

Contents

Preface	V
1 Corporate Sustainability as a Challenge for Comprehensive Management.....	1
Human Factors, Business Excellence and Corporate Sustainability: Differing Perspectives, Joint Objectives	
<i>Klaus J. Zink, Ulrich Steimle, Klaus Fischer.....</i>	<i>3</i>
1 Sustainability as an Economic Principle	4
2 Sustainable Development and Corporate Sustainability.....	5
3 Satisfaction of Human Needs – Joint Objective though Differing Perspectives	9
4 Corporate Sustainability – Synergies and Challenges for Comprehensive Management	11
5 Conclusions	15
2 Comprehensive Management Concepts and Sustainable Excellence.....	19
Performance Excellence: Path to Integrated Management and Sustainable Success	
<i>Gopal K. Kanji.....</i>	<i>21</i>
1 Business Excellence	22
2 Systems Approach.....	24
3 Critical Success Factors Approach	25
4 Kanji’s Business Excellence Measurement System and Kanji’s Business Scorecard.....	26
5 Empirical Evidence in Healthcare	28
6 Methodology.....	30
7 Conclusion.....	34

Developing Sustainable Competitive Advantage through Operational Excellence and Adaptation Excellence with Value-Innovations

<i>Kostas N. Dervitsiotis</i>	37
1 Environmental Changes and Systemic Thinking.....	37
2 The Character of a Value-Innovation	38
3 The Development of Sustainable Competitive Advantage.....	39
4 Analyzing the Value-Innovation Process	42
5 The Process Steps for Knowledge Creation Leading to Value-Innovations	46
6 Assessment of Proposed Value-Innovations for the Exploration of Emerging Opportunities with Staged Investments	49
7 Key Metrics to Assess the Quality of the Value-Innovation Process	51
8 Leadership Aiming for a Balance Between Short- and Long-term Goals.....	52
9 Conclusions	53

Sustainable Improvement: Six Sigma – Lessons Learned after Five Years of Training and Consulting

<i>Xavier Tort-Martorell, Pere Grima, Lluís Marco</i>	57
1 Sustainable Improvement	57
2 UPC's Open Enrollment Course	59
3 Lessons Learned from Black Belt Training in Open Enrollment Courses	62
4 In Company Black Belt Training and Coaching	65
5 Two Questions Concerning the Survival of Six Sigma.....	71
6 Conclusions	73

A Strategy for Building Sustainable Innovation Excellence – A Danish Study

<i>Su Mi Dahlgaard-Park, Jens J. Dahlgaard</i>	77
1 Literature Study, Model Building and Simplification	78
2 A People Oriented Quality Strategy for Building Sustainable Organizational Excellence.....	80
3 Epistemology and Ontology behind the “4P” Model	83
4 Questionnaire Design and a Simple Approach for Measuring Innovation Excellence	87
5 Using the Simple Approach to Prioritize Improvement Areas.....	88
6 Discussion and Conclusions	90

The Impact of Cultural Issues and Interpersonal Behavior on Sustainable Excellence and Competitiveness: An Analysis of the Italian Context

Vittorio Cesarotti, Caterina Spada 95

- 1 Relevance of the Findings for Ergonomics Theory 95
- 2 Corporate Sustainability: Definitions and Models 96
- 3 A Management Model for Corporate Sustainability 98
- 4 From Corporate Sustainability to Sustainable Excellence..... 98
- 5 Sustainable Excellence and Cultural Issues..... 100
- 6 Sustainable Excellence and Cultural Issues: The Italian Case 102
- 7 Working on the Cultural Leverages..... 109
- 8 Conclusion..... 111

3 Human Factors in Organizational Design and Management – Creating Sustainability 115

Building Sustainable Human-Centered Systems: A Grand Challenge for the Human Factors and Ergonomics Discipline in the Conceptual Age

Waldemar Karwowski..... 117

- 1 Sustainability in the World of Technology, Science, and Engineering..... 117
- 2 Grand Challenges and Opportunities for Engineering..... 121
- 3 Grand Challenges and Opportunities for the Human Factors and Ergonomics Discipline in the 21st Century 122
- 4 Business and Social Sustainability: Constraints and Opportunities. 123
- 5 Building Sustainable Human-Centered Society 124
- 6 Conclusions 125

Achieving Sustainability through Macroergonomic Change Management and Participation

Andrew S. Imada..... 129

- 1 Sustainable Development 129
- 2 The Challenge to Sustainability..... 130
- 3 The Ergonomic Alternative 132
- 4 Conclusions 136

Continuous Technology Implementation and Sustainability of Sociotechnical Change: A Case Study of Advanced Intravenous Infusion Pump Technology Implementation in a Hospital

Pascale Carayon, Tosha B. Wetterneck, Ann Schoofs Hundt, Steve Rough, Mark Schroeder 139

1 Introduction 140

2 Background 141

3 Case Study 144

4 Discussion 146

5 Conclusion 148

The Influence of Project Duration and Focus on Involvement in Participatory Processes

Peter Vink 153

1 Introduction 153

2 Method 158

3 Results 160

4 Discussion 164

The Role of Ergonomics in Securing Sustainability in Developing Countries

Patricia Ann Scott 171

1 Potentials to Reverse the “Negative Spiral” 171

2 Basic Scenario in Industrially Developing Countries 172

3 Basic Requirements for Sustainable Change 175

4 Securing Sustainability 177

5 Conclusions 179

Participation as Precondition for Sustainable Success: Effective Workplace Improvement Procedures in Small-scale Sectors in Developing Countries

Kazutaka Kogi 183

1 Relevance of Participatory Workplace Improvement Procedures 183

2 Subject of Investigation 185

3 Results and Discussion 186

4 Conclusions 196

The Future of Work in a Sustainable Society	
<i>Colin G. Drury</i>	199
1 From World through Work to Ergonomics	199
2 Sustainability at the World Level	200
3 Growth, Limits and Perception at the World Level.....	202
4 Changes in the World of Work.....	205
5 Adapting to a Sustainable Reality: HFE Roles.....	208
4 Sustainability as Challenge for Human Factors and Integrated Management Systems	215
Social Responsibility, Strategic Management and Comprehensive Corporate Development: Old Roots, New Issues?	
<i>Philippe Hermel</i>	217
1 Numerous and Varied Concepts, but a Basis of Common Concerns: What Are We Faced with?	218
2 Old Roots: A Useful Journey Back to a Quarter of a Century Ago.221	
3 What Differs 25 Years Later?.....	223
4 Conclusion.....	227
Human Factors and Comprehensive Management Concepts: A Need for Integration Based on Corporate Sustainability	
<i>Klaus J. Zink</i>	231
1 Some History	231
2 Stakeholder-Oriented as a Common Frame?.....	235
3 Relationship between Total Quality Management and Human Factors in the Past.....	237
4 Integration in Concepts of Sustainability as a Common Challenge.240	
5 Conclusion.....	248
About the Authors.....	255

