

MANAGEMENT ACCOUNTING PRACTICES IN THE PUBLIC FINANCIAL SECTOR IN NEPAL

A THESIS

Submitted

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RECOMMENDATION

This is to certify that the thesis
Submitted by

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Entitled

**Management Accounting Practices in the
Public financial Sector in Nepal**

Has been prepared as approved by this department in the prescribed format of
Faculty of Management. This thesis is forwarded for examination.

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VIVA – VOCE SHEET

We have conducted the viva examination of the thesis presented
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Management Accounting Practice in the Public Financial Sector in Nepal

And found the thesis to be the original work of the student and written according to the prescribed format. We recommended this thesis to be accepted as partial fulfillment of the requirement for Master's degree in Business studies (MBS)

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CHAPTER – I

INTRODUCTION

1. Introduction

Accounting is the language of business. To clearly understand and successfully communicate the business results, Management Accounting is a type of accounting discipline that helps management to achieve the desired goal. So Management Accounting is the process of various activities which is adopted by the management. Management Accounting is concerned with classification, analysis and reporting of financial transactions of a business with a view to ascertain its profit or loss for the period and its financial position at the end of each accounting period. It interprets and communicates information about the financial position of the business. Thus, Management Accounting can be defined as a process of recording, classifying and summarizing financial transactions of a business in a such manner that the results of its operations and financial position can be ascertained at the end of a given period and communicate them to various users. It is the process of systematic collection, recording, classifying, summarizing and interpreting of the financial transactions. Management Accounting helps management maximize profit. Each and every business is today operating in a dynamic environment. Management must be concerned with all the aspects of operation of companies including production of goods as well service, delivery of service sales and marketing activities, supporting activities, financial activities, such as personal training, data processing etc. Management

Accounting always looks for future. Thus task is integral part of management process. The process is indentifying and measuring analysis, interpreting and communication information for searching the purpose of the enterprises. So Management Accounting is the process of planning, coordination, control and decision making concerning limited resources for defined goal of company. Management Accounting helps manage to formulate the policies and strategies to assist its day to day activities as well medium and long term activities. Management Accounting is concerned with cost classifications, estimation, cost allocation, profit measurement and recognition by applying cost volume profit analysis, Budgeting for planning and control for short medium and long term, ratio analysis, standard costing, flexible budgeting, decision regarding alternative in business operation, pricing decision, long term investment.

1.1 Background of study

Nepal is a landlocked country. The population of the country has been estimated to be more than 2.5 crore and its geographical structure is complex. So necessary resources have been distributed and allocated by government body through public financial sector. Public Financial Sector is one of the government activities Public Financial Sectors are in operation to strengthen economic activities. In these activities, how managerial accounting techniques are practiced and it's planning controlling and decision making process is done. Public Financial Sectors have sufficient role to the nation to smoothen economic activities, from the view point of social, trade point view and dynamic environment.

Management Accounting covers various tools and technique as well as cost accounting, statistics, production and operations management, economics, marketing, MIS, strategic, financial and tax planning. The various Management Accounting tools are as follows:

Cost Classification and Cost Estimation

Cost Allocation

Profit Measurement and Recognition.

Cost-Volume-Profit analysis

Budgeting for Profit Planning and Control

Standard Costing

Flexible Budgeting and Overhead Cost control

Decision making to alternative in Business Operation

Pricing Decision

Long term Investment Decision

Cash flow Analysis

Analysis of Financial Statement

1.2 Statement of the problem

The Financial Sectors have been operating well from the very establishment. Their experience on international banking, prompt and computerized service, professional attitude are factor for their rapid progress. These banks have been able to capture a remarkable market of Nepalese Banking Sector or Financial Service Industry in a relatively

short period of time.

Success is not a matter of chance. Profit does not just happen, it is to be planned and managed. Management Accounting provides techniques to aid management functions. Poor performance is the outcomes of poor planning, controlling and decision making.

The research questions were used to study the scenario of Management Accounting tools in financial sectors:

1. What type of Management Accounting tools are used by financial sector?
2. Which Management Accounting tools are mostly practiced and which are not practiced till now?
3. What are the major difficulties in the application and implementation of Management Accounting tools?
4. In which areas of the financial sectors can Management Accounting tools be applied to improve the competitiveness?

1.3 Objective of study

The main objective of the research was to examine and study the state of practices of Management Accounting tools in the financial sectors in Nepal. The specific objectives were

1. To evaluate the process of planning controlling and decision making process of Public Financial Sector in Nepal.
2. To identify the major difficulties for practicing the Management

Accounting tools in Public Financial Sectors Nepal

3. To make suggestion and recommendation to overcome the difficulties in practicing Management Accounting tools and techniques in Public Financial Sector in Nepal

1.4 Significance of the study

The research work was concerned with the study of the practice of Management Accounting tools in Public Financial Sectors in Nepal. This study will be significant in the following ways.

1. It analyzes the use of Management Accounting tools in financial sectors.
2. It will be useful to the potential investor, lenders, managers, policy and stakeholders of the financial sectors.
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. Last but not the least, it provides literature to the researcher.

1.5 Limitations of the study

Each and every activity as well study is not free from some limitations. The limitations of the present study are as follows:

1. The study has focused practice of Management Account tools/technique in Public Financial Sectors
2. The study covered Public Financial Companies in Nepal. So, the

findings would not represent to other Public Enterprises and Private Companies in Nepal.

3. The data and other information were collected through got from primary sources because this was survey type research.

1.6 Organization of the study

This study was divided into five chapters

1. Introduction
2. Review of literature
3. Research of methodology
4. Data presentation and analysis
5. Summary, conclusions and recommendations,

Chapter: 1 Introduction

This chapter included background of study, a basis of review of public enterprises as well Public Financial Sector, statement of the problem, objectives of the study importance of the study and limitations of the study.

Chapter: 2 Review of Literature

This chapter included the review of the past studies of Management Account and brief review of Management Account tool and technique, past researcher studies and research gap.

Chapter : 3 Research Methodology

The Research Methodology is the third chapter. This chapter dealt with “Research Methodology” adopted for the study and included research design, data collection procedure and data analysis tools.

Chapter : 4 Data Presentation and Analysis

The Data Presentation and Analysis is the fourth chapter. This chapter consist the data presentation and analysis of the data was tabulated by using statistical tools.

Chapter : 5 Summary, Conclusion and Recommendations

This chapter included Summary, Conclusion and Recommendations of the study. Finally list of bibliography, appendices were included.

CHAPTER - II

LITERATURE REVIEW

2.1 Perspective of Management Accounting

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, Ojha and Acharya, 2004:1.10]

Managerial Accounting is an inexact science. Its usefulness depends to a very extent upon the intelligent interpretation of the data made available. Managerial Accounting provides information to assist managers in their planning and control of activities. Managerial Accounting activities include collecting, classifying, and processing, analyzing and reporting information to manager. Unlike the financial accounting information prepared for external constituencies such as investors, creditors, suppliers and tax and regulatory authorities. Managerial Accounting information should be designed to help decision making within the firm. Therefore the scope of Managerial Accounting extends beyond traditional measures of the cost and revenues from the transactions that have already occurred to include also information on sales, backlogs, unit quantities, prices demands and capacity resources and extensive performance measures based on physical or non-financial measures. [Bajracharya, et al.,2005:31]

Management Accounting is the presentation of accounting information to formulate the policies to be adapted by the Management and assist its day-to-day activities. It helps the management to perform all its functions including planning, organizing, staffing, directing and control presents to management the accounting information in the form of processed data, which it collects from financial accounting. [Paul,1994:1]

Accounting is concerned basically with providing financial information that will help decision makers to make economically rational decisions. American Management Association defines "Managerial Accounting is the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information".

The concept of Management Accounting has been developed because of complexity in business environment. The various tools and techniques of Management Accounting will help to change that complexity into opportunities. It collects both financial and non-financial information from various branches of knowledge. This information should be classified, processed, analyzed, recorded and reported as per the requirements of management. The main theme of these reports is to simplify the planning and decision-making process. Finally, managerial accounting provides an effective support to achieve better organizational objectives. It is important not only for managers and employees but also every aspect of stakeholders.

2.2 Major Management Accounting Tools

The management tools discussed in this research is as follows:

1. Capital budgeting
2. Cost segregating into Fixed and Variable
3. Standard costing
4. Break Even Analysis (BEP)/Cost-Volume-Profit (CVP) Analysis
5. Ratio Analysis/Financial Statement Analysis
6. Master Budgeting
7. Flexible Budgeting
8. Responsibility Accounting
9. Activity Based Costing (ABC)
10. Cash Flow Statement
11. Zero Base Budgeting (ZBB)
12. Lease or Buy

2.3 Management Accounting in Nepalese Perspective:

Nepal being a small landlocked country situated between the two large countries with a huge and rapid growth in business, industrial, and economic sectors. The country is under serious political instability for a long period of time because of which the security problem has emerged. Many multinational companies are hesitating to come and establish their subsidiaries here. Because of the same reasons, Nepalese investors are

also not very intense in making investments within the country on top of that most of the existing companies are running in traditional approach with autocratic leadership. The rapid changes in technology and the globalization of the market have become the real challenges today. Understanding the opportunity and the huge market available in the neighboring countries and throughout the global after the country's entry into the WTO, the functions and importance of Management Accounting has been realized by the business people and companies. Thus there is still plenty of scope of Management Accounting. It has almost become mandatory to understand and use Management Accounting to grow and sustain in today's rapidly changing and competitive global market.

Management Accounting is a new accounting discipline and it is still in developing stage. It can be said that the role of Management Accounting is yet to be recognized.

2.4 Role of Public Enterprises

In general, public enterprises are the providers of government's services and facilities easily to people. "Public Enterprises can be defined as an activity of the government whether, central, state or local, involving manufacturing or production of goods including agriculture or making available a service for a price such activity being managed either directly, that is departmentally, or through an autonomous body with the government having a majority ownership that is more than 50% of equity" (Narayan, 1998:3).

The Public Enterprises are state owned organizations having more than 50% share of government.

“Public Enterprises in Nepal constitute a vital instrument for the socio-economic development for our country. It enjoys a strategic and crucial position in our mixed economy. They have been established in many sectors of the economy with a view to provide goods and services for the overall development of the country. Consequently, they are dominant in the production or supply of sugar, cement, cigarettes, leather, agricultural tools, petroleum products and all public utilities”. (Shrestha, 1990:1)

“Those organization namely, government enterprises and public corporations which are entirely or mainly owned and/or controlled by the public authorities consisting of establishments which by virtue of their kind of activities, technology and mode of operation are classified as industries” (Shrestha, 1990:3). The Seoul work shop on “Performance of Public Enterprises” held in September 1975 defines public enterprises as all productive entities/organizations which are owned and/or controlled by public authorities and where output is marketed. It had further clarified that (a) “Productive entity-Organization” refers to an identifiable decision-making units with an explicit or extractable budget and which produces goods or services” (b) “Ownership refers to such entities or organizations whose more than 50% of outstanding entity is hold by a “public authority” either :directly or indirectly”, (c) “Control” means the power to be exercised in the management of the enterprises through the

appointment of top management members of the board of directors and the chief executives, (d) “Output” is said to be “Marketed” if sales covers more than 50% of current cost. Current cost refers here only to intermediate inputs and returns to factory not owned by the enterprises, and constituting largely wages and rent. Thus public enterprises usually refer to commercial operating organizations wholly or partly owned and effectively controlled by a public authority.

2.5 Evolution of Public Enterprises

Today, the evolution of Public Enterprises (PE), in the world has taken place in such a way that one can hardly find any government remaining aloof from the industrial enterprises, though the degree of involvement may vary. In fact the very characteristic of the present century has been the acceptances of the role of the state involvement in the economy, in matter how loud the whole world cry for the total role played by the private sector. Even PE’s do exist in a country like USA, where the stronghold of private enterprises exists. The USA makes the least use of the PE’s; the U.S. has disbanded most of the PE’s that expanded considerably mainly to meet the financial and procurement purpose. For the purpose of dealing with emergency requirements of the two world wars and the Great Depression of the 1930s, it has founded Tennessee Valley Authority (TVA) in 1933, a unique PE setting an example to be imitated by many countries to undertake integrated development of great river valleys. Irrigations, flood control, navigation, soil conservation and the generation of hydro-electric power are the example of PEs. The former British Minister for overseas Development

once remarked “We now need to extend the concept of intervention and planning from the national to the international level, from the nation to the world, from the country to the planet. We must now determine that we shall solve our shared and common problems only by a firm rejection of any illusion that there is a free world market economy”. The need of the PE was far greater felt especially during the post world war period and the great depression of the thirties, though the need of it went on emphasizing with the adoption of development planning since 1950s.

Each private sector as well as public has its own merits and demerits depending upon the ideology, resources available, regulation, consciousness, control, monitoring and supervision mechanism etc. Former Prime Minister of India Mrs. Indira Ghandi once remarked “People steeped in poverty are naturally impatient for an ending if disparities and for the opportunity of better life. Many projects have to be taken in hand. Development cannot be left to the merely of market forces. For it is feasible for the private individual or group to finance the vast investments involved. State intervention is therefore necessary. And we must fulfill our pledge to give social and economic justice to our people”. Whereas former President of Korea, Park Chung he insisted “Private ownership of production should be necessary to control to stimulate national development and protect the interests of the people”.

“It is believed that Japan was the first to use PE’s systematically for promotional purposes. Soviet Union also used it properly for building

up its socialist economy in those days. India is no exception to it. Public sector did exist in pre-independence era too. But its real development process could take shape only after 1947 with the industrial policy 1998 resolution, which called for ‘the state to play a progressively active role in the development of industries’. In fact, it was the socialist orientation of the government, which led to the development of PE’s in India. In Bangladesh, its history dates back to early 1950s. The creation of PE’s in Sri Lanka owes to the 2nd world war during which period, it was hard hit by supply position of essential commodities that the government to forcefully set up the PE’s. The history of PE’s in Thailand is associated with the up surge of Thai nationalism in the 1930s. Mechanized Spinning and weaving mills established in 1934, which was the first enterprise in Thailand. To conclude, one thing is sure and it is that most developing countries need to make fairly extensive use of PE’s as a catalytic agent in the process of moving towards development oriented economy at a certain stage in the development process public utility and social sector (Shrestha, 1990:5)

2.6 Types of public enterprise

According to functions and services given by the enterprises, they are classified into the following types:

- Manufacturing Public Enterprises
- Commercial Public Enterprises
- Financial Public Enterprises
- Public utilities Public Enterprises

- Social services Public Enterprises
- Development or service Public Enterprises

2.7 Objective of Public Enterprises

Public Enterprises are established to fulfill different requirements. Their basic goal is to serve people as well as to help the nation to develop. It becomes very important to declare the declaration of the objectives; it becomes easier to formulate the strategy and working policies of the enterprises. One of the reasons of the failure of the enterprises, if failed, is regarded as the absence of the objectives. The objectives of the Public Enterprises are therefore most important factor to be taken in the consideration. The objectives of the Public Enterprises are classified into the following groups:

2.7.1 Economic objectives

- I. Accelerating the rate of Economic growth
- II. Attaining the goals of planned Economic Development
- III. Regional and balance development
- IV. Mobilization of funds for future plans
- V. Making available essential goods and services cheaply and adequately
- VI. Acting as model entrepreneur
- VII. Saving foreign exchange
- VIII. Maintaining Economic stability

2.7.2 Social objectives

- I. Prevent monopolistic practices
- II. Generate Employment Opportunities
- III. Reduction in Disparity of Income
- IV. Attaining social justice and social welfare
- V. Avoiding concentration of wealth and means of production in fewer hands
- VI. Making healthy and efficient enterprises

2.7.3 Political objectives

- I. National Defence policy
- II. Political Ideology
- III. National interest and Welfare
- IV. Political Interest and purpose (Joshi, 1993:9)

2.8 Importance of Public Enterprises

The importance of the establishment of public enterprises lies in the services offered to the public sectors by a government. The following points can justify the importance of increasing establishment of the enterprises:

- I. To accelerate the rate of economic growths
- II. To develop the fundamental infrastructures
- III. To provide the public utility
- IV. To balance the regional development
- V. To supply the essential commodities

- VI. To create a model entrepreneur
- VII. To check the inflationary trends
- VIII. To contribute to national funds
- IX. To increase foreign exchange reserves
- X. To strength the sick industries
- XI. To generate the employment opportunities
- XII. To initiate research and development activities
- XIII. To prevent concentration of economic power
- XIV. To establish welfare oriented society

2.9 Growth of Public Enterprises in Nepal

Nepal has adopted a mixed economic system whereby public and private sectors coexist to enhance public welfare. With the initiation of first year plan in 1956, PE's have started to grow in Nepal. The industrial policy of 1957 formally recognized for the first time the responsibility of the government in "promoting, assisting and regulating" industrial development in the country and the first plan intended to establish state monopolies in the fields of transportation, telecommunication, hydro electric power generation and irrigation, and to run some big industries, such as cement, sugar, cigarettes, textiles, iron and steel.

The role of public and private sectors are defined in each development plan. However, shortage of capital, skill, know-how and entrepreneurial abilities in the private sectors combined with the inadequacies of physical and institutional infrastructures made it

necessary for the government to step in and breakthrough the barriers of stagnation with various measures including direct participation and management of industrial activities. (Shrestha, 1991: 1) A review of the history of PE's in Nepal tends to suggest that "the desire for more rapid development, the desire for self sufficiency the heavy aid-dependency syndrome of the government and the theoretical virtuosity of the public enterprises as an instrument of implementing national plans have served as powerful objectives for their establishment". (Pradhan, 1982). The emergence of PE's was thus predicted by the inability of private sectors to adequately fulfill these nation objects. (Shah, 1999:8) It appears that the government participation in non-basic industries was considered merely as temporary measures design to fill up the vacuum created by the lack of capital, initiative and entrepreneurial ability of the private sector. But the state ownership and operation of public utilities and basic industries were deemed essential part because of ideological consideration and partly because of broad socio-economic consideration (Shrestha, 1991:2). PE's in Nepal mostly came out into existence during the second, third and forth plans in 1960's and the first half of 1970's. However, their historical roots could be traced back well over a century, when the government decided to provided public services like financial service, drinking water, postal services, telephone, railways, and ropeways through departmental management. During the period of Ranodeep Singh (1878-1886), a government owned financial institution was opened in 1880 by the name of Tejarath Adda (Office of Finance). During the period of Bir Shamsheer Rana (1886-1891), drinking water office was established. Postal services in 1892, electricity in 1912 and

Telephone and rail and ropeway service were provided in 1928. Many of the present days, PE's have roots in these govt. units. (Pradhananga, 1983)

In the content of Nepal, industrialization is still in its infancy with major areas under public sectors management. The contribution of industrials sector in the national economy is not more than 10% of the people still development on agriculture their livelihoods.

In Nepal PE's were established with the explicit objectives of mobilizing resources and earning reasonable profits necessary for the development of the country. This goal was accepted in the second plan (Pathak, 1983:39). Public enterprise of Nepal constitutes a vital instrument for the socio-economic development of our country. The private sector did not show any interest might due to lack of capital, entrepreneur skill, capable of being bearing risks. So that govt. started to establish companies and organization as PE's.

The role of government Public Enterprise becomes increasingly essential especially in term of fulfilling the basic needs, developing the infrastructure and providing financial support for the establishment of industrial enterprises. Following reasons motivated the establishment of PE's in Nepal.

In the past war period, slogan of socialism was popular and the major political parties of Nepal were educated in this school.

I. Private sectors were poor in both capital and knowhow and govt.

Initiation was essential to essential to enhance economic activities.

- II. Additional income was expected from govt. Investment in productive sectors, which was essential to finance other priority sectors
- III. Donor countries and agencies were interested to invest in several enterprises hence PE's were established to utilize their resources and,
- IV. Another rational for establishment of PE's was to prevent private sectors to exploit general public by charging monopoly price and rendering low quality and quantity of goods and services. (Privatization, HMG/N 1996:1)

Public Enterprises in Nepal constitute vital instrument for the country. It enjoys a strategic and crucial position in our mixed economy. They have been established in many sectors for the overhaul development of the country with different goals and objectives. Public enterprise is an organization, which is owned and managed public authority to extent of 5% or more is engaged in activities of a business character and its market outputs in the shape of goods and services for a price. Public sectors of Nepal are still struggling for a place in the socio-economic and political environment ruled by the tradition.

In Public Enterprises government invest a huge amount to establish business organization. So it needs control and return at reasonable rate on the invested amount while selling the goods and services. The enterprises charge the price on the product based on return cost of input plus a reasonable profit on investment since PE's are financed by Govt. and establish with the objectives of fulfilling social needs to the country.

Through they are autonomous in management but controlled by public authority to fulfill the social responsibility in the country.

2.10 Review of the Previous 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.

2.10.1 Miss Kalpana Bhattari (2004) had conducted a research on the topic “Budgeting in Public Enterprises; a Case Study of Nepal Telecom”. The main objective of her study is to examine the application of profit planning in NTC. The necessary data and other information were collected from secondary as well as primary sources of data. The time period covered of the research was five years from FY 2055/56 to FY 2060/61. In her research, she had pointed out various Objectives & findings. Some remarkable objectives were as follows:

-) To examine the practice and effectiveness of profit planning in NTC.
-) To observe the NTC's profit planning system on the basis of budgeting system.
-) To provide suggestions for improvement of efficient planning or budgeting of NTC's in near future based on findings.

Some major findings were as follow.

-) Budgets are prepared just to fulfill the formalities which are not used effectively for profit planning process.
-) Long term and short term budgets are prepared but long term budget is confined only able to the top level.
-) The corporation is not able to maintain to proper coordination between various directorates in regard in the goal and objectives of the corporations.
-) The corporation fails to analyze its strengths and weakness in depth because of the absence of the competitors.
-) Lack of skilled planners and experts.
-) Gap between actual production and actual sales.

2.10.2 Mr. Bodha Raj Tripathee (2005) had conducted a research on the topic “Profit Planning in Manufacturing Enterprises of Nepal; A Case Study of Harrisiddhi Brick and Tiles Factory”. He had focused his study in the application of profit planning in manufacturing enterprises. The time period covered by the research was 12 years from FY 2047/48 to FY 2058/59. In his research, he

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

-) To analyze the absolute profit and losses of HBTF.
-) To examine and analyze the various functional budgets those are prepared by HBTF.
-) To evaluate the variance between target and actual sales of HBTF.
-) To assess financial performance of HBTF in terms of various financial ratios and cost structure.
-) To examine relationship between the financial performances of the factory and the market price of the share of the factory.

Some major findings were as follow.

-) HBTF Ltd. prepares functional budgets like sales budget, production, budget, expenses budgets on annual basis. But the short term product wise production and sales budgets on monthly basis. But they are found to be found far from real life situation.
-) Marketing manager is responsible for sales forecasting in HBTF. Forecasting is said to be done keeping in view different situations and past records but it is not supported by necessary marketing strategy for promotion.
-) The sales target set with foresting is ambitions. Actual sales are less then that of targeted sales. There is significance difference between targeted sales an actual stale. This shows lack of promotional activities to increase sales.

- J Although, straight-line trend shows the positive sales figure for the future, it is for below the volume of sales to operate at BEP level.
- J The poor financial performance of the factory has also led to decline in its market price of share.

2.10.3 Mr. Ailendra Kumar K.C. (2006) had conducted a research on the topic “Management Accounting Practices in Public Enterprises.” He had focused his study to examine the practice of Management Accounting Tools in public enterprises. Mr. 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 follow:

- J To study and examine the present practice of management accounting tools in public enterprises in Nepal.
- J To identify the areas where management accounting tools can be applied to strengthen the public enterprises.
- J To identify difficulties in applying management accounting tools in Nepalese public enterprises.
- J 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 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. And not practicing Management Accounting Tools such as zero Based Budgeting, Activity Based Budgeting, Activities 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.
-) Lack of information and cognizance about Management Accounting tools are the main factors causing problem in the application of such tools.

2.10.4 Mr. Krishna Bdr. Karki (2006) had conducted a research study on "Management accounting practice in Joint Venture Banks of Nepal." He had focused his study to examine the practice of Management Accounting tools in Joint Venture Banks of Nepal. Mr. 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 Ventures Banks of Nepal. So, it shows gap between the theory and practice.
-) Management Accounting is help to managers to formulate organizational strategies as well policy for decision making.
-) In NJVBs, practice of hiring 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 banks 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 Based 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.

2.10.5 Mr. Narayan Prasad Acharya (2006) had conducted research study on topic "Management Accounting practice in Nepalese Public Enterprises." He had focused his study to examine the practices of Management Accounting tools in NPE's. Mr. 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-based 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 & revenue.
-) Government's policy was affecting to more then 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.

2.10.6 Mr. Dil Kumar Shrestha (2008) had conducted a research on the topic “Management Accounting Practices in the Public Trade Companies of Nepal.” He had focused his study to examine the practice of Management Accounting tools in Public Trade Companies in nepal. Mr. 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 MA tools and techniques use in PTCs in Nepal.
-) To identifying the process of planning, controlling and decision making process of PTCs in Nepal
-) To identify the management policy towards the MA tools and techniques.
-) To identify the major difficulties in using MA tools and techniques in PTCs in Nepal.
-) To make suggestions to overcome the difficulties in practicing MA tools and techniques in PTCs in Nepal.

Some major findings were as follows:

-) Management Accounting is help to managers to formulate organizational strategies as well as policy. PE's as practicing MA 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 MA 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 experts service for budget prepared

- J 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.
- J 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.

2.10.7 Mr. Niranjana Dallakoti (2008) had conducted a research on topic “A study on Management Accounting Practices in Civil Aviation Authority of Nepal” he had focused his study to examine the Management Accounting tools practiced in CAAN. Mr. Dallakoti’s research was based on primary and secondary data collection. In his research, he had pointed out various objectives & findings. Some remarkable objectives were as follows:

- J To study and examine the Management Accounting tools practiced in CAAN
- J To identify the Management Accounting tools not in use.
- J To identify the difficulties in applying Management Accounting tools in CAAN
- J To recommend the areas where Management Accounting tools can be applied to strengthen the organization.
- J To make recommendation to overcome the difficulties in applying ma 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 out side training centers.
-) A study on Management Accounting practices in civil aviation authority of Nepal.

2.10.8 Miss Tika Thebe (2009) had conducted a research on the topic “The Balance Scorecard: Measuring total Business unit Performance (A Comparative Study of Commercial Banks)”. The main objective of her study is comparison of Nepal Investment Bank Limited and Kumari Bank Limited by using balanced scorecard a tool of strategic Management Accounting. The specific objectives of this study are as follows: The necessary data and other information were collected from secondary as well as primary sources of data. In her research, she had pointed out various objectives & findings. Some remarkable objectives were 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 follows:

-) With the help of rank correlation, it has 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 of nine objects, five objects developed by KBL have zero correlation while only one object with NIBL has zero correlation.
-) Among four perspectives three perspectives favor NIBL. It shows the better performance of NIBL through BSC approach.

2.11 Research gap

Previous researches conducted on accounting on profit planning control were only on the budgeting practices in manufacturing companies especially in public enterprises and their findings were based mostly on secondary data. Previous Researches conducted on Management Accounting practices were not sufficient and they were concerned especially on public enterprises. Public Enterprises consists various sectors like manufacturing, trade, financial, public utility and social service sector. This study focused on Public financial sectors. This research examined the present practice of management accounting tools in Public financial companies in Nepal and disclosed the reason about the management accounting tools which were not practiced for planning, controlling and decision making process.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Sources of data

The data were mainly collected from primary sources. Primary data were collected through the structured questionnaire.

3.2 Population and Samples

Nepalese Public financial Companies were considered as the total population. There are eight Public Financial Companies. All eight company data were collected in my study.

3.3 Data Processing Procedure

The data collected were categorized in suitable comparative tabular form. The data were processed with simple arithmetic mean and percentage basis. This section consisted presentation, interpretation of available data and test of hypothesis. The raw data collected through questionnaire were converted into table form according to questionnaire's objective.

3.4 Statistical Tools Used

Statistical tool like chi-square (2) was use for the test of hypothesis
This study included the following hypothesis:

Hypothesis 1:

Null Hypothesis H₀:

There is no significant relationship between the use of cost segregation into fixed & variable and profit & loss account. (Use of cost segregation into fixed & variable and Profit & loss account are independent)

Alternative Hypotheses H₁:

There is significant relationship between the use of cost segregation into fixed & variable and profit & loss account. (Use of cost segregation into fixed & variable and Profit & loss account are dependent)

Hypothesis 2:

Null Hypothesis H₀:

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 H₁:

There is significant relationship between the use of payback period and net present value. (Use of Payback period and net present value are dependent)

Hypothesis 3:

Null Hypothesis H_0 :

There is no significant relationship between the uses of annual budgeting and ratio analysis. (Use of annual budgeting and ratio analysis are independent)

Alternative Hypothesis H_1 :

There is significant relationship between the uses of annual budgeting and ratio analysis. (Use of annual budgeting and ratio analysis are dependent)

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

The basis objective of the study is to examine the present practice of Management Accounting tools in the Nepalese Public Financial Sector and to identify the area where Management Accounting tools could be applied to strengthen the financial sector.

To meet the objectives, all the Public Financial Company with head office in Kathmandu is taken as target population. There are eight Public Financial Companies in Nepal. The structured Questioners were distributed to all the eight Public Financial Companies listed below:

1. Agriculture Development Bank (ADB)
2. Rastriya Beema Sansthan (RBS)
3. Rastriya Banijya Bank (RBB)
4. Nepal Stock Exchange (NEPSE)
5. Nepal Bank Limited (NBL)
6. Nagarik Lagani Kosh (NLK)
7. Karmachari Sanchaya Kosh (KSK)
8. Nepal Industrial Development Corporation (NIDC)

The responses made by those Public Financial Companies were properly processed, tabulated and analyzed. Tables were developed based on the open ended questions. Hypothesis was tested with chi-square

statistical tools. The major findings of the research were based on the analysis and interpretation of data, which were included at the end of this chapter.

4.2 Percentage Analysis of Management accounting practice

Table-1
Practice of Management accounting tools in the PFS in Nepal

S.N.	Tools	No. Of population	No. Of practitioners	Percentage (%)
1	Cost segregation into fixed and variable	8	-	-
2	Cost-Volume-Profit Analysis	8	2	25
3	Standard costing	8	3	37.5
4	Annual Budget	8	7	87.5
5	Responsibility accounting	8	-	-
6	Financial statement analysis	8	5	62.5
7	Cash flow statement	8	4	50
8	Activity based costing	8	1	12.5
9	Flexible Budgeting	8	2	25
10	Long term budget	8	2	25

The above table-1 shows the practice of Management Accounting tools in Public financial Sector in Nepal. The percentage representations of the tools like: Annual budget, financial statement Analysis, cash flow statement, standard costing were 87.5%, 50% and 37.5% respectively.

Cost–volume–profit analysis, flexible budget and long term budget were practiced by 25% of the Public Financial Companies and activity based costing by 12.5%. None of the Public Financial Company practiced the tools like cost segregation into fixed and variable and responsibility accounting.

Practice of annual budget, financial statement analysis and cash flow statement were almost common in every Public Financial Company where as practice of responsibility accounting was almost nil.

Table-2
Reason for Not Practiced Management Accounting Tools in
PFS's of Nepal

S.N.	Tools	No of respondent	No of practitioners	Percentage (%)
1	Lack of expertise	8	2	25
2	High cost/quite expensive	8	-	-
3	No information about the tools	8	-	-
4	Governmental policy	8	2	25

The above table-2 shows reasons for not practicing Management Accounting tools in PFS's of Nepal. The ratings made for lack of expertise and governmental policy were 25% and 25%. High cost/quite expenses and No information about the tools were not in responses.

Table-3

**Type of the Budget practiced in the public financial sector of
Nepal**

S.N.	Types of budget	No of population	No. of practitioners	Percentage (%)
1	Operational budget only	8	6	75
2	Cash budget only	8	1	12.5
3	Master budget	8	2	25
4	Program budget	8	1	12.5

The table 3 shows the practice of budget in the Public Financial Sector of Nepal. A total of 6 companies out of 8 companies with 75% of financial sector practiced operational budget and two companies practiced master budget. While one company in percentage 12.5% of the companies were found practicing cash budget and program budget. Therefore from the table, it was found that operational budget was mostly practiced in the Public Financial Sector.

Table-4

Basis for budget preparation in the public financial sector

S.N	Base	No of population	No of practitioners	Percentage (%)
1	Past budget estimate	8	8	100
2	Past actual expenses	8	4	50
3	Zero based	8	-	-
4	Activity based	8	1	12.5

The table no 4 shows the basis of budget preparation in the PFS of Nepal. It is obvious that 100% of the PFS practiced past budget estimate as basis to prepare budget while 50% of the PFS practiced past actual expenses and only 12.5% public financial company followed activity based budgeting as basis of budget preparation.

The practice of past budget estimate as the basis for budget preparation was high among the Public Financial Sector. Reasonable basis other environmental factors need to be taken into consideration so that budget could be effectively implemented.

Table-5

Budget preparation system in the public financial sector

S.N.	Budget prepared by	No of population	No of practitioners	Percentage (%)
1	Committee	8	5	62.5
2	Planning department	8	-	-
3	Finance department	8	3	37.5
4	Outside experts	8	-	-

The above table-5 shows the budget preparation system practiced in the Public Financial Sector of Nepal. From the table it is clear that in 62.5% of the Public Financial Companies used to prepare the budget through committee while 37.5% of the company practiced through finance department. None of the company practiced through planning department and outside experts.

Practice of hiring outside experts for preparing budget was almost nil in Public Financial Sectors. Regarding the preparation of budget necessary information were collected from different departments and finally submitted to the concern authorities. Thus, from the survey it was found that preparation of the budget by the committee was practiced by the majority of the Public Financial Sectors.

Table-6

Types of budget practiced in the public financial sector

S.N.	Types of budget	No of population	No of practitioners	Percentage (%)
1	Annual	8	7	87.5
2	More than 1yr and less than 5yr	8	-	-
3	More than 5yr	8	-	-
4	Quarterly	8	1	12.5
5	5years	8	1	12.5

The above table-6 shows the types of budget practiced in the Public Financial Sector of Nepal. It is clear that 87.5% of the Public Financial Sector practiced annual budget while 12.5% each prepared quarterly and 5yrs budget.

The Public Financial Companies did not prepare long term budget. The long term budget consuming is a time budget and need lots of exercise.

Table-7

Use of capital budgeting tools in purchasing of fixed assets

S.N.	Tools	No of population	No of practitioners	Percentage (%)
1	Payback period (PBP)	8	2	25
2	Discounted Payback period (DPBP)	8	2	25
3	Average rate of return (ARR)	8	-	-
4	Net present value (NPV)	8	5	62.5
5	Internal rate of return (IRR)	8	2	25
6	Profitability index (PI)	8	-	-
7	Modified internal rate of return (MIRR)	8	-	-

The above table-7 shows the present practice of capital budgeting tools in the Public Financial Sectors of Nepal. It is clear that 62.5% of the Public Financial Company practiced net present value of capital budgeting 25% practiced payback period (PBP), 25% practiced discounted payback period (DPBP) and 25% practiced internal rate of return. No company practiced modified internal rate of return (MIRR), profitability index (PI) and average rate of return. From the table it is obvious that NPV, PBP were the most practiced tools in Public Financial Sector of capital budgeting for long term capital investment decision.

Table-8
Pricing product/services in the public financial sector

S.N.	Pricing technique	No of population	No of practitioners	Percentage (%)
1	Full cost based pricing	8	3	37.5
2	Variable cost based pricing	8	1	12.5
3	Going rate pricing	8	-	-
4	Target return on investment Pricing	8	4	50
5	Activity based cost pricing	8	-	-

The table shows that most of the Public Financial Company practiced target return on investment pricing the target return on investment pricing was used by 50% where as 37.5% of the Public Financial Sector practiced full cost based pricing and 12.5% of the Public Financial Company practiced variable cost based pricing. The going rate pricing and activity based cost pricing were not practiced by the Public Financial Sector.

Table-9
Practice of transfer pricing in the public financial sector

S.N.	Transfer pricing technique	No of population	No of practitioners	Percentage (%)
1	Market- price based	8	3	37.5
2	Cost- price based	8	2	25
3	Target return based	8	2	25
4	Negotiated price based	8	-	-

From the table it is clear that 37.5% of Public Financial Companies practiced transfer pricing is market price based, while 25% companies practiced cost price based transfer pricing and target return based. The negotiated priced based was not practiced in the Public Financial Companies.

Table-10
Joint cost allocation into different product lines or departments in the PFS

S.N.	Tools	No of population	No of practitioners	Percentage (%)
1	Units of production method	8	2	25
2	Sales value method	8	1	12.5
3	Negotiation	8	4	50

The above table shows that 50% Public Financial Sector practiced to joint cost allocation into different products lines or departments by negotiation, while 25% of company practiced with unit of production method and 12.5% Company practiced sales value method.

Table-11
Method of segregating mixed cost into fixed and variable in the PFS

S.N.	Methods	No of population	No of practitioners	Percentage (%)
1	High-low-point method	8	-	-
2	Regression method	8	1	12.5
3	Average method	8	4	50

4	Analytical method	8	3	37.5
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The above table 11 shows the practice of segregating mixed cost into fixed and variable in the Public Financial Sector. From the above table most of financial company or 50% company practice average method to segregate mixed cost and 37.5% companies practice with analytical method and 12.5% uses to segregate mixed cost into fixed and variable cost regression method.

Table-12

Types of decision making practice in the PFS

S.N.	Types of decision making	No of population	No of practitioners	Percentage (%)
1	Make or buy the components	8	2	25
2	Lease or purchase of the fixed assets	8	-	-
3	Drop or continuous the product/service line	8	2	25
4	Sell now or further process	8	1	12.5
5	Special offers decision	8	1	12.5

The above table 12 shows the types of decision making practiced by the PFS. From the table it is clear that 25% of the company practiced “make or buy the components and drop or continuous the product/service line”. While 12.5% of the financial company practiced sell now or further process and special offers decisions.

Table-13

Tools practiced in the PFS of Nepal for measuring and controlling the overall performance

S.N	Tools practiced	No of population	No of practitioners	Percentage (%)
1	Profit and loss make by the company	8	8	100
2	Budgetary measure and control	8	3	37.5
3	Standard costing technique	8	-	-
4	Flexible budgeting	8	-	-
5	Ratio analysis	8	3	37.5

The above table-13 shows the tools practiced by the PFS of Nepal for measuring and controlling the overall performances. From the table it is clear that 100% financial company practiced profit and loss make by the company for measuring and controlling the performances, while 37.5% of financial company practiced “budgetary measure and control and ratio analysis”.

Table-14

Cost and revenue estimation practice in the PFS of Nepal

S.N.	Cost and revenue estimation technique	No of population	No of practitioners	Percentage (%)
1	Past trend analysis	8	6	75
2	Zero base analysis	8	-	-
3	Market survey	8	3	37.5
4	Engineering analysis	8	-	-
5	Judgment analysis	8	4	50

The above table 14 shows the practice of cost and revenue estimation in the public financial sector. From the table it is clear that 75% of Public Financial Company practiced past trend analysis to estimate cost and revenue while 37.5% of Public Financial Company practiced market survey and 50% company practiced zero base analysis and engineering analysis.

Table-15
Major difficulties for the application of the managerial accounting tools and techniques

S.N.	Difficulties	No of population	No of practitioners	Percentage (%)
1	Lack of information and cognizance	8	1	12.5
2	Size and nature of business	8	6	75
3	High cost/quite expensive	8	1	12.5
4	Long procedure	8	1	12.5
5	Traditional approaches of concerned authorities	8	4	50

The above table 15 shows that the major difficulties for the application of the Managerial Accounting tools and technique practiced by the PFS. It is clear that 75% of company did not practiced Managerial Accounting tools and techniques because of size and nature of business, while 50% of company did not practiced because of traditional attitude of the concerned authorities. 12.5% of company did not practiced managerial accounting tools and techniques because of lack of information and cognizance, high cost/quite expensive and long procedure.

1.1 Hypothesis Test

Hypothesis 1

Null Hypothesis. H_0 : There is no significant relationship between the use of cost segregation into fixed & variable and profit & loss account, (Use of cost segregation into fixed & variable and profit & loss account are independent)

Alternative Hypothesis. H_1 : There is significant relationship between the use of cost segregation into fixed & variable and profit & loss account. (Use of cost segregation into fixed & variable and profit and loss account are dependent)

Solution:

Practicing MA Tools

MA Tools	Yes	No	Row Total
Cost Segregation into Fixed & Variable	0 a	8 b	8 (a+b) r_1
Profit & Loss Account	8 c	0 d	8 (c+d) r_2
Column Total	8 (a+c) c_1	8 (b+d) c_2	16 N

Since the cell frequency is less than 5, therefore by applying Yates correlation for calculating χ^2 . Add 0.5 to the cell frequency which is less than 5 and adjust the remaining frequency by fixing row total and column

total. Thus, adjusted 2x2 contingency table is presented in the following table.

Practicing MA tools

MA Tools	Yes	No	Row Total
Cost Segregation into Fixed & Variable	0.5 a	7.5 b	8 (a+b) r ₁
Profit & Loss Account	8.5 c	-0.5 d	8 (c+d) r ₂
Column Total	9 (a+c) c ₁	7 (b+d) c ₂	16 N

Calculation of χ^2

O	$E \frac{RT \times CT}{N}$	O-E	(O-E) ²	$\frac{(OZE)^2}{E}$
0.5	4.5	-4	16	3.56
7.5	3.5	4	16	4.57
8.5	4.5	4	16	3.56
-0.5	3.5	-4	16	4.57
				$\frac{(OZE)^2}{E} \times 16.26$

Test statistics under H₀ is,

$$t^2 \times \frac{(OZE)^2}{E} \times 16.16$$

Where,

χ^2 = chi-square test

O = Observed Frequency

E = Expected frequency

The Calculated Value of $\chi^2 = 16.26$

Tabulated Value: d.f. = (r-1) (c-1) = (2-1) (2-1) = 1

Level of significance (α) = 5%

Where,

d.f. = degrees of freedom

Tabulated value of χ^2 at 5% level of significance for 1 d.f. is 3.84

Result

Since the calculated value of χ^2 16.26 is greater than the tabulated value of χ^2 at 5% level of significance for 1 d.f. is 3.48, the null hypothesis H_0 is rejected and hence the alternative hypothesis H_1 is accepted. It means that use of cost segregation into fixed & variable and profit & loss account are dependent.

Hypothesis 2

Null Hypothesis. H_0 : 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)

Solution: Practicing Capital Budgeting Tools

Capital Budgeting Tools	Yes	No	Row Total
Payback Period	2 a	6 b	8 (a+b) r_1
Net Present Value	5 c	3 d	8 (c+d) r_2
Column Total	7 (a+c) c_1	9 (b+d) c_2	16 N

Since the cell frequency is less than 5, therefore by applying Yates correlation for calculating χ^2 . Add 0.5 to cell frequency which is less than 5 and adjust the remaining frequency by fixing row total and column total. Thus, adjusted 2x2 contingency table is presented in the following table.

Practicing Capital Budgeting Tools

Capital Budgeting Tools	Yes	No	Row Total
Payback Period	2.5 a	5.5 b	8 (a+b) r_1
Net Present Value	4.5 c	3.5 d	8 (c+d) r_2
Column Total	7 (a+c) c_1	9 (b+d) c_2	16 N

Calculation of χ^2

O	E X $\frac{RT \times CT}{N}$	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
2.5	3.5	-1	1	0.286
5.5	4.5	1	1	0.222
4.5	3.5	1	1	0.286
3.5	4.5	-1	1	0.222
				$\frac{(O-E)^2}{E} \times 1.016$

Test Statistics under H₀ is,

$$\chi^2 = \frac{(O-E)^2}{E} \times 1.016$$

Where, χ^2 = Chi-square test

O = Observed frequency

E = Expected frequency

The Calculated Value of $\chi^2 = 1.016$ Tabulated Value:

Level of significance (α) = 5%

Where, d.f. = degrees of freedom

Tabulated value of χ^2 at 5% level of significance for 1 d.f. is 3.84

Result

Since the calculated value of χ^2 1.016 is less than tabulated value of χ^2 at 5% level of significance for 1 d.f. is 3.84, the null hypothesis H_0 is accepted and hence the alternative hypothesis H_1 is rejected. It means that use of payback period and net present value are independent.

Hypothesis 3

Null Hypothesis H_0 : There is no significant relationship between the use of Annual Budget and Ratio analysis. (Use of Annual Budgeting and Ratio analysis is independent)

Alternative Hypothesis H_1 : There is significant relationship between the use of Budget Annual and Ratio analysis. (Use of Annual Budgeting and Ratio analysis is dependent)

Solution:

Practicing MA Tools

MA Tools	Yes	No.	Row Table
Annual Budgeting	7 a	1 b	8 (a+b) r_1
Ratio Analysis	3 c	5 d	8 (c+d) r_2
Column Total	10 (a+c) c_1	6 (b+d) c_2	16 N

Since the cell frequencies are less than 5 or equal to 5, therefore by applying Yates correlation for calculating χ^2 . For this, add 0.5 to cell frequency which is less than 5 and adjust the remaining frequency by fixed row total and column total. Thus, adjusted 2x2 contingency table is presented in the following table.

Practicing MA Tools

MA Tools	Yes	No.	Row Table
Annual Budgeting	7.5 a	0.5 b	8 (a+b) r ₁
Ratio Analysis	3.5 c	4.5 d	8 (c+d) r ₂
Column Total	11 (a+c) c ₁	5 (b+d) c ₂	16 N

Calculation of χ^2

O	$E = \frac{RT \times CT}{N}$	O-E	$(O-E)^2$	$\frac{OZE^2}{E}$
7.5	5	2.5	6.25	1.25
0.5	3	-2.5	6.25	2.08
3.5	5	-1.5	2.25	0.45
4.5	3	1.5	2.25	0.75
				$\frac{\sum OZE^2}{E} = 4.53$

Test Statistics under H_0 is, $\chi^2 = \sum \frac{fO - EA}{E} X 4.53$

Where, O = Observed Frequency

E = Expected Frequency

The calculated value of $\chi^2 = 4.53$

Tabulated Value

d.f. = (r-1) (c-1) = (2-1) (2-1) = 1

Level of Significance (α) = 5%

Tabulated value of χ^2 at 5% level of significance for 1 d.f. is 3.84

Result

Since the calculated value of χ^2 4.53 is greater than tabulated value of χ^2 at 5% level of significance for 1 d.f. is 3.48, the null hypothesis H_0 is rejected and hence the alternative hypothesis H_1 is accepted. It means that use of annual budget and Ratio Analysis are dependent.

4.3 Major Findings

On the basis of comprehensive analysis of the available data, the following findings were drawn.

1. This study on practice of Management Accounting tools in PFS's of Nepal for planning, controlling and decision making process found that annual budget, financial statement analysis and cash flow statement were mostly practiced. The annual budget was

practiced by 87.5% PFS's of Nepal where as 62.5% companies practiced financial statement analysis and 50% companies practiced cash flow statement. No company practiced cost segregation into fixed & variable and responsibility analysis. Cost-volume-profit analysis and flexible budgeting were practiced by 25% each. Activity based budgeting was practiced by 12.5% companies. Standard costing tool was practiced by 37.5% companies.

2. Reasons for not practicing Management Accounting tools were lack of expertise, high cost/quite expensive, no information about the tools and governmental policy. The lack of expertise and governmental policy accounted for 25% where as remaining financial company did not practiced because of high cost/quite expensive and lack of information about the tools.
3. The types of budget practiced in PFS's of Nepal were operational budget, cash budget, master budget and program budget. Almost 75% PFS's of Nepal practiced operational budget while 25% prepared master budget. Cash budget and program budget were practiced 12.5%. Most of PFS's of Nepal practiced operational budget only for carryout operational activities.
4. The past budget estimate of historical expenses were the basis used for preparation of budget. It recorded 100% of PFS's of Nepal. But only 50% and 12.5% PFS's of Nepal prepared budget on the basis of past actual expenses and activity based budgeting. Zero base budgeting was

not practiced because of government policy and unwilling of the management.

5. The average method and analytical methods were practiced for cost segregation into fixed & variable by 50% and 37.5% PFS's of Nepal. Regression method was practiced 12.5% in PFS's of Nepal for Segregate mixed cost into fixed & variable. High-low- point method was not used in PFS's in Nepal.
6. The committee and finance department division rating 62.5% and 37.5% of PFS's of Nepal used to prepare budget. But planning department and outside experts were not taken for budget preparation.
7. Regarding types of budget practice in PFS's of Nepal, it was found that 87.5% PFS's of Nepal prepared annual budget. It was also found that quarterly and 5yrs budget were practiced by 12.5% respectively. The budget for more than 1yr and less than 5yr and more than 5yr budget were not prepared.
8. The net present value of capital budgeting practiced by 62.5% companies. The payback period, discounted payback period and internal rate of return respectively were used by 25% each of PFS's of Nepal. Average rate of return and profitability index and modified internal rate of return were not practiced by PFS's of Nepal.
9. Target return on investment pricing was adopted by 50% of PFS's on Nepal. The full cost based pricing was practiced by 37.5% and variable cost based pricing was practiced by 12.5% which was below average. Activity based cost pricing and going rate pricing were not practiced by PFS's of Nepal.

10. The market price based transfer pricing was followed by 37.5% of PFS's of Nepal. But 25% of PFS's practiced cost price based target return based respectively. Negotiation was not practiced in PFS's of Nepal.
11. Negotiation was adapted to joint cost allocate into different product lines or department by 50% of PFS's of Nepal. Unit of production method and sales value method were practiced by 25% and 12.5% respectively.
12. Average method of segregating mixed cost was used by 50% of PFS's of Nepal. But analytical method and regression method were practiced by 37.5% and 12.5% respectively. High low point method was not practiced by PFS's of Nepal.
13. Make or buy the components and drop or continuous the product/service line were followed by 25% of PFS's of Nepal. But 12.5% companies followed sell now or further process and special offer decision. Lease or purchase of the fixed assets was not practiced by PFS's of Nepal.
14. The overall performance at the end of the accounting year was used by 100% of PFS's of Nepal taking the reference of profit & loss. 37.5% companies practiced budgetary measure and control and ratio analysis. The standard costing technique and flexible budgeting were not practiced by PFS's of Nepal.
15. The cost and revenue estimation was used by 75% of PFS's of Nepal on the basis of past trend analysis. 50% and 37.5% companies made it on the basis of judgment analysis and market

survey respectively. Zero base analysis and engineering analysis were not practiced by PFS's of Nepal.

16. The size and nature of business was taken as major difficult for the application of managerial accounting tools and technique in PFS's of Nepal by 75% companies. 50% companies felt traditional approaches for implementation. 12.5% companies felt lack of information and cognizance, high cost/quite expensive and long procedure.
17. The hypothesis test 1, revealed that PFS's of Nepal were dependent in use of cost segregation into fixed & variable and profit & loss account. It means that there is significance relationship between the use of cost segregation into fixed & variable and profit & loss account. The hypothesis test 2, revealed found that PFS's of Nepal were independent in use of payback period and net present value. It means that there is no significance relationship between the practicing of use payback period and net present value tools. The hypothesis test 3, revealed that PFS's of Nepal were dependent in use of Annual Budgeting and Ratio analysis. It means that there is significance relationship between the uses of Annual Budgeting and Ratio analysis

CHAPTER-V

Summary, Conclusion and Recommendations

5.1 Summary

Management is always concerned with planning, organizing directing and controlling for goal achievement by managing 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 an organization. Accounting is the process of recording, classifying, analysis, and identifying and interpretation of financial transactions. The main purpose of accounting is to ascertain the result and financial position of business activities of a particular period. The accounting system which assists management in carrying out its function more efficiently is 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 minimizing losses and maximize profit.

In Nepal, Public Enterprise consist various sector like manufacturing, trade, public utility, social-service and financial sector owned by the government. State PE's were established for socio-

economic development as well good governance. So, the public enterprises have been assuming a vital role in the socio-economic development process of our country since the inception of the planning process. Their proper management is assumed further momentum in the present context of e-commerce, political and cultural changes in the country. Most of them were not performing well. In this study, only management accounting practices in public financial companies in Nepal were taken.

There are various Management Accounting tools and techniques which can be applied in every company. Such tools are, cost classification & estimation, cost allocation, profit measurement & recognition, cost-volume profit planning & control, standard costing, pricing decision, statement of cash flow, Ratio analysis and long term investment decision.

The main objective of this research study was to find out the present practices of Management accounting tools & techniques in public financial companies in Nepal. And other objectives were to find out the reasons for none practicing the Management Accounting tools & techniques and difficulties faced in the application of Management Accounting tools in public financial companies in Nepal.

As per the nature of study, survey type research was designed. Surveys of Eight public financial companies in Nepal were made through questionnaires. Sixteen tick mark questionnaires were distributed as well as discussions were made to get valuable information and data. Information was tabulated, analysis, interpretation as per the requirement of the study. Simple percentage tool has been applied to analyze and

interpret of findings. The statistical tools chi-square χ^2 was used to test the hypothesis related test.

5.2 Conclusion

This research study showed different types of management accounting tools & techniques not applied in the public financial companies in Nepal. The management accounting tools are cost segregation, budgeting annual, responsibility accounting, capital budgeting, cash flow, activity based budgeting. But these tools were not fully practiced by public financial companies in Nepal. Annual budgeting, income statement, cash flow and responsibility accounting were practices.

The non practicing tools were cost segregation into fixed and variable, responsibility accounting, high cost/quite expensive, no information about the tools, zero base budgeting, outside experts more than one yr and less than 5yr more than 5yr, average rate of return, profitability index, modified rate of return, activity based costing, negotiated price based, high low point method, lease or purchase of the fixed assets, standard costing and flexible budgeting. Similarly, zero base analysis and engineering analysis were not practiced.

In public financial companies in Nepal, practices of hiring outside expert for practicing Management Accounting tools and techniques for various course of action (i.e., planning, controlling and decision making) were almost nil. Lack of information nature and size of business and cognizance about the Management Accounting tools and techniques were the main factors causing problem in application of such Management Accounting tools & techniques. From the hypothesis tests, it was cleared

that PFS's were independently practices the Management Accounting tools & techniques. It means that, Management Accounting tools & techniques are independent among them in PFS's in Nepal.

5.3 Recommendations

Management accounting is a new discipline. It is still in a developing stage in the context of Nepalese corporate companies. This research study showed that the present practice of Management Accounting tools and techniques were more traditional approach. If an organization follows properly Management accounting tools & techniques for managerial adjustment in the utilization of limited resources that would definitely show better performance. So, the following recommendations were made based on findings of this research study.

1. Management should use Management Accounting tools and technique for planning, controlling and decision making process. For planning process the tools like cost classification & estimation, cost allocation, profit measurement and recognition and budgeting for planning are recommended. For controlling process the tool like responsibility accounting, standard costing, flexible budgeting and budgetary control are recommended. For decision making process the tools like capital budgeting, environment analysis, resources analysis, cash flow analysis and pricing analysis can be used. To implement these courses of action, Management should established separate Management Accounting department.

2. Nepalese Public Financial Companies were facing with expertise of Management Accounting tools & techniques. Therefore, they should hired Management Accounting experts. If not possible, they can send their existing employee for on the job training programmed for the certain period. If possible it should take service from consultant. For information about the Management Accounting tools & technique, management should establish management accounting information system section in Management Accounting department which also will help management on different issues.
3. Financial statement analysis was widely used by many financial sector enterprises. It is recommended to use other method such as high- low point method analysis method as well least square method.
4. Nepalese Public Financial Companies were advised to use zero base budgeting activity based budgeting for budget preparation.
5. The budget in, Nepalese Public Financial Companies were prepared budget by committee, planning department and finance department mostly. It is also recommended to take outside expert's opinion for budget prepared which helps to make more effective budget.
6. The budget in, Nepalese Public Financial Companies were using overall master budget but those were not effectively implemented. So, it is

recommended to implement effectively all the components of master budget.

7. Nepalese Public Financial Companies should practice not only past trend analysis and market survey but also should practice zero base budgeting, judgmental analysis and engineering analysis for cost and revenue estimation for the future period. Because these will help to achieve their goals.
8. While purchasing fixed assets or making long term investment decision, Nepalese Public Financial Companies should use net present value, internal rate of return and discounting payback period.
9. Nepalese Public Financial Companies should practice not only full cost pricing and target return on investment pricing but also activity based cost pricing and going rate pricing.
10. Nepalese Public Financial Companies should use not only profit and loss account but also should use standard costing, budgetary control, ratio analysis, cash flow analysis and activity based costing for evaluation of overall performance of companies at the end of each accounting year.

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