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Autore	Madni Azad M
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Nota di contenuto	21st Century Imperatives -- Thinking Different -- Disciplinary Convergence -- Disruptive Collaboration -- From Models to Stories -- Generating Novel Options -- Human Performance Enhancement -- Design Elegance and Systems Engineering -- Affordable Resilience -- Autonomous System-Of-Systems -- Looking To The Future.
Sommario/riassunto	This book explores the ways that disciplinary convergence and technological advance are transforming systems engineering to address

gaps in complex systems engineering: Transdisciplinary Systems Engineering (TSE). TSE reaches beyond traditional disciplines to find connections—and this book examines a range of new methods from across such disparate areas of scholarship as computer science, social science, human studies, and systems design to reveal patterns, efficiencies, affordances, and pathways to intuitive design. Organized to serve multiple constituencies, the book stands as an ideal textbook supplement for graduate courses in systems engineering, a reference text for program managers and practicing engineers in all industries, and a primary source for researchers engaged in multidisciplinary research in systems engineering and design. Introduces a bold, new vision of where model-based systems architecting and engineering is headed; Maximizes reader understanding of recent advances in social networks, collaboration technologies, interactive storytelling, virtual worlds, and systems design that enable transdisciplinary systems engineering; Illustrates convergence among disciplines across social, human, and applied sciences with robust examples; Facilitates creation of new courses in systems architecting and engineering by structuring each chapter as an independent resource, allowing the content to be presented in order of academic need. Azad Madni has eloquently and substantively addressed one of the most important issues facing 21st Century systems engineering and design. The author makes it clear that an environment of autonomous systems, system of systems, and the internet of things will require that we are able to apply more than math and science to solve thorny problems. They will necessitate that systems engineers and designers have an understanding of the intricate interactions that can exist between technology and humans. John Brooks Slaughter, Ph.D., P.E., NAE Professor of Education and Engineering University of Southern California President Emeritus, Occidental College Chancellor Emeritus, U. of Maryland.