# **Project Evaluation**

# What is a project?

A project is a set of *interrelated task* to be executed *over a fixed time period* and within certain *cost* and *other limitation*. By implementing project an individual or collaborative enterprise that is carefully planned to achieve a *particular aim*.

Thus, we can define a project as an organized programme of pre-determined group of activities that are non-routine in nature and that must be completed using the available resources within the given time limit.

Let us now consider some definitions of a project.

Gillinger defines "project" as the whole complex of activities involved in using resources to gain benefits.

Project management institute, USA defined project as "a system involving the co-ordination of a number of separate department entities throughout organization, in a way it must be completed with prescribed schedules and time constraints".

According to the encyclopedia of management, "project is an organized unit dedicated to the attainment of goal, the successful completion of a development project on time, within budget, in conformance with predetermined programme specification."

# **History of the Project**

Though project management is in the process of getting evolved as a separate branch of study, projects are not new to the earth. One of the seven wonders of the world, the pyramids date back to 2650 B.C. which stand as the hall mark of Egyptian civilization. The period of construction of the Taj Mahal, another wonder of the world is reported to be during 1626-1648 A.D. It is reported that about 20,000 persons worked for nearly 22 years to complete this spectacular structure, which stands today as mankind's proudest creation. One can imagine the extent of resources and expertise that would have been put forth for the completion of such magnificent projects.

# Characteristic of a Project

(1) Objectives: A project has a set of objectives or a mission.

(2) Life cycle: A project has a life cycle.

Conception stage

Definition stage

Planning & organizing stage

Implementation stage and commissioning stage.

#### (3) Uniqueness:

Every project is unique and no two projects are similar. Setting up a cement plant and construction of a highway are two different projects having unique features.

#### (4) Team Work:

Project is a team work and it normally consists of diverse areas. There will be personnel specialized in their respective areas and co-ordination among the diverse areas calls for team work.

# (5) Complexity:

A project is a complex set of activities relating to diverse areas.

### (6) Risk and uncertainty:

Risk and uncertainty go hand in hand with project.

#### (7) Customer specific nature:

A project is always customer specific. It is the customer who decides upon the product to be produced or services to be offered and hence it is the responsibility of any organization to go for projects/services that are suited to customer needs.

#### (8) Change:

Changes occur throughout the life span of a project as a natural outcome of many environmental factors, economic factors, market factors, technological factors. The changes may vary from minor

changes, which may have very little impact on the project, to major changes which may have a big impact or even may change the very nature of the project.

#### (9) Optimality:

A project is always aimed at optimum utilization of resources for the overall development of the economy.

### (10) Sub-contracting:

A high level of work in a project is done through contractors. The more the complexity of the project, the more will be the extent of contracting.

#### (11) Unity in diversity:

A project is a complex set of thousands of varieties. The varieties are in terms of technology, equipment and materials, machinery and people, work, culture and others.

# **Project Evaluation**

Project evaluation is a systematic and objective assessment of an ongoing or completed project. The aim is to determine the relevance and level of achievement of the project objectives, development, effectiveness, efficiency, impact and sustainability.

Program evaluation may be conducted at several stages during a program's lifetime. Each of these stages raises different questions to be answered by the evaluator, and correspondingly different evaluation approaches are needed

#### 1. Pre project evaluation

What can I expect from the delivery of this project? What are the obstacles, I could face? What potential risk and issues are presents? Before you start a project, you have to evaluate the viability of that project.

Rossi, Lipsey and Freeman (2004) suggest the following kinds of assessment, which may be appropriate at these pre project evaluations stages:

Assessment of the need for the program

Assessment of program design and logic/theory

Assessment of how the program is being implemented (i.e., is it being implemented according to plan? Are the program's processes maximizing possible outcomes?)

Assessment of the program's outcome or impact (i.e., what it has actually achieved)

Assessment of the program's cost and efficiency

#### 2. Ongoing project evaluation

Is the project moving forward efficiently and toward the goals set prior to its initiation? Am I properly using resources? What risks have arisen now that the project is motion?

It's crucial to monitor and evaluate the project while in progress to make sure it achieve the

planned expectations.

#### 3. Post project evaluation

What went well? What did not? What lessons can be learned from any struggles to ensure the next project runs more smoothly? When the project is finished take time to evaluate what worked and what didn't work to learn from your mistakes.

# Why do we evaluate a project?

Evaluation is a process that critically examines a program. It involves collecting and analyzing information about a program's activities, characteristics, and outcomes. Its purpose is to make judgments about a program, to improve its effectiveness, and/or to inform programming decisions (Patton, 1987).

• Analyses the process of implementation.

It scrutinizes the project life cycle system by evaluating. During the implementation review, the project evaluation assesses and validates the implementation on each site that implements the new solution.

# • Identify problems

Identify all problems and constraints that have been encountered. Discovering problems along the way allows the project team to provide solutions. It also helps prevent future recurrence of similar issues.

#### • Lessons to be learnt

Providing reviews and feedbacks allow individuals and project teams to reflect on their performance. The results aim to re-energize the project teams to improve their performance, resolve conflicts and learn from their past mistakes.

#### • Assure quality of project management

A project evaluation assures that project management is meeting the standards that follows the organization's policies, processes and procedures.

#### • Assure quality of products and services

A project evaluation acts as a quality assurance instrument. It checks the quality and services of a project and its employees.

# Analyses the impact or changes

All the changes that have occurred within beneficiary stakeholders and the community.

#### • Identify project risk

Project evaluation helps to identify project risks that may involve budget, time, scope and quality.

#### • Asses and enhance project performance

Evaluating the various phases in the project can help to improve performance of the project team. It also helps to achieve the outcomes that are already fixed for the project.

#### • Best use of resources

It also improves resource and budget allocation. Identifying priorities, corrective measures and preventative actions can lead to a successful project outcome.

#### • Modifying according

Project Evaluation helps to modify the project according to the need of community, time or effectiveness of the project.

# • Planning for future

Project Evaluation helps to make recommendations for the implementation of future projects.

# • For improvement

It scrutinizes the methodology used to help identify the gaps in order to make the necessary improvements.

# • Provide learning opportunities

A project evaluation can lead to learning opportunities through assessments of project management (organizational, team and individual) competency.

# • Successful completion

Project evaluation leads to achieve the fixed targets.

# • Decision making

Identifying problems earlier helps address problems and make decisions whether the project should continue by making a go/no-go decision in each phase.

# Different types of project evaluation aspects

Project evaluation can be done under different aspects

- 1. Financial evaluation
- 2. Economic evaluation
- 3. Market evaluation
- 4. Technical evaluation
- 5. Ecological evaluation

#### **Financial Evaluation**

Finance is one of the most important prerequisites to establish an enterprise. In order to adjudge the financial viability of the project, financial evaluation is very important. A project financial evaluation tells you whether a project will contribute to your resources. While complicated analysis techniques and computer programs can be performed high level calculations and provide you with advance financial rations and rate of return, you can carry out a few simple calculations to determine whether the project makes financial sense. You can then decide whether to perform a more detailed analysis.

Following aspects need to be carefully analyzed:

#### • Cost of capital

Land and site development

Buildings and civil works

Plant and machinery

Technical fees

Pre-operative expenses

#### • Means of finance

Share capital

Loans

Intensive sources

Miscellaneous sources

#### • Estimates of sales and production

Forecast of sales revenue

# • Cost of production

Material cost

Utilities cost

Labor cost

Factory overheads – The expenses on repairs and maintenance, rent, taxes, insurance on factory assets and so on are collectively referred to as factory overheads

• Working capital requirement and its financing

The working capital requirements consists of the following

Raw materials and components

Stock of goods in process –working process

Stock of finished goods

Operating cost

### • Estimates of working results

Given the estimates of sales and revenues and cost of production, the next step is to prepare the profitability projections or estimates of working results. The estimates of working results may be prepared along the following line

Cost of production, Administrative expenses, Sales expenses, gross profit before interest, Depreciation, Tax etc.,

#### • Projected cash flow

The cash flow statement shows the movement of cash into and out of the firm and its net impact on the cash balance within the firm.

#### • Projected balance sheet

The balance sheet showing the balance in various asset and liabilities accounts, reflects the financial condition of the firm at a given point of time.

Financial evaluation to help you decide whether the project has to immediately make a contribution to the bottom line or whether you are taking a longer term view. Decide how profitable it has to be compared with other attractive projects you could undertake or whether a marginally profitable project makes sense because it achieves other positive goals. The financial evaluation gives you a financial result but you have to decide whether that result is attractive enough to proceed with project.

The financial statement analysis is important as it provides meaningful information to the shareholders in taking such decisions. The management of the company is responsible for taking decisions and formulating plans and policies for the future.

The benefits of financial evaluation

# • Improved debt management:

As you will surely know, debt can cripple the progress of any company, regardless of sector. While there may be many different types of financial reporting concerning purpose or software, almost all solutions will help you track your current assets divided by the current liabilities on your balance to help gauge your liquidity and manage your debts accordingly.

#### • Trend identification:

Regardless of what area of financial activity you're looking to track, all types of this kind of reporting will help you identify trends, both past and present, which will empower you to tackle any potential weaknesses while helping you make the kind of improvements that will benefit the overall health of your business.

#### • Real-time tracking:

By gaining access to centralized, real-time insights, you will be able to make accurate, informed decisions swiftly, thereby avoiding any potential roadblocks while maintaining your financial fluidity at all times.

#### • Liabilities:

Managing your liabilities is a critical part of your company's ongoing financial health. Business loans, credit lines, credit cards, and credit extended from vendors are all integral liabilities to manage. By using a financial report template, if you're planning to apply for a business expansion loan, you can explore financial statement data and determine if you need to reduce existing liabilities before making an official application.

# • Progress and compliance:

As the information served up by financial reporting software is both accurate and robust, not only does access to this level of analytical reporting offer an opportunity to improve your financial efficiency over time, but it will also ensure you remain 100% compliant – which is essential if you want your business to remain active.

# **Financial Evaluation Methods**

- 1. Static Approach
  - a. Pay Back Period
  - b. Average Rate of Return
- 2. Dynamic Approach
  - a. Net Present Value
  - b. Internal Rate of Return
  - c. Benefit Cost Ratio