# Table of Contents

Preface .................................................................................................................................................. xi

**Chapter 1**  
Industrial Informatics: What We Know and What We Don’t Know.................................................. 1  
*Jonny Holmström, Umeå University, Sweden*  
*Mikael Wiberg, Umeå University, Sweden*  
*Andreas Lund, Umeå University, Sweden*

**Chapter 2**  
From Closed to Open: ICT as an Enabler for Creating Open Innovation Systems  
in Industrial Settings ............................................................................................................................... 5  
*Daniel Nylén, Umeå University, Sweden*

**Chapter 3**  
Industrial Informatics and the Ecology of Innovation: IS Innovation Processes................................... 20  
*Per Levén, Umeå University, Sweden*

**Chapter 4**  
Making IT Visible: The Paradox of Ubiquitous Services in Practice ..................................................... 30  
*Katrin Jonsson, Umeå University, Sweden*

**Chapter 5**  
Interactive Architecture as Digital Texturation: Transformed Public Spaces &  
New Material Integration ......................................................................................................................... 44  
*Mikael Wiberg, Umeå University, Sweden*

**Chapter 6**  
Not Stronger Than the Weakest Link: An Empirical Study of Coordination Work in an  
Industrial Context ................................................................................................................................. 58  
*Rikard Harr, Umeå University, Sweden*

**Chapter 7**  
The Crux of Integration: Exploring Infrastructure Evolution in the Process Industry ............................ 73  
*Lars Rönnbäck, Umeå University, Sweden*
Chapter 8
Coping with Complexity: Exploring Modularity and Flexibility in IT Infrastructure Adaptation
Johan Sandberg, Umeå University, Sweden

Chapter 9
Living on the Edge: Balancing Rigor and Relevance Within an Action Research Context
Nils-Petter Augustsson, Umeå University, Sweden
Jonny Holmström, Umeå University, Sweden

Chapter 10
Managing an Outsourcing Partnership: Important Stages in the Process
Ulrika H. Westergren, Umeå University, Sweden

Chapter 11
From Systems and Tools to Networks and Infrastructures - from Design to Cultivation:
Towards a Design Theory of Information Infrastructures
Ole Hanseth, University of Oslo, Norway

Chapter 12
Organizational Effects of Information Technology: Investigating Information Technology Use in the Context of Lean Manufacturing
Johan Tetzlaff, Umeå University, Sweden
Jonny Holmström, Umeå University, Sweden

Chapter 13
Technology, Agency, and Community: The Case of Modding in World of Warcraft
Bonnie Nardi, University of California, USA
Jannis Kallinikos, London School of Economics, UK

Chapter 14
Green IS: Steps Towards a Research Agenda
Jonny Holmström, Umeå University, Sweden
Lars Mathiassen, Georgia State University, USA
Johan Sandberg, Umeå University, Sweden
Henrik Wimelius, Umeå University, Sweden

Compilation of References

About the Contributors

Index