Record Nr. UNINA9910366589003321 Autore Chiesa Giacomo Titolo Technological Paradigms and Digital Eras: Data-driven Visions for Building Design / / by Giacomo Chiesa Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-26199-9 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (xvii, 192 pages) Collana PoliTO Springer Series, , 2509-6796 Disciplina 720 Soggetti Buildings—Design and construction Building Construction Engineering, Architectural Computer-aided engineering Sustainable architecture Computer simulation **Building Construction and Design** Computer-Aided Engineering (CAD, CAE) and Design Sustainable Architecture/Green Buildings Simulation and Modeling Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- ICT, data and design issues -- Modelling reality, modelling virtuality -- Scripting and parametric CAD modelling for performance-driven design -- Real time monitoring -- Platform - A space for project design and an interface between reality and virtuality -- Data, properties, smart city -- Conclusions. Sommario/riassunto The book connects the ICT and the architectural worlds, analyzing modeling, materialization and data-driven visions for design issues at different scales. Furthermore, using sample modeling and materialization tools, it explores the links between performance-driven design approaches and the application of new digital technologies.

Intended for architects and urbanists, it provides a theoretical

framework to address the implications of the digital revolution in building design and operation. Furthermore, combining insights from IT and ICT with architectural and urban design know-how, it offers engineering professionals a technology-driven interpretation of the building design field.