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Nota di contenuto	Introduction to Digital Twins -- Fundamentals of Digital Twins, Modeling Approaches, and Governance -- DISCS: An approach for accelerating the development of digital twins for smart cities -- A System of Systems Foundation for Digital Asset Lifecycle Management -- Model-Based Engineering of Multi-Purpose Digital Twins in Manufacturing -- Digital Twins for Assessing the Impact of Autonomous Vehicles on Built-Environment Changes -- Human Digital Twins to Support Nurse Practitioner's Clinical Decision-Making Using Multimodal Data: A Theoretical, Methodological, and Analytical Framework -- Conceptualising The Application of Digital Twins in Supply Chain Management: A Path Towards Supply Chain Resilience -- Digital Twins for Creating Value through "Buildings as Batteries" using a Mass Customization Network -- Social and Human Dimensions of Digital Twin Technologies in Formal and Informal Institutional Settings -- Digital Twins and Their Role in Reengineering Engineering Education.
Sommario/riassunto	Digital twin technologies, currently at the forefront of development, play a crucial role in integrated systems, industrial design,

manufacturing, data analytics, and decision-making processes. As we move forward, digital twin technologies, along with their enabling technologies such as Artificial Intelligence, Machine Learning, Internet of Things (IoT), metaverse, and advanced visualization features, will continue to drive digital transformation and innovation across various societal contexts. This book presents a conceptual framework that examines critical perspectives on digital twins across diverse disciplines. It evaluates the contributions of leading thinkers to the broader discourse about digital twins. The introductory chapter provides an overview of the entire book, summarizing all subsequent chapters. Chapter 2 delves into the fundamentals of digital twins, covering theories, definitions, and enabling technologies. Chapters 3 to 10 explore various application areas, including smart cities, manufacturing, healthcare, infrastructure, and supply chain. Chapter 10 specifically focuses on socio-technical aspects related to the design, development, and implementation of digital twins. It emphasizes the significance of digital twins as a public good and identifies opportunities, gaps, and challenges. The final chapter addresses the current and future need for skills in training, education, and awareness, proposing collaborative approaches for industry and academia.