Contents

Part I  Understanding the Costs and Benefits of RFID

1  The Business Value of RFID ............................ 3  
   Alp Ustundag

2  The Cost–Benefit Models for RFID Investments ............. 13  
   Serdar Baysan and Alp Ustundag

3  Risk Analysis for RFID Investments Under Uncertainty ...... 23  
   Emre Cevikcan and Alp Ustundag

4  Evaluating RFID Investments: A Real Options Approach ...... 35  
   Alp Ustundag and Seda Ugurlu

5  Decision Making for Determining the Implementation Level  
   of RFID Projects ............................................ 53  
   Emre Cevikcan and Alp Ustundag

6  RFID in Supply Chain: The Tagging Cost Sharing Approach ... 69  
   Alp Ustundag and Mehmet Serdar Kilinc

Part II  Justifying RFID Investments in Different Application Areas

7  RFID Adoption in Healthcare and ROI Analysis ............... 81  
   Nebil Buyurgan, Sylvain Landry and Richard Philippe

8  Economic Evaluation of RFID Investments  
   in Cargo Operations ............................................ 97  
   Alp Ustundag, Ozgur Kabadurmus and Mehmet Serdar Kilinc
9 Value of RFID Technology in Construction Supply Chains 111
  Gursans Guven, Gokhan Demiralp and Esin Ergen

10 Economic Potential of RFID Use in Apparel Retail Industry 129
  Alp Ustundag, Aylin Ustundag and Mert Bal

11 Value of RFID Enhanced Maintenance in Aerospace Industry 141
  Sule Itir Satoglu and Alp Ustundag

12 Value of RFID in Library Management System 155
  Sule Itir Satoglu, Alp Ustundag and Mehmet Serdar Kilinc

About the Authors 169

Index 173
The Value of RFID
Benefits vs. Costs
Ustundag, A. (Ed.)
2013, VIII, 176 p., Hardcover
ISBN: 978-1-4471-4344-4