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Conclusions

The i3-MARKET Book series is a detailed compilation of all about design process, implementation work and the produced results and outcomes in the form of legacy of the i3-MARKET and Open Source Software projects.

In this third book, we concentrated in bringing the technology deployments and provide an overview of the technologies and techniques that can be used to facilitate an smooth deployment and adoption of the i3-MARKET methodologies and solutions that are the foundations of i3-MAKRET software. Additionally and to provide a complete view of the three books this section includes not only this book conclusions but serves as a compilation of all the findings and conclusions from the three books in order to list together all the advances and improvements over the state of the art that this books series is aiming to share.

The i3-MARKET project addresses the challenge of being integrative following design methods used in industry and OSS implementation best practices, interoperable by using semantic models that define a common conceptual framework and information model that enables cross-domain data exchange and sharing, intelligent from the perspective of smart contracts generated automatically and associating those financial operations into a set of software tools that facilitate that data assets can be commercialized via intra-domain or cross-domain almost transparently in a secure and protected digital market environment.

The i3-MARKET Book Series presents an overview of the i3-MARKET methodologies and solutions that are the foundations of its software results in the form of a Backplane with a set of software support tools and as a solution addressing the challenge of enabling the coexistence of data spaces with marketplaces for enlarging the European digital market ecosystem.

The i3-MARKET project provided a blueprint open-source software architecture called "i3-MARKET Backplane" that addresses the growing demand for connecting multiple data spaces and marketplaces in a secure

and federated manner. The i3-MARKET Consortium is contributing with the developed software tools to build the European data market economy by innovating marketplace platforms, demonstrating with three industrial reference implementations (pilots) that a decentralized data economy and more fair growth is possible.

The first part of the i3-MARKET Book series introduces and explains the principles of the modern data economy that lead to make the society more aware about the value of the data that is produced everyday by themselves but also in a collective manner. Data Business is one of the most disruptive areas in today's global economy, particularly with the value that large corporates have embedded in their solutions and products as result of the use of data from every individual.

The i3-MARKET architecture design provides adequate and in-house developed building blocks for trustworthy (secure and reliable) data-sharing and exchange of existing data assets for current and new future market-place platforms, with special attention on commercializing data assets from individuals, SMEs, or large industrial corporations. We used and developed the i3-MARKET backplane using open-source technologies that impulse the adoption and exploit the open-source culture, a tendency that, for more than a decade, is hitting the industry markets and that today more and more industries are following.

In the second i3-MARKET series book, is discussed why data is the focus of current technological developments towards digital markets and the meaning of data being the next asset to appear evolved in trading markets. At the same time, it focused on introducing the i3-MARKET technology and the proposed solutions. In the second i3-MARKET series book, the basic technological principles and software best practices and standards for imple-menting and deploying data spaces and data marketplaces were introduced and explained. The second 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.

In this third i3-MARKET series book the best practices, software methods and mechanisms that allow the i3-MARKET backplane reference implemen-tation to be instantiated, tested and validated are explained. This book series part concentrates in the technical experts and developers' community as a way to provide support tools and guidance in their process to integrate the i3-MARKET tools and its reference implementation. This book is offered a guidebook for technical experts and developers is addressed, the so-called

industrial deployment and to provide clear understanding of the technological components and the software infrastructures. The steps to install and instanti- ate the i3-MARKET backplane with less efforts and to avoid overwhelm the deployment activity is also introduced. in this third part of the i3-MARKET book series, the different software technologies developed, including the use of open-source frameworks is explained. The third book can be considered the i3-MARKET handbook provisioning that i3-MAKRET backplane software can actually be used as input for configurators and developers to set up and pre-test testbeds and therefore i3-MARKEt software is also extremely valuable to organisations, scientific and academic communities to be used as a academic material.

In this i3-MARKET book series we discussed the technology assets that are designed and implemented following the i3-MARKET Backplane reference architecture (RA) that uses open data, big data, IoT, and AI design principles to help data spaces and data marketplaces to focus on todayâĂŹs datadriven society as the trend to rapidly transforming the data perception in every aspect of our activities. Moreover, the series of software assets grouped as subsystems and composed of software artefacts is included and explained in full. Further, the book series describes the i3-MARKET Backplane tools and how these can be used for supporting marketplaces and its components. The i3-MARKET Book series is an overview of the reference open-source solution to enable the data economy across different data marketplaces.