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IT项目管理

(英文版·第4版)

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PROJECT MANAGEMENT

FOURTH EDITION



KATHY SCHWALBE

(美) Kathy Schwalbe 奥古斯堡学院

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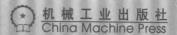
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Information Technology Project Management (Fourth Edition)

(美) Kathy Schwalbe 著



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Introduction to Project Management

Objectives

After reading this chapter, you will be able to:

- 1. Understand the growing need for better project management, especially for information technology projects
- 2. Explain what a project is, provide examples of information technology projects, list various attributes of projects, and describe the triple constraint of projects
- Describe project management and discuss key elements of the project management framework, including project stakeholders, the project management knowledge areas, common tools and techniques, and project success factors
- 4. Understand the role of the project manager by describing what project managers do, what skills they need, and what the career field is like for information technology project managers
- Describe the project management profession, including its history, the role
 of professional organizations like the Project Management Institute, the
 importance of certification and ethics, and the growth of project management software

OPENING CASE

A nne Roberts, the new Director of the Project Management Office for a large retail chain, stood in front of five hundred people in the large corporate auditorium to explain the company's new strategies. She was also broadcasting to thousands of other employees, suppliers, and stockholders throughout the world via the Internet. The company had come a long way in implementing new information systems to improve inventory control, sell products using the Web, and streamline the sales and distribution processes.

However, the stock price was down, the nation's economy was weak, and people were anxious to hear about the company's new strategies.

Anne began to address the audience, "Good morning. As many of you know, our CEO promoted me to a new position as Director of the Project Management Office. Most of what we do in this department involves projects, and my role in this new position is to turn the company around by helping us effectively select and manage those projects. Our challenge is to develop a culture in which we all work together to provide high-quality goods and services to our consumers while earning a profit in this difficult market. To meet this challenge, we must collaborate to focus on finding solutions to complex problems. We must decide what projects will most benefit the company, how we can continue to leverage the power of information technology to support our business, and how we can exploit our human capital to successfully plan and execute those projects. If we succeed, we'll become a world-class corporation."

"And if we fail?" someone asked from the audience.
"Let's just say that failure is not an option," Anne replied.

INTRODUCTION

Many people and organizations today have a new or renewed interest in project management. Until the 1980s, project management primarily focused on providing schedule and resource data to top management in the military and construction industries. Today's project management involves much more, and people in every industry and every country manage projects. New technologies have become a significant factor in many businesses. Computer hardware, software, networks, and the use of interdisciplinary and global work teams have radically changed the work environment. The statistics below demonstrate the significance of project management in today's society, especially for projects involving information technology (IT):

■ A 2001 report showed that the U.S. spends \$2.3 trillion on projects every year, an amount equal to one-quarter of the nation's gross domestic product. The world as a whole spends nearly \$10 trillion of its \$40.7 trillion gross product on projects of all kinds. More than sixteen million people regard project management as their profession.¹

¹ Project Management Institute (PMI), The PMI Project Management Fact Book, Second Edition, 2001.

- Worldwide IT spending is expected to grow by between 4 percent and 6 percent in the next few years. Forrester Research estimated that technology spending in the United States would total \$752 billion in 2004, an increase of 4.4 percent over 2003. Forrester also predicts that U.S. IT spending will grow by another 5.7 percent in 2005, to reach \$795 billion.²
- In 2003, the average senior project manager in the U.S. earned almost \$90,000 per year. The average salary of a program manager was \$103,464, just slightly less than the average Chief Information Officer (CIO) salary of \$103,925. The average salary for a Project Management Office (PMO) Director was \$118,633.3
- In the U.S., the number-one reality television show in 2004, *The Apprentice*, portrayed the important role project managers play in business. Each week of the show, teams would select a project manager to lead them in accomplishing that week's project. The project manager would be held partly responsible for the team's success or failure. Whether you're trying to make money by selling lemonade, running a golf tournament, or developing a new information system, project managers play a vital role in business success.

Today's companies, governments, and non-profit organizations are recognizing that to be successful, they need to be conversant with and use modern project management techniques. Individuals are realizing that to remain competitive, they must develop skills to become good project team members and project managers. They also realize that many of the concepts of project management will help them in their everyday lives as they work with people and technology on a day-to-day basis.

What Went Wrong?

In 1995, the Standish Group published an often-quoted study entitled "CHAOS". This prestigious consulting firm surveyed 365 information technology executive managers in the United States who managed more than 8,380 information technology application projects. As the title of the study suggests, the projects were in a state of chaos. United States companies spent more than \$250 billion each year in the early 1990s on approximately 175,000 information technology application development projects. Examples of these projects included creating a new database for a state department of motor vehicles, developing a new system for car rental and hotel reservations, and implementing a client-server architecture for the banking industry. The survey found that the average cost of an information technology application development project for a large company was more than \$2.3 million; for a medium company, it was more than \$1.3 million; and for a small company, it was more than \$434,000. Their study reported that the overall success rate of information technology projects was *only* 16.2 percent. The surveyors defined success as meeting project goals on time and on budget.

² Butler, Steve, IT Spending, Analyst Views, February 2004.

³ Project Management Institute (PMI), Project Management Salary Survey, Third Edition, 2003.

The study also found that more than 31 percent of information technology projects were canceled before completion, costing U.S. companies and government agencies more than \$81 billion. The authors of this study were adamant about the need for better project management in the information technology industry. They explained, "Software development projects are in chaos, and we can no longer imitate the three monkeys—hear no failures, see no failures, speak no failures."

Many organizations claim that using project management provides advantages, such as:

- Better control of financial, physical, and human resources
- Improved customer relations
- Shorter development times
- Lower costs
- Higher quality and increased reliability
- Higher profit margins
- Improved productivity
- Better internal coordination
- Higher worker morale

This chapter introduces projects and project management, discusses the role of the project manager, and provides important background information on this growing profession. Although project management applies to many different industries and types of projects, this textbook focuses on applying project management to information technology projects.

WHAT IS A PROJECT?

To discuss project management, it is important to understand the concept of a project. A **project** is "a temporary endeavor undertaken to create a unique product, service, or result." Operations, on the other hand, is work done in organizations to sustain the business. Projects are different from operations in that they end when their objectives have been reached or the project has been terminated.

Examples of Information Technology Projects

Projects can be large or small and involve one person or thousands of people. They can be done in one day or take years to complete. Information technology

⁴ The Standish Group, "The CHAOS Report" (www.standishgroup.com) (1995). Another reference is Johnson, Jim, "CHAOS: The Dollar Drain of IT Project Failures," Application Development Trends (January 1995).

⁵ Project Management Institute, Inc., A Guide to the Project Management Body of Knowledge (PMBOK® Guide) (2004), p. 5. Note: Page numbers are based on the early release of the third edition released on August 31, 2004.