

Foreword

German philosopher and publicist Richard David Precht has a bleak view of the digitalized world. He believes that it will soon lead to a society greatly influenced by Industrie 4.0, in which “robots” carry out the services once performed by slaves.

Only time will tell whether this will become reality. But what is certain is that in the internet of things and services, an infrastructure that is comprised of objects from the physical world must be sufficiently represented in the information world using clear rules. This is why the reference architecture model RAMI 4.0 and the I4.0 component have been the focal point of Industrie 4.0 from the very start.

As the number of documents stemming from different working groups from within the Industrie 4.0 Plattform increased, it became clear that a logical train of thought was required that could highlight the relationships between these documents and offer the reader an overarching view of the technology of Industrie 4.0.

This book brings together results previously only found in individual documents. Essentially, it deals with the characterization of “assets” in the information world by means of standardized properties, and with the rules for depicting information about a physical asset in the information world.

The authors would like to express their gratitude to all those who contributed to and proofread the contents of this book. The suggestions made regarding potential German and international standards within the context of Industrie 4.0 were particularly helpful. Because the topic of Industrie 4.0 spans multiple industries, it is possible that certain themes or issues are not sufficiently dealt with here, either because they would necessitate a book in their own right or because there is not yet sufficient research in these areas. The authors hope that this book makes it easier to understand the content already available from Plattform Industrie 4.0, ZVEI, VDI/GMA, VDMA and Bitkom, as well as the documents that will appear in future.

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