

# Contents

	<i>Preface for the Second Edition</i>	<i>V</i>
	<i>Preface for the First Edition</i>	<i>VII</i>
<b>PART A</b>	<i>Introduction</i>	<i>1</i>
1	<b>Motivation</b>	1
2	<b>Goals</b>	8
3	<b>Procedure, Methods and Overview</b>	10
<b>PART B</b>	<i>Concepts and Theories</i>	<i>17</i>
4	<b>Foundation of Knowledge Management Systems</b>	19
4.1	<b>Knowledge management</b>	19
4.1.1	From organizational learning to knowledge management	20
4.1.2	From management of data to management of knowledge	37
4.1.3	From traditional work to knowledge work	44
4.1.4	Definition	49
4.1.5	Critique to knowledge management	55
4.2	<b>Knowledge</b>	57
4.2.1	History and related concepts	57
4.2.2	Types and classes of knowledge	63
4.2.3	Consequences for knowledge management (systems)	67

	4.2.4	Definition	73
4.3		Knowledge management systems	79
	4.3.1	Overview and related concepts	79
	4.3.2	Definition	82
4.4		Résumé	85
<b>5</b>		<b>Strategy</b>	<b>87</b>
	5.1	Strategy and knowledge management	87
		5.1.1 From market-based view to knowledge-based view	88
		5.1.2 Knowledge (management) strategy	98
		5.1.3 Process-oriented knowledge management strategy	102
	5.2	Goals and strategies	108
		5.2.1 Strategic goals	108
		5.2.2 Strategic options	114
		5.2.3 Generic knowledge management strategies	123
	5.3	Success factors and barriers	126
	5.4	Résumé	130
<b>6</b>		<b>Organization</b>	<b>133</b>
	6.1	Structural organization	138
		6.1.1 Separate knowledge management unit	140
		6.1.2 Knowledge management roles	142
		6.1.3 Groups, teams and communities	157
	6.2	Process organization	175
		6.2.1 Knowledge management tasks	175
		6.2.2 Knowledge management processes	179
		6.2.3 Example: Process-oriented KM	184
	6.3	Organizational culture	189
		6.3.1 Definition	189
		6.3.2 Willingness to share knowledge	190
	6.4	Other interventions	197
	6.5	Modeling	199
		6.5.1 Process modeling	201
		6.5.2 Activity modeling	210
		6.5.3 Knowledge modeling	214
		6.5.4 Person modeling	220
	6.6	Résumé	228
<b>7</b>		<b>Contents and Systems</b>	<b>231</b>
	7.1	Technological roots	231
	7.2	Contents	239
		7.2.1 Types of contents	240
		7.2.2 Size and media used	244
		7.2.3 Structuring of contents	246
		7.2.4 Quality of contents	247

7.3	Centralized architecture	250
7.3.1	Integrating architectures for centralized KMS	250
7.3.2	Infrastructure and integration services	260
7.3.3	Discovery services	261
7.3.4	Publication services	264
7.3.5	Collaboration services	266
7.3.6	Learning services	270
7.3.7	Personalization services	271
7.3.8	Access services	273
7.3.9	Example: OpenText Livelink	274
7.4	Distributed architecture	278
7.4.1	Peer-to-peer metaphor	278
7.4.2	Peer-to-peer knowledge management systems	280
7.4.3	Example: Infotop	286
7.5	Classification	298
7.5.1	Related work	299
7.5.2	Classes	306
7.6	Résumé	310
<b>8</b>	<b>Economics</b>	<b>316</b>
8.1	Expenses and funding	318
8.1.1	Expenses for knowledge management	318
8.1.2	Expenses for knowledge management staff	320
8.1.3	Funding	320
8.2	Benefits of knowledge management initiatives	320
8.2.1	Intellectual capital approach	321
8.2.2	Measuring knowledge transformations	322
8.3	Information systems success	323
8.3.1	A multi-faceted construct	324
8.3.2	The DeLone/McLean model	326
8.3.3	Critique and extensions	328
8.4	Success of knowledge management systems	331
8.4.1	System quality	334
8.4.2	Information, communication and knowledge quality	335
8.4.3	Knowledge-specific services	337
8.4.4	System use	338
8.4.5	User satisfaction	340
8.4.6	Impact on individuals	342
8.4.7	Impact on collectives of people	344
8.4.8	Impact on the organization	347
8.5	Résumé	349
<b>9</b>	<b>Summary and Critical Reflection</b>	<b>355</b>

<b>PART C</b>	<b><i>State of Practice</i></b>	<b>359</b>
<b>10</b>	<b>Related Empirical Studies</b>	<b>361</b>
10.1	Surveys	361
10.1.1	APQC	361
10.1.2	ILOI	362
10.1.3	Delphi-Group	362
10.1.4	Ernst & Young	363
10.1.5	Journal of Knowledge Management	364
10.1.6	Fraunhofer Institute Stuttgart	365
10.1.7	KPMG United Kingdom	365
10.1.8	Fraunhofer Berlin	366
10.1.9	Journal Personalwirtschaft	367
10.1.10	Fachhochschule Cologne	367
10.1.11	KPMG Germany	368
10.2	Case studies	369
10.3	Résumé	370
<b>11</b>	<b>Research Design</b>	<b>372</b>
11.1	Goals and research model	372
11.2	Methods, procedure and sample	375
11.3	Hypotheses	377
11.4	Respondents and response rate	383
11.5	Résumé	387
<b>12</b>	<b>Strategy and Environment</b>	<b>390</b>
12.1	Organizational and business environment	390
12.1.1	Size of organizations	390
12.1.2	Organizational structure	392
12.1.3	Résumé	393
12.2	Strategy	393
12.2.1	Targeted goals	394
12.2.2	Achieved goals	397
12.2.3	Documentation and evaluation	399
12.2.4	Résumé	402
<b>13</b>	<b>Organization</b>	<b>404</b>
13.1	Organizational design	404
13.1.1	Scope	404
13.1.2	Structural organization	414
13.1.3	Knowledge management tasks and roles	420
13.1.4	Résumé	429
13.2	Organizational culture	433
13.2.1	Willingness to share knowledge	434
13.2.2	Turnover in employees	442
13.2.3	Résumé	444

<b>14</b>	<b>Contents and Systems</b>	<b>446</b>
14.1	Platforms and systems	446
14.1.1	Groupware platforms	447
14.1.2	Knowledge management systems	448
14.1.3	Résumé	452
14.2	Contents	454
14.2.1	Types of contents	454
14.2.2	Size and media used	462
14.2.3	Structuring of contents	466
14.2.4	Résumé	469
14.3	Functions	470
14.3.1	Integrative functions	472
14.3.2	Interactive functions	475
14.3.3	Bridging functions	477
14.3.4	Extension and intensity of KMS use	480
14.3.5	Résumé	484
<b>15</b>	<b>Economics</b>	<b>486</b>
15.1	Funding	486
15.1.1	Expenses	486
15.1.2	Type of funding	489
15.1.3	Résumé	490
15.2	Benefits	490
15.2.1	Support of business goals	490
15.2.2	Success factors and barriers	494
15.2.3	Usage of KMS and services	497
15.2.4	Correlations with goals	497
15.2.5	Résumé	501
<b>16</b>	<b>Summary and Critical Reflection</b>	<b>503</b>
 <b>PART D</b>		
	<i>Conclusion and Outlook</i>	<b>513</b>
<b>17</b>	<b>Scenarios</b>	<b>514</b>
17.1	Knowledge management starter	521
17.2	Centralized “market and hierarchy”	525
17.3	Decentralized “network and community”	530
17.4	Personal “idea and individual”	535
<b>18</b>	<b>Outlook</b>	<b>543</b>

<i>List of Figures</i>	551
<i>List of Tables</i>	555
<i>Bibliography and On-line Resources</i>	559
19 Literature	559
20 On-line Resources	620
21 Knowledge Management Tools and Systems	622
<i>Index</i>	629