

国外优秀信息科学与技术系列教学用书

项目管理

——IT 职业人员的理想实践

(影印版)

PROJECT MANAGEMENT

Best Practices for IT Professionals

■ Richard Murch



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Richard Murch

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出版说明

20 世纪末,以计算机和通信技术为代表的信息科学和技术对世界经济、科技、军事、教育和文化等产生了深刻影响。信息科学技术的迅速普及和应用,带动了世界范围信息产业的蓬勃发展,为许多国家带来了丰厚的回报。

进入 21 世纪,尤其随着我国加入 WTO,信息产业的国际竞争将更加激烈。我国信息产业虽然在 20 世纪末取得了迅猛发展,但与发达国家相比,甚至与印度、爱尔兰等国家相比,还有很大差距。国家信息化的发展速度和信息产业的国际竞争能力,最终都将取决于信息科学技术人才的质量和数量。引进国外信息科学和技术优秀教材,在有条件的学校推动开展英语授课或双语教学,是教育部为加快培养大批高质量的信息技术人才采取的一项重要举措。

为此,教育部要求由高等教育出版社首先开展信息科学和技术教材的引进试点工作。同时提出了两点要求,一是要高水平,二是要低价格。在高等教育出版社和信息科学技术引进教材专家组的努力下,经过比较短的时间,第一批由教育部高等教育司推荐的 20 多种引进教材已经陆续出版。这套教材出版后受到了广泛的好评,其中有不少是世界信息科学技术领域著名专家、教授的经典之作和反映信息科学技术最新进展的优秀作品,代表了目前世界信息科学技术教育的一流水平,而且价格也是最优惠的,与国内同类自编教材相当。这套教材基本覆盖了计算机科学与技术专业的课程体系,体现了权威性、系统性、先进性和经济性等特点。

目前,教育部正在全国 35 所高校推动示范性软件学院的建设,这也是加快培养信息科学技术人才的重要举措之一。为配合软件学院的教学工作,结合各软件学院的教学计划和课程设置,高等教育出版社近期聘请有关专家和软件学院的教师遴选推荐了一批相应的原版教学用书,正陆续组织出版,以方便各软件学院开展双语教学。

我们希望这些教学用书的引进出版,对于提高我国高等学校信息科学技术的教学水平,缩小与国际先进水平的差距,加快培养一大批具有国际竞争力的高质量信息技术人才,起到积极的推动作用。同时我们也欢迎广大教师和专家们对我们的教材引进工作提出宝贵的意见和建议。联系方式: hep.cs@263.net。

出 版 册 目

To my Family—with much love and respect

My Parents—Alfred and Maud Murch

Michael and Jeanne Murch

Wendy and Michael Crowley

Trevor Murch

*who prepared me for managing the greatest and
most challenging project of all:*

—Life—

出 版 册 目

二〇〇二年

Preface

Project management leadership has become a highly sought-after skill. An increasingly competitive global marketplace demands that businesses get new products, services, and business development completed quickly, on time, and within budget.

From small companies to web-based businesses to giant global financial institutions, project managers are fueling much of the successful development of exciting new business enterprises. They do this by delivering projects that have consistent value and help increase profits.

Talented and knowledgeable project managers will command the best assignments, salaries, other compensation and bonuses. They are the future business leaders, entrepreneurs, and global citizens, proving their value to any organization competing in today's fast-paced marketplace.

Regardless of how much in demand they are, good project managers are not born, but rather created through a combination of experience, time, talent, and training. Although excellent organizational skills are a prerequisite for the project manager, other key attributes may not be naturally occurring and need to be developed. Unfortunately, most of this development time occurs on the job, so few individuals who are promoted to the role of project manager ever feel fully ready to take on the challenge offered to them.

When faced with a first project, many project managers are worried that they don't yet know what they should know. Historically, project

management, particularly in the Information Technology (IT) arena, has had a reputation for always being late and over budget. Even under the best of circumstances, project management is not easy; the project manager is continually faced with changing conditions, technology, resources, requirements, and schedules. Technology only serves to complicate matters further because today's computing environments tend to become obsolete with ever-increasing speed. Thus, a good project manager must not only be proficient at managing, but he or she must retain that proficiency as the technology changes. This light-speed adaptability is not an option, but rather an absolute requirement of the job. Clearly, the job of project manager is not for the faint-of-heart. Good preparation and knowledge about what the job entails is hugely valuable and key to surviving a first project.

The purpose of this book is to provide the new project manager with an accessible resource that presents the key topics and subject areas that he or she is likely to encounter. The book's broad coverage should be especially useful to a busy project manager who will not have time initially to research all of these topics in-depth but requires an immediate working knowledge of the overall functions and behaviors of an IT project. As the project manager becomes more comfortable with the basics, the book continues to be a valuable tool because it includes a wealth of additional resources such as books, papers, and web sites for additional learning as needed.

The hardest part of any project is knowing where to begin. It is hoped that this book will be a great jumping-off point to a successful career of well-managed endeavors for many a project manager.

► Who Should Read this Book

This book is intended for the novice project manager responsible for IT projects, regardless of size or complexity. Because of the broad nature of its coverage, it can be used as an introduction to key topics on the entire project lifecycle for someone previously unfamiliar with the nature of IT projects. For moderately experienced individuals, it can become a convenient reference manual to help reinforce the basic understanding of IT project management. Additionally, the sections on specialized topics will be useful to project managers seeking to increase

their learning and to grow their experience base into niche areas such as Knowledge Management or Risk and Crisis Management.

► Organization of this Book

This book is organized into five parts that broadly categorize the information contained in it. These parts and their subjects are:

Part One: Introduction to Project Management provides a brief overview of this book and some historical background on Project Management and its overall evolution.

Part Two: Principles of Project Management covers ground-floor information such as basic skills, elements of project planning and reporting, and the makeup and issues surrounding good project teams.

Part Three: The Project Management Lifecycle categorizes the project by phase, explains each phase's purpose and describes in finer detail the activities, deliverables, and resources for and intentions of each phase.

Part Four: Project Management Techniques provides information on a number of techniques and topics facing Project Managers today, such as the types and use of methodologies, managing risks and problems, and specializations such as Software Quality Assurance, Configuration Management, and Crisis Management.

Part Five: Special Topics in Project Management concludes the main portion of this book with some discussion of hot topics such as Knowledge Management and the impact of the Internet on Project Management.

Finally, there are numerous additional sources of information available to the Project Manager included in several Appendices.

Contents

Preface

- ▶ Who Should Read this Book
- ▶ Organization of this Book

Part 1

Introduction to Project Management

Chapter 1

Evolution of Project Management

- ▶ Introduction
- ▶ Industrial Revolution
- ▶ Key People in Early Project Management
- ▶ Other Significant Events

Part 2 **Principles of Project Management**

11

Chapter 2

Basic Skills for Project Managers' 13

▶ Introduction	13
▶ What Does a Project Manager Do?	14
▶ Necessary Skills	14
<i>Personal Skills</i>	15
<i>Technical Skills</i>	16
<i>Management Skills</i>	17
<i>Coping Skills</i>	18
▶ Manage One Project—or Many?	18
▶ Project Management Skills Development	19
▶ Keys to a Successful Skills Management Endeavor	25
▶ Conclusions	25

Chapter 3

Project Planning and Reporting 27

▶ Introduction	27
▶ Project Planning Deliverables	28
▶ Project Standards	29
▶ How Much Detail?	31

▶ Project Status —An Example	32
▶ Customer Satisfaction/Follow-On Potential	41
▶ Conclusions	41

Chapter 4

Project Teams	43
▶ Shortages in Information Technology Staff	43
▶ Need for Retention	44
▶ The Cost of Information Technology Staff Replacement— An Analysis	47
▶ Retention—Meeting Needs	48
▶ Conclusions	52

Part 3

The Project Management Lifecycle	55
----------------------------------	----

Chapter 5

▶ Project Lifecycle Overview	57
▶ Introduction	57
Purpose	57
Background	58
Goals	58
Overview	59
▶ Lifecycle Process Management	60
Stakeholders	60
Audience	62
Roles and Responsibilities	62

Revision Process	62
New Releases	63
Communication	63
▶ Section Layout and Structure	63
▶ Phase Checklists	64
▶ CRUD—Deliverables Matrix	66
<hr/>	
Chapter 6	
Project Planning Phase	69
▶ Purpose	70
▶ Objectives	70
▶ Activities	71
<i>Initiate Project and Organize</i>	71
<i>Project Definition and Planning</i>	71
<i>Management Review and Approval</i>	74
▶ Roles	74
▶ Inputs	75
<i>Information Plan</i>	75
▶ Outputs	75
<i>Business Case</i>	75
<i>Conceptual Design</i>	75
<i>Project Plan</i>	76
▶ Milestones	76
<i>Project Plan Sign-Off</i>	76
Tools	76

Chapter 7

Analysis and Design Phases

► Analysis Phase	79
► Purpose	80
► Objectives	80
► Activities	80
<i>End User Requirements</i>	80
► Roles	84
► Inputs	85
<i>Conceptual Design</i>	85
<i>Current System Description</i>	86
<i>Enterprise Model</i>	86
<i>Information Plan</i>	86
► Outputs	86
<i>Business Process Prototype</i>	86
<i>Requirements Specification</i>	86
<i>Quality Requirements</i>	87
► Milestones	87
<i>Architecture Analysis Assessment Complete (Optional)</i>	87
<i>Requirements Sign-Off</i>	87
► Tools	88
► Design Phase	88
<i>Purpose</i>	88
<i>Objectives</i>	89
<i>Activities</i>	89
<i>Quality Verification and Validation (QV&V)</i>	92
► Roles	93
► Inputs	93

Corporate Standards	93
Business Process Prototype	94
Requirements Specification	94
► Outputs	94
Design Document	94
► Milestones	96
Architecture Design Assessment Complete	96
Design Sign-Off	96
Lifecycle Assessment Complete	96
► Tools	96

Chapter 8

Construction Phase

► Purpose	99
► Objectives	99
► Activities	100
Detailed Design	100
Programming	102
► Roles	103
► Inputs	104
Design Document	104
► Outputs	104
Code	104
Programming Work Units	104
Test Database	104
Unit/String Test Results	105
► Milestones	105
Code Review Complete	105
String Test Sign-Off	105

► Tools

Chapter 9

Test Planning and Preparation

► Purpose	107
► Objectives	108
► Activities	108
<i>Design Testing Approach</i>	108
<i>Plan Test</i>	110
<i>Create Test Model</i>	110
► Roles	110
► Inputs	111
<i>The Corporation IT Standards Environment</i>	111
<i>Conversion Plan</i>	111
<i>Data Conversion Processes</i>	111
<i>Design Document</i>	111
<i>Requirements Specification</i>	111
► Outputs	112
<i>Automated and Manual Test Procedures</i>	112
<i>Test Model</i>	112
<i>Test Plan</i>	112
► Milestones	112
<i>Test Plan Sign-Off</i>	112
► Testing Phase	113
<i>Purpose</i>	113
<i>Objectives</i>	113
<i>Activities</i>	114
<i>Roles</i>	115
<i>Inputs</i>	115
<i>Outputs</i>	116

Milestones	116
► Tools	117
► Preparation Phase	118
Purpose	118
Objectives	118
Activities	119
Roles	120
Inputs	121
Outputs	121
Milestones	122

Chapter 10

Roll-out Planning and Implementation Phase 125

► Purpose	126
► Objectives	126
► Activities	126
Design Data Conversion Processes	126
Complete Rollout and Conversion Plans	127
Develop Conversion Procedures	127
Prepare Site	127
Create Conversion Files	128
► Roles	128
► Inputs	128
Design Document	128
Current System Descriptions	129
► Outputs	129
Conversion Plan	129
Converted Data	129
Data Conversion Processes	129
Rollout Plan	129

► Milestones	130
<i>Conversion Readiness Sign-Off</i>	130
► Rollout	130
<i>Purpose</i>	130
<i>Objectives</i>	131
<i>Activities</i>	131
<i>Roles</i>	132
<i>Inputs</i>	132
<i>Outputs</i>	133
<i>Milestones</i>	134

Part 4

Project Management Techniques

135

Chapter 11

Project Management Methodologies

137

► Introduction	137
► What Is a Methodology, and Why Use One?	139
► Methodology Structures	139
► Why Use a Methodology?	140
► Author's Prediction	142
► What Are the Products?	143
► A Case in Point	143
► Conclusions	145
► Suggested Readings	146