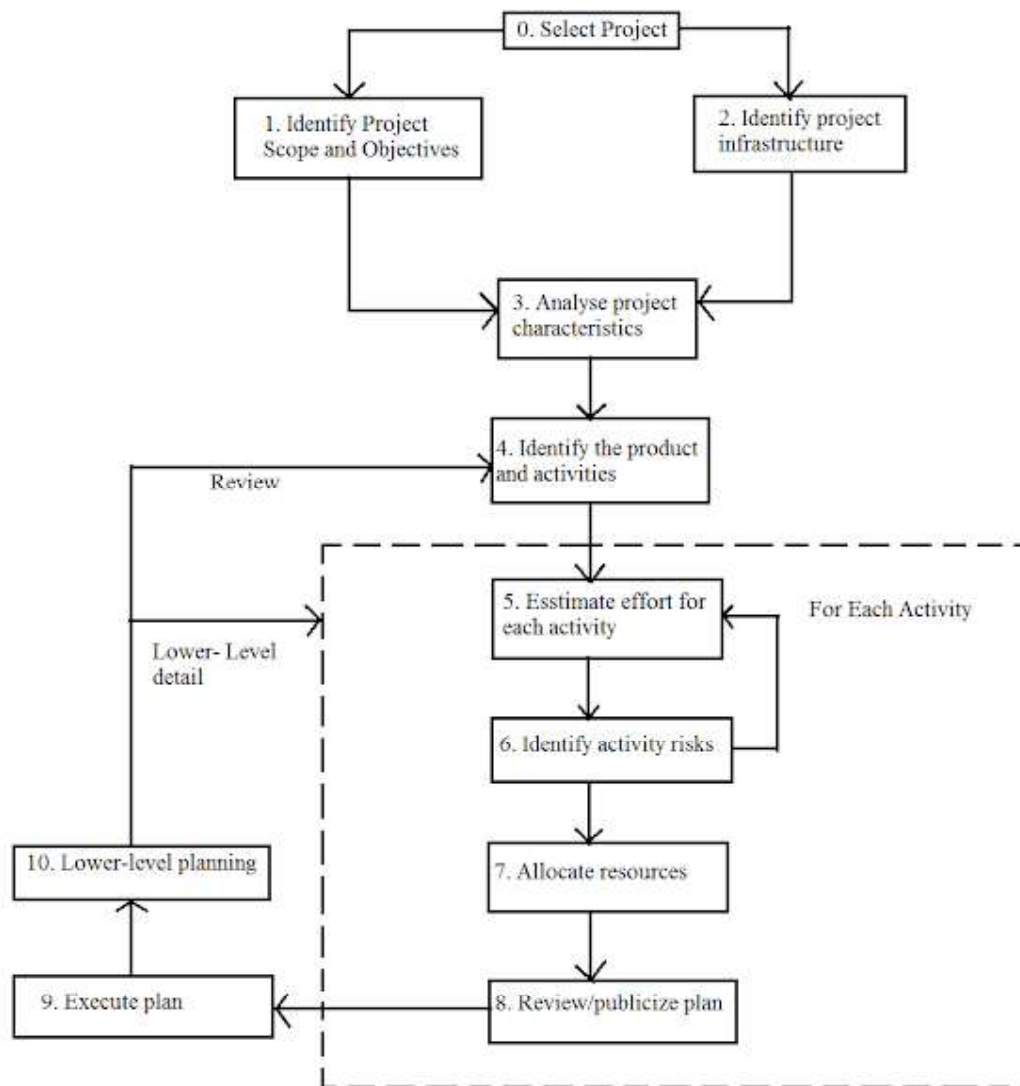


## **STEPWISE PROJECT PLANNING**

### **Introduction:**

Planning is the most difficult process in project management. The framework described is called the Stepwise method to help to distinguish it from other methods.



### **Step 0: Select Project**

### **Step 1: Identify project scope and objectives**

Step 1.1 : Identify objectives and practical measures of the effectiveness in meeting those

objectives

Step 1.2 : Establish a project authority

Step 1.3 : Stakeholder analysis - identify all stakeholders in the project and their interests.

Step 1.4 : Modify objectives in the light of stakeholder analysis.

Step 1.5 : Establish methods of communication with all parties.

## **Step 2 : Identify project infrastructure**

Step 2.2 : Identify installation standard and procedures

Step 2.3 : Identify project team organization

## **Step 3 : Analyse project characteristics**

Step 3.1 : Distinguish the project as either objectives- or product-driven.

Step 3.2 : Analyse other project characteristics

Step 3.3 : Identify high-level project risks

Step 3.4 : Take into account use requirements concerning implementation

Step 3.5 : Select development methodology and life-cycle approach

Step 3.6 : Review overall resource estimates

## **Step 4 : Identify project products and activities**

Step 4.1 : Identify and describe project products

Step 4.2 : Document generic product flows

Step 4.3 : Recognize product instances

Step 4.4 : Produce ideal activity network

Step 4.5 : Modify the ideal to take into account need for stages and checkpoints

## **Step 5 : Estimate effort for each activity**

Step 5.1 : Carry out bottom-up estimates

- distinguish carefully between effort and elapsed time

Step 5.2 : Revise plan to create controllable activities

- breakup very long activities into a series of smaller ones

- bundle up very short activities

## **Step 6 : Identify activity risks**

Step 6.1 : Identify and quantify activity based risks

- damage if risk occurs

- likelihood if risk occurring

Step 6.2 : Plan risk reduction and contingency measures

- risk reduction : activity to stop risk occurring

- contingency : action if risk does occur

Step 6.3 : Adjust overall plans and estimates to take account of risks

## **Step 7 : Allocate resources**

Step 7.1 : Identify and allocate resources

Step 7.2 : Revise plans and estimates to take into account resource constraints

**Step 8 : Review/ Publicize plans**

Step 8.1 : Review quality aspects of the project plan

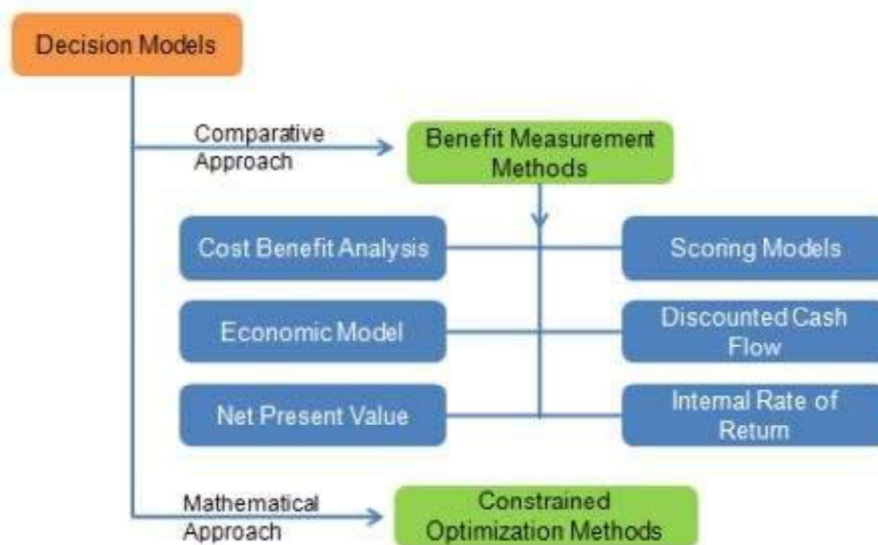
Step 8.2 : Document plans and obtain agreement

**Step 9 and 10 : Execute plan. Lower levels of planning****Selecting a Project:****Selection Methods**

There are various project selection methods practised by the modern business organizations. These methods have different features and characteristics. Therefore, each selection method is best for different organizations.

Although there are many differences between these project selection methods, usually the underlying concepts and principles are the same.

Following is an illustration of two of such methods (Benefit Measurement and Constrained Optimization methods):



As the value of one project would need to be compared against the other projects, you could use the benefit measurement methods. This could include various techniques, of which the following are the most common:

- You and your team could come up with certain criteria that you want your ideal project objectives to meet. You could then give each project scores based on how they rate in each of these criteria and then choose the project with the highest score.
- When it comes to the Discounted Cash flow method, the future value of a project is ascertained by considering the present value and the interest earned on the money. The higher the present value of the project, the better it would be for your organization.
- The rate of return received from the money is what is known as the IRR. Here again, you need to be looking for a high rate of return from the project.

The mathematical approach is commonly used for larger projects. The constrained optimization methods require several calculations in order to decide on whether or not a project should be rejected.

Cost-benefit analysis is used by several organizations to assist them to make their selections. Going by this method, you would have to consider all the positive aspects of the project which are the benefits and then deduct the negative aspects (or the costs) from the benefits. Based on the results you receive for different projects, you could choose which option would be the most viable and financially rewarding.

These benefits and costs need to be carefully considered and quantified in order to arrive at a proper conclusion. Questions that you may want to consider asking in the selection process are:

- Would this decision help me to increase organizational value in the long run?
- How long will the equipment last for?
- Would I be able to cut down on costs as I go along?

In addition to these methods, you could also consider choosing based on opportunity cost - When choosing any project, you would need to keep in mind the profits that you would make if you decide to go ahead with the project.

Profit optimization is therefore the ultimate goal. You need to consider the difference between the profits of the project you are primarily interested in and the next best alternative.

### **Implementation of the Chosen Method**

The methods mentioned above can be carried out in various combinations. It is best that you try out different methods, as in this way you would be able to make the best decision for your organization considering a wide range of factors rather than concentrating on just a few. Careful consideration would therefore need to be given to each project.

## **Identifying Project Scope and Objectives:**

The activities in this step ensure that all the parties to the project agree on the objectives and are committed to the success of the project. A danger to be avoided is overlooking people who are affected by the project.

### **Step 1.1: Identify objectives and practical measures of the effectiveness in meeting those objectives**

We discussed earlier the need for agreed objectives for a project and ways of measuring the success in achieving those objectives.

The project objectives for the Brightmouth College payroll project have already Case Study Example: been discussed in Exercise 1.7. Project objectives

Amanda at IOE has the objectives clearly laid down for her in the recommendations of a feasibility study report, which have been accepted by IOE management. The main objectives

are to allow a detailed monthly statement to be sent to group account clients and to be able to reallocate the cash received to individual jobs when the client has paid on the monthly statement. There are also other objectives that refer to expected timescales and the resources that may be used.

### **Step 7.2; Establish a project authority**

A single overall project authority needs to be established so that there is unity of purpose among all those concerned.

Amanda finds that her manager and the main user management have already set up a Project Board that will have overall direction of the project. She is a little concerned because the equipment maintenance staff are organized with different sections dealing with different types of equipment. This means that a customer might have work done by several different sections. Not all the sections are represented on the Project Board and Amanda is aware that there are some differences of opinion among the different sections. It is left to the user representatives on the board to resolve those differences and to present an agreed policy to the systems developers.

Brigette finds that effectively she has two different clients for the payroll system: the finance and personnel departments. To help resolve conflicts, it is agreed that the managers of both departments should attend a monthly meeting with the Vice-Principal, which Brigette has arranged in order to steer the project.

Case Study Examples: Project authorities

Throughout the text we use capitalized initial letters to indicate a term that has a precise meaning in the PRINCE 2 standards, e.g. Project Board.

### **Step 1.3: Identify all stakeholders in the project and their interests**

Recall that this was the basis of a discussion in Chapter 1. Essentially all the parties who have an interest in the project need to be identified. In Exercise 1.8 you produced a list of the stakeholders in the Brightmouth College Payroll project.

What important stakeholders outside the IOE organization should be considered Exercise 2.1 in the case of the IOE Maintenance Group Accounts System?

### **Step 1.4: Modify objectives in the light of stakeholder analysis**

In order to gain the full cooperation of all concerned, it might be necessary to modify the project objectives. This can mean adding new features to the system giving a benefit to some stakeholder group as a means of assuring their commitment to the project. This is potentially