Project Management (Part 1) - Getting Started with Project Management

An Online Continuing Education Course for Engineers

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Project Management (Part 1) - Getting Started with Project Management

Module 1

Project Management: The Key to Achieving Results

In This Module

- Defining a project and its four stages
- Breaking down project management
- Identifying the project manager's role
- Determining whether you have what you need to be a successful project manager

Successful organizations create projects that produce desired results in established time frames with assigned resources. As a result, businesses are increasingly driven to find individuals who can excel in this project-oriented environment.

Because you're taking this course, chances are good that you've been asked to manage a project. So, hang on tight — you're going to need a new set of skills and techniques to steer that project to successful completion. But not to worry! This module gets you off to a smooth start by showing you what projects and project management really are and by helping you separate projects from nonproject assignments. This module also offers the rationale for why projects succeed or fail and gets you into the project-management mindset.

Determining What Makes a Project a Project

No matter what your job is, you handle a myriad of assignments every day. For example, you may prepare a memo, hold a meeting, design a sales campaign, or move to new offices. Or you may make the information systems more user-friendly, develop a research compound in the laboratory, or improve the organization's public image. Not all these assignments are projects. How can you tell which ones are and which ones aren't? This course is here to help.

Understanding the three main components that define a project

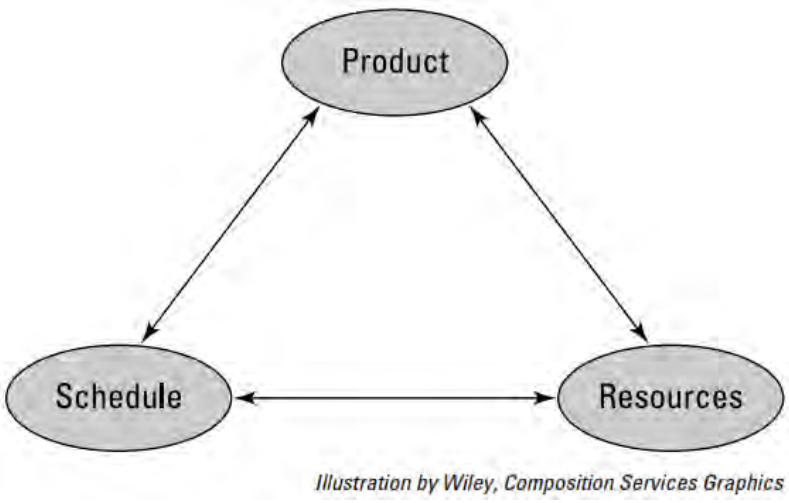
A *project* is a temporary undertaking performed to produce a unique product, service, or result. Large or small, a project always has the following three components:

- ✓ **Specific scope:** Desired results or products.
- ✓ **Schedule:** Established dates when project work starts and ends.
- ✓ **Required resources:** Necessary number of people and funds and other resources.

Remember

As illustrated in Figure 1-1, each component affects the other two. For example: Expanding the type and characteristics of desired outcomes may require more time (a later end date) or more resources. Moving up the end date may necessitate paring down the results or increasing project expenditures (for instance, by paying overtime to project staff). Within this three-part project definition, you perform work to achieve your desired results.

Figure 1-1: The relationship between the three main components of a project.



Although many other considerations may affect a project's performance (see the later section "Defining Project Management" for details), these three components are the basis of a project's definition for the following three reasons:

- ✓ The only reason a project exists is to produce the results specified in its scope.
- ✓ The project's end date is an essential part of defining what constitutes successful performance; the desired result must be provided by a certain time to meet its intended need.
- ✓ The availability of resources shapes the nature of the products the project can produce.

A Guide to the Project Management Body of Knowledge, 5th Edition (*PMBOK 5*), elaborates on these components by:

- ✓ Emphasizing that *product* includes both the basic nature of what is to be produced (for example, a new training program or a new prescription drug) and its required characteristics (for example, the topics that the training program must address), which are defined as the product's *quality*
- ✓ Noting that *resources* refers to funds, as well as to other, nonmonetary resources, such as people, equipment, raw materials, and facilities

PMBOK 5 also emphasizes that *risk* (the likelihood that not everything will go exactly according to plan) plays an important role in defining a project and that guiding a project to success involves continually managing tradeoffs among the three main project components — the products to be produced and their characteristics, the schedule, and the resources required to do the project work.

Recognizing the diversity of projects

Projects come in a wide assortment of shapes and sizes. For example, projects can

- ✓ **Be large or small**
  - Installing a new subway system, which may cost more than $1 billion and take 10 to 15 years to complete, is a project.
  - Preparing an ad hoc report of monthly sales figures, which may take you one day to complete, is also a project.
- ✓ **Involve many people or just you**
  - Training all 10,000 of your organization's staff in a new affirmative-action policy is a project.
  - Rearranging the furniture and equipment in your office is also a project.
- ✓ **Be defined by a legal contract or by an informal agreement**
  - A signed contract between you and a customer that requires you to build a house defines a project.
  - An informal promise you make to install a new software package on your colleague's computer also defines a project.
- ✓ **Be business-related or personal**
  - Conducting your organization's annual blood drive is a project.
  - Having a dinner party for 15 people is also a project.

A project by any other name just isn't a project

People often confuse the following two terms with *project:*

- ✓ **Process:** A *process* is a series of routine steps to perform a particular function, such as a procurement process or a budget process. A process isn't a one-time activity that achieves a specific result; instead, it defines *how* a particular function is to be done every time. Processes, like the activities that go into buying materials, are often parts of projects.
- ✓ **Program:** This term can describe two different situations. First, a *program* can be a set of goals that gives rise to specific projects, but, unlike a project, a program can never be completely accomplished. For example, a health-awareness program can never completely achieve its goal (the public will never be totally aware of all health issues as a result of a health-awareness program), but one or more projects may accomplish specific results related to the program's goal (such as a workshop on minimizing the risk of heart disease). Second, a *program* sometimes refers to a group of specified projects that achieve a common goal.

Remember

No matter what the individual characteristics of your project are, you define it by the same three components I describe in the previous section: results (or scope), start and end dates, and resources. The information you need to plan and manage your project is the same for any project you manage, although the ease and the time to develop it may differ. The more thoroughly you plan and manage your projects, the more likely you are to succeed.

Describing the four stages of a project

Every project, whether large or small, passes through the following four stages:

- ✓ **Starting the project:** This stage involves generating, evaluating, and framing the business need for the project and the general approach to performing it and agreeing to prepare a detailed project plan. Outputs from this stage may include approval to proceed to the next stage, documentation of the need for the project and rough estimates of time and resources to perform it (often included in a project charter), and an initial list of people who may be interested in, involved with, or affected by the project.
- ✓ **Organizing and preparing:** This stage involves developing a plan that specifies the desired results; the work to do; the time, cost, and other resources required; and a plan for how to address key project risks. O s from this stage may i de a project plan that documents the intended project and th supporting processes needed to create them.
- ✓ **Carry** team and the project ontrolling is stage may include

obtaining customer sing financial tage may include suggestions for .

For s ects, it can take many ier to mon itor and co ate phases, each of whi s. No matter how si

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In a peri he next one; and after fect, and project su at you may face, such

- ✓ **Yo o meet tight dea** the current one increases the risk may cause you to miss deadlines and spend more ginally planned. If you choose this strategy, be sure people unde potential risks and costs associated with it.
- ✓ **Sometimes you learn by doing.** Despite doing your best to assess feasibility and develop detailed plans, you may realize you can't achieve what you thought you could. When this situation happens, you need to return to the earlier project stages and rethink them in light of the new information you've acquired.
- ✓ **Sometimes things change unexpectedly.** Your initial feasibility and benefits assessments are sound and your plan is detailed and realistic. However, certain key project team members leave the organization without warning during the project. Or a new technology emerges, and it's more appropriate to use than the one in your original plans. Because ignoring these occurrences may seriously jeopardize your project's success, you need to return to the earlier project stages and rethink them in light of these new realities.