SNS COLLEGE OF TECHNOLOGY

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ed to Anna University, Chennai

Department of Automobile Engineering

III YEAR/ VI SEMESTER

19MEE301 / Engineering Economics and cost Analysis

UNIT-5

The Definition of Project Appraisal

Project appraisal means a pre-investment analysis of project to determine whether the project should be implemented or not. There are some inherent differences between the terms Project Appraisal and Project Valuation although they are often used interchangeably. Project appraisal refers to an ex-ante examination of a proposal project to determine whether the same should be implemented or not whereas project evaluation is an ex-post assessment of the impact of an accomplished project.

Project appraisal is defined to provide a base – technical, economic, and commercial for an investment decision about any project. It covers a wide range of analysis of the alternative approaches for selecting the optimum solution in respect of location, technology, size of a project,engineering and organizational set-up, market size, financial cost-benefit, economic and social aspects of the project and various other relevant issues. It may either market oriented or based on materials inputs, that is derives its initiative from an assumed or existing demand or from available material inputs such as raw materials, or energy. Thus project appraisal is not an end in itself, but only a means to arrive at an investment decision that need not agree with the conclusions of the feasibility study. In fact, it would be rare to find investor response so flexible as to fully conform to the results of such a study.

Project appraisal as an aid to investment decision assumes special significance when a scarce factor,such as capital, foreign exchange, and or labor is to be rationed in terms of the alternative uses to which it can be put. In addition, the time element is another important factor in the appraisal of investment decisions

Types of Project Appraisal Methodologies

Net Present Value

A project's net present value is determined by summing the net annual cash flow, discounted at the project's cost of capital and deducting the initial outlay. Decision criteria is to accept a project with a positive net present value. Advantages of this method are that it reflects the time value of money and maximizes shareholder's wealth. Its weakness is that its rankings depend on the cost of capital; present value will decline as the discount rate increases

Payback Method

A company chooses the expected number of years required to recover an original investment. Projects will only be selected if initial outlay can be recovered within a predetermined period. This method is relatively easy since the cash flow doesn't need to be discounted. Its major weakness is that it ignores the cash inflows after the payback period, and does not consider the timing of cash flows.

Internal Rate of Return

This method equates the net present value of the project to zero. The project is evaluated by comparing the calculated Internal rate of return to the predetermined required rate of return. Projects with Internal rate of return that exceed the predetermined rate are accepted. The major weakness is that when evaluating mutually exclusive projects, use of Internal rate of return may lead to selecting a project that does not maximize the shareholders' wealth.

Profitability Index

This is the ratio of the present value of project cash inflow to the present value of initial cost. Projects with a Profitability Index of greater than 1.0 are acceptable. The major disadvantage in this method is that it requires cost of capital to calculate and it cannot be used when there are unequal cash flows. The advantage of this method is that it considers all cash flows of the project.

Cost–benefit analysis

Cost–benefit analysis (CBA), sometimes called benefit–cost analysis (BCA), is a systematic approach to estimating the strengths and weaknesses of alternatives that satisfy transactions, activities or functional requirements for a business. It is a technique that is used to determine options that provide the best approach for the adoption and practice in terms of benefits in labor, time and cost savings etc. (David, Ngulube and Dube, 2013). The CBA is also defined as a systematic process for calculating and comparing benefits and costs of a project, decision or government policy .

To provide a basis for comparing projects. It involves comparing the total expected cost of each option against the total expected benefits, to see whether the benefits outweigh the costs, and by how much.

CBA is related to, but distinct from cost-effectiveness analysis. In CBA, benefits and costs are expressed in monetary terms, and are adjusted for the time value of money, so that all flows of benefits and flows of project costs over time (which tend to occur at different points in time) are expressed on a common basis in terms of their "net present value.

Closely related, but slightly different, formal techniques include cost-effectiveness analysis, cost– utility analysis, risk–benefit analysis, economic impact analysis, fiscal impact analysis, and Social return on investment (SROI) analysis.