

Work plan and Costing

Module 1: Introduction to Work Planning and Costing

Objective: Understand the significance of work planning and costing in engineering projects.

1. What is a Work Plan?

Definition:

A work plan is a detailed roadmap for a project or task. It lays out the steps needed to take the project from concept to completion. A work plan can be created for a whole project or a task within a project.

Components of a work plan:

A good Workplan contains the following elements: **tasks, milestones, resources, timelines, and responsibilities.**

-Tools for creating work plans

Flowcharts are important tools for creating task workplans. Example tools that can be used to create good workplans are:

Google Docs, Lucid.app, Diagramgpt

- Examples:

share 2 links of good work plans

2. What is Costing?

- Definition:

Costing is the process of estimating and calculating the resources(money, time, labor, materials) required to complete a project/task. On a day to day basis, software engineers will be required to do costing for tasks they are undertaking.

3. Importance of Work Planning and Costing

1. Better Project Understanding

Enhanced Project Clarity: Work plans decompose complex projects into smaller tasks, revealing interdependencies and providing a clear picture of how individual efforts contribute to the overall goals.

Realistic Expectations: Time estimates within the work plan set expectations for workload and identify potential scope issues early on through cost considerations. This allows developers to plan their time effectively.

Empowered Decision-Making: By understanding task dependencies and potential resource limitations, developers can prioritize work, suggest alternative solutions, and proactively identify areas requiring collaboration or additional support.

Stronger Communication and Collaboration: Work plans create a shared understanding among all stakeholders, fostering better communication within the development team. Developers can discuss dependencies, roadblocks, and areas where collaboration is crucial.

2. Project success:

Staying on Track: A workplan keeps the project on schedule by breaking down large goals into manageable tasks.

Meeting Budget: Costing helps ensure the project stays within budget by identifying potential cost overruns early on.

3) **Reduced Risk and Improved Efficiency**

Identify Needs and Avoid Waste: By planning tasks and resources, you identify what's truly essential. This avoids spending time and money on unnecessary activities.

Proactive Problem Solving: Planning helps foresee potential roadblocks. Costing forces you to consider material and labor costs, allowing for adjustments to avoid going over budget.

4) **Better Communication and Stakeholder Management**

Clear Expectations: A workplan with timelines and milestones sets clear expectations for everyone involved. Stakeholders understand the project's scope and timeframe.

Informed Decision Making: With costing information, stakeholders can make informed decisions about resource allocation and potential budget adjustments.

Module 2: Practical Application Using Asana

Objective: Gain hands-on experience in creating work plans and managing project tasks using Asana.

After understanding work planning and costing, Asana helps you put it all together. Asana is a project management tool that helps teams collaborate and deliver on promises. To have a better understanding of Asana, please do the course below:

<https://academy.asana.com/asana-basics>

Additional Resources

<https://youtu.be/fgUdSL3yrts?si=kzjCXq8t4EwZZ-Df>

<https://academy.asana.com/page/all-courses>