



River Publishers Series in Computing and Information Science and Technology

## **Systems and Implemented Technologies for Data-Driven Innovation, addressing Data Spaces and Marketplaces Semantic Interoperability Needs**

**i3-MARKET Series - Part II: Data Economy, Models, Technologies and Solutions**

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### **Description:**

In the second i3-MARKET series book we review the basic technological principles, software best practices, and standards for implementing and deploying data spaces and data marketplaces. The book provides a definition for data-driven society as: The process to transform data production into data economy for the people using the emerging technologies and scientific advances in data science to underpin the delivery of data economic models and services. This book further discuss why data spaces and data marketplaces are the focus in today's data-driven society as the trend to rapidly transforming the data perception in every aspect of our activities. In this book technology assets that are designed and implemented following the i3-MARKET backplane reference implementation (WebRI) that uses open data, big data, IoT and AI design principles is introduced. Moreover, the series of software assets grouped as sub-systems and composed by software artefacts are included and explained in full. Further, we describe i3-MARKET backplane tools and how these can be used for supporting marketplaces and its components including details of available data assets. Next, we provide description of solutions developed in i3-MARKET as an overview of the potential for being the reference open-source solution to improve data economy across different data marketplaces.

**Keywords:** Data Marketplace, Digital Markets, Big Data and Cybersecurity