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Titolo	Industrial Metaverse Building Blocks : An Extended Reality (XR) Model-Based Approach / / by Alessandro Migliaccio, Giovanni Iannone, Mark Sage
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Descrizione fisica	1 online resource (172 pages)
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Altri autori (Persone)	IannoneGiovanni SageMark
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Soggetti	Metaverse Mixed reality
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Note generali	Includes index.
Nota di contenuto	Chapter 1: Awareness -- Chapter 2: A strong modelling foundation -- Chapter 3: XR Life Cycle -- Chapter 4: Convergence -- Chapter 5: Key Use Cases for XR -- Chapter 6: Deployment -- Chapter 7: Learning from Experience -- Appendix A: Artificial intelligence in the Metaverse -- Appendix B: Sources.
Sommario/riassunto	Explore the Metaverse's role in centralizing industrial data. This book introduces the methodology and applications of extended reality (XR) technologies in the life cycle of complex systems as a natural part of model-based systems engineering (MBSE). The integration of extended realities within the Metaverse opens up new possibilities for immersive experiences and enhanced collaboration, making them an indispensable tool to optimize the workflow in large organizations and SMEs. Virtual reality (VR) and augmented reality (AR) technologies enable users to interact with digital models in a more intuitive manner. Starting with the basis of model-based systems engineering, the book is structured into six building blocks (chapters) that outline the process needed to understand how to create and support industrial activities using immersive technology. You'll see how teams can collaborate remotely in shared virtual spaces, breaking down geographical, language, and shared content barriers while fostering creativity and innovation. Interviews are then provided in chapter 7, in which experts

share their experiences deploying the building blocks of the Metaverse in their organization. Industrial Metaverse Building Blocks offers practical insights into the benefits and implementation of mixed reality, guiding you on effectively integrating the technology into your organization to drive innovation and achieve strategic goals. You will:

- Access real-time data, ensuring accuracy for stakeholders
- Utilize 3D and AI for model-based simulations
- Enhance collaboration through VR and AR integration
- Implement Model-Based Systems Engineering for industrial tech
- Increase the efficiency of system engineering/product development with XR/MBSE technology .

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