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Titolo	Platform Based Design and Immersive Technologies for Manufacturing and Assembly in Offsite Construction : Applying Extended Reality and Game Applications to PdMA // by Lilia Potseluyko, Farzad Pour Rahimian, Nashwan Dawood, Faris Elghaish
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Soggetti	Construction industry - Management Civil engineering Virtual reality Augmented reality Construction Management Civil Engineering Virtual and Augmented Reality
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- Literature Review -- Conceptual Framework -- Gains and Drawbacks of each XR type -- Test/Deploy/Review the developed solution -- Prototyping Virtual Showhome and design variables, metadata demonstration -- Advances of Real-Life industry Application. Discussion and Unfolding Stories -- Case study: Norscot Joinery. Before Automation and Digitalisation Company Overview -- End-User Software Testing Results -- Conclusion.
Sommario/riassunto	This book explores the applications of virtual reality technologies in building design and offsite construction. Its focus is on how small and medium-sized architectural and construction practices with limited

budgets and time can implement innovation through visualisation creation. Virtual reality technologies, known as empathy machines, offer a productive interaction process for clients and professionals. Gaming and simulation have already proven their efficacy in solving problems in science and business. However, the next challenge is designing data-rich virtual environments that can enhance clients' spatial understanding, simplify architect-client communications, provide customisation options, consolidate quantification, and export data directly to manufacturers' software, minimizing fragmentation across the entire building information management (BIM) lifecycle. With this book, architects and construction professionals can learn how to leverage virtualreality technologies to improve their work processes and enhance client engagement. Whether you're new to virtual reality or an experienced practitioner, this book provides valuable insights and practical tips to help you harness the power of this exciting technology.
