

1. Record Nr.	UNINA9910845193803321
Autore	Oks Sascha Julian
Titolo	Industrial Cyber-Physical Systems : Advancing Industry 4.0 from Vision to Application / / by Sascha Julian Oks
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer Gabler, , 2024
ISBN	3-658-44417-7
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (XXVI, 300 p. 52 illus., 14 illus. in color. Textbook for German language market.)
Collana	Markt- und Unternehmensentwicklung Markets and Organisations, , 2945-8803
Disciplina	658.4062 658.514
Soggetti	Technological innovations Management Innovation and Technology Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction: Scope and Relevance of this Research -- Foundations: Underlying Concepts of this Research -- Study I: Industrial Cyber-Physical Systems in a Systemic Perspective -- Study II: Industrial Cyber-Physical Systems in a Stakeholder Perspective -- Study III: Industrial Cyber-Physical Systems in an Organizational Perspective -- Study IV: Industrial Cyber-Physical Systems in a Holistic Perspective -- Reflections and Conclusion: Integration and Advancements of this Research.
Sommario/riassunto	Cyber-physical systems (CPS) are one of the key concepts of Industry 4.0. Despite their great potentials for industrial value creation, there are challenges, such as a significant increase in complexity, as a result of which the development status of Industry 4.0 is behind expectations. This book addresses this issue with the following research design: In addition to providing a comprehensive foundation of industrial CPS and Industry 4.0, four studies are conducted, each consisting of an exploratory research part and a design science research (DSR) part. In doing so, four perspectives are directed at the topic of industrial CPS: A systemic, a stakeholder-centered, an organizational and a holistic. In

conclusion, the contributions are integrated in a summary and the artifacts are incorporated into an overarching methodological framework. Thus, theoretical contributions are derived and concrete practical recommendations for the main target groups of organizations, educational institutions and international delegations provided. About the author Dr. Sascha Julian Oks is a postdoctoral researcher at the Chair of Information Systems, Innovation & Value Creation at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) and at the LF Group Chair of Digital Innovation in Service Industries at the HHL Leipzig Graduate School of Management. His research focuses on the engineering and the implementation of industrial cyber-physical systems (CPS).

---