

Preface

In the contemporary world, the efficient management of supply chains is very critical. The most important problems encountered in supply chain management result from the information flow. In this context, RFID is the most important technology providing real-time information and ensuring supply chain traceability.

RFID has become of importance in the mobile and wireless communication technologies, and has influenced various industries. Nowadays, it is used for a wide variety of application areas ranging from retail to manufacturing, healthcare, logistics, and defence. The developments in the semiconductor industry and cost decrease trigger the mass usage of RFID in the global business world. However, there are some challenges to consider when deciding to invest in RFID. The most important one is the determination of the real value of RFID. Several years after the first releases, studies indicate that it is not easy to quantify the expected benefits of RFID integrated systems since many are strategic and intangible.

RFID is a strategic key technology which adds value throughout the supply chain and increases the competitive advantage of a company. It improves the business process by increasing the process efficiency, accuracy, visibility, and security. These are four dimensions that managers should concentrate on to quantify the benefits of an RFID investment. Since the investment cost is high and the business processes are restructured, RFID investment should be seen as a strategic business decision and not a technology one. To ensure the RFID project success, the cost and benefit values should be calculated most accurately.

This book brings together the opinions of a number of leading academics and researchers about the evaluation of RFID investments. They tried to find answers as to which methods and techniques can be used for RFID valuation and how RFID adds value to business processes in various applications. Through individual chapters in this book the authors present their views, approaches, concepts, and developed analytical tools. Readers from the business and academic world will learn the key issues currently being addressed in valuation of RFID throughout the world.

This book is composed of two parts. The first part focuses on the main concepts, methods, and techniques used in valuation of RFID. The second part deals with

RFID valuation examples in different application areas of retail apparel, cargo, library, aerospace, healthcare, and construction.

I would like to thank all the authors for contributing to this book:

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- Mehmet Serdar Kilinc, University of Arkansas
- Nebil Buyurgan, University of Arkansas
- Sylvain Landry, HEC Montréal
- Richard Philippe, Logi-D
- Ozgur Kabadurmus, Auburn University
- Esin Ergen, Istanbul Technical University
- Gursans Guven, Istanbul Technical University
- Gokhan Demiralp, Istanbul Technical University
- Aylin Ustundag, Niederrhein University of Applied Sciences
- Mert Bal, Yildiz Technical University

I would also like to thank my colleague Serdar Baysan for his support to prepare the final format of the book. And finally I thank my parents and my wife Nihan for her moral support and endless patience.

Istanbul, 2011

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The Value of RFID

Benefits vs. Costs

Ustundag, A. (Ed.)

2013, VIII, 176 p., Hardcover

ISBN: 978-1-4471-4344-4