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Titolo	Best Matching Theory & Applications // by Mohsen Moghaddam, Shimon Y. Nof
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Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVI, 231 p. 57 illus., 48 illus. in color.)
Collana	Automation, Collaboration, & E-Services, , 2193-4738 ; ; 3
Disciplina	620
Soggetti	Automatic control Robotics Automation Manufactures Computational intelligence Artificial intelligence Control, Robotics, Automation Machines, Tools, Processes Computational Intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction: Best Matching and Best Match -- The PRISM Taxonomy of Best Matching -- Mathematical Models of Best Matching -- Distributed Decision-Making and Best Matching -- Static and Centralized Matching -- Dynamic and Distributed Matching -- Extended Examples of Best Matching -- Frontiers in Best Matching.
Sommario/riassunto	Mismatch or best match? This book demonstrates that best matching of individual entities to each other is essential to ensure smooth conduct and successful competitiveness in any distributed system, natural and artificial. Interactions must be optimized through best matching in planning and scheduling, enterprise network design, transportation and construction planning, recruitment, problem solving, selective assembly, team formation, sensor network design, and more.

Fundamentals of best matching in distributed and collaborative systems are explained by providing: § Methodical analysis of various multidimensional best matching processes § Comprehensive taxonomy, comparing different best matching problems and processes § Systematic identification of systems' hierarchy, nature of interactions, and distribution of decision-making and control functions § Practical formulation of solutions based on a library of best matching algorithms and protocols, ready for direct applications and apps development. Designed for both academics and practitioners, oriented to systems engineers and applied operations researchers, diverse types of best matching processes are explained in production, manufacturing, business and service, based on a new reference model developed at Purdue University PRISM Center: "The PRISM Taxonomy of Best Matching". The book concludes with major challenges and guidelines for future basic and applied research in the area of best matching.
