

CSE4708: Software Project Management

Unit II : Project Evaluation & Estimation

Topic: Project Evaluation

Name: Manka Sharma

Delivered on: 11th September 2020

Project Evaluation

Project Evaluation

- When managing a project, one is required to make a **lot of key decisions**.
- There is always something that **needs executing**, and often that something is **critical to the success of the venture**.
- Because of the high stakes, good managers don't just make decisions based **on gut instinct**.
- They prefer to **minimize risk to the best of their ability** and act only when there is **more certainty than uncertainty**.
- But how can you accomplish that in a world with **myriad variables** and **constantly shifting economics**?
- The answer: **consult hard data collected with reporting tools, charts and spreadsheets**.
- That **data can** be used to evaluate the **decisions with a process called cost benefit analysis (CBA)**.
- An intelligent use of cost benefit analysis **will help in minimizing risks and maximize gains both for the project and the organization**.

Project Evaluation

Why is project evaluation important:

- project evaluation is important for answering the following questions-
 - what progress has been made?
 - were the desired outcomes achieved?
 - whether the project can be refined to achieve better outcomes?
 - do the project results justify the project inputs?
- What are the challenges in monitoring and evaluation?
 - getting the commitment to do it.
 - establishing base lines at the beginning of the project.
 - identifying realistic quantitative and qualitative indicator.
 - finding the time to do it and sticking to it.
 - getting feedback from your stakeholders.
 - reporting back to your stakeholders

Project Evaluation

- It is consider to proceed with a project only where the **benefits outweigh the costs**.
- However, in order to choose among projects, **the timing of the costs and benefits as well as the benefits relative to the size of the investment are also considered**.

Project Evaluation

The main objective for Project Evaluation are

- To Analyse the process of implementation focussing on participation of community
- To Analyse the impact or changes that have occurred within beneficiary households and the community
- To Identify problems and constraints that have been encountered.
- To Identify important lessons to be learnt and make recommendations for the implementation of future plan.

Project Evaluation

High level assessment of the project

- to see whether it is **worthwhile to proceed** with the project
- to see whether the project will **fit in the strategic planning of the whole organization**

Project Evaluation

- **Why**
 - Want to decide whether a project can proceed before it is too late
 - Want to decide which of the several alternative projects has a better success rate, a higher turnover, a higher ...
 - Is it desirable to carry out the development and operation of the software system
- **Who**
 - Senior management
 - Project manager/coordinator
 - Team leader
- **When**
 - Usually at the beginning of the project
 - e.g. Step 0 of Step Wise Framework
- **What**
 - Strategic assessment
 - Technical assessment
 - Economic Assessment

Project Evaluation

- **How**
- Cost-benefit analysis
- Cash flow forecasting
- Cost-benefit evaluation techniques
- Risk analysis

Strategic Assessment

- Used to assess whether a project fits in the *long-term goal* of the organization
- Usually carried out by senior management
- Needs a strategic plan that clearly defines the objectives of the organization
- Evaluates individual projects against the strategic plan or the overall business objectives
- Programme management
 - suitable for projects developed for use in the organization
- Portfolio management
 - suitable for project developed for other companies by software houses

Strategic Assessment

- **Programme Management**

- Individual projects as components of a programme within the organization
- *Programme as “a group of projects that are managed in a coordinated way to gain benefits that would not be possible were the projects to be managed independently”*

Strategic Assessment

- **Portfolio Management**
- suitable for product developed by a software company for an organization
- may need to assess the product for the client organization
 - Programme management issues apply
- need to carry out strategic assessment for the providing software company Long-term goal of the software company
- The effects of the project on the portfolio of the company (synergies and conflicts)
- Any added-value to the overall portfolio of the company

Technical Assessment

- Functionality against hardware and software
- The strategic plan of the organization
- any constraints imposed by the plan

Economic Assessment

Why?

- Consider whether the project is the best among other options
- Prioritizes the projects so that the resources can be allocated effectively if several projects are underway

Economic Assessment

How?

- Cost-benefit analysis
- Cash flow forecasting
- Various cost-benefit evaluation techniques
- NPV and IRR