1. Record Nr. UNINA9911031578803321 Autore Lee Ju Hyun Titolo Design Thinking: Creativity, Collaboration and Culture / / by Ju Hyun Lee, Michael J. Ostwald, Ning Gu Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-94721-5 Edizione [2nd ed. 2025.] Descrizione fisica 1 online resource (421 pages) Collana Mechanical Engineering (R0) Series Altri autori (Persone) OstwaldMichael J GuNing Disciplina 620.0042 Soggetti Engineering design Industrial design Graphic arts Computer-aided engineering Art - Study and teaching Architecture **Engineering Design** Industrial Design Graphic Design Computer-Aided Engineering (CAD, CAE) and Design Creativity and Arts Education Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part I: Creativity -- Exploring Design Thinking -- Parametric Design Process with Assessed Levels of Creativity -- Design Strategies Supporting Creativity -- Measuring Cognitive Complexity -- Part II: Collaboration -- Cognitive Perspectives for Teamwork -- Design Collaboration with Building Information Modelling -- Interactive and Collective Thinking Through Mobile Computing -- Part III: The Language of Design -- Cognitive and Linguistic Differences in Design -- Multi-Cultural Design Education -- Conclusion. Sommario/riassunto This book presents new ways of facilitating design thinking, through

the combination of cognitive design strategies and information

technologies. It provides readers with an in-depth understanding of the

traditional and digital design processes and activities that are employed in architecture, computational design, communication design and graphic design. In response to evolving design practices, including the growing use of artificial intelligence (AI), this fully updated and expanded edition features a new chapter on digital design collaboration, along with extended discussions on the role of technology in shaping creative and collaborative processes. The book is divided into three parts: Part I, which focuses on creativity, uses evidence derived from empirical studies to develop an understanding of the way computational environments shape design thinking and may lead to more inventive outcomes. Part II considers the cognitive. sociotechnical dimensions of design teams, crowds and collectives. It investigates the ways digital design platforms promote interactive and collective thinking. Lastly, Part III addresses culture, examining the linguistic and cultural context of the globalised design ecosystem. Providing valuable insights into design thinking, this book helps readers engage with their local and global environments. It will appeal to academics, researchers and professionals with an interest in understanding design thinking in the context of creativity, collaboration and culture.