Organizational Design: A Step-by-Step Approach

Fourth Edition

Now in its fourth edition, this is the definitive step-by-step “how to” guide to designing an organization. Building on information processing theory, the book proposes a holistic, multi-contingency model of the organization. This textbook communicates the fundamentals of traditional and new organizational forms, including up-to-date analysis of self-organizing, boss-less, digital, and sustainable organizations. Providing a framework for the practical implementation of organizational design changes, the authors break the process down into seven basic steps: (1) Assessing Goals, (2) Assessing Strategy, (3) Analyzing Structure, (4) Assessing Process and People, (5) Analyzing Coordination, Control and Incentives, (6) Designing the Architecture, and (7) Implementing the Architecture. Each step connects with one of the nine interdependent components of the multi-contingency model, and the authors also provide a logical query process for approaching each of these components. This is an ideal guide for managers or executives interested in assessing their organization and taking steps to redesign it for success, as well as for MBA and executive MBA students looking for an introduction to organizational design.

Richard M. Burton is Professor Emeritus of Organization and Strategy at The Fuqua School of Business, Duke University. Richard has published articles in journals including Organization Science, Management Science, Administrative Science Quarterly, and Strategic Management Journal, among others. He is the recipient of an honorary doctorate from Aarhus University, Denmark.

Børge Obel is a professor at the Interdisciplinary Center for Organizational Architecture, Department of Management, Business and Social Sciences, Aarhus University, Denmark, and The European Institute for Advanced Studies in Management (EIASM), Brussels. Børge has published numerous academic papers in journals including Strategic Management Journal, Organization Science, ASQ, and Management Science.

Dorthe Dojbak Håkonsson is a professor at the Department of Management, Business and Social Sciences, Aarhus University, Denmark, where she also serves as Center Leader of ICOA (the Interdisciplinary Center for Organizational Architecture). She is Associate Editor of the Journal of Organization Design, and a member of the board of the Organizational Design Community. Dorthe has published articles in journals including Strategic Management Journal, California Management Review, and Long Range Planning, among others.
ORGANIZATIONAL DESIGN
A Step-by-Step Approach
Fourth Edition

Richard M. Burton
Duke University, North Carolina

Børge Obel
Aarhus University, Denmark

Dorthe Døjbak Håkonsson
Aarhus University, Denmark
CONTENTS

List of Figures  x
List of Tables  xi
Preface to First Edition  xiii
Preface to Second Edition  xv
Preface to Third Edition  xvii
Preface to Fourth Edition  xix
An Outline of the Step-by-Step Approach  xxi

Step 1  Getting Started

1 Assessing the Scope and Goals of the Organization  3
   The Challenge of Designing  3
   The Multi-Contingency Model  8
   The Information-Processing View in the Digital World  10
   Fit and Misfits in the Model  13
   Select an Organization for Analysis  15
   Assess the Scope of the Organization  16
   Assess the Organization’s Goals: Efficiency and Effectiveness  17
   The Four Prototype Designs  18
   Misfits and Balancing Competing Design Dimensions  21
   Diagnostic Questions  23
   Summary  25
   Glossary  25

Step 2  Assessing the Strategy

2 Strategy  29
   Introduction  29
   Reactor  31
   Defender  32
   Prospector  34
   Analyzer without Innovation  36
   Analyzer with Innovation  37
   Digital Business Strategy  39
   Fit and Misfits  40
   Diagnostic Questions  41
   Summary  43
   Glossary  43

3 Environment  45
   Introduction  45
   Organizational Boundary and Digital Ecosystems  47
   Environmental Uncertainty and Complexity  48
   Calm Environment  53
   Varied Environment  54
Contents

Fragmented 124
Knotty 125
Fit and Misfits 126
Diagnostic Questions 129
Summary 130
Glossary 130

7 Leadership and Organizational Climate 132
Introduction 132
Leadership Style 132
Maestro 134
Manager 135
Leader 136
Producer 137
Organizational Climate 138
Group 140
Internal Process 141
Developmental 143
Rational Goal 143
Fit and Misfits 144
Diagnostic Questions 146
Summary 150
Glossary 150

Step 5 Analyzing Coordination, Control, and Incentives

8 Coordination and Control 155
Introduction 155
Coordination and Control Systems 156
Family 159
Machine 160
Market 161
Clan or Mosaic 161
Information and Knowledge Systems 163
Event-Driven 165
Data-Driven 166
Agent-Driven 167
Relationship-Driven 168
Fit and Misfits 170
Diagnostic Questions 173
Summary 175
Glossary 175

9 Incentives 178
Introduction 178
Personal Pay 183
Skill Pay 183
### Contents

- **Bonus-Based** 184
- **Profit-Sharing/Gain-Sharing** 186
- **Fit and Misfits** 187
- **Diagnostic Questions** 190
- **Summary** 192
- **Glossary** 192

#### 10 Designing the Structure and Coordination 193
- **Introduction** 193
- **The Traditional Designs – When Do They Work?** 194
  - When to Choose a Simple Configuration 195
  - When to Choose a Functional Configuration 196
  - When to Choose a Divisional Configuration 197
  - When to Choose a Matrix Configuration 199
- **Transformation from the Traditional to the New** 200
- **Self-Organization and Boss-Less Organizations – When Do They Work?** 201
- **Hybrid Organizational Forms** 202
  - **Ambidextrous Organizations** 203
- **New Properties of Organizations** 204
  - **The Agile Organization** 204
  - **The Sustainable Organization** 205
  - **The Digital Organization** 207
- **Summary** 208
- **Glossary** 209

#### Step 6 Designing the Architecture

#### 11 Designing the Architecture and the Sequence of Change 213
- **Introduction** 213
- **Setting the Stage for What to Do** 213
- **The Sequence of Changes** 215
- **Assessing the Content Costs** 217
- **Assessing the Process Costs** 218
- **What Are the Difficulties of Change?** 219
- **Determining the Sequence of Change** 220
- **Prototyping and Experimentation** 222
- **Managing Misfits over Time** 223
- **Anticipating the Future** 227
- **Dynamic Fit and Time** 228
- **The Organizational Life Cycle** 231
- **Summary** 232
- **Glossary** 232

#### Step 7 Implementing the Architecture

#### 12 Implementing the Change: Who Should Do What When? 237
- **Introduction** 237
- **Specifying and Implementing the Change Project** 238
Contents

What: Define the Tasks as Projects and Sub-Projects 240
Who: Allocate Tasks 242
When: Decide on Milestones and Deadlines 244
Follow Up on Deadlines 246
Communication 247
Summary 247
Glossary 248

References 249
Index 259
## FIGURES

1.1 The multi-contingency model 9
1.2 The information-processing model 11
1.3 Component relations in the multi-contingency model 14
1.4 Interlocking the two-by-two component descriptions 15
1.5 The goal space 18
1.6 Making changes in the efficiency/effectiveness space 22
1.7 Locate your organization on the goal space 25
2.1 The strategy space 30
2.2 Locate your organization in the strategy space by rating the levels of exploration and exploitation 43
3.1 The environment space 52
3.2 Locate your organization in the environment space by rating the levels of complexity and unpredictability 60
4.1 The basic configurations of the firm 67
4.2 A simple configuration 68
4.3 A functional configuration 70
4.4 LEGO Group functional chart 2014 71
4.5 The LEGO Group Executive Leadership Team 72
4.6 The divisional configuration with product and information flows 75
4.7 A matrix configuration 78
4.8 Locate your firm in the configuration space 91
6.1 Task design space 120
6.2 Flow chart of tasks in an emergency department 121
6.3 Locate your firm in the task design space 130
7.1 The leadership style space 134
7.2 Categorization of organizational climate 140
7.3 Locate your unit of analysis's leadership style 147
7.4 Locate your firm in the organizational climate space 149
8.1 Coordination and control space 159
8.2 Locate your organization in the coordination and control space 174
9.1 The incentive system design space 182
9.2 Locate your organization in the incentive scheme design space 190
10.1 The complete set of component types within the $2 \times 2$ organizational architectural space 194
11.1 The organizational design drill-down model 214
11.2 The misfit possibilities curve 216
11.3 The difficulty of change 219
11.4 Determining the sequence of changes 221
TABLES

2.1 Fit between organizational goals and strategy 40
3.1 Fit among organizational environment, strategy, and organizational goals 58
3.2 Complexity scores 59
4.1 Fit among configuration, environment, strategy, and goals 87
6.1 Fit and misfit for task design 127
7.1 Fit and misfit to include leadership style and organizational climate 145
8.1 Fit and misfit to include coordination, control, and information and knowledge systems 170
9.1 Fit and misfit table for incentive alignments 188
10.1 The four prototype configurations 195
11.1 My organization’s difficulty of change 220
11.2 Examples of internal, external, and combined sources of organizational design misfits 225
12.1 Drill down 1: leadership style 241
12.2 Drill down 2: preference for delegation 241
12.3 Drill down 3: job descriptions 241
12.4 Allocation of project responsibility 243
12.5 Spreadsheet to keep track of planned versus actual progress 245
12.6 Risk overview – drill-down 2 activities 246
PREFACE TO FIRST EDITION

In writing this book, we had specific readers in mind. We dedicate this book to our executive students at The Fuqua School of Business and at the Aarhus School of Business, Denmark. Executive students are very special professionals who come from around the world and bring their varied experience. They have a goal to acquire new knowledge to act and take decisions that will make a difference in their world. In particular, they want to improve the performance of their firm, unit, or organization. From our first detailed outline to the final editing from Cary, Durham, and Aarhus – whether in person, video conference, or elaborate email – they were ever with us.

Experience and science are two great teachers. Most of us spend most of our time in organizations at work, home, worship, and leisure. Over time, we amass a wealth of experience through observation and action to apply in the design of organizations; simply, we use our experience to design. But this experience is limited and we can enhance it by blending it with the science of organization design. The science of organization design is an accumulation of knowledge by many individuals who, over many years, have conducted research on the performance of organizations under many conditions. It informs us about how to take action to design an organization. The scientific foundation of this book comes from almost a century of research we call the multi-contingency approach of organizational design.

The executive wants to understand, diagnose, and take action. Experience and science are complementary and mutually supportive. In our classes we try to build upon our executive students’ varied experiences with the science of organization design to enhance their ability as executives to take informed decisions and actions. As leaders in their firms they want to know what is wrong, why it is wrong, and what can be done. In this book we approach their questions systematically. We begin with the goals of the organization; then we develop an understanding of the environment; examine the strategies; tease out the structure and the IT infrastructure; examine the leadership style; observe the climate; and scrutinize the incentives. Using our experience and the science of good design, we analyze what works well and what does not work well, or not at all. Good design fits together; poor design has misfits and the organizational performance suffers. Design is the diagnosis of misfits and the action to fix them. What is a good way to read and use this book? The book begins with organizational goals and builds up a comprehensive integrated model for a good organizational design. Skip around, examine the figures and tables, answer the diagnostic questions to get started. For whatever approach you find comfortable, you should pick an organization such as your own firm to use for analysis of, and reflection on, the concepts. Along the way, you should diagnose the organization and think about the actions you want to take to make your organization perform better.

Many have helped in a number of ways. There are our executive students who provided the motivation. Over the last two years, Dr. Katy Plowright, our editor at Cambridge, has been the patient yet demanding task master; she has been our anchor and our guide. Further, we have had the support of a number of editors at Cambridge; they have been most helpful. Dorthe Dojthak Håkonsson of the University of Southern Denmark and Min Li of the Fuqua School read the penultimate draft and made many...
improvements. Karin Søby of the Aarhus School of Business read and corrected the manuscript. Finally, we want to thank our friends and families, who have been there when we needed them most – all the moments between the blank screen and a book.

Richard M. Burton
Gerardine Desanctis
Børge Obel
August 12, 2005

On August 16, 2005, Gerry DeSanctis passed away. Gerry was charming, patient, supportive, and kind, as well as disciplined, determined, and strong willed. She had passion for her students and was a complete teacher. We were privileged to work with her in writing this book. She made us better, both in our work and our spirit. It was a wonderful opportunity and an experience that bonded our friendship.

Gerry had deep courage. She is our incredible colleague and beloved friend. In her parting words, “I’ll always be with you.”

Richard M. Burton
Børge Obel
September 10, 2005
PREFACE TO SECOND EDITION

Since the first edition in 2006, many things have changed. The world economic crisis, which is most evident in the financial sector, has changed our world from expected growth to more restrictions and more nuanced changes. Yet, the fundamentals of organizational design remain relevant – perhaps even more so. The step-by-step approach which focuses on the identification and fixing of misfits addresses today’s challenges; an information-processing view of organization captures the basic processes of organization; and a design is essential to good performance for the organization. In short, the basic ideas for a good design remain, even if some of the parameter values are modified.

Yet, we have made some significant changes in this second edition. We have: added a number of examples to illustrate the fundamentals and provide a timely context for the reader; introduced emotions as an underlying frame for leadership and climate; expanded the dynamic fit ideas and included time more explicitly; and deepened the examination of joint ventures, mergers, partnerships, and strategic alliances.

Paula Parish of Cambridge University Press has been a very supportive editor. Dorthe Døjbak Håkonsson, of the Aarhus School of Business, Aarhus University, has shared our joint research which is central to the changes in this edition.

And finally, thanks to the many individuals who used the first edition and inspired us to undertake this revision.

Richard M. Burton  
Børge Obel  
September 3, 2010
PREFACE TO THIRD EDITION

In this third edition, we are joined by our long-time friend and colleague: Associate Professor Dorthe Dejdbak Håkonsson, Aarhus University, Denmark. The three of us have done joint research on organizational design for more than two decades. Our joint journal articles and Dorthe’s related research bring new insights and ideas to this edition.

The book itself has a new feel, with the diamond model for thirteen contingencies of organizational design. It brings the $2 \times 2$ contingency fit models together into a holistic framework, further providing the basis for the implementation of organizational architecture.

The information-processing view of the organization and the multi-contingency model remain the basis. The step-by-step approach to design is still the core – now with two more steps representing the issues of going from a diagnosis to implementation. Further, there are many new developments which bring the book up to date: new organizational forms introducing agreements as a fundamental dimension, revised ideas for information and knowledge systems, revised discussion of the sequencing of misfit realignment, and the implementation of organizational change in Chapter 12. This project view for implementation is an information-processing approach for: what is to be done, who is to take action, and when. Further, the project approach to implementation provides a “drill-down” method for detailed implementation with milestones and deadlines. It brings organizational design in the front to the practice level for the firm.

So many people have made this book possible. Foremost, we thank our students. They have challenged us and made the book much better. Paula Parish of Cambridge University Press pushed and pulled with finesse. Morten Rasmussen made the new feel of the book possible with fashionable figures and tables. Tore Håkonsson, Senior Vice President at SOLAR, and Jesper Sørensen, Senior Manager at Shell, had insights on business change models that were most useful to our linking of our theory to a practical change implementation framework. We also thank members of the NOCA (Network of Corporate Academies) theme group on Organization Design and Development for the useful comments and discussion of an earlier version of this book. Karin Seby proofread the book.

Finally, we remember our friend and colleague: Professor Gerardine DeSanctis. Her scholarly work is still very visible in this edition. In the first edition, we wrote: “Gerry had deep courage. She is our incredible colleague and beloved friend. In her parting words, ‘I will always be with you.’”

Richard M. Burton
Børge Obel
Dorthe Dejdbak Håkonsson
October 1, 2014
PREFACE TO FOURTH EDITION

With a fourth edition, what is there to say? Happily, there is a great deal to say. First, the information-processing model of organizational design remains fundamental. The basic of who talks with whom about what and who makes which decisions is not only affirmed, but we have new capabilities to incorporate into the model. Previously, we thought of “whom” as an individual, but now we have agents who are human and intelligent robots applying artificial intelligence (AI) to implement and modify organizational rules. The change here is the pace of change in utilizing these intelligent robots in services such as banking, accounting, health care, and interpersonal communications. Of course, robots have been used in manufacturing, but the rapid expansion in services of who talks to whom and who makes which decisions is expanding. That is, agents – human and robots – are the information-processing building blocks of information work in organizations. We find digitalization of the organization everywhere.

Second, we are experimenting with new forms of organization which are built upon traditional forms and incorporate new mechanisms. To name a few: self-organizing teams and larger boss-less organizations without an explicit hierarchy; organizations which incorporate contract employees and activities within the organization; agile organizations which can adapt quickly to new situations; virtual organizations which challenge time zones and work processes; and ambidextrous organizations which must be efficient and effective at the same time. It is an exciting time for organization design with these experiments which give us new questions, new insights and a new expanded space of possibilities for what might be a good organization design. Where there is a tendency to view these new forms as quite different from traditional forms of organization, we see them as transformations and variations which fit well within the information-processing view of organization.

Whatever the form, the fundamental design challenge remains to take the big task of an organization and break it into smaller units, which must be coordinated to obtain a unified performance of the whole. The multi-contingency model with its nine components of design is a holistic approach to design traditional and new organizations with enhanced agent capabilities to process information in ways we could realize just in the recent past. The multi-contingency model now has nine components rather than thirteen. The four components which previously fit well in a $2 \times 2$ model are now found in all quadrants as properties. They are still in the model, but integrated into the nine components. This change follows the new technology developments in information processing which cut across all four quadrants at the same time and change some of the components themselves in our holistic approach.

In every edition, we have utilized case stories to illustrate concepts, ideas, and place the discussion in today’s world. Here, we augment those short cases with four comprehensive case studies: Libratone, LEGO, Haier, and Microsoft, which apply the multi-contingency model to diagnose these companies for fit and misfit. The information-processing model of organization is made fully evident and complete for these cases.

With each edition, our students and colleagues have challenged us and made the book better. Further, they made us better as scholars and we thank them. Valerie Appleby of Cambridge University Press has been a stalwart support who made the
intricacies of that organization work for us. Morten Rasmussen has added color to his artistic rendering of the figures, tables, headings, and icons. He has gone beyond shades of grey to a full mosaic. Executives at LEGO and other organizations have given their descriptions and insights which greatly enhance the book. Merete Elmann proof-read and edited a penultimate version for clarity. Birgitte Steffensen edited the references. This edition builds upon the three previous versions and everyone there helped us here as well. Again, we thank each one.

We especially want to remember our long-time colleague and friend Gerardine DeSanctis, who was instrumental in creating the first edition; her intellect and deep understanding continue to guide our thinking.

Richard M. Burton
Børge Obel
Dorthe Døjbak Håkonsson

October 1, 2019
AN OUTLINE OF THE STEP-BY-STEP APPROACH

STEP 1 Getting Started
1. Assessing the Scope and Goals of the Organization

STEP 2 Assessing the Strategy
2. Strategy
3. Environment

STEP 3 Analyzing the Structure
4. Traditional Configurations of the Firm
5. New Organizational Forms

STEP 4 Assessing Process and People
6. Work, Task Design, and Agents
7. Leadership and Organizational Climate

STEP 5 Analyzing Coordination, Control, and Incentives
8. Coordination and Control
9. Incentives
10. Designing the Structure and Coordination

STEP 6 Designing the Architecture
11. Designing the Architecture and the Sequence of Change

STEP 7 Implementing the Architecture
12. Implementing the Change: Who Should Do What When?