

## PROJECT PORTFOLIO MANAGEMENT

Project Portfolio Management (PPM) is a management process with the help of methods aimed at helping the organization to acquire information and sort out projects according to a set of criteria.

### Objectives of Project Portfolio Management

When it comes to the objectives, the following factors need to be outlined.

- The need to create a descriptive document, which contains vital information such as name of project, estimated timeframe, cost and business objectives.
- The project needs to be evaluated on a regular basis to ensure that the project is meeting its target and stays in its course.
- Selection of the team players, who will work towards achieving the project's objectives.

### Benefits of Project Portfolio Management

Project portfolio management ensures that projects have a set of objectives, which when followed brings about the expected results. Furthermore, PPM can be used to bring out changes to the organization which will create a flexible structure within the organization in terms of project execution. In this manner, the change will not be a threat for the organization.

The following benefits can be gained through efficient project portfolio management:

- Greater adaptability towards change.
- Constant review and close monitoring brings about a higher return.
- Management's perspectives with regards to project portfolio management is seen as an 'initiative towards higher return'. Therefore, this will not be considered to be a detrimental factor to work.
- Identification of dependencies is easier to identify. This will eliminate some inefficiency from occurring.
- Advantage over other competitors (competitive advantage).
- Helps to concentrate on the strategies, which will help to achieve the targets rather than focusing on the project itself.
- The responsibilities of IT is focused on part of the business rather than scattering across several.

The mix of both IT and business projects are seen as contributors to achieving the organizational objectives.

### Project Portfolio Management Tools

There are many tools that can be used for project portfolio management. Following are the essential features of those tools:

- A systematic method of evaluation of projects.
- Resources need to be planned.
- Costs and the benefits need to be kept on track.
- Undertaking cost benefit analysis.
- Progress reports from time to time.
- Access to information as and when its required.
- Communication mechanism, which will take through the information necessary.

### **Techniques Used to Measure PPM**

There are various techniques, which are used to measure or support PPM process from time to time. However, there are three types of techniques, which are widely used:

- Heuristic model.
- Scoring technique.
- Visual or Mapping techniques.

The use of such techniques should be done in consideration of the project and organizational objectives, resource skills and the infrastructure for project management.

Why Project Managers to Focus on PPM?

PPM is crucial for a project to be successful as well as to identify any back lags if it were to occur. Project Managers often face a difficult situation arising from lack of planning and sometimes this may lead to a project withdrawal.

It's the primary responsibility of project managers to ensure that there are enough available resources for the projects that an organization undertakes. Proper resources will ensure that the project is completed within the set timeline and delivered without a compromise on quality.

Project managers also may wish to work on projects, which are given its utmost priority and value to an organization. This will enable project managers to deliver and receive support for quality projects that they have undertaken. PPM ensures that these objectives of the project management will be met.

### **The Five Question Model**

The five question model of project portfolio management illustrates that the project manager is required to answer five essential questions before the inception as well as during the project execution



Same as with financial portfolio management, the project portfolio management also has its own set of objectives. These objectives are designed to bring about expected results through coherent team players.

Project portfolio management provides an overview of all the projects that an organization is undertaking or is considering. The concerns of project portfolio management include:

- Identifying which project proposals are worth implementation
- Assessing the amount of risk of failure that a potential project has
- Deciding how to share limited resources, including staff time and finance, between projects

The three key aspects of project portfolio management are

- Portfolio Definition
- Portfolio Management
- Portfolio Optimization

## **COST BENEFIT EVALUATION TECHNOLOGY**

The Cost Benefit Evaluation techniques are

- Net profit
- Payback period
- Return on Investment
- Net Present Value
- Internal Rate of Return

### **Net Profit**

- The difference between the total costs and the total income over the life of the project is calculated as net profit.
- Net profits do not involve the timing of the cash flows. When there are many projects, the net profit of preferable projects is done on selection criteria.
- Some projects incomes are returned only towards the end of the project. This is a major disadvantage which means that the investment must be funded for longer time.
- Estimates in distant future are less reliable than the short-term estimates which are more preferable.

### Payback Period

- The time taken to break even or pay back the initial investment is the payback period. The project with the shortest payback period will be taken based on organizations that wish to minimize the time limit.
- The payback period is simple to calculate but sensitive to forecasting errors.
- The limitation of the payback period is that it ignores the overall profitability of the project.

### Return on Investment

- The accounting rate of return or the return on investment compares the net profitability to the investment required.
- Return on Investment (ROI) is calculated using the given formulae;

$$ROI = \frac{\text{average annual profit}}{\text{total investment}} \quad ROI = \frac{\text{average annual profit}}{\text{total investment}} \times 100$$

- The ROI provides simple, easy to calculate the measure of return on capital.

Eg: The net profit of a project is Rs.30,000 and the total investment is Rs.100,000. Calculate the ROI if the total period is taken as 3 years.

$$ROI = \frac{\text{average annual profit}}{\text{total investment}} \quad ROI = \frac{\text{average annual profit}}{\text{total investment}} \times 100$$

$$= 30,000 \times \frac{1}{3} \times 100 = 100,000$$

$$= 10\%$$

- The limitations of ROI is that it takes no account of the timing of the cash flows and does not bother about the compound interest.

### Net Present Value

- Net present value is a project evaluation technique that is determined by the profitability of the project and the timing of the cash flows produced.
- The annual rate of return with respect to discounted future earnings is termed as the discount rate.
- The net present value of any future cash flow is calculated by the formulae: Present value = value in year  $t / (1+r)^t$

Where 'r' denotes the discount rate expressed as a decimal value, 't' represents the number of years of future cash flows.

- Net present value can also be calculated by multiplying the cash flow by the appropriate discount factor.
- NPV for a project is obtained by summing the discounted values and discounting each cash flows.
- The discount rates must be standard and it should reflect the interest rates as nominal with similar projects which is uncertain with NPV method.
- Using NPV, the measure of profitability of comparable projects is not directly concerned with earnings from other investments which are quoted as a percentage interest rate.

### Internal Rate of Return

- The limitation of NPV is overcome by the internal rate of return method. This method provides a profitability measure as a percentage return that is directly compared with interest rates.
- The percentage discount rate which produces an NPV of zero is calculated by IRR.
- A spreadsheet or a small computer program can be used to calculate the IRR is a convenient and useful measure of value of a project.
- A project with an IR greater than the current interest rates provides better return rate than lending from a bank.
- The limitation of IRR is that it does not indicate the absolute size of the return value.
- A total evaluation takes into account the problems of cash flow funding where as a project's IRR indicates that the profitable project future earnings are less reliable than investing with a bank.