

Contents

Foreword: Can Knowledge Management Survive? xiii
Jay Liebowitz

1 Introduction to Knowledge Management 1

Learning Objectives 1

Introduction 2

What Is Knowledge Management? 5

Multidisciplinary Nature of KM 8

The Two Major Types of Knowledge: Tacit and Explicit 9

Concept Analysis Technique 11

History of Knowledge Management 15

From Physical Assets to Knowledge Assets 19

Organizational Perspectives on Knowledge Management 21

Library and Information Science (LIS) Perspectives on KM 22

Why Is KM Important Today? 22

KM for Individuals, Communities, and Organizations 25

Key Points 26

Discussion Points 27

References 27

2 The Knowledge Management Cycle 31

Learning Objectives 31

Introduction 32

Major Approaches to the KM Cycle 33

The Meyer and Zack KM Cycle 33

The Bukowitz and Williams KM Cycle 38

The McElroy KM Cycle 42

The Wiig KM Cycle 45

An Integrated KM Cycle 51

Strategic Implications of the KM Cycle 54

Practical Considerations for Managing Knowledge 57

Key Points 57

Discussion Points 57

References 58

3 Knowledge Management Models 59

Learning Objectives 59

Introduction 59

Major Theoretical KM Models 62

The Von Krogh and Roos Model of Organizational Epistemology 62

The Nonaka and Takeuchi Knowledge Spiral Model 64

The Choo Sense-Making KM Model 73

The Wiig Model for Building and Using Knowledge 76

The Boisot I-Space KM Model 82

Complex Adaptive System Models of KM 85

The European Foundation for Quality Management (EFQM) KM Model 89

The inukshuk KM Model 90

Strategic Implications of KM Models 92

Practical Implications of KM Models 92

Key Points 93

Discussion Points 93

References 95

4 Knowledge Capture and Codification 97

Learning Objectives 97

Introduction 98

Tacit Knowledge Capture 101

Tacit Knowledge Capture at the Individual and Group Levels 102

Tacit Knowledge Capture at the Organizational Level 118

Explicit Knowledge Codification 121

Cognitive Maps 121

Decision Trees 123

Knowledge Taxonomies 124

The Relationships among Knowledge Management, Competitive Intelligence, Business Intelligence, and Strategic Intelligence 131

Strategic Implications of Knowledge Capture and Codification 133

Practical Implications of Knowledge Capture and Codification 134

Key Points 135

Discussion Points 135

References 136

5 Knowledge Sharing and Communities of Practice 141

Learning Objectives	141
Introduction	142
The Social Nature of Knowledge	147
Sociograms and Social Network Analysis	149
Community Yellow Pages	152
Knowledge-Sharing Communities	154
Types of Communities	158
Roles and Responsibilities in CoPs	160
Knowledge Sharing in Virtual CoPs	163
Obstacles to Knowledge Sharing	168
The Undernet	169
Organizational Learning and Social Capital	170
Measuring the Value of Social Capital	171
Strategic Implications of Knowledge Sharing	173
Practical Implications of Knowledge Sharing	175
Key Points	175
Discussion Points	176
References	177

6 Knowledge Application 183

Learning Objectives	183
Introduction	184
Knowledge Application at the Individual Level	187
Characteristics of Individual Knowledge Workers	187
Bloom's Taxonomy of Learning Objectives	191
Task Analysis and Modeling	200
Knowledge Application at the Group and Organizational Levels	207
Knowledge Reuse	211
Knowledge Repositories	213
E-Learning and Knowledge Management Application	214
Strategic Implications of Knowledge Application	216
Practical Implications of Knowledge Application	217
Key Points	218
Discussion Points	218
Note	219
References	219

7 The Role of Organizational Culture	223
Learning Objectives	223
Introduction	224
Different Types of Cultures	227
Organizational Culture Analysis	229
Culture at the Foundation of KM	232
The Effects of Culture on Individuals	235
Organizational Maturity Models	238
KM Maturity Models	239
CoP Maturity Models	244
Transformation to a Knowledge-Sharing Culture	246
Impact of a Merger on Culture	256
Impact of Virtualization on Culture	258
Strategic Implications of Organizational Culture	258
Practical Implications of Organizational Culture	259
Key Points	262
Discussion Points	262
References	263
8 Knowledge Management Tools	267
Learning Objectives	267
Introduction	268
Knowledge Capture and Creation Tools	270
Content Creation Tools	270
Data Mining and Knowledge Discovery	271
Blogs	274
Mashups	275
Content Management Tools	276
Folksonomies and Social Tagging/Bookmarking	277
Personal Knowledge Management (PKM)	279
Knowledge Sharing and Dissemination Tools	280
Groupware and Collaboration Tools	281
Wikis	285
Social Networking, Web 2.0, and KM 2.0	288
Networking Technologies	292
Knowledge Acquisition and Application Tools	297
Intelligent Filtering Tools	298
Adaptive Technologies	302
Strategic Implications of KM Tools and Techniques	303
Practical Implications of KM Tools and Techniques	304

Key Points 304

Discussion Points 305

References 306

9 Knowledge Management Strategy 311

Learning Objectives 311

Introduction 311

Developing a Knowledge Management Strategy 316

Knowledge Audit 318

Gap Analysis 322

The KM Strategy Road Map 325

Balancing Innovation and Organizational Structure 328

Types of Knowledge Assets Produced 333

Key Points 336

Discussion Points 337

References 338

10 The Value of Knowledge Management 339

Learning Objectives 339

Introduction 339

KM Return on Investment (ROI) and Metrics 343

The Benchmarking Method 345

The Balanced Scorecard Method 351

The House of Quality Method 354

The Results-Based Assessment Framework 356

Measuring the Success of Communities of Practice 359

Key Points 360

Discussion Points 362

References 362

Additional Resources 364

11 Organizational Learning and Organizational Memory 365

Learning Objectives 365

Introduction 365

How Do Organizations Learn and Remember? 368

Frameworks to Assess Organizational Learning and Organizational Memory 369

The Management of Organizational Memory 370

Organizational Learning 377

The Lessons Learned Process 378

Organizational Learning and Organizational Memory Models 379

A Three-Tiered Approach to Knowledge Continuity	385
Key Points	390
Discussion Points	391
References	392
12 The KM Team	397
Learning Objectives	397
Introduction	398
Major Categories of KM Roles	402
Senior Management Roles	403
KM Roles and Responsibilities within Organizations	410
The KM Profession	412
The Ethics of KM	413
Key Points	419
Discussion Points	420
Note	421
References	421
13 Future Challenges for KM	423
Learning Objectives	423
Introduction	424
Political Issues Regarding Internet Search Engines	425
The Politics of Organizational Context and Culture	427
Shift to Knowledge-Based Assets	429
Intellectual Property Issues	433
How to Provide Incentives for Knowledge Sharing	435
Future Challenges for KM	440
KM Research	442
A Postmodern KM	446
Concluding Thought	447
Key Points	448
Discussion Points	449
References	450
14 KM Resources	453
The Classics	453
KM for Specific Disciplines	454
International KM	455
KM Journals	455
Key Conferences	456

Key Web Sites	457
KM Glossaries	457
KM Case Studies and Examples	458
KM Case Studies	458
KM Examples	459
KM Wikis	459
KM Blogs	459
Visual Resources	460
YouTube	460
Other Visual Resources	460
Some Useful Tools	460
Other Visual Mapping Tools	460
Note	460
Glossary	461
Index	477