

Contents

Part I The Case for Transforming Service and Field Operations

1 IT Exploitation Through Business Transformation: Experiences and Implications	3
Neil F. Doherty and Crispin R. Coombs	
2 Transforming Field and Service Operations with Automation	15
Gilbert Owusu and Paul O’Brien	

Part II Methods, Models and Enabling Technologies for Transforming Service and Field Operations

3 Designing Effective Operations: Balancing Multiple Business Objectives Using Simulation Models	31
Stephen A. Cassidy and David C. Wynn	
4 System Dynamics Models of Field Force Operations	47
Kjeld Jensen, Michael Lyons, and Nicola Buckhurst	
5 Understanding the Risks of Forecasting	71
Jonathan Malpass	
6 Modern Analytics in Field and Service Operations	85
Martin Spott, Detlef Nauck, and Paul Taylor	
7 Enhancing Field Service Operations via Fuzzy Automation of Tactical Supply Plan	101
Sid Shakya, Summer Kassem, Ahmed Mohamed, Hani Hagra, and Gilbert Owusu	

Part III Case Studies

8	The Role of Search for Field Force Knowledge Management	117
	Dyaa Albakour, Géry Ducatel, and Udo Kruschwitz	
9	Application of AI Methods to Practical GPON FTTH Network Design and Planning	133
	Kin Fai (Danny) Poon, Anis Ouali, Andrej Chu, and Riaz Ahmad	
10	The Role of Service Quality in Transforming Operations	153
	Gilbert Owusu, Paul O’Brien, and Sid Shakya	
11	Field Force Management at <i>eircom</i>	167
	Feargal Timon and Attracta Brennan	
12	Understanding Team Dynamics with Agent-Based Simulation	183
	Thierry Mamer, John McCall, Siddhartha Shakya, Gilbert Owusu, and Olivier Regnier-Coudert	
13	Effective Engagement of Field Service Teams	199
	Tanya Alcock and Jonathan Malpass	
14	The Asset Replacement Problem State of the Art	213
	Amir H. Ansaripoor, Fernando S. Oliveira, and Anne Liret	

Part IV Challenges, Outcomes and Future Directions

15	Enabling Smart Logistics for Service Operations	237
	Yingli Wang, Mohamed Naim, and Leighton Evans	
16	Measuring and Managing the Benefits from IT Projects: A Review and Research Agenda	257
	Crispin R. Coombs, Neil F. Doherty, and Irina Neaga	
	Index	271

Transforming Field and Service Operations
Methodologies for Successful Technology-Driven
Business Transformation

Owusu, G.; O'Brien, P.; McCall, J.; Doherty, N. (Eds.)
2013, XIX, 277 p. 73 illus., 8 illus. in color., Hardcover
ISBN: 978-3-642-44969-7