CAPITAL BUDGETING

CAPITAL: Scarce, non-human resource of productive enterprise.

BUDGETING: Detailed and quantified planning which guides future activities of an enterprise towards the achievements of its profit goals.

MEANING

Capital Budgeting consist in planning the deployment of available capital for the purpose of maximisation of the long- term profitability, i.e., ROI of the firm. It refers to the process by which a firm determines, where it should apply its comparatively limited financial resources.

- Capital Budgeting is a decision making process by which a firm evaluates the purchase of major Fixed assets. It exclusively deals with major investment proposals which are essentially long-term projects and is concerned with the allocation of firm's scarce financial resources among the available market opportunities

- Capital budgeting addresses the issue of strategic long-term investment decisions.

- Capital budgeting can be defined as the process of analyzing, evaluating, and deciding whether resources should be allocated to a project or not.

- Capital Budgeting involves a current outlay or series of outlays of cash resources in return for an anticipated flow of future benefits. In other words, the system of CB is employed to evaluate expenditure decision which involves current outlays but are likely to produce benefits over a period of time. These benefits can be in the form of increased revenues or reductions in cost.

- Process of capital budgeting ensure optimal allocation of resources and helps management work towards the goal of shareholder wealth maximization.

Nature of Investment Decisions

- The investment decisions of a firm are generally known as the capital budgeting, or capital expenditure decisions.

- The firm's investment decisions would generally include expansion, acquisition, modernisation and replacement of the long-term assets. Sale of a division or business (divestment) is also as an investment decision.

- Decisions like the change in the methods of sales distribution, or an advertisement campaign or a research and development programme have long-term implications for the firm's expenditures and benefits, and therefore, they should also be evaluated as investment decisions.

FEATURES

- potentially large anticipated benefits;
- a relatively high degree of risk ; &
- a relatively long time period between the initial outlay & the anticipated return
- The exchange of current funds for future benefits.
- The funds are invested in long-term assets.
- The future benefits will occur to the firm over a series of years.

IMPORTANCE

- Decisions relating to capital investment are among the difficult and critical decisions. Critical because the effects of such decisions will have a far reaching influence on firms profitability for many years to come. They also have a bearing on the competitive position of the enterprise as related to fixed assets.

- The decision-maker looses some of his flexibility, for the results continue over an extent period of time, thus he has to make a commitment for the future. Secondly, a capital expenditure decision has its effect for long-times fund and inevitablely affects company's future cost structure

- Capital investment decisions, once made, are not easily reversible without much financial loss.

- Capital investment involves costs and the majority of the firms have scarce capital resources, it underlines the need for thoughtful, wise and correct investment decision.

- It is the single most important financial decision as it affects the financial health of the enterprise for a long period of time. With capital expenditure project involving considerably large volume of capital, return on which will be flowing in the enterprise over a number of years bears testimony to its significance.

- Another factor contributing to the significance of capital investment decision is the risk exposure of funds committed in capital expenditure projects, effects of which will be felt by the company over extended period of time. Once the financial manager has committed the funds, he is at the mercy of future development.

- Capital investment decision is also important because its effect on operating expenses and the patterns of cash flows for long period.

- Capital budgeting is a vital function of the management for it is one of the critical determinants of the success or failure of the company. Ill-advise or excessive capital spending may create excessive capacity and increase operating cost, limits the capacity, company's funds and reduce its profits.

PROCESS

Identification of Potential Investment Opportunities:

The first step in the capital budgeting process is to explore the investment opportunities. There is generally a committee that identifies the expected sales from a certain course of action, and then the investment opportunities are identified keeping these targets as a basis.
Before initiating the search for the potential investments, there are certain points that need to be taken care of: monitor the external environment on a regular basis to know about the new investment opportunities, define the corporate strategy based on the analysis of the firm's strengths, weaknesses, opportunities and threats, share the corporate strategy and objectives with the members of capital budgeting process and seek suggestions from the employees.

Assembling of Investment Proposals:

Once the investment opportunities are identified, several proposals are submitted by different departments. Before reaching the capital budgeting process committee, the proposals are routed through several persons who ensures that the proposals are in line with the requirements and then classify these according to their categories Viz, Replacement, Expansion, New product and Obligatory & welfare investments. This categorization is done to simplify the task of committee members and facilitate quick decision making, budgeting, and control.

Decision Making:

At this stage, the executives decide on the investment opportunity on the basis of the monetary power, each has with respect to the sanction of an investment proposal.

For example, in a company, a plant superintendent, work manager, and the managing director may okay the investment outlays up to the limit of 15,00,000, and if the outlay exceeds beyond the limits of the lower level management, then the approval of the board of directors is required.

Preparation of Capital Budget and Appropriations:

The next step in the capital budgeting process is to classify the investment outlays into the smaller value and the higher value. The smaller value investments okayed by, the lower level management, are covered by the blanket appropriations for the speedy actions. And if the value of an investment outlay is higher then it is included in the capital budget after the necessary approvals. The purpose of these appropriations is to evaluate the performance of the investments at the time of the implementation.

Implementation:

Finally, the investment proposal is put into a concrete project. This may be time-consuming and may encounter several problems at the time of implementation.

For expeditious processing, the capital budgeting process committee must ensure that the project has been formulated and the homework in terms of preliminary studies and comprehensive formulation of the project is done beforehand.

Performance Review:

Once the project has been implemented the next step is to compare the actual performance against the projected performance. The ideal time to compare the performance of the project is when its operations are stabilized. Through a review, the committee comes to know about the following: how realistic were the assumptions, was the decision making efficient, what were the judgmental biases and were the desires of the project sponsors fulfilled.

TYPES OF INVESTMENT DECISIONS

One classification is as follows:

- Expansion of existing business
- Expansion of new business
- Replacement and modernisation

Yet another useful way to classify investments is as follows:

- Mutually exclusive investments
- Independent investments
- Contingent investments

ACCEPT-REJECT DECISIONS

- **It is fundamental decision in CB. If the project is accepted, the firm invests in it & vice-versa.**
- **Proposals which yield a ROR > COC or RRR are to be accepted.**
- **Thus, all independent projects are accepted. (IP are those , that do not compete with one other)**

MUTUALLY EXCLUSIVE PROJECTS

- **MEPs are projects which compete with other projects in such a way that the acceptance of one will exclude the acceptance of other project.**
- **Thus, only one project is to be selected. The acceptance of "best" alternative automatically eliminates the others.**

CAPITAL RATIONING DECISIONS

- **CB becomes a simple process where the firm has unlimited funds, in that all IPs yielding return greater than some pre-determined level are accepted.**
- **In real world, it is not the situation, as firms have fixed capital budget. A larger number of investment proposals compete for these limited funds. Therefore, the firm must ration them. It allocates funds to projects that it maximises long-run returns.**
- **It is selection of a group of investment proposals out of many investment proposals acceptable under the accept-reject decision.**
- **Ranking of investment projects is employed in capital rationing.**
- **Ranking is on the basis of ROR.**

- **Cost incurred and benefits received from the capital budgeting decisions occur in different time periods and therefore not comparable because of the time value of money.**
- **It is not often possible to calculate in strictly quantitative terms all the benefits or the costs relating to a particular investment decision.**

CONVENTIONAL AND NON-CONVENTIONAL CASH FLOWS

- A conventional investment has cash flows the pattern of an initial cash outlay followed by cash inflows. Conventional projects have only one change in the sign of cash flows; for example, the initial outflow followed by inflows, i.e., – + + +.
- A non-conventional investment, on the other hand, has cash outflows mingled with cash inflows throughout the life of the project. Non-conventional investments have more than one change in the signs of cash flows; for example, – + + + – ++ – +.

INVESTMENT EVALUATION CRITERIA

Three steps are involved in the evaluation of an investment:

- Estimation of cash flows
- Estimation of the required rate of return (the opportunity cost of capital)
- Application of a decision rule for making the choice

EVALUATION CRITERIA

1. Non-discounted Cash Flow Criteria
   - Payback Period (PBP)
   - Discounted Payback Period (DPB)
   - Accounting Rate of Return (ARR)

2. Discounted Cash Flow (DCF) Criteria
   - Net Present Value (NPV)
   - Internal Rate of Return (IRR)
   - Profitability Index (PI)