Preface

This volume attempts to grasp the current rise of 3D printing and discuss the technology's impact on the future of value creation, which we assume will reveal increasingly decentralized and networked properties. The initial motivation for this joint endeavor came about in a research project conducted by the *Institute for Ecological Economy Research* (IOEW) with generous financial support from the German Federal Ministry of Education and Research (BMBF; grant number: 16/1615). Situated at the intersection of decentralized production technologies and sustainable consumption patterns, the project clearly revealed the many facets of 3D printing and multiple social and organizational innovations that accompany the proliferation of this technology.

The contributions in this book take up these facets as starting points to elaborate on the economic, technical, social, and environmental implications of 3D printing and relate them to broader paths of sustainable value creation. We are delighted with the group of interdisciplinary researchers who submitted the chapters for our edited volume and shared their interesting ideas and exciting approaches to create this multifaceted overview of current trends and trajectories in the field of 3D printing and the overarching transformation of value creation. Furthermore, we would like to thank the BMBF and our counterparts at VDI|VDE Innovation und Technik GmbH, especially Simone Ehrenberg-Silies, Susanne Zindler, and Marc Bovenschulte for supporting our work and offering the opportunity to realize this book.

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