

5.1: Introduction

Learning Objectives

After reading this chapter, you will be able to:

1. Describe how to create a project resource plan.
2. Define the resources that will be utilized in a project, including the project team members.
3. Elaborate on resource loading, leveling, and crashing to conduct resource allocation effectively.
4. Define basic terms such as budget, estimate, price, cost, and value.
5. Discuss the relationship between cost and budget.
6. Explain basic concepts related to budgeting.
7. Identify different types of costs, and discuss issues related to contingency funds, profit, and cost estimating.
8. Explain the benefits of contingencies.

Overview

A project manager is responsible for planning, developing, managing, and monitoring and controlling the resources to ensure that project objectives can be achieved. Effective resource management is integral to overall project success. The objective is to identify and allocate resources effectively and efficiently to project activities to complete the project to the satisfaction of the stakeholders, in particular, clients and customers. Whereas scope, time, and cost are the main constraints of a project, they are tightly linked to the resources. After the scope and schedule are delineated, the project manager can continue with the identification and allocation of resources based on the scope (product requirements and project activities) and the schedule (how project activities are sequenced on a timescale). Allocation of resources allows the project manager to determine the overall project budget most of which is spent on resources.

While performing the planning of all the knowledge areas (e.g., scope, schedule, cost, quality, stakeholders, risks), the project manager should be aware of the fact that all knowledge areas are tightly linked to each other. That is, it is not possible to start with cost or quality first. The scope is the starting point when project managers with the help of business analysts, subject matter experts, clients, the project sponsor, and various stakeholders identify the project purpose, measurable objectives, requirements, deliverables, and WBS activities. Whereas scope, time, and cost are the main constraints of a project, all three are tightly linked to the resources, which are other constraints that include time and cost as critical resources. After the scope and schedule are delineated, the project manager can continue with the identification and allocation of resources based on the scope (requirements and project activities) and the schedule (how project activities are sequenced with duration for each of them). Allocation of resources provides the project manager to determine the overall project budget most of which is spent on resources.

Every project boils down to money. If we had a bigger budget, we could probably get more people to do the project more quickly and deliver more. That's why no project plan is complete until we come up with a budget. But no matter whether the project is big or small, and no matter how many resources and activities are in it, the process for figuring out the financial bottom line is always the same. This chapter starts with defining the project cost and its types, then elaborates on the cost management plan, continues with how to estimate costs and determine the budget, and ends with project procurement management.

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