CHAPTER- I
INTRODUCTION

1.1 Background of the Study

1.1.1 General Background

Industrial development is the essential element in the economic growth of developing countries. Almost all of the developed countries are in the age of industrialization. To achieve a high economic growth of any country, industrialization is the must. It is well know that, the share of the developing countries in world trade is much smaller than that of the industrialized countries. Developing countries like Nepal must therefore concentrate on the most important means of stimulating and maintaining accelerated industrial growth. To achieve a high industrial growth of any nation, industrial sector should be developed and increased. But developing countries like Nepal have a problem of developing industrial sector. Such problems are raised in the form of many issues like industrial management, industrial policy, and economic, political and social condition of the nation and so on. Therefore, to achieve a high industrial growth, such problems should be eliminated at first. Step should be taken to accelerate industrial development in those countries where yet a little progress has been made. This should be done in such a way that the available potential is utilized to the utmost. Almost all of the developed countries have a better management system regarding industrial sector, good predictable capacity, should economic-political environment and promoting type of industrial policy. So, industrial development is the main phenomenon of economy and developing countries like Nepal should develop industries as much as possible by providing entrepreneurial training, management system training, good industrial policy, guarantee of industrial security etc.

To develop the industrial sector of the nation, a separate industrial policy has been enacted by Nepal government as 'Industrial Policy 2049'. In the act provisions regarding registration and operation have been clearly mentioned. As per industrial policy, industries are classified into four classes based on how much fixed capital is used by industry. Such classification is:

I. Traditional cottage industry: Related to art and culture, labor oriented, using local raw material.

II. Small industry: Investment in fixed capital of up to Rs. 1 corer excluding traditional cottage industry.

III. Medium size industry: Investment in fixed capital more than Rs. 1 corer and less than Rs. 5 corer.

IV. Large scale industry: Investment in fixed capital more than Rs. 5 corer (Industrial Act 2049, Sec. 4.3).

Cottage and small industries was highly flourished during the Lichhavi period. Among those industries, spinning cotton, metal, timber, paper, oil processing, arts and architecture industries were highly developed and were popular among Nepalese people. The goods produced in those industries were consumed within the country. Some of them were also exported to India and China. In this way, the industries had been started to establish from Lichhavi period. At present, there are many cottage and small scale industries established in the book of DCSI. As per data taken from DCSI, 20645 industries have registered during the period of last 10 years in Kathmandu district. A detail is presented below:

Table 1.1
Number of Cottage and Small Scale Industries in Kathmandu District

Year	No. of establishment
2063/64	2022
2064/65	1825
2065/66	2040
2066/67	2180
2067/68	1950
2068/69	1939
2069/70	1882
2070/71	2180
2071/72	2047
2072/73	2580

Source: DCSI Report

On the other hand, the establishment of large scale industries had started during the period of 1990's. A phase of industrialization had been started from establishment of Biratnagar Jute Mill in 1936. At present, there is1932 large scale industries have registered in Kathmandu district in the books of DI.

By observing the number of industries established in Kathmandu district, it is bright shine for the economic development of Nepal. But the case is quite different. As per the DCSI data, only 30% of the registered industries are operating and rest are closed in the year when they are registered. The cause of closing the industries may be lack of capital, lack of good management system, lack of proper environment and many other negligible problems. It may be the cause of improper investment policy. Among different causes, investment policy is one of the major causes of failure for operation of industries. Therefore, the research is conducted to find out the practices of capital budgeting in manufacturing enterprises of Kathmandu district.

The area of capital budgeting is both comprehensive and challenging. It plays a vital role for assisting the goals of the organization. Without considering the capital budgeting techniques, it is more difficult to achieve the goal of the organization. Goals/objectives of a firm may be various types such as profit maximization, wealth maximization, growth, stability, risk reduction etc. To achieve such objectives, capital budgeting techniques should be used efficiently and effectively. Analysis of capital budgeting involves cash outflows and cash inflows.

1.1.2 Introduction of Capital Budgeting

Capital budgeting is the decision-making process of either purchase or not the fixed assets. It can be defined as the process of evaluating new project for investment. Investment in fixed assets involve huge amount of money and waiting for long time period of expected return. Therefore, capital budgeting is both comprehensive and challenging.

Capital budgeting may be defined as the decision-making process by which firms evaluate the purchase of major fixed assets, including buildings, machinery, and equipment (Hampton, 1990).

It also covers decisions to acquire other firms, either through the purchase of their common stock or groups of assets that can be used to conduct an ongoing business. Capital budgeting describes the firm's formal planning process for the acquisition and investment of capital and results in a capital budget that is the firm's formal plan for the expenditure of money to purchase fixed assets.

Capital budgeting is the process of planning and controlling the strategic (long-term) and tactical (short-term) expenditures for expansion and contraction of investment in operating fixed assets (Weslch et al., 2000).

A capital budgeting decision may be defined as the firm's decision to invest its current funds most efficiently in the long-term assets in anticipation of an expected flow of benefits over a series of years (Pandey, 1992).

Capital budgeting is commonly referred to as fixed assets management, when integrated with the financial manager's goal of attaining proper combinations of assets (i.e. optimal assets mix); fixed assets assume a great deal of significance. Fixed assets are also frequently termed as the earning assets of the firm. Generally the more fixed assets maintained by a firm, the more aggressive is the managerial philosophy and larger the inherent risk.

Since assets are the source of revenue generation for the firm, it appears logical that future sales growth is heavily correlated with the expansion of capital expenditure. With increased sales from closely scrutinized capital expenditure selections, the long-range impact on the firm's earnings and dividends theoretically should be referred by a strong performance in the market value of the firm's equity share price. It should be noted, however that capital budgeting is indeed a specialized process, which very frequently requires highly sophisticated techniques and rather indicate forecasting for future years. Inaccuracy in the selection of such projects will ultimately decrease the profit, dividends and share price value of the firm. Comprehensive profit planning includes the underlying activities or task that must generally be carried out to attain maximum usefulness. The mechanics of profit planning and control is activities as the design of budget schedules routine and repetitive computations and clerical activities relate to a profit planning and control programmed.

Investment in fixed assets is not an easy task. A firm should be able to invest their fund in such a way that the overall objectives of the firm could be achieved. If a wrong decision occurs regarding capital investment, a firm has to bear heavy loss and bankruptcy. So, the firm should more exercise and observe before taking decision

regarding investment in fixed assets. It should analyze and evaluate various capital budgeting tools before reaching an investment decision.

A capital budgeting decision is a two-sided process. First, the analyst must evaluate a proposed project to forecast the likely or expected return from the project. It means firstly calculate the internal rate of return of the project. For this calculation, generally begins with an expenditure of cash at the beginning of the project's service life and a stream of cash flowing to the firm over the life of the project. The second side of a capital budgeting decision is to determine the required rate of return from a project. After determining the required rate of return of the project, then evaluation can be made.

In this way, capital budgeting is the process of evaluating the project to invest in long-term by using different evaluation methods and tools and taking a correct decision regarding long-term assets. Therefore, capital budgeting is the most important evaluation tools of investment in fixed assets.

1.1.3 Significance of Capital Budgeting

The preparation of the firm's capital budgeting is highly significant for a number of reasons:

i. Substantial Expenditure

In fact, the capital expenditures usually involve substantial amount of money to be invested. Therefore, a careful judgment of planning and evaluation is necessary for capital budgeting. This fact is just as important as the first one, if a firm buys expensive capital assets, the decision to do so have better be a good one. Otherwise, the firm will suffer financially in time to come in two ways: the funds of the return from the expenditure will not be rewarding.

ii. Long-time Period

The effects of capital-spending decisions will be felt by the firm over extended periods of time. Once a multi-million value building is begun, the firm cannot easily withdraw from the construction. When a firm forecasts the need for additional manufacturing space, it may begin constructing a factory. If changes in the market place eliminate the need for the extra capacity, the firm faces a serious problem. Does

it keep the facility incurring heavy fixed costs with no revenues, in the hope that conditions will improve and the capacity will be needed? Does it sell the plant at a potentially large loss? The long-term commitment adds considerable risk to the firm's capital budgeting decisions. To illustrate in the case of manufacturing firm, capital expenditure decision are going to determine what plants will be built, where they will be built and how they will be equipped. These factors in turn largely determine what can be made in the plants. Such decisions shape the basic character of the firm or its 'image' and as such may be very important.

iii. Implied Sales Forecasts

The spending of funds for fixed assets represents an implied forecast of future sales. If machinery or a building is not purchased, the firm may not be able to meet the demand in the future. If too much is purchased, the firm is stuck with unneeded capacity. An important part of capital budgeting process is forecasting sales, possibly ten or fifteen years into the future.

iv. Irreversibility

Capital expenditure decisions are quite often irreversible, because there is little or no second hand market for many types of capital goods. The only alternative is continuous use of asset to its scrap value. Thus, the decision is irreversible. Because of these two features, capital expenditures effectively commit the firm to a given technology, and significantly determine the future pattern of operating expenditure.

v. Over and under Capacity

To improve the timing and quality of asset acquisition, the capital expenditure decisions must be carefully drawn. An erroneous forecast of asset requirements can result in serious consequences. If the firm invests too much amount having large capacity in assets, it will incur unnecessarily heavy expenses. If it has not spend enough on fixed assets, two serious problems may arise. First, the firm's equipment may not sufficiently be modern to enable it to produce competitively. Secondly if it has inadequate capacity, it may lose a position of its share of market to rival firms. To regain lost customers typically requires heavy selling expenses, price reduction product improvements and so forth.

1.2 Statement of the Problem

There are almost all manufacturing public enterprises are in loss and are running with the government subsidy whereas most of the private sector enterprises are running successfully in their business. Manufacturing industry should contribute a huge amount of GDP for the smooth economic development of any country. Most of the developed countries have a large number of manufacturing enterprises and they contribute a huge amount in GDP. Therefore, industry should operate effectively. But the causes of industry failure in Nepal are less utilization of capacity, lack of integration of activities, lack of good decision power and some other current problems. Most of the enterprises in Kathmandu district acquire the fixed assets to meet the demand of the product. But they rarely take the feasibility study of the project. They have no practice of evaluating project before investment. They have no knowledge of application of capital budgeting techniques and they rarely analyze the cash outflow at the year zero and expected cash inflow in the future. This research is tried to explore the following basic problems:

A. Whether or not the entrepreneurs have knowledge of capital budgeting and time value of money?
B. Whether or not the companies undertake an evaluation study regarding the fixed investment decision?
C. Do the enterprises use the concept of time value of money to take investment decisions?
D. Whether or not the firm's objectives have been achieved by using capital budgeting evaluation techniques?

1.3 Objectives of the Study

The basic objectives of the research are to study capital budgeting practices applied by manufacturing firms in Kathmandu district. The other objectives of the study are as follows:

A. To identify the entrepreneurs knowledge of capital budgeting and time value of money.
B. To identify the manufacturing enterprises undertake an evaluation study the fixed investment decision.
C. To identify the use of time value of money concept in investment decision.

D. To explore the capital budgeting technique used by the manufacturing enterprises.

1.4 Significance of the Study

In modern business world, there are many types of organization that is operating to generate profit as well as to provide service to the general public. Among them, some manufacturing organization produce goods and service and service organization provide better service to customer. Manufacturing organizations have a challenge to investment money in a proper place. In other words, manufacturing organizations investment their fund in a right manner to achieve organization effectiveness. There are two ways of investing their fund; in long-term assets and in short-term assets. Investment of fund in long-term assets is called long-term investment decision i.e. capital budgeting decision and investment in short-term assets is called working capital decision. Between two types of investment, there is highly risk to invest in long-term assets i.e. capital budgeting decisions. Therefore, organization should able to invest their fund such a manner that the organization will have to increase their stock price. So, capital budgeting decision is very important for any types of organization.

Analysis of major new project is not a easy task. To analyze the new project, different factors have to be considered. An organization should be able to invest the money in a right place. Before investing the fund in long-term assets, the company should know about the expected future return from the assets. After that, if the expected future return is higher than the amounts which invest today, the company should invest in long-term assets. Capital budgeting decisions must be related to the firm's overall strategic planning. Strategy involves planning for the future of the firm. Capital budgeting inherently requires a commitment into the future. The purchase of an asset with an economic life of 10 years involves a long period of waiting before the final results of such actions can be known. It must be integrated with strategic planning because excessive investments or inadequate investments will have serious consequences for the future of the firm. If the firm has invested too much in fixed assets, it will incur unnecessarily heavy expenses. If it has not spent enough, it will have inadequate capacity and may lose a portion of its share of the market to rival

firms. To regain lost customers is difficult and expensive. Therefore, capital budgeting decision is most crucial factor for any organization.

The present study is focus on the practices of capital budgeting in manufacturing enterprises of Kathmandu district. The presents study tries to find the capital budgeting techniques used by manufacturing enterprises. So, the study is significant for the managers who formulate a broad objectives and strategies of the firm. It helps to know either capital budgeting should be analyzed or not before taking long-term investment decision. It helps to the decision makers that how to use the concept of time value of money, what are the techniques that are to be used for different investment range, why the organization has to use capital budgeting techniques. Therefore, this study will be useful for managers, accountant, policy makers and planners, potential investor and other researchers who want to carry further research in these fields.

1.5 Limitation of the Study

This study is limited to the manufacturing base enterprises. The present practices of capital budgeting in manufacturing concern of Kathmandu district is the limitation of the study. It studies the some selected manufacturing enterprises and it is assume that the selected enterprises represent all the manufacturing enterprises of Kathmandu district. The present study is not free from limitations. The limitations of the study are presented as follows:

I. The study only covers the practices of capital budgeting in manufacturing enterprises of Kathmandu district.
II. The study is based on the primary data. Structured questionnaire is used for collecting the primary data. Therefore, respondent must be filled the questionnaire based on the alternatives developed by researcher.
III. The accuracy of this study is depending upon the true response of the respondent.
IV. The study is depending on information gathered from selected manufacturing enterprises and the researcher assumes that the sample manufacturing enterprises represents all the manufacturing enterprises of Kathmandu district.

1.6 Organization of the Study

The study has been organized into five chapters. They are:

Chapter - I: Introduction

This chapter contains the introduction of the study. It includes general background, introduction of the capital budgeting, significance of the capital budgeting, statement of the problem, objectives of the study, significance of the study, limitations and organization of the study.

Chapter - II: Review of Literature

Chapter two states the theoretical framework and review of related studies and research gap.

Chapter - III: Research Methodology

Chapter three explains the methodology used in this research to find the result for meeting the objectives set in the chapter one. It includes introduction, research design, sources of data, population and sample, method of data collection and analysis.

Chapter - IV: Data Presentation and Analysis

Chapter four includes the presentation and analysis of data of manufacturing enterprises of Kathmandu district with major finding.

Chapter - V: Summary, Conclusion and Recommendations

Chapter five states the summary, conclusion and recommendations of the study.

CHAPTER- II

REVIEW OF LITERATURE

2.1 Theoretical Review/ Conceptual Review

2.1.1 Capital Expenditure Definition

The term 'investment' usually refers to the commitment of resources made with the expectation of realizing future benefits over reasonability long time period. In other words, capital expenditure which is known as fixed investment also, is the investment in tangible assets with terminable life utilized in production and or distribution of product or service. Fixed investment includes long time period and huge amount of money/fund required to invest. An efficient allocation of capital is the most important finance function in the modern times. It involves decisions to commit the firm's funds to the long-term assets. Such decisions are of considerable importance to the firm since they tend to determine its value size by influencing its growth, profitability and risk (Pandey, 1998).

A capital expenditure is any expenditure of cash where the benefit is expected in the from of future cash returns (Gray and Kenneth, 1973).

Capital budgeting is the process of planning and controlling the strategic (long term) and tactical (short term) expenditures for expansion and contraction of investments in operating fixed assets (Welsch, Hilton and Gordon, 2000).

The capital expenditure decision, through which a firm invests funds in plant, equipment and other long-lived assets. These investments can be divided into three different categories:

i. Physical Plant
   a. New building and additions
   b. Major repairs and renovations
ii. Equipment's
   a. Additional equipment's of new type (for new products)
   b. Additional equipment's for greater production volume.

c. Replacement for various reasons.

d. Equipment's for cost reduction

iii. Administration

a. Office equipment

b. Renovation

2.1.1.1 Concept of Capital Budgeting Decision

The decision regarding capital expenditures have far-reaching effects on the success or failure of an enterprise. If capital assets are acquired once, it cannot be disposed of except at a substantial loss. On the other hand, if capital assets are acquired on a long term credit basis, a continuing liability is incurred over a long period of time. By that means, capital budgeting decision is important.

Capital budgeting decision indicates the process of selecting and allocating funds for tangible fixed assets with terminable life. This can also be viewed as deciding such fixed investment projects, which involves the outlay of cash in return for anticipated flow of future benefits. The capital budgeting decision process involves the planning and management of business investment in fixed assets. This process begins with the search for new and more profitable investment opportunities. It continues through months of preparing engineering, market and economic analysis designed to forecast operational impacts and evaluate the profitability of each investment proposal. And finally concludes with the preparation, approval and implementation of the firm's capital budget.

Fixed investment decision differs from current assets planning. It usually commits the company to a long term course of action. The operating expenditure can be regulated to the increase or decrease of market demand. Further, the current assets are of convertible natures which are rolling in the business in one from or other. They can be reduced or increased or covered into cash at frequent intervals. But once the firm commits itself to a fixed investment it restricts to a very high degree its future flexibility.

Capital investment within any organization is crucial for that organization's well-being and long term survival. Capital investments are these which have a long term

effects on the organization by providing benefits over a number of years (Broadbent and Cullen, 1997).

The real distinction between current assets decision and fixed investment decision lies with the duration of time involved in capital expenditure decision. Investment in labor, materials and accounts receivable affects cash flows over relatively short period of time, usually a year or less. In contrast, investment in fixed assets affect revenue over much longer time periods ranging from 3 to 30 years or more. Like current assets decision, fixed investment decision require a comparison of costs against benefits for fixed investment decision extends for into the future, it requires the use of more complex tools and techniques in order to analyze them correctly.

Decision regarding fixed investment is very often in irreversible because there is little or no second hand market for many types of capital assets. Further, deviation from its chosen course of action is likely to prove costly in many respects such as:

a. Loss all or a portion of funds originally invested in equipment and procurement and training of labor to operate the equipment.
b. Loss of investment in market and procurement efforts.
c. Loss due to disruption of daily operations, and
d. Loss of competitive position and or image gone due to the limited availability of funds.

2.1.1.2 Nature of Investment Decision

The investment decisions of a firm are generally known as the capital budgeting or capital expenditure decisions. A capital budgeting decision may be defined as the firm's decision to invest its current funds most effectively in the long-term assets in anticipation of an expected flow benefits over a series of years. The long-term assets are those which affect the firm's operations beyond the one-year period. The firm's investment decisions would generally include expansion, acquisition, modernization and replacement of the long term assets. Sale of a division or business (divestment) is also analyzed as an investment decision. Activities such as change in the methods of sales distribution, or undertaking an advertisement campaign or a research and development programmed have long term implications for the firm's expenditures and

benefits, and therefore they may also be evaluated as investment decisions. It is important to note that investment in the long term assets invariably requires funds to be tied up in the current assets such as inventories and receivables. As such, investment in fixed and current assets is one single activity (Pandey, 1999).

The following are the features of investment decision:

I. The exchange of current funds for future benefits: Capital budgeting decision is concerned with the investment of fund today to achieve future benefits. Thus, capital budgeting decision is future oriented.
II. The funds are invested in long-term assets: Capital budgeting decision refers to the investment of fund in long term assets. Investment of fund in short term assets is called working capital decision. Therefore, investment of fund in long term assets is another nature of capital budgeting decision.
III. The future benefits will occur to the firm over a series of years:

The expected cash inflow from investment of fixed assets will occur over the life of investment of project.

It is significant to emphasize that expenditure and benefit of an investment should be measured in cash. In the investment analysis, it is cash flow which is important, not the accounting profit. It may also be pointed out that investment decisions affect the firm's value. The firm's value will increase if investments are profitable and add to the shareholder's wealth. Thus, investment should be evaluated on the basis of criterion which is compatible with the objective of the shareholder's wealth maximization. An investment will add to the shareholder's wealth if it yields benefits in excess of the minimum benefits as per the opportunity cost of capital.

2.1.1.3 Importance of Investment Decision

Investment decision is the most crucial decision among other types of organizational decision. The importance of capital budgeting is increasing due to the following reasons:

I. They influence the firm's growth in the long run.
II. They affect the risk of the firm.
III. They involve commitment of large amount of funds.

IV. They are irreversible or reversible at substantial loss.

V. They are among the most difficult decisions to make.

Growth: The effects of investment decisions extend into the future and have to be endured for a longer period than the consequences of the current operating expenditure. As firm's decision to invest in long term assets has a decisive influence on the rate and direct of its growth. A wrong decision can prove disastrous for the continued survival of the firm; unwanted or unprofitable expansion of assets will result in heavy operating costs to the firm. On the other hand, inadequate investment in assets would make it difficult of the firm to complete successfully and maintain its market share.

Risk: A long-term commitment of funds may also change the risk complexity of the firm. If the adoption of an investment increases average gain but causes frequent fluctuations in its earnings, the firm will become more risky. Thus, investment decisions shape the basic character of a firm.

Funding: Investment decisions generally involve large amount of funds which make it imperative for the firm to plan its investment program very carefully and make an advance arrangement for procuring finances internally or externally.

2.1.1.4 Components of Investment Decision

Capital budgeting constitutes a significant area of decision in determining whether or not corporations should commit substantial expenditure in the acquisition of fixed assets. Special case should be taken in treatment of this part of investment decisions otherwise any negligence or miscalculation lead to loss of large amount of committed funds. The financial manager of a corporation must have ability and realistic assessment of capital budget by using combination of past performance and historical data, future expectations and recommendations of all interested departments of corporations (Hampton, 1997).

Capital budgeting involves a set of criteria to aid management for ranking capital expenditures in order of their desirability, and financial manager must be vigilant in keeping 'eye to eye' towards following components:

I. The capital budgeting process provides an overall framework in capital budgeting decision as financial manager should know how to proceed with project generation, project evaluation, project selection and project execution (Quirin, 1967).

II. The capital budgeting policies involves estimate of capital needs and such capital needs show substantial expenditure for a long planning horizon subject to continuous review.

III. The estimation of net cash flows portrays the series of cash disbursements or receipts written so that their timing can be seen and expenditure of cash for investment project adheres to differential after-tax cash flow and calculation of investment on future earnings per share caused either by additional revenue or cash saving on operations. The timing of flows involves lead log relationships between income and cash flows.

IV. The implications of futurity and uncertainly implies foregoing the present value of funds for expected streams of future earnings, and uncertainty exist in this expected future cash flows due to lack of perfect foresight about future events. There is, thus, a financial risk when cash flows were not sufficient to meet loan obligations and business risk arising from product market.

V. The capital urgency process shows the urgency of investment decisions to justify acceptance of investment project for elimination of specific trouble spot on the basis of emergency needs, and there exists the organizational legitimacy of urgency on managerial behavior using the concept of discretionary investment, multiple goal theories, bargaining theories, and liquidation and control theories and so on.

VI. The capital rationing technique to curtail profitable investment projects due to given budget constraint which is either external or self-imposed reason to obtain maximum combination of investment proposals (Panday, 1979: 86).

2.1.1.5 Principles of Capital Budgeting

Capital expenditure decisions should be taken on the basis of the following factors:

I. Creative search for profitable opportunities: The first stage is the conception of the profit making idea. Profitable investment opportunities should be sought to supplement existing proposals.

II. Long-Range Capital Planning: A flexible program of a company's expected future development over a long period of time should be prepared.

III. Short-Range Capital Planning: This is for a short period. It indicates its sectorial demand for funds to stimulate alternative proposals before the aggregate demand for funds is finalized.

IV. Measurement of Project Work: The economic worth of a project to a company is evaluated at this stage. The project is ranked with other projects.

V. Screening and Selection: The project is examined on the basis of selection criteria, such as the supply and cost of capital, expected returns, alternative investment opportunities etc.

VI. Control of Authorized Outlays: Outlay should be controlled in order to avoid costly delays and cost over runs.

VII. Post Mortem: The ex-post routines of a completed investment project should be re-evaluated in order to verify their exact conformity with extant projections.

VIII. Retirement and Disposal: The expiry of the cycle in the life of a project is marked at this stage.

IX. Froms and procedures: These involve the preparation of reports necessary for any capital expenditure programmed.

X. Economics of capital Budgeting: It includes estimating the rate of return on capital expenditures. Knowledge of economic theory underlying investment decisions is needed for this purpose. This broad field of decision making for capital investment is one of the most difficult, one of the most recurrent and one of the most controversial of management areas; and it is also an area where there are tremendous opportunities for basic improvements in operations and policies. It may be emphasized here that the use of a model or of any of the mathematical techniques of the operations researcher does not imply management by computers. The mathematical model itself is a tool of management rather than a replacement for management

XI. Authorization: Since capital expenditure budget does not contain detailed expenditure, it is essential that before any individual projects relating to capital items are started, the expenditure should be specially authorized (Kulkarni, 1992).

2.1.1.6 Characteristics of Capital Budgeting

a. Capital Expenditure for long Period

Capital budgeting entails heavy expenditure. In fact, this is a very important characteristic which explains the importance of capital budgeting decisions to a firm. Capital is sunk for a long period. This long term commitment adds considerably to the risk of capital budgeting decisions. Capital expenditure is the main link between the present and the future, for it is the principal means by which an industrial company tries to attain its long term goals and objectives. Because of its relationship with long term profit planning, its disproportionately heavy impact on short term profits and its high volume, capital expenditure should be planned and controlled. Decisions which involve the authorization of capital expenditure projects are among the most important for the board of directors and their managerial advisers.

Most capital expenditure schemes call for a permanent commitment of relatively large sums of money over a number of years. Capital expenditure is a strategic investment of some magnitude and is of a non routine nature; it has economic life and its benefits continue over a series of years. From the stand point of the stockholder and the consumer, capital expenditures are the principal bulwark against the seemingly endless progression of wage increase. From the stand point of labor, capital expenditures are the basic economics. Source of further wage advances, for they embody the creative forward strides of advancing technology. Finally, capital expenditures, both by their aggregate size and by their cyclical timing, have a great deal to do with the character of the economy as a whole, and, therefore, with the government's role in maintaining stability:

I. Creative search for profitable opportunities: The concept of the profit making idea must be embodied in the capital facility. Profitable opportunities for the company's invested capital must be turned up. A corporation's future profitability and growth are linked to the soundness of its capital expenditure policy. This calls for the need for clearly identifying the steps of a capital expenditure

management programme. These steps then require to be integrated into a procedure to be used for the conduct of an organizations capital expenditure programme.

II. Long-Range Capital Planning: To provide consistent benchmark's for proposals originating in all parts of the organization, it is necessary to have some kind of a plan sketched and for the future eventhough through it is tentative plan. Today's capital expenditures make the bed that the company must lie in tomorrow. The capital expenditure budget embraces a company's plans for replacing, improving and adding to its capital equipment.

III. Short-Range Capital Planning: The purpose of preparing a short range capital budget is to force the operating management to submit the bulk of its capital proposals early enough to give the top management an indication of the company's credit demands for funds.

IV. Measurement of Project Worth: In order to permit an objective ranging of projects, the productivity of the proposed outlay will have to measure properly.

V. Screening and Selection: A screening standard should be set in the light of the supply of cash available for capital expenditures, the cost of money to the company, and the attractiveness of alternative investment opportunities.

VI. Control of Authorized Outlays: Control has to be exercised by the top management in order to ensure that the facility confroms to specifications and that the outlay does not exceed the amount authorized. Once the capital expenditure is incurred, it is most difficult to change the course of expenditure. As capital assets are usually of limited specific use, the future needs of such assets should be carefully assessed.

VII. Post-Mortem: In order to preserve the integration of the estimates of projected earnings, a post completion audit of the company's perfromance should be affected.

VIII. Retirement and Disposal: A management's responsibility for an investment approach ceases only when the facilitates have been disposed off. The asset must be retained throughout its economic life until is virtually becomes worthless at the time of disposal.

IX. Froms and Procedures: An effective system of capital expenditure control should be implemented with the use of specialized froms, written procedures, etc. all tailored to the company's needs.

X. Economic of the Capital Budgeting: Good estimates of the rate of return on capital expenditure projects re-suppose an understanding of the economic concepts that underlie sound investment decisions.

XI. Increase the Breadth of Analysis Leading to Decision Making: In evaluating capital expenditure decisions or a profit plan, it has been fairly common to consider only a few alternative strategies or economic assumptions before reaching a decision.

XII. Tool for Special Problems: More and more attention is being devoted by management to temporary and special problem situations.

XIII. Understanding inherent Logic of the Financial System: As a by product of financial modeling, some executives have found that the act of defining the logic and interaction of the financial system in developing the model is, in itself, a very important and revealing activity.

b. Forecasting

As funds are committed over extended periods of time, there is a need for proper forecasting. A bird in hand is worth two in the bush. There is an element of uncertainly and risk which may lie in store for the future. All these factors have to be properly evaluated in the process of forecasting. A proper cost benefit relationship should also be established.

c. Planning Asset Capacities

A firm has to assess the capacities of the assets properly before arriving at its long term decisions. Both under-capacities and over capacities should be avoided. Moreover, the management should determine the timing and the quality of asset acquisitions. Asset capacities have to be related to market factors, which may change over a period of time because of various cyclical fluctuations. A firm should, therefore, plan and fix the capacities of its assets in which long term investment is going to be sunk. Far-sighted judgment is an essential prerequisite of wise decisions bearing on capital expenditures. But such a judgment, to be sound, should be based on an analysis of all the facts, many of which may be extremely technical and complex. The top management needs an objective means of measuring the economic worth of individual investment proposals so that it may choose and select those which will have the most profound impact on a company's long run prosperity. The real worth of

an investment proposal may be traced to the credibility of the forecasts of the sales demand and production capacity which underpin the validity of that assessment, and any miscalculation of these is likely to be of far greater consequence that the relatively marginal effects of errors caused by the use of a wrong rate of interest in discounting calculations (Kulkarni, 1992).

2.1.1.7 Classification of Fixed Investment

Different kinds of investment require different types of analysis. Based on capital budgeting decision, there are different types of fixed investment. The following categories are most frequently used in this classification scheme:

a. Independent investment,
b. Mutually exclusive investment,
c. Pre-requisite investment, and
d. Replacement

This classification is based on the fund available for investment in fixed assets. If the firm has a large amount of fund available, then the firm can invest in many small projects. If a firm has an opportunity to invest the money in profitable investment opportunities, then all profitable investment can be made under independent project. But, on the other hand, only one of the profitable investments should be select if the projects are mutually exclusive. Many other classifications are possible based on technical characteristics or the frequency of the budgeting decision and they have their own uses. One such classification suggested by Joel Pean is based on economic consideration and intended to show distinctive problems of accepting investment proposals. This classification is more relevant for our study and has been discussed below:

Replacement Investment

A replacement investment is an outlay for new equipment that will do the same job as the previous equipment. Primarily, it is intended to produce cost savings. Two kinds of replacement investments can be distinguished; like for like replacement and obsolescence replacement. In case of the first kind, saving result primarily from operating inferiorities caused by physical wear and tear. Whereas in the case of

second, savings are the result of technical progress. For both types, the source of earnings is perspective cost saving.

Thus, replacement investments are undertaken for the purpose of replacing existing assets with new ones that will produce the same product or perfrom the same function either more efficiently or in greater quantity of volume.

Expansion Investment

To expand the present production capacity of the machine or fixed asset, expansion decision should be made. Expansion investment means purchase of fixed assets to increase the present capacity of the organization. Thus, expansion investments are capital expenditures designed to expand the capacity to produce and sale of the existing products. Such investment includes proposal for adding more machines of the type already in use or the opening of another branch in the citywide chain of stores. Expansion investments are frequently included in replacement decision such as a large and more efficient one may replace an old, inefficient machine. The return on an expansion investment is the expected additions to profit that will result from making the investment.

Product Investment

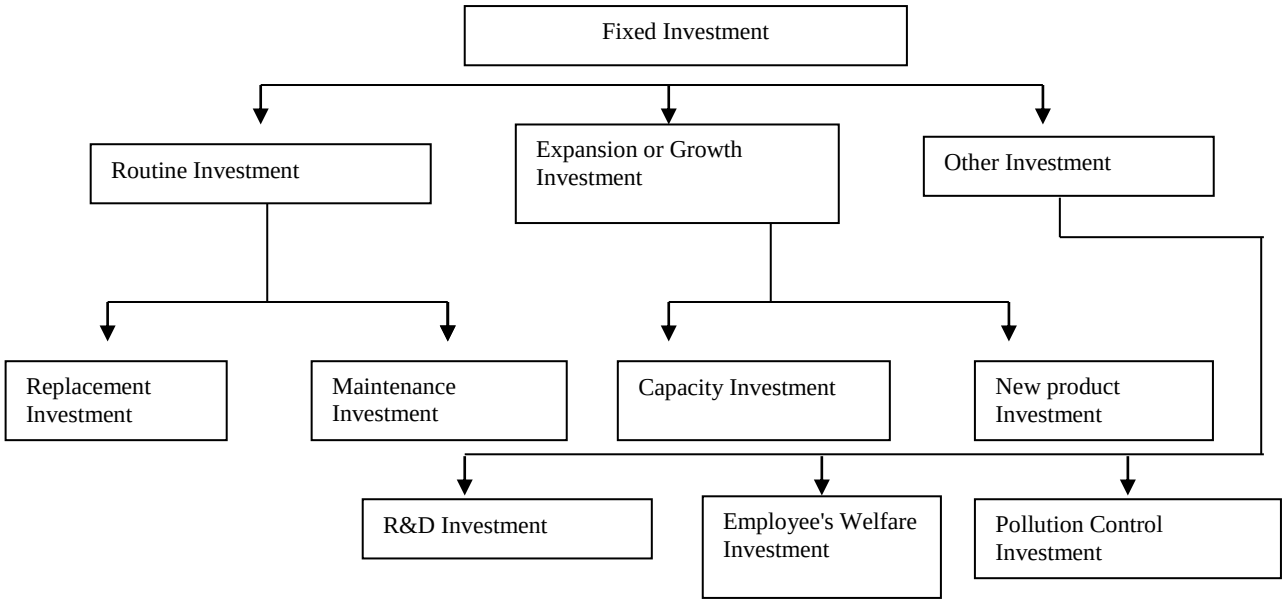
Product investment includes both improvement in existing products and additions to the product line. Defensive product improvements have a higher order of productivity that aggressive improvements, and fixed investment decision considerations are quite different for the two types of improvements. Investments to add products to a company's line are of two main kinds. One is the investment for established products that are new to the company and the other is the investments for pioneering products that are new to the economy. A degree of uncertainty, sometimes extremely high, is clearly involved in this type of expansion investments but the firm at least has the advantage of examining past production and sales experience with similar machines or stores. To measure the return on such investment, projection of complete income statement over a period of years is necessary. This statement requires forecast of sales, selling price, market development cost and production cost.

Other Investment

The other categories of investments are intangible in nature. These investments include proposals to boost employee's morale and productivity.

Figure 2.1

Classification of Fixed Investment



Welfare projects do not fit into any risk classification as they are usually required by legislation or are a part of employment costs, the benefits of which may be very difficult to measure(Broadbent &Cullen, 1997).

Most R&D departments are expected to concentrate on product development and refinement and new applications. They tend to keep their eyes on the technological workbench immediately before them on the technology of today, on the one to five year time horizon, and on the company's immediate concerns (Bright, 1971).

Statutory pollution control devices, which must be undertaken even, thought they produce no revenues, are other examples of such other investments. The primary factor influencing assets replacements are physically deterioration and obsolescence. When new assets promise efficiently and productivity superior to that of existing assets, replacement decision may be in order. Although replacement spending is a

from of cost reduction spending, for analytical purposes we could consider the two as separate categories. The cost reduction expenditures arise to check various productive factors. Whereas replacement investments arise to check operating interiority caused by physical wear and tear. While replacement and cost reduction on investments primarily decrease a firm's cost, other types of investment is that for the expansion of facilities. A second type of investment expenditure associated with increased demand is that of innovative investment.

2.1.1.8 Problems of Fixed Investment Decision

The basic management problem of fixed investment decision lies in the search for optimum quantity and mix of fixed assets for achievement of short and long range goals. The problem is continuing one, since; change in both external and internal factor is associated with the business system. The problem faced by management is now best to allocated limited resources among the factors of production. How much should a company invest in new equipment, when it could alternatively employ the funds for factory labor, for advertising and market survey of new products? If new equipment to be purchased, which new equipment among the many alternatives should present equipment repaired, be reconditioned through capital addition or be replaced? What criteria should be used to select equipment or the decide upon replacement? When and how should fixed investment be disposed off? These are all functions which are fundamental to capital investment problem.

There are three basic reasons why fixed investment decision poses difficulties for the decision maker. In the first place, the estimated benefits will be derived in the future. The future is never known with certainty. Secondly, even if the benefits are certain, it might be exceedingly difficult to measure the same in quantitative terms. And finally, benefits received and costs incurred at different points in time are not strictly comparable. A rupee received now is not the same as rupee received next month or next year, and can not be directly compared.

The symptoms which indicate that problem exists with the fixed investment may originate from three sources:

a. Equipment becomes so worn out that repair is uneconomical, and the equipment becomes so obsolescent that the company is likely to lose the market.

b. Managers, engineers and other specialists may ask for capital addition or replacement of fixed investments.
c. Management may like to narrow the gap between actual performance and ideal performance.

Once the management is aware of the existence of any of the symptoms indicating a problem of fixed investment, a decision has to be taken for investment. The investment proposal may originate within the firm, though they may call on technical specialists for advice, the proposal may originate at any level within the company, from the board of directors down to the production line worker. In practice a large portion of proposals originate in a fashion. However, because of the future uncertainties and the desire of management for sustained growth in the firm, many firms have found that it is desirable to be more systematic in the search for new investment opportunities.

2.1.1.9 Reasons for Fixed Investment

In order to maintain its market position with its present products, a company must have equipment which will produce products as good as or better that its competitors. It should be remembered that if the company itself did not plan to make its own product improvement, its competitors would get an advantage of it. But the present Nepalese conditions do not warrant such situation. However, if the firm which wants to study healthy must organize its research and development dept in order to innovate and grow for innovation and growth, timely replacement of equipment and addition of capital are required because of the following reasons:

a. Wear and Tear

Wear and tear in machines is a silent creeping of old age. Parts wear out at a time and are replaced. Capital additions are made to replace major components yet the question arises when the equipment should be replaced to avoid steadily increasing maintenance cost. The reason for wear of the asset is portions of the asset being consumed in the process on use, where the asset is used in many shifts a day and proper maintenance or replacement is not done, wear and tear comes much earlier than that of the economic life of the assets.

b. Obsolescence

When machine does not stay long enough to be considered worn or even lost its original operating characteristics. It becomes obsolete because the product designed to produce has become obsolete. This obsolescence occurs when alternative methods for performing a function become available which are better for some reason. They are economy, quality or newness of product produced or plant safety. Where technological development is more and change in fashion of the customers is frequent there the obsolescence becomes quicker. In spite of the fact that the machine in use is a brand new and has good part of me economic life left, it may need change due to the obsolescence.

c. Change in Volume of Production

In many times, the product of a company becomes quite popular in the market. Again due to increase in population and publicity might result is an increase in demand for the product if the company fails to match the demands of the customers, it may lose them to it's' competitors. Once the customers are habituated with other products, it is difficult to make again the product popular. Hence, an expansion investment is necessary to meet the changed volume of production. Further it is not sufficient, only to add a new machinery to increase the volume of production, but at the same time, the other facilities like the warehousing facilities, distribution channel, selling counters and executives etc are also to be increased to hold dislocation in storing and distribution of the increased volume of production.

d. Equipment Inadequate for Product Improvements

A progressive company is constantly working on improvements of its products. Better finishing, better fit, better materials, additional features and new functions are examples of product improvements. It may not be possible to produce such improvements with present processes and equipment's. The problem is whether a particular improvement or set of improvements is sufficient to justify replacement of present production equipment. Even for the introduction of a new product, the existing equipment may not be found suitable. Hence, either for improvement of the existing products or introduction of new products, replacements may be necessary.

e. Working Conditions and Morale

Working conditions result from among other things, the nature of the plant and its equipment. Industrial processes are likely to contribute noise, heat, fumes and odors, and other potential hazardous factors. Otherwise profitable machinery can be uneconomical if frequent or serious accidents or illness results. At any rate, the expected psychological boost to plant morale obtained through attractive machinery with processes having minimum hazardous factors also may justify equipment replacement.

f. Workers' Skill and Learning

The amount of skill, training or education required by the equipment operator is another consideration, related to this learning time for worker to reach maximum production, new equipment may either increase or decrease these costs. Opposing costs of upgraded labor versus greater production per unit of time may also require consideration.

g. Change to a New Plant Site

It is possible for many reasons such as expansion, new sources of raw materials, new markets, labor conditions, transportation, taxes, or termination of a lease that an entire plant may have to relocate.

2.1.1.10 Factors Influencing Fixed Investment Decision

Fixed investment represents not just a temporary commitment, but rather a long term equipment of the company. The sources of fixed investment problem are in (a) Contemporary operating circumstances in some cases and (b) Dynamic leadership in other cases. The management before taking any decision should answer three types of questions to every fixed investment proposal.

Why do this at all? Will a proposed new investment be profitable? Shall an existing investment be expanded? Shall existing process be modified? Why do it new? Are market conditions favorable now? Shall the excess capacity be utilized? Are the interest rates favorable for development? Why do this way? This is the choice between alternative ways of doing the same thing and is common to all types of engineering activity. In order to get appropriate answers to the above questions the

management has to adequately consider following factors which influence the investment decisions:

a. Nature of the Business

The type of investment decision considerably depends upon the nature of the business undertaking. In some cases, a quick and frequent decision on fixed investment is necessary to avoid disruption in production and sale. Whereas, in some other cases a well regulated investment policy can prevail in the business for a long period, except some minor changes from time to time.

b. Market Analysis Sales and Forecasts

Management must forecast long range as well as short-range market and sales potentials and plan its efforts to participate in growth and innovation. Investment decision based upon faulty market analysis and sales forecasts will certainly lead the companies into difficult in getting back the investment.

c. Rate of Growth

The rate of growth of the company is to be estimated from the past performance. The increase in fixed investment during the same period has to be compared with the rate of growth and correlation between them to be established. The management has to see whether the increase in fixed investment is keeping pace with that of the rate of growth or not.

d. Alternative Opportunities

The basic question management must answer is, where can we employ our resources so that we maximize our return over the long run? To evaluate old versus new equipment or alternative new equipment projects.

The following equipment characteristics need to be considered:

- Degree of newness of processes
- Service life of equipment
- Cost of equipment and net investment
- Salvage value

- Operating cost
- Quality of output, and
- Non-economic advantages and disadvantages such as safety and working condition.

e. Taxes and Depreciation

Income taxes depend upon profits and profits depend upon the depreciation charges. Thus a large new investment means a big annual depreciation charge deducted from the revenue for purposes of tax consumption. The lower the tax, the greater the cash flow for a given investment depreciation for tax purposes is called tax depreciation as opposed to physical depreciation. It doesnot usually represent the loss in value of the asset. The actual difference in value of the asset at the beginning of a year and at the end is called economic depreciation. The tax law permits two types of depreciation methods; straight line method and declining balance method. An appropriate selection of two methods can produce a substantial amount of after tax earnings for FID.

f. Sources of Funds

Capital structure determines the claims against the corporation. Every time management makes its decision to undertake a new investment project, it is at the same time making a decision as to the type of capital structure the company should have. There are only two broad ways to financing fixed investment or the acquisition of nay capital asset:

(i) Obtaining funds from gross retained earnings or from sale of shares which increases ownership claims and (ii) obtaining funds by borrowing and taking long term debt, which increase creditor's claim. The ratio of debt to equity which a firm decides upon affects the cost of new asset and hence the decision as to what to purchase and when.

g. Working Capital

Most of the times management concentrate on the purchase prices, operating costs and revenues of alternatives projects and fails to estimate the need of additional working capital. When the company is considered a choice of making entirely

different products, it is likely that large capital expenditure will be made. Working capital may be quite different for various alternatives. To maintain adequate working capital, the company may have to increase its long term debt or raise additional equity capital. Even if internal capital is available, care must be exercised to ensure that liquidity is maintained. When the costs of working capital are considered it is possible that other wisely profitable project may be dropped from the budget.

h. Cash Flow Budget

The cash flow budget which shows a flow of funds into and out of the company should be developed for alternative investment projects being considered. Its analysis may affect FID as (i) it may indicate that a change in timing is necessary to give place to some more important expenditure and (ii) investment which yields highest cash inflow in the earlier years of its life would be preferred.

i. Inflationary Price Change

This is a very significant factor in evaluating investment proposals, in which the equipment and facilities have long useful lives, due to constant decrease in the purchasing power of the currency. In case of inflationary price change the depreciation amount will not be sufficient to recover the historical cost. So the deficiency is to be met either from retained profits or from additional capital for replacement. Besides, due to change in purchasing power of the company, firms invest in fixed assets in earlier years at a less cost than the years in which they actually need them?

j. Risk and Uncertainty

Factors taken into consideration for evaluation of a fixed investment projects are related to the future and subject to variation due to uncertainties. Operating costs, revenues, interest rates or cost of capital, and even installed costs may vary. In comparing alternatives, management may have to choose between the different risks situations. Sometimes there may be no way of estimating what specifically will happen in future. Management may want to be prepared for the worst or to be prepared for the best, and must choose it strategy accordingly.

2.1.1.11 Evaluation Process of the Fixed Investment

The fixed investment evaluation process in any business enterprise involves several distinct steps. The first step in evaluating investment is that of defining what that investment is and what is costs and benefits are. In order to define what that investment is one has to classify the investment proposal. Once all the investment opportunities have been properly classified the task of sorting out and measuring the relevant project benefits and costs, so that each potential investment can been correctly evaluated.

Fixed investment analysis requires the use of definition of project benefits and costs, distinct from the more familiar accounting definitions of income or profit, and cost. An investment must be evaluated in terms of the cash flows it will generate in each interval over an appropriate period, generally the project's expected life time.

Inadequate management attention to a capital addition may result in over-investment or under investment and a consequent deterioration of a company's competitive position in the industry. A prudent management should not undertake a capital addition unless (a) it is necessary for continued operations, or (b) it is probable that it will yield a return at least equal to the long term objective of return on investment (Welsch et al., 2000).

Therefore, the evaluation process should also recognize only the incremental cash flows, the difference between the firm's cash inflows and outlays with and without the project respectively. Finally the cash flow must be measured on a comparable basis that recognizes difference in the timing of the cash receipts and disbursements.

After each project in a firm's current list of prospective capital investments have been properly defined and all relevant project costs and benefits have been identified, the next step is that of ranking the proposals in order of desirability. The desirability is based upon Keynesian concept of the marginal efficiency of capital. According to this concept, it will be found that a firm will continue to invest in fixed assets up to the point at which the rate of return of the last project is equal to or just exceeds the firm's established cut off rate of interest, which is the firm's cost of capital.

The different methods of analysis for ranking the fixed investment projects involve two steps. First, a comparison between two proposals has to show which is better. Thus a new project may be compared with each other. Second, an index for each project which permits comparison or ranking of any number of projects. Certain implicit assumptions underline the various methods. The probable assumptions are that the type of assets being compared on the basis of cost/benefit relationships:

1. Perfrom the same function at different costs.
2. Perfrom different functions at:
    a. The same cost b. Different costs
3. Perfrom improved functions yielding greater revenues at:
    a. The same cost b. Different costs
4. Perfrom new functions.
5. Have different lives and patterns of costs and revenues.

Thus, methods of analysis which compare only costs or cost savings imply that all other factors remain the same.

In most firms there are more proposals for projects than the firm is able or willing to finance. Some proposals are good and others are poor. Methods must be developed for distinguishing between the good and the poor. In reaching decision any suitable criterion should follow the following fundamental principles:

a. The 'Bigger the Better' principle. Other things being equal, bigger benefits are preferable to smaller ones.
b. The 'Earlier the Better' principle. Other things being equal, early benefits are preferable to later benefits.

In the process of FID one has to perfrom the quantitative evaluation of each investment proposal. Although there are many techniques one can use in profitability analysis, only four are examine and evaluated here. And of these four, only two are acceptable from a theoretical point of view, the net present value method and internal rate of return method. The other two techniques, the average rate of return on investment and the payback periods are presented merely because both are widely used.

Cash Flow Considerations

'The cash inflows for a project usually come from revenues and/or a cost saving. A cost saving is equivalent to a revenue because it increases profits. Cash outflows usually occur at the beginning of a project, and cash inflow typically occurs during the life of a project. Typical cash flows are as follows:

Cash Inflows:

- Revenues from the project
- Cost savings from the project.
- Reduction of current assets.
- Increases in current liabilities.
- Residual (salvage) value on project assets at the end of their useful life.

Cash Outflows:

- Initial investment (including directly related payments).
- Repairs and maintenance.
- Operating costs of the project.
- Increases in current assets.
- Reduction in current liabilities (Welsch et al., 2000).

2.1.1.11.1 Shortcut and Simple (non-DCF) Methods for Computing the Investment Worth of a Proposed Capital Expenditure

a. The Payback Period

'Earlier the Better Principle' is the principle of the PBP. It is defined as the number of years required to recover the original cash outlay invested in a project (Pandey, 1992).

The PBP calculates the payback period, which is the number of years that it takes to recoup a cash investment from the annual net cash inflows from the investment. This method is very popular in practice because it gives a quick information and if the risks is high or the future potentials beyond the payout period are difficult to assess then it is quite useful.

b. The Accounting Rate of Return

The accounting rate of return is found out by dividing the average after tax profits by the average investment(Pandey, 1992).

This method is also know as the return on investment (ROI) method uses accounting information, as revealed by financial statements, to measure the profitability of an investment.

Here, two basic principles are concerned; it is compatible with the 'bigger the better' principle 'earlier the better' principle, for equal weight is given to project earning in the first and last year.

2.1.1.11.2 Discounted Cash Flow (DCF) Methods

a. Net Present Value Method

Conversion of the future estimated cash inflows into the present value is known as the total present value and the difference between total present value and net cash outlay is called as net present value. In the equation from, we can write as follows:

NPV = Total Present Value – Net Cash Outlay

To determine the net present value we have to use the discount rate or cost of capital or cutoff rate or required rate of return, or minimum rate of return or hurdle rate or interest rate or target rate or market rate etc.; whatever is to be said but al represents the same meaning. In this method, cash inflows and cash outflows both discounted at the firm's cost of capital. To convert estimated cash inflows of the future into present value we can use two methods.

I. FormulaFormat

$$NPV = \frac{CFAT}{(1+r)^n}$$

II. Table Format

In this method, we can use two different tables for two types of cash flows as even net cash flows and uneven net cash follows.

Acceptance Rule:

If NPV > 0, then accept

If NPV < 0, then reject

If NPV = 0, then indifference (BEP) position

b. Internal Rate of Return Method

The IRR method is another discounted cash flow technique which takes account of the magnitude and timing of cash flows and this method also uses time adjusted rate of return and so on.

The IRR method computes the true rate of return whereas in NPV method, rate of return is determined by top management. The internal rate of return can be defined as that rate which equates the present value of cash inflows with the present value of cash outflows of an investment (Pandey, 1992).

The internal rate of return is usually the rate of return that a project earns. It is that rate which gives project NPV of zero' (Khan & Jain, 1990).

In other words, IRR is that rate at which the net present value of the investment is zero.

Procedures for Calculating IRR

The Computation of IRR involves two cases:

i. Even cash inflows for each period, and

ii. Uneven cash inflows for two or more periods.

i. Even Cash Inflows for Each Period, and

For even cash flows we have to follow-up these steps to calculate IRR.

Step 1: To find out factor by using the following fromula (Like calculation of PBP).

$$\text{PBP} = \frac{\text{Net Investment}}{\text{Annual Cash Inflows}}$$

Step 2: Mach the factor on annuity table is the line of period equal to final year of the project and determine the rate. if the figures on table are not equal to factor, take two figures corresponding to two rates, are more than factor and another less than factor.

Step 3: Interpolate the two rates and determine IRR

Step 4: The highest rate of return is acceptable for the acceptability of the project IRR should be greater than cost of capital.

II. Uneven Cash Inflows for Two or More Periods

For uneven cash flows we use trial and error approach to calculate the IRR. This approach is to select any discount rate to compute the present value of cash inflows. If the present value of the expected cash inflows is lower than the present value of cash outflows a lower rate should be tried otherwise vice-versa. This step will be repeated unless the NPV becomes zero.

Interpolating formula:

$$\text{IRR} = \frac{\text{NPV}_{\text{LR}}}{\text{NPV}_{\text{LR}} - \text{NPV}_{\text{HR}}} \times (\text{HR} - \text{LR})$$

2.1.1.12 Financing Fixed Investment

The FID is directly related to the financing decision because the acceptance of the fixed investment proposals gives rise to the financing decision. In the process of financing decision, one has to determine the new financing mix or capital structure of a firm. If a company can change the return on investment simply by varying its capital structure, an optimal financing mix would exist in which the return is maximized. The financing decision takes into account the firm's present and expected future portfolio of assets, for they determine the business risk complexion of the firm as perceived by investors.

Sources of Finance

Whether large or small investment it need funds to settle it. There are really only two broad ways to finance field investments: to increase the claims of the owners or to increase the claims of the creditors. The sources of financing can also be classified as external financing and internal generation of funds. The sum of various means of raising funds comprises the financial structure of any business, which is revealed by the left hand side of the balance sheet such as liabilities plus net worth. When we omit short-term borrowings from this list we call the remaining assorted claims the structure of the business.

A firm in practice may plan to finance an investment under consideration either by debt or equity, or partly by debt and partly by equity' (Pandey, 1992: 466).

Equity Financing

Preference Share

Preferred stock is capital stock which grants the owners certain rights and privileges that are not available to owners of common stock. In other words, preferred stock will have certain "preferences" over common stock. The specific preferences will vary from company to company, but two frequent ones are:

a. A prior claim to assets upon liquidation of the corporation, and
b. A preference to dividends.

A corporation may issue several different types of preferred stock, which include:

1. Stock which has preferences to dividends and consequently may be:
   a. Cumulative or non-cumulative.
   b. Participating or non-participating.
2. Convertible or non-convertible
3. Callable (Kindsfather et al., 1978).

That share which is preferred to dividends to the owners before the owners of common stock and accumulating the dividends until they are paid are known as cumulative preference share whereas not accumulating the dividends of the year is non-cumulative preference share.

If the stock is in participating nature, then it has to right to take dividend from the remaining profit (that part of profit which is remained after distributing the dividends to the common stock holders). If it is not right to take dividend from the remaining profit then it is known as non-participating preference shares.

The share which has a right to change in ordinary share is known as convertible preference share otherwise non-convertible preference share.

Callable preference share has the power to redeem the stock at any time when the corporation desires. In practice, most of the preferred stock issued is callable.

Ordinary Share

Ordinary shares are those shares which get the dividend after distributing the dividend at given rate to the preference shares from the profit. Ordinary, shareholders are the real owner of the corporation.

Common shares represent the ownership position in a company. The holders of common shares, called shareholders or stockholders are the legal owners of the company. Common shares are the source of permanent capital since they do not have a maturity date. For the capital contribution by shareholders by purchasing common shares, they are entitled for dividends. The amount or rate of dividend is not fixed; it is decided by the company's board of directors. A common share is, therefore, known as variable income security. Being the owners of the company, shareholders bear the risk of ownership; they are entitled to dividends after the income claims of others have been satisfied. Similarly, when the company is wound up, they can exercise their claims on assets after the claims of other suppliers of capital have been met (Pandey, 1992).

Internal Sources

A company's main internal sources of funds are depreciation and general reserves. Internal sources are said to have certain peculiar advantages as a source of financing. These sources are within full control of management, available without delay, no negotiation, no publicity or no explanation is need and free from any commitment to interest payment.

a. Depreciation Reserve or Sinking Fund

'The sinking fund method not only takes depreciation into account but also makes provision for replacement of the asset. Under this method, a fund is created by debiting depreciation account and crediting sinking fund account. Depreciation account is ultimately transferred to profit and loss account. An amount equivalent to depreciation charged is invested outside the business in gilt-edged or other securities

and allowed to accumulate at compound interest so as to produce the required amount to replace the asset after a specified period of time. The main advantage of this method is that it avoids strain on working capital, if substantial sums are withdrawn from the business to replace the asset at the end of its life (Mukherjee and Hanif, 1998).

b. General Reserve

Where a part of the undistributed profit is set aside for strengthening the general financial condition of the business, it is called a general reserve. Such reserves are also termed as free reserves, since they represent profits which are freely available for distribution. The contingency reserve or undistributed balance of the profit and loss account also comes within this category. The aim or objectives of creating such a reserve may be classified as under:

a. For meeting unknown future losses;
b. For expansion of business;
c. For strengthening the financial position of the business; and
d. For equalization of dividends over years, in case of joint stock companies (Gupta and Singh, 2008).

The size of the reserve of a company can build up every year is determined by the following factors:

a. Profit after tax,
b. Capital structure
c. Dividend policy.

General reserves may be created in the year in which the profits are sufficient and the management thinks it proper to do so.

Debt Financing

Debt financing' is the process of obtaining operating funds by borrowing. The individuals or firms loaning the funds to a business are called creditors. The business is expected to repay the loan, with interest, at some designated date. If the business firm fails to make loan repayments when due, the creditors may take legal action against the business in an attempt to make collections.

Funds are borrowed either by obtaining a loan from various lending institutions and individuals or through the selling of bonds (Kindsfather et al., 2005).

I. Debentures

A debenture is a long-term promissory note for raising loan capital. The firm promises to pay interest and principal as stipulated. The purchases of debentures are called debenture holders. An alternative term for debenture in India is bond. In U.S.A. when the term debenture is used, it generally means unsecured bond.

Features

A debenture is a long-term, fixed-income, financial security. Debenture holders are the creditors of the firm. The par value of a debenture is the face value appearing on the debenture certificate (Pandey, 1992).

Debenture or bond is long-term promissory note. The debenture trust deed or indenture defines the legal relationship between the issuing company and the debenture trustee who represent the debenture holders. Debenture holders have a prior claim on the company's income and assets. They will be paid before shareholders are paid anything. Debenture could be secured and unsecured and convertible and non-convertible. Debentures are issued with a maturity date (Pandey, 1992).

II. Bank Credit

Bank and Finance Companies provide the short-term and long-term loan. A line of credit also can be settled.

'A line of credit is a statement by the bank that it will lend up to a certain maximum amount to a specific customer. Before issuing the line of credit, the bank will thoroughly study the financial condition of the customer. The bank's board of directors must give approval of the line of credit to comply with the legal requirement that directors approve all loans.

Establishing a line of credit may be very advantageous to a business. Banks do not cancel or reduce it unless adverse changes occur within the business. Therefore, the business is aware of the maximum amount it may borrow, it knows it may obtain a

loan quickly, and it can plan operating activities accordingly (Kindsfather et al., 1978).

III. Family and Friends

'Family and friends are a frequently source of short-term financial aid to very small business operations. Unfortunately, many businessmen turn to them only when they are unable to obtain funds elsewhere. The family and friends often are not able to refuse and sink their money into a losing venture. In other cases, however, family and friends have been a valuable source of loans to many small successful businesses who were in need of temporary financial aid (Kindsfather et al.,1978).

IV. Governmental Sources

- Credit guarantee
- Financial aids or advances
- Special aids to particularly deserving groups: such as unemployed persons, technicians, artisans, etc.
- Export promotion and import substitute's scheme etc.
- Income tax rebate/concession holidays schemes (for the expansion and modernization of technology, for investment on pollution control device, etc.) (See Income Tax Act 2058 and Industrial Business Act, 2059: Sec. 15).

The Priority List of Financing might be:

a. Debt
b. Preference shares
c. Retained earnings, and
d. Ordinary shares

The sum total of the costs of individual source of financing is known as the cost of individual source of financing is known as the cost of capital. The cost of each source incurred in order to secure the use of capital from a particular source. This, of course is determined taking the tax factor into consideration.

The opportunity cost is the rate of return foregone on the next best alternative investment opportunity of comparable risk. Thus, the required rate of return on an investment project is an opportunity cost (Pandey 1992).

Importance of Cost of Capital

1. Designing of capital structure
2. To select investment project
3. Evaluating the financial performance of top management
4. For taking other financial decision (Dangol and Parajapati 2055)

2.1.1.13 Capital Structure

The two principal sources of long-term finance for a business firm are equity capital and debt capital. Equity and debt are defined here in a broad sense. Equity consists of paid-up share capital, share premium, reserves and surplus and preference capital. Debt consists of term loans and debentures. The inclusion of preference capital under equity is somewhat arbitrary. Preference capital is a hybrid from of financing, which partakes of some characteristics of equity and some of debt. It is similar to equity in two ways: preference dividend is not an obligatory payment and preference dividend is not a tax deductible expense. It is akin to debt in some ways: the rate of preference dividend is fixed and the claim of preference shareholder is prior to that of equity shareholders (Chandra, 1994).

The capital structure decision of the firm can be characterized as a choice of that combination of debt and equity which maximizes the market value of the firm (Pandey, 1992).

2.2 Review of Related Studies

Neupane (2005), a research of *"Capital Budgeting Practices in Rupandehi District"* has been conducted by Khem Raj Neupane in 2005. The study has the following objectives:

- To know the capital budgeting techniques used by the enterprises in Rupandehi district.
- To know the impact of suggestion from technician in capital budgeting decision.

- To know the use of time value of money concept in investment decision.
- To know the refund adopted by the enterprises to determine the cost of equity capital, cost of retained earnings and cost of capital.

The major findings of the study are as follows:

- Most of the sample companies in Rupandehi district are cleared about the concept of capital budgeting.
- Most of the sample companies in Rupandehi district know about the capital budgeting techniques.
- Although, most of the sample companies know concept and technique of capital budgeting yet only 33.33% companies have been applying capital budgeting technique while investing in the project.
- The applicants of capital budgeting technique while making the capital expenditure decision preferred the evaluation technique in this order:
  a. PBP
  b. NPV and using one particular technique in conjunction with other.
  - Reason for preferring a particular technique according to preference of applicants companies are as follows:
    a. Easy to explain to BOD
    b. Simplicity
    c. Incorporates time value of money and PBP is more practical and convenient in present situation.
- 12 companies out of 18 i.e. 66.67% do not apply capital budgeting evaluation technique while making the capital expenditure decision and they dominantly opined that the use of capital budgeting evaluation technique is important while acquiring the major fixed assets.
- Most of the sample companies i.e. 66.67% want to increase the cash inflow whereas 33.33% companies want to reduce the operating cost.
- Most of the sample companies in Rupandehi district are not foregone profitable investment opportunities in view of some limit imposed on the size of capital budgeting. This situation implies that there is not any difficulty to the financing capital expenditures.

The study carried out by Basheer et al(2010) in Jordan there is a slow in the use of WACC as the discount rate. Most firm were using the cost of equity and the cost of borrowing. This also shows a contradiction from the theoretical part of the literature on capital budgeting decision as theory emphasize the use of WACC as the discount rate. The study also indicate that lack of experience and staff explains the reason why companies have not adopted the WACC as the discount rate. The study showed a few percentages on incorporation of inflation, lack of staff also explained why companies are not incorporating inflation in their study. The study also indicated that firms use different methods in analyzing risks in cash flows.

Mbabazize, Peter Mbabazi and Daniel Twesige (2014), studied on the topicCapital Budgeting Practices in Developing Country*:* A Case Study of Ruwanda, The result of the survey are neither conclusive nor generalizable instead it opens up area of capital budgeting for more definitive and targeted research in Rwanda. In case of Rwanda most of firms are adopting the use of discounting cash flow techniques through there are still some inconsistencies on the applicability of those techniques as most of firms are still using wrong discount rate in discounting the expected cash flows. More to the still few firms consider the impact of inflation in the capital budgeting decisions. Further research need to be carried out to approve the validity of these findings by looking on how capital budgeting cash helps developing countries in the efficient allocation of resources.

Trends towards sophisticated techniques for evaluation of capital budgeting have continued; more particularly, the discounted cash flow (DCF) has become the dominant evaluation method over other non-DCF techniques in the recent years, for example, in Canada (Bennouna et al. (2010) and; Jog and Srivastava (1995); the UK (Arnold and Hatzopoulos, 2000) and US (Graham and Harvey, 2001).

On the contrary, in one of the earliest studies in the US, Kalmmer (1973) showed thar 19 percent indicated that they used DCF method as their primary method to evaluate projects based on the 1959 survey. A majority of the firms used either payback (34 percent) or Accounting Rate of Return (34 percent) as their primary method of evaluation. In 1970, the picture had changed dramatically. Some 57 percent of the firms used the DCF methods, while 26 percent opted for the Accounting Rate of

Return of Return and only 12 percent applied the payback method as their primary technique of evaluation.

In the Asia-Pacific region, Wong et al. (1987) found that in the Asian countries; Malaysia, Hong Kong and Singapore, the payback period method was most popular primary measure for evaluation and kinking projects. For Malaysia, the evidence was confirmed by Han (1986). Kester et al. (1999) study based on Australia, Hong Kong, Indonesia, Malaysia, Philippines and Singapore, reported that the payback period method is still and important method. Yet, DCF methods seemed to have increasing popularity in these countries, excluding Australia from the sample countries, about 95 percent of the firms in the five Asian countries indicated that they used the Payback period method and 88 percent of them applied the NPV method when evaluating the projects.

Studies investigating capital budgeting in countries, characterized by a lesser degree of development, most of all Asian countries but also countries from CEE, are definitely less common. However, one should mention two cross-section works: Kester et al. (1999) which is more than a dozen years old and embraces such countries as Hong Kong, Indonesia, Malaysia, the Philippines, and Singapore as well as a work by Andor et al. (2011) revealing the practices of ten CEE countries: Bulgaria, Croatia, Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. Even with more of such studies (see selected studies presented in Table 1), a practical use of investment appraisal methods is not researched enough, especially when compared to research carried out in more developed countries.

In the context of Nepal, Pradhan and Adhikari (1998) found that most of the Nepali companies used unsophisticated and non-discounted cash flow (NDCF) techniques. However, Paudel (2006) reported that the capital investment evaluation techniques being used in Nepali changed from unsophisticated to sophisticated techniques, and the Nepali companies also used the DCF techniques to determine capital budgeting decision.

2.3 Research Gap

The capital budgeting related study has been conducted by few researchers. One of the study related with capital budgeting has been done by Neupane in 2005 entitled 'Capital budgeting practices in Rupandhei district in domestic context.' Other studies are not available in the central library. So, the researcher has taken only one of the previous research works as review of related studies. In global context, 'capital budgeting practices in small manufacturing industries in U.K.' has been done (www.google.com). So, the researcher can conclude there is only few numbers of studies has been conducted in this topic.

In the context of Nepal previous research is limited with the capital budgeting practices in Rupandehi district only. So, no any research has been done in the manufacturing enterprises of Kathmandu district. Therefore, this research is most important and useful for those manufacturing enterprises that are established and operated in Kathmandu district.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

This research has been tried to explore the capital budgeting practice in Kathmandu district that do the entrepreneurs or the managers know about capital budgeting technique: Do they applying capital budgeting technique while making the capital budgeting decision? What level of formal capital budgeting analysis is required? Has the expectation of cash flow matched or not with the actual data? Does the use of CB evaluation techniques vary according to the investment range? What are the different methods to be used at different investment range? What are the difficulties in capital budgeting? Which method of capital budgeting evaluation technique, they prefer? With finding out that why they are not emphasizing properly to acquire the fixed assets.

Research methodology is the way to solve systematically about the research problem (Kothari 1990).

Research methodology is that procedure of planned outline which deals with the research design, data collection procedure, nature of data, identifies the population, making confidence of the sampling method and sampling variables, data selecting styles, presentation style of collected information and interpreting it. Now, no doubtingly it is obvious that the research methodology is helpful to attain the objectives of the research.

3.2 Research Design

Research design is that outline which configures the collection and analysis style of the data and information.

As the topic of this research capital budgeting practice in Kathmandu district so it mostly tries to flash the present status of capital budgeting practice in such region. The information of this research concerns with descriptive and analytical type of research design.

Descriptive research is process of accumulating facts. It does not necessarily seek to explain relationship and test hypotheses make predictions or get at meanings and implications of a study (Wolff and Pant, 2002).

The research is to be based on the providing information of the sample companies i.e. primary information as well as it uses some second informationfrom relevant sources of information i.e. secondary information and that information tries to describe all the facts, which have been collected for the aim of the study.

3.3 Sources of Data

The research is to be based on the information of the sample companies through structured questionnaire and some relevant books, journals, reports, electronic media such as websites etc. It means the analysis is done on the basis of primary and secondary information but primary information is mostly prioritized. The primary information is gained through the sample respondent companies and secondary information is gained through the various sources of flashed information.

3.4 Population and Sample

The population for the study comprised all the manufacturing based enterprises, which are operated in Kathmandu district. Among all manufacturing enterprises, only 25 manufacturing enterprises are taken as sample for study.

3.5 Method of Data Collection

This research is related with the capital budgeting practices of manufacturing based companies in Kathmandu district. As stated previously that the research is based on the primary and secondary sources of information.

For the collection procedure of the data, some questions' answer is to be found out, as, why is it studied? What may be the relevant data? Which organization and sources may be the right for the collection of data and information? Who may be the right person to obtain the required data and information? How does one can to contact with such persons? Who is the supervisor for such particular research? What may be the right instrument as books, journals, reports, electronic media such as websites etc. for the solution of the research problem?

Once the data and information properly collected then the compilation, tabulated, presentation, analysis and interpretation has been done.

3.6 Methods of Research Analysis

For the analysis of the collected data and information, analysis has been done as the nature of data is available. First of all the collected data and information has been grouped and rearranged so as to make comparison easy. Pilot study and pre-testing has been done to test the reliability and validity of the information. A variety of methodology is applied according to the reliability and consistencies of data, then the grouped and rearranged data is tabulated, presented, analyzed, and interpreted systematically as it is needed.

For the data analysis and interpretation, analytical tools are used according to the nature of the data.

CHAPTER- IV

DATA PRESENTATION AND ANALYSIS

4.1 Knowledge of Time Value of Money

To know the respondent companies are familiar with the concept of time value of money concept, researcher had asked 'what is your opinion that the entrepreneurs have to gain the knowledge of time value of money concept?' The result has been presented in the following table:

Table 4.1

Knowledge of Time Value of Money

S.No	Clarity Options	No. of Respondents	Response in Percent
1	Must necessary	14	56
2	Moderately necessary	8	32
3	General knowledge is required	3	12
4	Not necessary	0	0

Source: Field Survey

It is observed that 56 percent of the respondents have focused on time value of money concept that it is must necessary to the entrepreneurs to gain the knowledge of time value of money concept. It means majority respondents are in favor of time value of money concept. Every entrepreneur has to gain the knowledge of time value of money concept for the smooth operation of business.

On the other hand, all respondents are agreed that entrepreneurs have to gain the knowledge of time value of money concept as they have asked must necessary, moderately necessary or general knowledge is required. No one respondent has asked that the entrepreneurs have to gain the knowledge of time value of money concept 'Not necessary'. It also shows that all respondents are familiar with the concept of time value of money.

Thus, it is concluded that all entrepreneurs have to gain the knowledge of time value of money concept and all companies have clarity about the concept of time value of money.

4.2 Necessity of Knowledge of TVM

To examine the necessity of the knowledge of TVM for the management, a question was asked, 'The management must be familiar with the concept of TVM. Do you agree?' The responses of respondents were as follows:

Table 4.2

Necessity of Knowledge of TVM

S.No.	Options	No. of Respondents	Response in Percent
1	It is must	9	36
2	Highly necessary	11	44
3	It is moderately necessary	5	20
4	Not necessary	0	0

Source: Field Survey

The respondents agreed that the management must be familiar with the concept of TVM. 36 percent respondents have a clear vision of necessity of TVM concept is the must. Majority parts i.e. 44 percent have agreed it is highly necessary and only 20 percent asked it is moderately necessary. By observing the answer of those respondents who asked TVM is highly necessary for the management, it can be said that they all have the knowledge about TVM and it is the most important part for CB analysis.

Thus, majority respondents agree about the necessity of knowledge of TVM to the entrepreneurs.

4.3 Clarification about the Concept of CB

To know whether the respondent companies were acquainted with the concept of CB, they were asked, 'Do you know that the CB is related with the decision making process which firms evaluate the purchase of major fixed assets?' The result has been presented in the following table:

Table 4.3

Clarification to the Concept of CB

S.No.	Clarity Options	No. of Respondents	Response in Percent
1	I know	13	52
2	Know something	12	48
3	I do't know	0	0

Source: Field Survey

It is observed that maximum respondents are known about CB is related with the decision making process by which firm evaluate the purchase of major fixed assets. In above table, 52 percent respondents have given their response that they know very well about this, 48 percent response that they know something but the researcher cannot get any answer that they do not know. So the researcher concluded that every employee is at least something known about the concept of CB.

4.4 Knowledge of CB

To know about the concept of CB that the respondents have got any idea about it, they were asked 'Have you got any idea about capital budgeting from anywhere?' The result has been presented in the following table:

Table 4.4

Knowledge of CB

S.No.	Options	No. of respondents	Response in Percent
1	Yes	25	100
2	No	0	0

Source: Field Survey

The researcher observed that 100 percent respondents have knowledge of CB technique. It shows that the organizations are aware in HR recruitment at present day. They recruit competent manpower for their organization. The researcher found every employee is known about CB.

4.5 Source of Knowledge of CB

The main source of gathering knowledge of CB is the academic study of the respondents. After visiting the selected manufacturing enterprises of Kathmandu district, it is concluded that 84 percent of the respondent companies have a source of

knowledge of CB is from academic study. To collect the information about source of knowledge of CB, a question of 'How did you get the knowledge of CB?' was asked. The responses are presented in the following table:

Table 4.5

Source of Knowledge of CB

S.No.	Options	No. of respondents	Response in Percent
1	From training given by organization	4	16
2	From academic study	21	84
3	From newspaper, journals and others	0	0
4	Any others (Please specify)	0	0

Source: Field Survey

It is observed that 16 percent of the respondents have knowledge of CB from their academic study. Majority respondents have gathered the knowledge of CB from academic study. Thus, it can be clearly identified that almost all managers have completed their bachelor's degree in management.

4.6 Knowledge of CB Techniques

To know the decision makers have knowledge of CB techniques, the researcher had asked, 'Do the decision makers have to know about CB techniques?' The responses obtained from respondents have been presented in the following table:

Table 4.6

Knowledge of CB Techniques

S.No.	Options	No. of Respondents	Response in Percent
1	Simple knowledge is required	9	36
2	Good knowledge is required	10	40
3	Very good knowledge is required	6	24
4	Not necessary	0	0

Source: Field Survey

It is observed that 40 percent of the respondents have focused that a very good knowledge about capital budgeting techniques is required by the decision makers. It also shows that the majority respondents have a sound knowledge of CB techniques

clearly. Respondents who do not reply that the decision makers do not have to know about the CB techniques also shows that they have very good knowledge of CB.

4.7 Usefulness of CB

The researcher had asked the question, 'Is it useful technique for the feasibility study of new investment?' In this question, various options are provided to the respondents and them response differently. The result has been presented in the table:

Table 4.7

Usefulness of CB

S.No.	Options	No. of Respondents	Response in Percent
1	Very useful	11	44
2	Useful	9	36
3	A little useful	5	20
4	Not useful	0	0

Source: Field Survey

From the above table, the researcher observed that 44 percent of the total respondents response it is very useful for the feasibility study of new investment, 36 percent response in favor of useful only, 20 percent response it is a little useful and no response it is not useful. So, the researcher concluded that CB is useful technique for the feasibility study of new investment in manufacturing enterprises of Kathmandu district.

4.8 Use of CB Methods

The researcher had asked the question, 'How frequently do you use the CB methods?' In this question, various respondents have given various responses that are figured in table below:

Table 4.8

Use of CB Methods

S.No.	Options	No. of Respondents	Response in Percent
1	Always	10	40
2	Often	5	20
3	Sometimes	8	32
4	Rarely	2	8
5	Never	0	0

Source: Field Survey

From above table, the researcher observed that 40 percent of the total respondents use CB methods frequently to analyze the feasibility study of the projects. Other results are, 32 percent use CB methods sometimes, 20 percent use it often, 8 percent use rarely. The researcher found every respondents use CB methods to analyze feasibility study of the projects from different ways as different timely manner because no respondent responses the option 'never' use of CB methods.

4.9 Range of Investment Where CB Used

To know in which range of investment CB is used, the researcher asked, 'In which investment range the CB must be done before investing in the project? Or what level of fromal CB analysis was required?' Maximum number of respondents answered at all level of investment they are used CB, which has been presented in the table.

Table 4.9

Range of Investment Where CB is used

S.No.	Options	No. of Respondents	Response in Percent
1	All	12	48
2	Greater than Rs 100000 only	5	20
3	Greater than Rs 500000 only	8	32
4	Never used	0	0

Source: Field Survey

It is observed that 48 percent respondents use CB on all level of investment, 32 percent use CB at the investment limit of only greater than Rs 500000 and 20 percent use CB at only greater than Rs 100000. The researcher found no any respondent use

CB in any investment. So, researcher concluded that CB is used in any level of investment either less than Rs 100000 or greater than Rs 500000.

4.10 Preference of Cash Flow Calculation Method

The researcher had asked the question, 'which types of cash flow calculation method do you like most?' In this question, three options are provided to the respondents. The result has been presented in the following table.

Table 4.10

Preference of Cash Flow Calculation Method

S.No.	Options	No. of Respondents	Response in Percent
1	Increment of cash inflow (expected income)	9	36
2	Reduction of cash outflow (operating cost)	8	32
3	Sometimes option 'a' sometimes 'b'	8	32

Source: Field Survey

From above table 4.10, the researcher observed that 36 percent respondents use incremental of cash inflow method for calculation of cash flow, 32 percent use operating cost or reduction of cash outflow method and same percent use sometimes incremental cash inflow method and sometimes operating cost method.

From the talking with respondents who prefer the increment of cash inflow, they said that every business entity wants to increase the sales although whatever they talks because one organization tends to reduce the operating cost then at which level and what amount of expenses they can to reduce. Furthermore in their words 'no one can be reduced the operating cost after a line. Therefore, they agree that sales maximization is better to generate the cash inflow more.

The respondents who prefer reduction of cash outflow said that using cost reduction of cash outflow said that using cost reduction tools empower the strength of the organization and if cost is reduced then one also can reduce the sales price and ultimately sales will be risen up. Therefore, reduction of operating cost is the best tool to generate the income.

4.11 Basis of Cash Flow Calculation

To evaluate the basis of cash flow calculation followed by respondents, the researcher provides various options. Various results have been found from respondents that are presented in the table 4.11.

Table 4.11

Basis of Cash Flow Calculation

S.No.	Options	No. of Respondents	Response in Percent
1	Studying past result	8	32
2	Considering the expected future environment	11	44
3	Observing the practices of competitor	6	24

Source: Field Survey

From the above table, the researcher observed that 44 percent respondents calculate cash flow considering the expected future environment, 32 percent respondents calculate cash flow by studying the company's past trend and 24 percent respondents calculate cash flow by observing the practices of competitor.

From the talking with respondents who prefer the cash flow should be calculated by studying past trend, they said that every organization should be clearly analyzed it's past days. It means what are the major factors that an organization has got the success over it's past days. Cash flow should be calculated on the basis of past growth rate of cash flow. It can be found easily that what the growth rate of cash flow in the past. Therefore, if cash flow has calculated by studying past result, it can be really matched with the actual cash flow in the future. So, the decision is being more realistic.

On the other hand, the respondents who prefer the cash flow should be calculated by considering the expected future environment said that the future is uncertain. But it can be estimated what will be the environment in future. If the expected environment is bright for business organization, level of cash inflow will be higher and vice versa. So, the cash flow should be calculated by considering the expected future environment.

4.12 Effectiveness of Cash Flow Forecasting

To examine the effectiveness of cash flow forecasting, the researcher had asked the question, 'Has your expectation of cash flow matched with actual data?' In this question, three options are provided to the respondents. Majority of the respondents asked nearly matched. The result has been presented in the following table:

Table 4.12

Effectiveness of Cash Flow Forecasting

S.No.	Options	No. of Respondents	Response in Percent
1	Highly matched	9	36
2	Nearly matched	12	48
3	Not matched	4	16

Source: Field Survey

From the above table, the researcher observed that 48 percent respondents responded it is nearly matched with actual data, 36 percent responded it is highly matched but 16 percent asked it is not matched with actual. From this, the researcher concluded that future forecasting of cash flow generally matched with actual. But, sometimes it does not match due to the basis of calculation ore error of calculation. The researcher found from interview, if considered expected future environment it would be highly matched or nearly matched. If does not consider future environment and use past trend of the company or competitors' practice, the forecasting of cash flow would not be matched.

4.13 Practices of CB Techniques in Manufacturing Enterprises of Kathmandu District

The researcher had asked the question, 'What methods/ techniques of CB the company is familiar with?' In this question techniques of CB are provided in options. The result has been presented in the following table:

Table 4.13
Practices of CB Techniques

S.No.	Options	No. of Respondents	Response in Percent
1	PBP	2	8
2	ARR	1	4
3	NPV	8	32
4	IRR	3	12
5	PI	1	4
6	All of above	10	40
7	If any (please specify)	0	0

Source: Field Survey

From the above table, the researcher observed that 40 percent of respondents use all capital budgeting evaluation techniques. It means they use suitable tools considering other factors like time, resources, investment types, investment range, decisions etc. They use sometimes NPV, IRR or ARR to take investment decision. Other result is observed as 32 percent use NPV, 12 percent uses IRR, 8 percent use PBP and 4 percent use both ARR and PI. So, the researcher concluded that NPV is the most suitable method to evaluate the investment decision because it is the discounted technique and it can give the better result for decision making. In this way, the researcher found that all techniques are used by the manufacturing enterprises as per requirement and suitability.

4.14 Vary in Using CB Techniques with Different Investment Limit

Respondent companies were asked to indicate the CB evaluation techniques vary or not according to the different limits of investment, the results have been presented in the following table:

Table 4.14
Vary in Using CB Techniques with Different Investment Limit

S.No.	Options	No. of Respondents	Response in Percent
1	Yes	18	72
2	No	7	28

Source: Field Survey

From the above table it is observed that 72 percent of the respondent companies are in favor of CB evaluation techniques vary according to the investment limit of the project. It means if the investment is in small amount, one CB technique is suitable, in

medium level investment one CB technique is suitable and so on. However, 7 out of 25 i.e. 28 percent companies use only one CB technique either in small size or any other size of investment.

Thus, it can be concluded that the use of CB evaluation techniques vary with different range of investment. Only one CB evaluation technique is not suitable for all of the investment.

4.15 Use of CB Evaluation Techniques with Different Investment Range

By focusing those respondent companies who reply the CB evaluation techniques vary with different investment range, they were asked, and 'which of the following CB evaluation techniques do you apply if your investment range is in the following?' The responses were as follows:

Table 4.15

Use of CB Techniques with Investment Range of Up to Rs 100000

S.No.	Evaluation Tools	No. of Respondents	Response in Percent
1	PBP	5	20
2	ARR	3	12
3	NPV	13	52
4	IRR	4	16
5	PI	0	0
6	All of above	0	0

Source: Field Survey

With the investment range of Rs 100000 and less, 52 percent of the respondents use NPV for the best CB techniques to evaluate the project. 5 out of 25 sample companies use PBP as the best CB evaluation techniques i.e. 20 percent. Thus, it is concluded that NPV is the best CB evaluation techniques for the investment range of up to Rs 100000.

Table 4.16

Use of CB Techniques with Investment Range of Rs 100000 to Rs 500000

S.No.	Evaluation Tools	No. of Respondents	Response in Percent
1	PBP	3	12
2	ARR	2	8
3	NPV	16	64
4	IRR	4	16
5	PI	0	0
6	All of above	0	0

Source: Field Survey

With the investment range of Rs 100000 to Rs 500000, 64 percent of the respondents use NPV as the best CB evaluation techniques. It is cleared that up to Rs 500000 investment, NPV method is widely used by the manufacturing organization of Kathmandu district.

Table 4.17

Use of CB Techniques with Investment Range of greater than Rs 500000

S.No.	Evaluation Tools	No. of Respondents	Response in Percent
1	PBP	1	4
2	ARR	0	0
3	NPV	17	68
4	IRR	7	28
5	PI	0	0
6	All of above	0	0

Source: Field Survey

With investment range of greater than Rs 500000, 68 percent of the respondents use NPV. Rest 32 percent use PBP, ARR and IRR. No manufacturing companies use the PI and all techniques at a time for analyzing the project or new investment.

Thus, it is concluded that CB evaluation techniques do not vary with investment range because majority of the respondents use NPV techniques before investing the project which is cleared in the table 4.15.4. From the practice of respondent companies and by the priority, new sequential order obtained is as follows:

Table 4.18

Sequential Order with Investment Range

S.No	Investment Range	Evaluation Tools Preference					
		1st	2nd	3rd	4th	5th	6th
1	**Up to Rs 100000**	NPV	PBP	IRR	ARR	-	-
2	Rs 100000 to Rs 500000	NPV	IRR	PBP	ARR	-	-
3	Rs 500000 & above	NPV	IRR	PBP	-	-	-

Source: Field Survey

4.16 Application of CB Techniques

The application of CB is the most important part for the organization. To examine the degree of CB techniques applied by organization, a question was asked, 'what is your opinion regarding the application of CB techniques in your organization?' The responses were as follows:

Table 4.19

Application of CB Techniques

S.No.	Options	No. of Respondents	Response in Percent
1	Highly satisfactory	11	44
2	Satisfactory	8	32
3	Average	4	16
4	Dissatisfactory	2	8
5	Highly dissatisfactory	0	0

Source: Field Survey

From above table, 44 percent of the respondents reply highly satisfactory about the application of CB techniques in their organization, 32 percent reply satisfactory result and 16 percent reply average. Only 8 percent of the respondent companies replied that the application of CB techniques is not at the point of satisfaction.

The respondents who dissatisfy about the application of CB in their organization said that no experts are available in the organization for handling such types of job and it is expensive to apply the CB techniques. In conclusion, the application of CB techniques is useful only for large types of organization and small types of organization does not want to evaluate project by using CB techniques.

4.17 Implementation of CB

To know whether the organizations get an advantage after implementing the CB evaluation techniques or not, a question was asked ' is it advantageous after implementing the CB evaluation techniques in your organization?' the results were:

Table 4.20

Implementation of CB

S.No.	Options	No. of Respondents	Response in Percent
1	Highly advantageous	7	28
2	Advantageous	15	60
3	Not advantageous	2	8
4	No change	1	4

Source: Field Survey

It is advantageous after implementing the CB evaluation techniques in manufacturing enterprises of Kathmandu district by research conducted. 60 percent of the respondent companies have got advantages of implementing CB techniques. Out of 25 respondents, 7 had replied that it is highly advantageous. Only 2 i.e. 8 percent of the respondent companies replied not advantageous after implementing CB techniques. Those who replied after implementing CB techniques, there is no change and not advantageous, such organization had very small volume of sales and they could not spend lots of money to implement the CB evaluation techniques.

Thus, it is concluded that most of the manufacturing enterprises get advantages after implement the CB evaluation techniques.

4.18 Effectiveness of CB Techniques

To know the effectiveness of CB evaluation techniques, the respondent companies were asked, 'Is there any difference in your organization before and after implementing the CB techniques?' The responses are presented in the following table:

Table 4.21

Effectiveness of CB Techniques

S.No.	Options	No. of Respondents	Response in Percent
1	Yes	19	76
2	No	6	24

Source: Field Survey

It is observed that 76 percent respondent companies realized that there is difference occurs in organization before and after implementing the CB techniques. Only 24 percent respondent companies replied that there is no any differences occur before and after implementation of CB techniques. Respondents, who replied there is no change occurs, use non-discounted methods for the evaluation of investment. Some respondents asked that they had used the CB evaluation techniques from the beginning of establishment of the organization. Therefore, it did not realize that any difference before and after implementing the CB techniques.

4.19 Attainment of Organizational Objectives

A question was asked, 'Have the CB techniques helped to attain organizational objectives?' The responses were as follows:

Table 4.22

Attainment of Organizational Objectives

S.No.	Options	No. of Respondents	Response in Percent
1	Yes	10	40
2	No	6	24
3	It has helped a little	9	36

Source: Field Survey

40 percent of the respondent companies are satisfied in using CB techniques because it has helped to attain the organizational objectives. Most of the companies have objective of maximization of wealth of the firm. By using CB techniques at the time of investment, many factors have analyzed. This analysis is very useful for the attainment of organizational objectives. The respondents, who reply CB techniques have not helped to attain the organizational objectives, asked that they would not able to implement the CB techniques properly due to the time factor, cost and management efficiency.

Thus, it is concluded that organizational objectives can be achieved through effective management and use of CB techniques.

4.20 Major Findings

1) 88% sample companies are familiar with the concept of TVM and CB.
2) TVM concept is known by every decision maker of organization.
3) Entrepreneurs/ Decision makers have to know about the concept of CB.
4) At least one of the staff of manufacturing enterprises are management graduate because they had took the concept of CB from their academic study.
5) 76% sample enterprises use CB evaluation techniques before investing in the project.
6) CB techniques are the useful technique for the feasibility study of new project.
7) Almost all manufacturing companies use the CB methods to analyze the feasibility study of the new project.
8) Generally, investment range does not differ the use of CB methods. It means whether the investment amount is greater or small, CB analysis is required.
9) Preference of cash flow calculation method is different in manufacturing organization. 36% enterprises used incremental of cash inflow and 32% enterprises used reduction of cash outflow methods and 32% enterprises are used both option.
10) For calculation of cash flow by manufacturing enterprises, they mostly consider the expected future environment. Therefore, it is concluded that cash flow is calculated by considering the expected future environment. But some enterprises calculate cash flow by studying past result and observing the practices of competitor.

11) From practice and responses given by the manufacturing enterprises, it is concluded that if they do not consider the expected future environment and use past trend of the company or competitor's practice, the forecasting of cash flow would not be matched.
12) The applicants of capital budgeting technique while making the capital expenditure decision preferred the evaluation techniques in this order:
    A. NPV
    B. IRR
    C. PBP
    D. ARR & PI

13) The use of CB techniques is mainly based on the time, available resources, investment types, investment range etc.
14) The use of CB evaluation techniques vary with different limits of investment. Only one CB evaluation technique is not suitable for all of the investment/ investment range.
15) If the investment range is less than Rs 100000, the most useful technique is NPV. Again if the investment range is Rs 100000 to Rs 500000 or greater than Rs 500000, the most useful technique is NPV, same as above. Thus, it is concluded that CB evaluation techniques do not vary with investment range.
16) The application of CB techniques is useful only for large types of organization and small types of organization do not want to evaluate project by using CB techniques.
17) 80% sample manufacturing enterprises get advantages after implementation of the CB evaluation techniques.
18) Any change in organization is brought by using the CB evaluation techniques.
19) Organizational objectives can be achieved through effective management and use of CB techniques.
20) Most of the sample companies in Kathmandu district are not foregone profitable investment opportunities in view of some limit imposed on the size of capital budget. This situation implies that there is not any difficulty to the financing capital expenditure.

CHAPTER- V

SUMMARY, CONCLUSIONSAND RECOMMENDATIONS

5.1 Summary

Nepal is developing country in the world. The main sources of income are agriculture. Industrialization is essential for the socio-economic development of the nation. Science and technological advancement play vital role in industrialization of the nation. Management of all these sectors is very essential. Without good management organization cannot achieve its goal and objective. Efficient management is the prime necessity of today's world as resources are limited and scarce. Proper uses of scarce resources in effective and efficient way are essential. As future is uncertain so risk is present in the business world. To avoid or reduce such risk, proper management is very necessary. Management effectively helps to achieve organizational objectives through the efficient use of the scarce resources in a changing environment. To achieve success in present world, management tools should be used properly. In this context, capital budgeting evaluation tools should be used before investment.

How practicable is the CB in manufacturing based enterprises of Kathmandu district? To achieve a result of practices of CB in manufacturing enterprises of Kathmandu district, this research work has been conducted. What are the different CB evaluation techniques while investing the new project? If yes, then what technique do they follow? What is the problem in implementation phase of CB? Have the CB techniques helped to attain organizational objectives or not? To assist for answering these questions, this research, which makes it possible to make some result upon the topic of 'Capital Budgeting Practices in Manufacturing Enterprises of Kathmandu District' has been done.

The study reveals that most of the sample companies know that TVM is related with the discounted of future cash flow based on discounted rate. The entrepreneurs have to gain the knowledge of TVM for the successful operation of the business. On the other hand, decision makers have to know about the CB techniques. This situation clarifies that CB practices in Kathmandu district are very good. They invest and acquire the project as fulfill present requirement.

The main objectives behind the research study are to explore the CB techniques used by the manufacturing enterprises of Kathmandu district. The research mainly focus on the concept clarification, significance of CB at the time of investment, estimation techniques of cash flow, use, implementation and effectiveness of CB techniques. The primary data are collected for analyzing the practices of CB. For this, structured questionnaire distributions were made and tabulated them.

This study has been organized in five main chapters consisting of introduction, review of literature, research methodology, presentation and analysis of data and summary, conclusion and recommendation. Besides this bibliography and appendix has also been included in this research study.

In overall view, CB practices in manufacturing enterprises are satisfactory. Most of the manufacturing enterprises have a sound knowledge of CB and they use CB techniques very effectively. Mainly, they use NPV for the evaluation of project. It is very good for manufacturing organizations. Those industries where the management graduate staffs are not there, they should recruit the management graduate staff that has a sound knowledge of CB.

5.2 Conclusions

After analyzing the primary data obtained from various respondents, lots of things found. They have presented in the list belowMost of the sample companies are familiar with the concept of TVM and CB.TVM concept is known by every decision maker of organization.Entrepreneurs/ Decision makers have to know about the concept of CB.At least one of the staff of manufacturing enterprises is management graduate because they had taken the concept of CB from their academic study.Most of the enterprises use CB evaluation techniques before investing in the project.CB techniques are the useful technique for the feasibility study of new project.Almost all manufacturing companies use the CB methods to analyze the feasibility study of the new project.

Generally, investment range does not differ the use of CB methods. It means whether the investment amount is greater or small, CB analysis is required.Preference of cash

flow calculation method is different in manufacturing organization. Both incremental of cash inflow and reduction of cash outflow methods are used by manufacturing enterprises.For calculation of cash flow by manufacturing enterprises, they mostly consider the expected future environment. Therefore, it is concluded that cash flow is calculated by considering the expected future environment. But some enterprises calculate cash flow by studying past result and observing the practices of competitor.

From practice and responses given by the manufacturing enterprises, it is concluded that if they do not consider the expected future environment and use past trend of the company or competitor's practice, the forecasting of cash flow would not be matched.The applicants of capital budgeting technique while making the capital expenditure decision preferred the evaluation techniques in this order:

a) NPV
b) IRR
c) PBP
d) ARR & PI

The use of CB techniques is mainly based on the time, available resources, investment types, investment range etc.The use of CB evaluation techniques vary with different limits of investment. Only one CB evaluation technique is not suitable for all of the investment/ investment range.If the investment range is less than Rs 100000, the most useful technique is NPV. Again if the investment range is Rs 100000 to Rs 500000 or greater than Rs 500000, the most useful technique is NPV, same as above. Thus, it is concluded that CB evaluation techniques do not vary with investment range.The application of CB techniques is useful only for large types of organization and small types of organization do not want to evaluate project by using CB techniques.

Most of manufacturing enterprises get advantages after implementation of the CB evaluation techniques.Any change in organization is brought by using the CB evaluation techniques.Organizational objectives can be achieved through effective management and use of CB techniques.Most of the sample companies in Kathmandu district are not foregone profitable investment opportunities in view of some limit imposed on the size of capital budget. This situation implies that there is not any difficulty to the financing capital expenditure.

5.3 Recommendations

After studying the capital budgeting practice in Kathmandu district, the following hints and suggestions can be provided to rectify the present drawbacks as well as to overcome the inefficiency and weaknesses. The following recommendations are made taking the reference of major findings:

1) In some enterprises even only one management graduate HR is not available. So, it is suggested that they should hire a competent HR for the management of organization.
2) In different investment range, it is suggested that CB evaluation techniques should be different. Only one CB evaluation techniques is not suitable for all types of investment range.
3) Before using a particular evaluation techniques, many other factors like time, expected future environment, different policies of the government etc. should be analyzed.
4) There are some provisions and facilities in the income tax such as repair and improvement cost, expansion investment, pollution control investment, employee welfare investment, R&D investment etc. These are those capital expenditure from which amount of expenses can be deducted. Therefore, it is suggested to study the Income Tax Act 2058 to the managers/ policy makers.
5) For the reliable result of CB evaluation, the use of a hurdle rate is necessary. The cost of capital should be calculated in way of more scientific.
6) Management most forecast long range as well as short range market and sales potentials and plans its efforts to participate in growth and innovation.
7) The efficient organizational structure should be designed which can show clearly about the authorities and responsibilities towards personnel.
8) If the personnel do not know about the CB and evaluations techniques, it should be provided the concept and use of CB through training.
9) To grab the profitable investment opportunities, organization must be established a R&D department. Thus, it is suggested to establish the R&D department to the large manufacturing enterprises.
10) Small types of organization should also use the CB evaluation techniques according to the capacity of the organization.

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APPENDIX-A

STRUCTURE QUESTIONNAIRE

Dear sir/madam,

I would like to introduce myself as the student of Central Department of Management TU, M.B.S. (Thesis year). In order to fulfill the partial requirement of Master's Degree in Management, I am conducting a research work entitled. Capital budgeting practices in manufacturing based enterprises of Kathmandu district.

I would very much appreciate if you kindly spare few of your busy and valuable time for completing my research work. Your views are purely used for my academic purpose only. I anticipate your suggestions as soon as possible.

Khagendra Prashad Paneru
Central Department of Management- TU
Kathmandu, Nepal

Name of the respondent: ……

Job title: ……..

Organization: ……..

1. What is your opinion that the entrepreneurs have to gain the knowledge of time value of money concept?
   a. Must necessary b. moderately necessary
   c. General knowledge is required d. Not necessary
2. "The management must be familiar with the concept of time value of money." Do you agree?
   a. It is must b. highly necessary
   c. It is moderately necessary d. Not necessary
3. Do you know that the capital budgeting is related with the decision making process by which firms evaluate the purchase of major fixed assets?

a. I know b. Know something c. I don't know

4. Have you got any idea about capital budgeting form any where?

a. Yes b. No

5. How did you get the knowledge of capital budgeting?

a. From training given by organization b. From academic study

c. From newspaper, journals and others d. Any others (please specify)

6. Do the decision makers have to know about capital budgeting techniques?

a. Simple knowledge is required b. Good knowledge is required

c. Very good knowledge is required d. Not necessary

7. Is it useful technique for the feasibility study of new investment?

a. Very useful b. Useful

c. A little useful d. Not useful

8. How frequently do you use the capital budgeting methods?

a. Always b. Often c. Sometimes d. Rarely e. Never

9. In which investment range, the capital budgeting must be done before investing in the project? Or what level of formal capital budgeting analysis was required?

a. All b. Greater than Rs. 100,000 only

c. Greater than Rs. 500,000 only d. Never used

10. Which types of cash flow calculation method do you like most?

a. Increment of cash inflow (expected income)
b. Reduction of cash outflow (operating cost)
c. Sometimes option 'a' sometimes 'b'

11. In your opinion cash flow should be calculated by:

a. Studying past result
b. Considering expected future environment
c. Observing the practices of competitor

12. In real situation, has your expectation of cash flow matched with actual data?

a. Highly matched b. nearly matched c. Not matched

13. What methods/techniques of capital budgeting the company are familiar with?

a. Payback period b. Average rate of return

c. Net present value d. internal rate of return

e. Profitability index f. All of the above

g. If others (please specify)

14. Do the use of capital budgeting evaluation techniques vary according to the investment range?

a. Yes b. No

15. Which of the following capital budgeting evaluation techniques do you apply if your investment is in the following?

Investment range	Evaluation tools
Up to Rs. 100,000	
Rs. 100,000 to Rs. 500,000	
Greater than Rs. 500,000	

a. Payback period b. Average rate of return

c. Net present value d. internal rate of return

e. Profitability index f. All of the above

16. What is your opinion regarding the application of capital budgeting techniques in your organization?

a. Highly satisfactory b. Satisfactory

c. Average d. Dissatisfactory

e. Highly dissatisfactory

17. Is it advantageous after implementing the capital budgeting evaluation techniques in your organization?

a. Highly advantageous b. Advantageous

c. Not advantageous d. No change

18. Is there any difference in your organization before and after implementing the capital budgeting techniques?

a. Yes b. No

19. Have the capital budgeting techniques helped to attain organizational objectives?

a. Yes b. No c. It has helped a little

20. Have you any feedback in research?

a. Yes b. No

(if yes :- ……....

……...……