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Overview of Capital Budgeting

Introduction

Imagine that Company A wants to modernize all its existing plants, or suppose Company B wants to divest its old businesses to enter into new economic ventures. Such situations require a sound capital expenditure (budgeting) decision. The basic feature of capital expenditure is that it involves a current outlay of funds in the expectation of a stream of future benefits. This section provides a broad overview of capital budgeting.

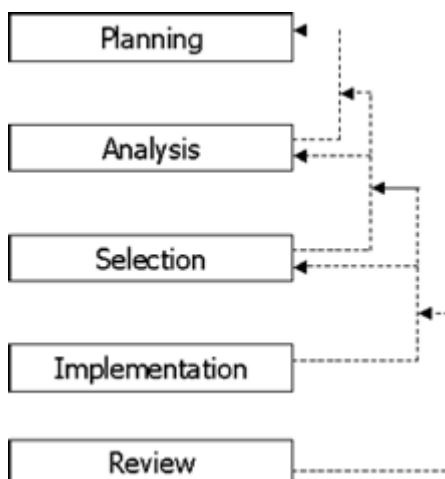
Phases of capital budgeting

Capital budgeting is a complex process, and there are five broad phases - planning, analysis, selection, implementation and overview.

Planning

The planning phase involves investment strategy and the generation and preliminary screening of project proposals. The investment strategy provides the framework that shapes, guides and circumscribes the identification of individual project opportunities.

Capital Budgeting Process



Analysis

If the preliminary screening suggests that the project could be worthwhile, a detailed analysis of the marketing, technical, financial, economic, and ecological aspects is conducted.

Selection

The selection process addresses the question of whether or not the project is worth any investment. A wide range of appraisal criteria has been suggested to judge the worth of a project. There are two broad categories - non-discounting criteria and discounting criteria. Some selection rules for both methods are listed below:

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Non-discounting criteria	Accept	Reject
Pay Back Period (PBP)	PBP < target period	PBP > target period
Accounting Rate of Return (ARR)	ARR > target rate	ARR < target rate

Discounting criteria	Accept	Reject
Net Present Value (NPV)	NPV > 0	NPV < 0
Internal Rate of Return (IRR)	IRR > cost of capital	IRR < cost of capital
Benefit - Cost Ratio (BCR)	BCR > 1	BCR < 1

Implementation

The implementation phase for an industrial project, which involves the setting up of manufacturing facilities, consists of several stages:

1. Project and engineering designs
2. Negotiations and contracting
3. Construction
4. Training
5. Plant commissioning

Review

Once the project is commissioned, a review phase has to be set in motion. Performance reviews should be completed periodically to compare the actual performance with the projected performance. In this stage, feedback is useful in several ways:

- It focuses on realistic assumptions
- It provides experience, which will be valuable in the future for decision-making
- It suggests corrective action
- It helps to uncover judgmental biases
- It advocates the need for caution among project sponsors

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Levels of decision making

In addition to various phases of capital budgeting, it is important to look at different levels of decision-making - operating, administrative and strategic decision-making levels.

<u>Decision</u>	<u>Applications (for example)</u>	<u>Decided by</u>
Operating decisions	Routine maintenance and minor office equipment	Lower-level management
Administrative decisions	Yearly maintenance and balancing equipment	Middle-level management
Strategic decisions	Expansions, diversifications	Top-level management / Board

Portfolio planning tools

Several tools are available to guide strategic planning and resource allocation decisions. These tools are called portfolio-planning tools.

The two most relevant and popular tools are:

- BCG product portfolio matrix
- General Electric's stoplight matrix.

Social Cost Benefit Analysis

Social Cost Benefit Analysis (SCBA) is also referred to as economic analysis. In this method, an investment project is evaluated from the point of view of society (the economy) as a whole. This method is now becoming more popular.