

Contents

List of figures and tables	xiii
Guided tour	xviii
Preface	xx
Foreword	xxi
Acknowledgements	xxii
Publisher's acknowledgements	xxiii

Making sense of the project context **1**

1 Introduction **2**

Introduction	3
1.1 Basic definitions	4
1.2 Importance of successful project management to an organisation and to you	9
1.3 Project management past and present	12
Summary	17
Key terms	18
Project management in practice: <i>Three project managers with distinctly different roles</i>	18
Topics for discussion	20
Further information	21
References	22

2 Structures and frameworks **23**

Introduction	24
2.1 Describing the project context: high-level frameworks	25
2.2 Describing the project process: activity models	29
2.3 Describing the project management challenge: managerial complexity	37
Summary	39
Key terms	40
Relevant areas of the Bodies of Knowledge	40
Project management in practice: <i>The rescue of the Baghdad Zoo</i>	42
Project management in practice: <i>Using the 7-S approach in the review of a real project</i>	43
Topics for discussion	47
Further information	47
References	48

3 Projects and organisations	49
Introduction	50
3.1 Organisational strategy and projects	51
3.2 Portfolios and programmes	56
3.3 Project roles and governance	62
Summary	65
Key terms	66
Relevant areas of the Bodies of Knowledge	66
Project management in practice: <i>The Airbus A380 development</i>	67
Project management in practice: <i>Selecting a personal project</i>	69
Topics for discussion	70
Further information	71
References	71

Managing the project process: the 4-D model

D1: Define it

73

4 Stakeholders, strategy and success	74
Introduction	75
4.1 Stakeholders: success and failure	76
4.2 Managing strategic choices	84
4.3 Benefits analysis, value and justification	87
Summary	89
Key terms	90
Relevant areas of the Bodies of Knowledge	90
Project management in practice: <i>Managing stakeholders at European transport infrastructure provider</i>	91
Project management in practice: <i>A new campus for the University of Rummidge</i>	92
Topics for discussion	94
Further information	94
References	95

5 Initial planning	96
Introduction	97
5.1 Models of planning	98
5.2 The planning process	102
5.3 Basic project landscapes: stages and gates, activities and stages, and maps	110
Summary	118
Key terms	118
Relevant areas of the Bodies of Knowledge	118
Project management in practice: <i>CADMID in military procurement projects</i>	120
Project management in practice: <i>The Mini project – the brief and the PID</i>	121
Topics for discussion	127

Further information	127
References	127

Managing the project process: the 4-D model

D2: Design it

129

6 Time planning

130

Introduction	131
6.1 Deconstruction of a project	132
6.2 Constructing a time plan	135
6.3 Using Gantt Charts	143
Summary	147
Key terms	148
Relevant areas of the Bodies of Knowledge	148
Project management in practice: <i>The Balti Experience</i>	149
Project management in practice: <i>The mobile phone development</i>	151
Topics for discussion	151
Further information	152
Reference	153

7 Rethinking time planning: the critical chain approach

154

Introduction	155
7.1 Limitations of current approaches to project planning	156
7.2 Managing by constraints in projects	161
7.3 Using the critical chain approach	165
Summary	168
Key terms	169
Project management in practice: <i>Balfour Beatty introduce critical chain project management</i>	169
Topics for discussion	171
Further information	172
References	172

8 Cost and benefit planning

174

Introduction	175
8.1 Basics of a cost planning process	176
8.2 Business case development	184
8.3 Challenges for the perceived wisdom	191
Summary	193
Key terms	193
Relevant areas of the Bodies of Knowledge	194
Project management in practice: <i>Justify IT!</i>	194
Topics for discussion	195
Further information	196
References	196
Appendix: Present value of £1	197

9 Stakeholders and quality	199
Introduction	200
9.1 The concept of quality and quality management	201
9.2 Quality performance and conformance	205
9.3 Towards quality improvement	210
Summary	212
Key terms	213
Relevant areas of the Bodies of Knowledge	213
Project management in practice: <i>Adopting a standard for project planning – useful discipline or unnecessary constraint?</i>	214
Topics for discussion	215
Further information	215
References	216
 10 Risk and opportunities management	 217
Introduction	218
10.1 The nature of risk and risk management	219
10.2 Qualitative and quantitative approaches	223
10.3 Opportunities management	231
Summary	232
Key terms	232
Relevant areas of the Bodies of Knowledge	232
Project management in practice: <i>It's a risky business</i>	234
Topics for discussion	235
Further information	236
References	237
Appendix: PERT factor tables	238
 Managing the project process: the 4-D model	
D3: Do it	241
 11 Project organisation: structures and teams	 242
Introduction	243
11.1 Teams	244
11.2 Structures	250
11.3 Managing people	255
Summary	259
Key terms	260
Relevant areas of the Bodies of Knowledge	260
Project management in practice: <i>Matrix management at Cardiff Bay Development Corporation</i>	261
Project management in practice: <i>Semco</i>	262
Topics for discussion	263
Further information	264
References	264

12 Management and leadership in projects	265
Introduction	266
12.1 Leading and managing	267
12.2 Style and culture	279
12.3 Management fads and fashions	281
Summary	283
Key terms	284
Relevant areas of the Bodies of Knowledge	284
Project management in practice: <i>Doesn't time fly?</i>	285
Topics for discussion	286
Further information	287
References	287
13 Control	289
Introduction	290
13.1 The concept of control	291
13.2 Techniques of control	296
13.3 Limits of control	306
Summary	307
Key terms	308
Relevant areas of the Bodies of Knowledge	308
Project management in practice: <i>The Lifter project</i>	309
Topics for discussion	311
Further information	312
References	312
14 Supply chain issues	313
Introduction	314
14.1 The supply chain	315
14.2 Purchasing and contracts	317
14.3 Modern approaches to supply chain management	324
Summary	327
Key terms	328
Relevant areas of the Bodies of Knowledge	328
Project management in practice: <i>Heathrow Terminal 5</i>	329
Topics for discussion	334
Further information	334
References	335
15 Problem-solving and decision-making	336
Introduction	337
15.1 Structuring problems	338
15.2 Problem analysis	343
15.3 Decision support	348
Summary	352
Key terms	353
Relevant areas of the Bodies of Knowledge	353

Project management in practice: <i>The use of cause–effect–cause analysis</i>	353
Topics for discussion	356
Further information	357
References	357

Managing the project process: the 4-D model

D4: Develop it

359

16 Project completion and review

360

Introduction	361
16.1 Completion and handover	362
16.2 Reviews and learning	367
16.3 Justifying it	373
Summary	375
Key terms	375
Relevant areas of the Bodies of Knowledge	375
Project management in practice: <i>IT all goes pear-shaped at VCS</i>	376
Topics for discussion	382
Further information	382
References	383

17 Improving project performance

384

Introduction	385
17.1 Maturity	386
17.2 Lean and agile	391
17.3 Securing improvement	395
Summary	397
Key terms	397
Project management in practice: <i>New product development at Toyota</i> <i>Forklift Trucks – the X300 project</i>	398
Topics for discussion	405
Further information	405
References	406

Index	407
-------	-----