

JNANAPEETA DCET ACADEMY

LETS DREAM IT.

CHAPTER 5

PROJECT CONTROL, REVIEW AND AUDIT

5.1 Introduction

Once the project has been launched, it is essential to control the projects to achieve the desired results. **Project control serves two major functions:**

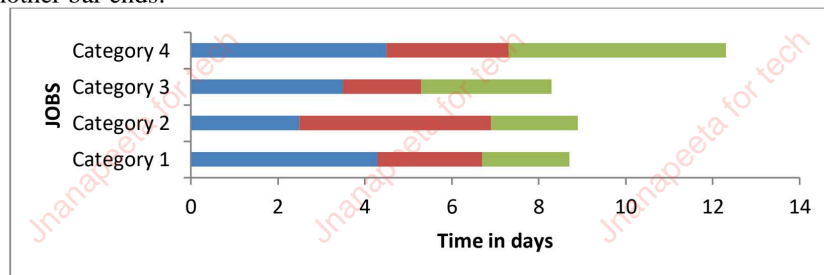
1. It ensures regular monitoring of performance.
2. It motivates project Personnel to achieve project goals.

5.2 Projected Control Purposes

1. To control the progress of the activities
2. Control the performance of project activities.
3. Control the project schedule.
4. Control the project's cost.
5. Control over delay in project activities.
6. To achieve goal effectively and efficiently.

5.3 GANTT Charts

1. A pictorial representation showing the various jobs, time and money involved is known as Bar chart or Gantt chart.
2. It consists of two coordinate representing the time elapsed and jobs or activities performed.
3. The jobs are represented in the form of bars.
4. The length of a bar indicates the duration the job or activity taken for completion.
5. In bar chart, some of the bars run parallel or overlap each other times-wise and some run serially with one bar after another bar ends.



5.4 Critical Path Method (CPM)

The critical path analysis is an important tool in production planning and scheduling. CPM is used for scheduling special projects where the relationship between the different parts of project is more complicated than of a simple chain of task to be completed one after the other. A CPM is a route between two or more operations which minimizes (or maximizes) some measures of performance. Under CPM, the project is analyzed into different operation or activities and their relationship are determined and shown on the network diagram, so, first of all a network diagram is drawn. After this the required Time or some other measure of them combined to develop a schedule which minimizes or maximizes the measure of performance for each operation. Thus, CPM marks critical activities in a project and concentrates on them.

5.5 PERT (Programme Evaluation and Review Technique)

Visit Jnanapeeta for tech YouTube channel

9108841633

JNANAPEETA DCET ACADEMY

LETS DREAM IT.

PERT is a time-event network analysis technique designed to watch how the parts of a programme fit together during passage of time and events. The PERT is used for planning and control of large projects in various industries like defense, Chemical and construction industries etc.

Features of PERT or Procedure or Requirement for PERT

1. All individual tasks should be shown in a network.
2. Events are shown by circles and whose completion can be measured at a given time.
3. Each arrow represents an activity the time consuming element of a program.
4. Activity time is the elapsed time required to accomplish element an event.
5. Finally compute the critical path and slack time.
6. Critical path is a sequence of activities, which takes the longest time to complete the work and the least slack time.

5.6 Network Technique in Project Scheduling

Network technique is used in project scheduling. When will each activity be started, when the same has to be completed, which activity can be delayed, when will the project be completed and related questions are answered by PERT and CPM techniques.

5.7 Project Review

Project review is an important aspect in the process of planning and corrects the errors and rectifies the same. Review is an important tool to identify the shortcomings during the entire implementation period and to develop corrective actions to improve the delivery and administrative purposes.

Functions or Objectives or Purposes or Role of Project Review

1. To assess the impact of the project
2. To examine the project efficiency
3. To measure the quality of project
4. To verify the safety aspects
5. To help, guide, direct and aid the planners.
6. To help and guide project sponsors.
7. To assess the outcome of the project

5.8 Two ways of Performance Evaluation

It is done periodically and seeks to measure the performance of the project on an ongoing basis. Performance evaluation may be done in terms of economic rate of return or book rate of return on investment.

1. **Economic Rate of Return= $\frac{\text{Cash flow} + \text{Changes in present value}}{\text{Present value at the beginning of the year}}$**

2. **Book rate of return for a given year = $\frac{\text{Cash flow} + \text{Changes in book value}}{\text{Book value at the beginning of the year}}$**

5.9 Project Audit Programme

Steps in Project Audit Programme

1. Preliminary examination of the project's organization, administration, record keeping, controls and planning and working methods and techniques performed.
2. Preparing the statements of project status, current and future.
3. Conducting preliminary analysis and presentation of results in the form of audit report.

Visit Jnanapeeta for tech YouTube channel

9108841633