

Chapter 7: Project Cost Management

Information Technology Project Management, Seventh Edition



Information Technology
PROJECT MANAGEMENT | 7e

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Note: See the text itself for full citations.

Learning Objectives

- ▶ Understand the importance of project cost management
- ▶ Explain basic project cost management principles, concepts, and terms
- ▶ Describe the process of planning cost management
- ▶ Discuss different types of cost estimates and methods for preparing them

Learning Objectives

- ▶ Understand the processes of determining a budget and preparing a cost estimate for an information technology (IT) project
- ▶ Understand the benefits of earned value management and project portfolio management to assist in cost control
- ▶ Describe how project management software can assist in project cost management

The Importance of Project Cost Management

- ▶ IT projects have a poor track record for meeting budget goals
- ▶ The CHAOS studies found the average cost **overrun** (the additional percentage or dollar amount by which actual costs exceed estimates) ranged from 180 percent in 1994 to 43 percent in 2010
- ▶ A 2011 Harvard Business Review study reported an average cost overrun of 27 percent. The most important finding was the discovery of a large number of gigantic overages or “black swans”

What Went Wrong?

- ▶ The U.S. government, especially the IRS, continues to provide examples of how not to manage costs
 - A series of project failures by the IRS in the 1990s cost taxpayers more than \$50 billion a year
 - In 2006, the IRS was in the news for a botched upgrade to its fraud-detection software, costing \$318 million in fraudulent refunds that didn't get caught
 - A 2008 Government Accountability Office (GAO) report stated that more than 400 U.S. government agency IT projects, worth an estimated \$25 billion, suffer from poor planning and underperformance
- ▶ The United Kingdom's National Health Service IT modernization program was called the greatest IT disaster in history with an estimated **\$26 billion overrun**. It was finally scrapped in 2011.

What is Cost and Project Cost Management?

- ▶ **Cost** is a resource sacrificed or foregone to achieve a specific objective or something given up in exchange
- ▶ Costs are usually measured in monetary units like dollars
- ▶ **Project cost management** includes the processes required to ensure that the project is completed within an approved budget

Project Cost Management Processes

- ▶ **Planning cost management** :determining the policies, procedures, and documentation that will be used for planning, executing, and controlling project cost.
- ▶ **Estimating costs**: developing an approximation or estimate of the costs of the resources needed to complete a project
- ▶ **Determining the budget**: allocating the overall cost estimate to individual work items to establish a baseline for measuring performance
- ▶ **Controlling costs**: controlling changes to the project budget

Figure 7-1. Project Cost Management Summary

Planning

Process: **Plan cost management**

Outputs: Cost management plan

Process: **Estimate costs**

Outputs: Activity cost estimates, basis of estimates, project documents updates

Process: **Determine budget**

Outputs: Cost baseline, project funding requirements, project documents updates

Monitoring and Controlling

Process: **Control costs**

Outputs: Work performance information, cost forecasts, change requests, project management plan updates, project documents updates, organizational process assets updates

Project Start

Project Finish

Basic Principles of Cost Management

- ▶ Most members of an executive board better understand and are more interested in financial terms than IT terms , so IT project managers must speak their language
 - **Profits** are revenues minus expenditures
 - **Profit margin** is the ratio of revenues to profits
 - **Life cycle costing** considers the total cost of ownership, or development plus support costs, for a project
 - **Cash flow analysis** determines the estimated annual costs and benefits for a project and the resulting annual cash flow

Table 7-1. Cost of Downtime for IT Applications

| Type of IT Application | Cost/Minute |
|--|-------------|
| Securities trading | \$73,000 |
| Enterprise Requirements Planning (ERP) | \$14,800 |
| Order processing | \$13,300 |
| Electronic commerce | \$12,600 |
| Supply chain | \$11,500 |
| Point of sale (POS) | \$ 4,700 |
| Automatic teller machine (ATM) | \$ 3,600 |
| E-mail | \$ 1,900 |

Source: The Standish Group International, "Trends in IT Value," www.standishgroup.com (2008).