 85% practiced master budget, 14% practiced cash budget and 100% practiced annual budgeting.
- Regarding types of budget practice in JVB's of Nepal, it was found that 100% JVB's of Nepal prepare short term budget. It was also found that medium term budget was prepared just by 14% and long term budget was not practiced by any bank.
- The cost and revenue estimation was used by 85% of JVB's of Nepal on the basis of past trend analysis. 42% and 28% banks use judgmental analysis and market survey analysis.
- With regard to capital budgeting techniques practiced by Nepalese joint venture banks, it was revealed that nearly 28% of joint venture banks are using average rate of return method, 42% of banks are using internal rate of return method. Similarly, 71% of them are using payback period. Net present value and profitability index are applied by 100% respectively.
- For decision making, quotation process is used by 85% joint venture banks of Nepal. Similarly, special order decision, tender process and lease or purchase decision were also applied by 28%, 28% and 71% joint venture banks respectively.

- For the process of pricing service, 57% JVB'S of Nepal used full cost pricing and 42% JVB'S of Nepal used target return on investment method. Variable cost base pricing and ABC costing method was not used by any joint venture banks.
- To segregate mixed cost into fixed and variable, just 42% JVB'S of Nepal used average method and 42% of joint venture banks use analysis method.
- To adjust risk while evaluating capital investment 85% of them use estimated cash flow technique. Sensitivity analysis and higher IRR were practiced by 42%, and 57% respectively. Similarly, short payback period was used by just 28% JVB'S of Nepal.
- To measure and control the overall performance of the banks at the end of accounting year, 100% JVB'S used profit or loss made by the banks. Budgetary control, ratio analysis and cash flow analysis were practiced by 28%, 57% and 71% JVB'S of Nepal. It can be seen in table that standard costing was not used by any joint venture bank of Nepal to evaluate overall performance.
- While analyzing the factors affecting decision making procedures of the joint venture banks of Nepal, it was found that government policy affect decision of 100% JVB'S of Nepal. Similarly, management accounting technique, objectives of bank and discretion of management also affect the decision of 57%, 42% and 28% JVB'S of Nepal.
- The nature of the business of banks was taken as major difficult for the application of managerial accounting tools & technique by almost all CB'S of Nepal.
- While examining different banks, it was found that management accounting tools were in practice in one way or the other but banks were practicing most of the privileged tools of management accounting such as sensitivity analysis, judgmental analysis, past actual expenses basis for budget preparation. Banks

were not practicing new advance technique of management accounting tools such as: zero base budgeting, activity based costing and target costing etc. This was because companies did not have any information and cognizance about the tools.

- From the open-end analysis, it was found that the major difficulties for application of new advance management accounting tools were respectively;
  - Lack of information
  - Lack of cognizance about the tools
  - Lack of expertise and
  - Trend of follow-up past trend

The hypothesis test 1 revealed that JVB'S of Nepal were independent in use of payback period and net present value. It means that there is no significance relationship between the use of payback period and net present value. The hypothesis 2 found that JVB'S of Nepal were independent in use of cost-volume-profit analysis and cash flow analysis. It means that there is no significance relationship between the use of cost-volume-profit analysis and cash flow analysis.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Management is always concerned with planning, organizing directing and controlling for goal achievement through using limited resources in dynamic environment. Dynamic environment plays vital role for management for goal achievement. Dynamic environment creates uncertain and risk which have opportunity as well as threats for organization. Accounting is the process of recording, classifying, analysis, and identifying and interpretation business transaction in financial or monetary term. The main purpose of accounting is to ascertain the result and financial position of business activities of particular period. Thus, Management accounting is the study of managerial aspects of accounting. The accounting system which assists management in carrying out its function more efficiently may be termed as management accounting. Management accounting is the process of identifying and communicating information for searching the goals of the company.

Managerial accounting is an integral part of management process and management accountant are important strategic partners in the companies' management team. Therefore, management accounting helps management to keep the minimizing losses and maximization of profit as well as getting others objectives.

Management effectively achieves organizational objective through the efficient use of scarce resources in a changing environment. Future is uncertain, it creates risk. To reduce risk, the only reliable weapon is good management.

Banks are the backbone of the country because they carry out economic activities. Their activities impact the economy in one-way or the other. Every bank has limited resources in a better way; different tools and techniques have been developed. Among the various tools and techniques, management accounting tools have proved beneficial in different aspect of managerial activities. The main objective of management accounting is to help managers in overall managerial activities by providing information and helping in planning, controlling and decision making. This acts as a strategic business partner in support of management role in decision making.

The main objective of the present research was to examine the present practice of management accounting tools in the joint venture banks of Nepal and to identify the area where management accounting tools can be applied to strengthen the bank.

As per the nature of the study, survey type research design is followed with descriptive and analytical approach. Surveys of different bank are made. Questionnaires were distributed and table talks were made to gather information. Information is tabulated as per the requirement of the study.

From the analysis it is found that management accounting tools such as capital budgeting, annual budgeting, cash flow and ratio analysis are the mostly practiced tools, where as practice of tools like zero base budgeting, activity based budgeting, activity costing, target costing and value engineering are almost nil in the joint venture banks of Nepal. Lack of information and extra cost burden are the main reason behind not practicing such tools.

From the hypothesis test; it was found that all the banks were independently practicing the management accounting tools. There was no significant relationship between the types of the banks and practice of management accounting tools.

5.2 Conclusion

Although different types of accounting tools were taught in colleges, it was not used by most of the joint venture banks of Nepal. It shows gap between the theory and practice. Tools like ratio analysis, capital budgeting, budget and cash flow are in practice but applications of new tools of management accounting are not in practice.

Hiring outside expert to carry out different activities of banks is also not found in joint venture banks of Nepal. Thus it can be concluded that Nepalese joint venture banks are in infant stage in practicing of management accounting tools. Management accounting experts are not found in joint venture banks of Nepal. They are with the concept that management accounting is similar to financial accounting. New tools and techniques such as; zero base budgeting, activity costing, target costing, value engineering have been developed around the globe but practice of it is almost nil in Nepalese joint venture banks. Lack of information and willingness about management accounting tools are the main factors causing problem in the application of such tools.

5.3 Recommendations

Nepal is in developing stage and it is proceeding towards globalization. As a member of WTO, Nepalese joint venture banks should fit with the global environment. Best-fit managerial strategies should be developed. Managers should think in a global perspective. Information should be updated. For better utilization of the limited resources and achieving goal through cut throat competition,

application of advance management accounting tools can be of great help. Thus the following recommendations based on the findings of the research study are:

1. To apply management accounting tools congenial environment and willingness of management is a must. So separate management accounting department should be established within a bank. Management accounting expert should be hired. Those banks that cannot manage to establish separate department can manage it under their existing accounting, financing, or planning department. If the bank cannot hire outside experts, it can send its existing employee for short-term training. If this is also not feasible they can manage it by taking service of fee based consultant.
2. Different types of internal and external information are necessary for the applications of management accounting tools. So banks are recommended to keep management accounting information system so that they can be informative through out the time about every aspects of management. Skill should be updated with the every changes taking place around the external environment. Skill can be developed through training.
3. To strengthen the competitiveness of Nepalese joint venture banks and to carry out managerial activities, the use of management accounting tools is recommended. For planning activities, tools like budgeting, cost volume profit analysis, linear programming model of planning can be used. For controlling activities, tools like budgetary control, variance analysis, standard costing and responsibility accounting can be use. For decision making, marginal analysis can be used. While implementing any tools of management accounting, it is recommended to analyze cost and benefit of the tools.
4. Interaction between academician and banks is a must. It is recommended that banks should create an environment of interaction between the academician and the banks. Banks can benefit from their knowledge about new tools and techniques of management accounting.

5. Academicians should put effort to bring advance management accounting tools into the light by conducting national seminars. Short term training packages on management accounting should be offered for business managers to acquaint them with the appropriate techniques of management accounting and to up date their knowledge and skill.
6. Mostly banking activities are based on use of traditional tools of management accounting such as past trend analysis, which must be lessen. For the smooth operation of the activities, they should be motivated toward the application of new, advance and modern management accounting tools such as target costing, activity costing, zero base budgeting.
7. While preparing budgeting and planning activities, banks should hire professional expert.
8. While making long-term investment decision or purchasing fixed asset, banks are recommended to apply NPV tool of capital budgeting.
9. Budget preparation should not be based on "actual past expenses" only. Along with actual past expenses, environmental factors should also be taken into consideration. It is because what happened in the past might not occur in the future.
10. Banks that depend completely on "profit and loss" criteria to measure the performance are suggested not to rely completely on this criterion. Along with this criterion, banks are suggested to follow criteria such as, activity, liquidity productivity and productivity analysis. Besides these, present performance of the bank should also be compared with past performance of the bank.
11. Banks using "cost plus pricing" should use target cost pricing, activity based pricing and marginal cost pricing tools as per the case.
12. The joint venture banks of Nepal should practice allocation of joint cost among the departments, divisions and units so that cost consumption rate per

division, department or unit can be ascertained which helps in decision making regarding cost. Proper allocation of joint cost is a must in every bank.

13. While estimating cost and revenue for future period, banks should not be based on "past trend" only. What happened in past might not happen in future so far the estimation, tools like "zero base", market survey and statistical tools should be practiced. This helps the bank to reach to correct estimation.
14. Academicians, who have cognizance about the tools, should put effort to bring advance management accounting tools into the light so that person related to these fields can get more information about the implementations and benefit of the tools.
15. Nepalese joint venture banks should be updated with new tools that are practiced around the globe in best performing banks. For cost reductions; life cycle costing, target costing, value engineering, process engineering; just-in-time inventory management, total quality management, management audit & bench marking should be practiced. Activities performed based on traditional management accounting tool is though helpful but not sufficient in the competitive age. New methods and techniques should be thought and developed so that cost minimization can be exercised, better quality can be delivered to delight the customer.
16. Out of the total profit made each year, some portion of it should be allocated for research and development program so that new tools and techniques can be developed and adopted in the banks.

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