Effective Resource Planning

Resources are critical to a project's success. Therefore, ensuring that the right resources are available at the right time is critical. Further, resource planning is a critical activity in project management, which aids the project manager in managing resources effectively.

Objectives

After completing this reading, you will be able to:

- Define resource planning

- Explain the benefits of resource planning

- Identify areas project managers should consider when assigning resources to tasks

What is effective resource planning?

Effective resource planning involves identifying and estimating the resources needed for a project, including personnel, equipment, materials, and budget. The project manager also needs to allocate the resources appropriately across the project's tasks and timelines to ensure effective use of the resources.

Effective resource planning involves identifying each deliverable for the project and creating a work breakdown structure (WBS) for the overall project. The WBS list all the project tasks sequentially to the lowest level. The WBS will help the project manager identify what and when resources are required to complete different tasks.

Resource planning considerations

After the project manager creates the WBS, they must assign different tasks to resources. Before resource assignment in the resource plan, project managers must consider various considerations.

- **Availability of resources**: Project managers need to ensure that resources are available when required. In addition, the project manager must consider team members' workload, equipment, and materials when assigning resources to tasks.

- **Skills and expertise**: Project managers must consider the skills and expertise required to complete each task. For the plan to be effective, the project manager must assign resources with the necessary skills and training to complete the tasks.

- **Prioritization of tasks**: Project managers should review and identify critical tasks and assign resources accordingly.

- **Interdependencies**: A project manager must consider interdependencies between tasks when assigning resources. The project manager must assign tasks dependent on each other to the appropriate resources and completed in the right sequence.
- **Budget**: Project managers must ensure resources assigned to tasks are within the allocated project budget.

What are the benefits of resource planning?

While it may seem a cumbersome process, resource planning is highly beneficial. Some benefits of effective resource planning include:

Better estimation of timelines and deadlines

Resource planning helps a project manager look ahead at a project's resource requirements and create a detailed plan for the types of resources needed, how much is required, and when each resource is needed. With a clear understanding of available resources and their capacities, project managers can better estimate project timelines and deadlines.

Better risk management

Resource planning is a proactive activity that helps project teams proactively manage risks and mitigate potential issues before they arise. For example, resource planning helps with a clear picture of resource requirements. By mapping the requirement with resource availability, project managers can identify potential bottlenecks or resource constraints that may impact project timelines before they become an issue.

Better cost management

With clear visibility of tasks, resource availability, and requirement, project managers can allocate resources efficiently and minimize unnecessary expenses.

Increased stakeholder satisfaction

By optimizing resource allocation and avoiding delays or cost overruns, project managers can demonstrate their ability to deliver high-quality results, enhancing stakeholder satisfaction.

Improved efficiency

Resource planning helps ensure the right resources are available at the right time, which can improve overall efficiency and productivity. In addition, it helps to avoid situations where resources are underutilized or overburdened.

Avoids overallocation

Overallocation occurs when a project manager assigns more work to a resource than they can realistically complete within a given time. With efficient resource planning, a project manager can avoid overallocation. Avoiding overallocation can help with:

- Increased team morale

- High energy and increased project involvement

- Superior quality output

- Reduction in delays

How to do resource planning

Project managers can use the resource breakdown structure (RBS) document to plan resources and avoid overallocation effectively. The Project Management Institute defines the resource breakdown structure as "a chart that is a hierarchical representation of resources by category and type."

Project managers create a resource breakdown structure during the planning phase of a project to identify all the necessary project resources, including human resources, software and tools, equipment, and more.

Conclusion

Resource planning is a crucial activity in project management that helps project managers manage resources effectively. Effective resource planning involves identifying and estimating the resources needed for a project and allocating them appropriately across tasks and timelines to ensure effective use. Project managers must consider several factors such as availability, skills, prioritization, interdependencies, and budget before assigning resources to tasks. Effective resource planning offers several benefits, including better estimation of timelines and deadlines, risk management, cost management, increased stakeholder satisfaction, and improved efficiency. The use of a resource breakdown structure document is a tool that project managers can use to plan resources effectively and avoid overallocation.