

# Contents

---

<b>Authors</b> .....	ix
<b>Contributors</b> .....	xi
<b>1</b> Introduction .....	1-1
<i>William J. O'Brien, Carlos T. Formoso, Kerry A. London, and Ruben Vrijhoef</i>	

## **SECTION I Production and Operations Analysis**

---

<b>2</b> Construction Supply Chain Modeling: Issues and Perspectives .....	2-1
<i>Marcelo Azambuja and William J. O'Brien</i>	
<b>3</b> Production Planning and Control and the Coordination of Project Supply Chains.....	3-1
<i>Carlos T. Formoso and Eduardo L. Isatto</i>	
<b>4</b> Supply Chain Management in Product Development.....	4-1
<i>Patricia Tzortzopoulos, Mike Kagioglou, Rachel Cooper, and Erica Dyson</i>	
<b>5</b> Collaboration and Communication in the Design Chain: A Value-Based Approach.....	5-1
<i>Stephen Emmitt and Anders Kirk Christoffersen</i>	
<b>6</b> Supply Chain Management for Lean Project Delivery.....	6-1
<i>Iris D. Tommelein, Glenn Ballard, and Philip Kaminsky</i>	
<b>7</b> Application of Integrated Materials Management Strategies .....	7-1
<i>Roberto J. Arbulú</i>	

8	Production System Instability and Subcontracted Labor .....	8-1
	<i>Rafael Sacks</i>	
9	Understanding Supply Chain Dynamics Via Simulation.....	9-1
	<i>Séverine Strohheckern (née Hong-Minh), Stephen M. Disney, and Mohamed M. Naim</i>	
	Commentary I.....	Commentary I-1
	<i>Glenn Ballard</i>	

## SECTION II Organizational Perspectives

---

10	Review of Organizational Approaches to the Construction Supply Chain .....	10-1
	<i>Ruben Vrijhoef and Kerry A. London</i>	
11	Construction Supply Chain and the Time Compression Paradigm.....	11-1
	<i>Denis R. Towill</i>	
12	Strategic Management of Construction Procurement .....	12-1
	<i>Andrew Cox</i>	
13	Industrial Organization Object-Oriented Project Model of the Facade Supply Chain Cluster .....	13-1
	<i>Kerry A. London</i>	
14	Innovation Management in the Construction Supply Chain.....	14-1
	<i>Bart A.G. Bossink and Ruben Vrijhoef</i>	
	Commentary II.....	Commentary II-1
	<i>Will Hughes</i>	

## SECTION III Information Technology

---

15	Overview of IT Applications in the Construction Supply Chain .....	15-1
	<i>Kalyanaraman Vaidyanathan</i>	
16	Field Technologies and Their Impact on Management of Supply Chains .....	16-1
	<i>Semiha Kiziltas, Burcu Akinci, Esin Ergen, Pingbo Tang, and Anu Pradhan</i>	

17 Benefits of Using E-Marketplace in Construction  
 Companies: A Case Study .....17-1  
*Luis F. Alarcón, Sergio Maturana, and Ignacio Schonherr*

18 Standards-Based Approaches to Interoperability in  
 Supply Chain Management: Overview and  
 Case Study Using the ISO 18629 PSL Standard ..... 18-1  
*A.F. Cutting-Decelle, R.I. Young, B.P. Das,  
 C.J. Anumba, and J. Stal-Le Cardinal*

19 Lean Enterprise Web-Based Information System for  
 Supply Chain Integration: Design and Prototyping ..... 19-1  
*Nashwan Dawood*

Commentary III ..... **Commentary III-1**  
*Richard H.F. Jackson*

**Author Index..... Author Index-1**

**Subject Index ..... Subject Index-1**