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Autore	Collan Mikael
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Nota di contenuto	Chapter 1: Industry 4.0 in retrospect and in context -- Part 1: Technical Perspectives -- Chapter 2: Additive Manufacturing – Past, Present, and the Future -- Chapter 3: Additive manufacturing from the point of view of materials research -- Chapter 4: Robotics in Manufacturing – The Past and the Present -- Chapter 5: Maintenance management in light of manufacturing 4.0 -- Part 2: Manufacturing 4.0 Business models and the economic feasibility of additive manufacturing -- Chapter 6: Industrial additive manufacturing business models - what we know from the literature? -- Chapter 7: Additive manufacturing cases and a vision for a predictive analytics and additive manufacturing based maintenance business model -- Chapter 8: Quantifying the economic feasibility of additive manufacturing - simulating production lifetime in

the context of spare parts production -- Chapter 9: Industry 4.0 transformation challenge in light of dynamic capabilities -- Part 3: Societal change brought about by manufacturing 4.0 -- Chapter 10: The Fourth Industrial Revolution and Changes to Working Life: What Supports Adult Employees in Adapting to New Technology at Work? -- Chapter 11: Modeling the Societal Division of Added Value Created Through Manufacturing 4.0 -- Chapter 12: Coping with Technological Change – Regional Preparedness in Face of Technical Change -- Chapter 13: Closing Words – Quo Vadis Manufacturing 4.0?. .

Sommario/riassunto

This open access book is among the first cross-disciplinary works about Manufacturing 4.0. It includes chapters about the technical, the economic, and the social aspects of this important phenomenon. Together the material presented allows the reader to develop a holistic picture of where the manufacturing industry and the parts of the society that depend on it may be going in the future. Manufacturing 4.0 is not only a technical change, nor is it a purely technically driven change, but it is a societal change that has the potential to disrupt the way societies are constructed both in the positive and in the negative. This book will be of interest to scholars researching manufacturing, technological innovation, innovation management and industry 4.0.
