INTRODUCTION

“Capital budgeting consists in planning the development of available capital for the purpose of maximizing the long term profitability (Return on investment) of the firm.”

R. M. Lynch

For any firm or company, its survival is entirely depends on its return on the investments made. Capital budgeting is a process of planning capital expenditure which is to be made to maximize the long term profitability of the firm or organisation. It essentially decides on those long term investment projects that are expected to make utmost contributions to the wealth of the shareholders in the long run. Here, the decision of capital budgeting are often called to be the most significant part of any corporate financial management, as it affects the profitability and stability of a firm for a long period.

Significance of capital budgeting is as follows:

1. Capital budgeting decisions are of vital importance in financial decision making, such decisions affect the profitability of the firm.

2. The most important reason for capital budgeting decision is that they have long term implications for a firm.

3. Capital budgeting is an important function of management, for it is one of the critical determinant of the success or failure of the company.

4. Capital budgeting decisions involve acquisition of Long term assets where huge investment is required. Hence capital budgeting decisions may affect the financial stability of the company.

5. Long term assets give benefit in future and as future is uncertain such decisions may involve lot of risk factor.

Certainly such decisions are required a thorough financial appraisal with the help of one or more of the well established methods, which also known as capital budgeting methods.

Figure 1: DIAGRAM OF CAPITAL BUDGETING METHODS

CAPITAL BUDGETING METHODS
The traditional methods of capital budgeting are widely used for a long time till modern methods came as a major tool. The research aim is to measure & evaluate the financial performance of manufacturing companies by using techniques of capital budgeting in Mumbai western suburbs.

Traditional methods

1. Payback Period Method (PBP):

   The payback period method is based on the assumption that the degree of risk associated with the length of time required to recover the investment from the firm’s cash inflows. At payback period the cash inflows from a project will be equal to the project cash outflows. This method signifies that the recovery time, by accumulation of the cash inflows (inclusive of depreciation) year by year until the cash inflows equal to the amount of the original investment.

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   \text{Payback Period} = \frac{\text{Initial Investment}}{\text{Net annual cash inflow}}
   \]

2. Payback Profitability Method:

   The payback profitability method shows the profitability of the project at its estimated life. After recovering initial cost of the project excess returns on investments can be ascertained by using payback profitability method. Payback Profitability = \(\text{Total annual cash inflow} – \text{Initial Investment}\)

3. Accounting Rate of Return (ARR):

   The average rate of return method of evaluating proposed capital expenditure is also known as ‘Average Rate of Return’ & ‘Annual Rate of Return’. It is based on accounting profit (exclusive of depreciation) rather than cash inflows. It is also known as ‘Return on Original Investment’ or ‘Return on Capital Employed Method’ employing the normal accounting technique to measure the increase in the profit expected to result from an investment by
expressing the net accounting profit arising from the investments as a percentage of that capital investments.

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\text{Accounting Rate of Return} = \frac{\text{Average annual profit after tax}}{\text{Average Investment}}
\]

MODERN METHODS

1. **Net Present Value (NPV):**

   Net present value is the summation of the present values of cash proceeds in each year minus the summation of present values of the net cash outflows in each year. The main objective of the firm is to create wealth by using existing & future resources to produce goods & services. To create wealth, inflows must exceed the present value of all anticipated cash outflows. NPV is obtained by discounting all cash outflows & inflows attributable to a capital investment project by a chosen percentage

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   \text{NPV} = \text{Total PV of cash inflows} - \text{Total PV of cash outflows}
   \]

2. **Profitability Index (PI):**

   It is a method of assessing capital expenditure opportunities in the profitability index. The profitability index is the present value of anticipated future cash inflows divided by the initial capital outlay.

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   \text{Profitability Index} = \frac{\text{Total Present Value of Cash Inflow}}{\text{Total Present Value of Cash Outflow}}
   \]

3. **Internal Rate of Return (IRR):**

   This technique is also known as ‘Yield on Investment’, ‘Marginal efficiency of capital’, ‘Marginal productivity of capital’, ‘Rate of return’, ‘time adjusted rate of return’ & so on. IRR method is based on the discounting rate which is internal to the proposal. The IRR is to be obtained by trial & error method to ascertain the discount rate at which the present values of total cash inflows will be equal to the present values of total cash outflows.

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   \text{IRR} = \text{Lower rate of return} + \left( \frac{\text{NPV at lower rate}}{\text{difference in NPV}} \right) \text{difference in two rates}
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