

Contents

<i>Preface</i>	ix
Introductory Topics	1
1. Entering the Intelligence Era	5
1.1 Introduction	6
1.2 Some Major World Changes	7
1.3 Chaos and Complexity Theory	10
1.4 Some Properties of Complex Adaptive Systems	12
1.5 Managing Complex Adaptive Systems	15
1.6 Edge of Chaos: An Unexplored Goldmine	17
1.7 Conclusion	18
2. The New Paradigm	23
2.1 Introduction	24
2.2 The New Consciousness	25
2.3 The Fresh Mindset	27
2.4 The Intelligence Paradigm and Intelligence Management	28
2.5 Conclusion	30

3.	Fundamentals of Intelligent Organization Theory	35
3.1	Introduction	36
3.2	Intelligence and Intelligent Traits	36
3.3	Levels of Organizational Intelligence	41
3.4	Intelligence, Information and Language	43
3.5	Theory and Knowledge Structure	46
3.6	Inherent Intelligent Structure and the Basic Intelligence Strategy	48
3.7	Conclusion	53
4.	Intelligent Biotic and Complex Adaptive Structure of Human Organization	59
4.1	Introduction	60
4.2	Human Intelligence and Consciousness	61
4.3	Structuring Around Intelligence: The First Perspective	62
4.4	Intelligent Interacting Agents	65
4.5	Orgmind and Orgmindfulness	67
4.6	Intelligent Intangible Structure	69
4.7	Intelligent Physical Structure	71
4.8	Connectivity and Artificial Networks: Natural Nodes and Artificial Nodes	72
4.9	Summary of First Perspective	74
4.10	Structuring Around Intelligence: The Other Three Perspectives	76
4.11	Conclusion	78
	Specialized Topics	81
5.	The Human Thinking System	85
5.1	Introduction	86
5.2	The Information-Processing Perspective	87
5.3	Physical Symbol Subsystem	93
5.3.1	Basic human intelligence and the character set	93
5.3.2	Basic entity capturing and processing	95

5.4	The Cognitive Perspective	96
5.5	Advanced Human Intelligence	97
5.6	Internalization	98
5.7	Energy–Matter Subsystem	100
5.7.1	Basic entity–energy quantum interaction	100
5.7.2	Energy quantum–matter structure interaction: Internalization	101
5.7.3	Matter structure–energy quantum interaction: Externalization	102
5.7.4	Energy quantum–basic entity interaction	102
5.7.5	Matter–matter interaction	103
5.7.6	Wisdom creation	103
5.7.7	Energy–matter function space	104
5.8	Conclusion	105
6.	Basic Intelligence Evolutionary Dynamic and the Intelligent Person Model	111
6.1	Introduction	112
6.2	Complex Adaptive Features and Intelligence Dynamics	113
6.3	Intelligence Decoder	115
6.4	Management of Human Organizations	117
6.4.1	Organization theory	117
6.4.2	Economic entity transformation	119
6.4.3	New management and leadership perspective	124
6.5	Intelligent Human Organization	126
6.5.1	Local self-enrichment processes	126
6.5.2	Global forces	129
6.5.3	Basic intelligent system dynamic: Mindfulness and orgmindfulness	132
6.6	Intelligent Person Model: A Smarter Evolver and Emergent Strategist	134
6.7	Conclusion	139

7. Artificial Intelligent Information Systems	
Network	145
7.1 Introduction	146
7.2 Intelligent Structure and Artificial Information Systems	147
7.3 Internal Intelligent Information Systems	150
7.3.1 Types of intelligent systems	150
7.3.2 Complexity-based IIS	151
7.3.3 Artificial intelligence IIS	153
7.4 External IIS	157
7.5 Conclusion	159
8. Interdependency: The Integrated 3C-OK Framework and the Higher Level Intelligence Dynamic	163
8.1 Introduction	164
8.2 The 3C (Collective Intelligence, Connectivity and Culture) Dynamic	166
8.2.1 Consciousness, connectivity and collective intelligence	166
8.2.2 Mindful culture as the core of supportive culture	170
8.2.3 Quality corporate intelligence enhancer	172
8.3 The OK (Organizational Learning and Knowledge Management) Dynamic	174
8.3.1 Learning organization	174
8.3.2 Organizational learning, knowledge structure and mindful culture	175
8.3.3 Classification of knowledge	177
8.3.4 Quality knowledge structure and knowledge management process	178
8.4 The Highly Intelligent Integrated 3C-OK Dynamic	180
8.5 Conclusion	181

9. Paper Dialogue: An Effective Methodology for Nurturing Collective Intelligence	187
9.1 Introduction	188
9.2 Dialogue	189
9.3 Abilene Paradox	191
9.4 Paper Dialogue	193
9.4.1 Procedures and dynamic	195
9.4.2 Observations and feedbacks	197
9.5 Conclusion	200
Concluding Topics	203
10. Intelligence Leadership and Intelligence Management Theory	207
10.1 Introduction	208
10.2 Exploiting Biotic Structure and Intelligent Complex Adaptive Dynamic	211
10.3 The New Leadership and Management Mindset	213
10.3.1 Significant new strategic focal points	213
10.3.2 A deeper analysis of the new mindset	213
10.4 The Macroscopic Framework of the New Leadership Model	215
10.4.1 Deeper analysis of the local autopoietic phenomena and collective self-organizing dynamic	215
10.4.2 Highly intelligent complex adaptive systems, <i>iCAS</i>	218
10.4.3 The new macroscopic intelligence-centric leadership framework	220
10.5 Some Microscopic Dynamics of the Intelligent Leadership Strategy	224
10.5.1 Constructive human self-organization dynamic and <i>iCAD</i>	224
10.5.2 Latent leadership: Highly intelligent leaders and interacting agents	226

10.5.3 New leadership strategic factors	228
10.6 Conclusion	230
11. Towards a Higher Order of Existence	235
11.1 Introduction	236
11.2 A More Holistic Perception	239
11.2.1 Intelligence/mind perspective	240
11.2.2 Biotic structure perspective	241
11.2.3 Nonlinear complex adaptive perspective	242
11.2.4 Intelligence-associated strategic model/ plan perspective	243
11.3 The Individual Wisdom Paradigm	246
11.4 Conclusion	247
Additional/Supportive Information	249
Appendix 1: Introduction to Chaos	251
Appendix 2: Introduction to CAS and Complexity Theory	259
Appendix 3: Gaia, Human Beings and the Brain's Evolution	265
Appendix 4: Intelligence Management, Knowledge Management and Organizational Learning	275
Appendix 5: Basic Characteristics of Dialogue	283
Appendix 6: Some CAS Research Institutions	287
Appendix 7: One Hundred Prominent Complexity/ CAS Researchers/Contributors	291
<i>Glossary</i>	293
<i>Bibliography</i>	307
<i>Index</i>	319
<i>About the Author</i>	325