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Nota di contenuto	Frontmatter -- Preface -- Contents -- Editors -- Authors -- Part I: Introduction -- 1 Robotic process automation -- Part II: RPA management -- 2 Managing RPA implementation projects -- 3 Finding the perfect RPA match -- 4 Process selection for RPA projects -- 5 Selecting processes for RPA -- 6 Transforming and recombining routines to scale the implementation of software robots -- 7 Liability for loss or damages caused by RPA -- Part III: RPA technology -- 8 Towards end-to-end business process automation -- 9 Human–computer interaction analysis for RPA support -- 10 Supporting RPA through natural language processing -- 11 Automated segmentation of user interface logs -- 12 Process mining and RPA -- Part IV: RPA applications -- 13 RPA in accounting -- 14 RPA for the financial industry -- 15 RPA for public administration enhancement -- 16 Applications of RPA in manufacturing -- Part V: RPA practice -- 17 AI evolves IA -- 18 The broad use of RPA based on three practical cases -- 19 Digitization applied to automate freight paper processing -- Index
Sommario/riassunto	This book brings together experts from research and practice. It includes the design of innovative Robot Process Automation (RPA)

concepts, the discussion of related research fields (e.g., Artificial Intelligence, AI), the evaluation of existing software products, and findings from real-life implementation projects. Similar to the substitution of physical work in manufacturing (blue collar automation), Robotic Process Automation tries to substitute intellectual work in office and administration processes with software robots (white-collar automation). The starting point for the development of RPA was the observation that – despite the use of process-oriented enterprise systems (such as ERP, CRM and BPM systems) – additional manual activities are still indispensable today. In the RPA approach, these manual activities are learned and automated by software robots, either by defining rules or by observing manual activities. RPA is related to business process management, machine learning, and artificial intelligence. Tools for RPA originated from dedicated stand-alone software. Today, RPA functionalities are also integrated into elaborated process management suites. From a conceptual perspective, RPA can be structured into input components (sensors in the wide sense), an intelligence center, and output components (actuators in the wide sense). From a strategic perspective, the impact of RPA can be related to the support of existing tasks, the complete substitution of human activities, and the innovation of processes as well as business models. At present, high expectations are related to the use of RPA in the improvement of software-supported business processes. Manual activities are learned and automated by software robots that interact with existing applications via the presentation layer. In combination with artificial intelligence (AI) as well as innovative interfaces (e. g., voice recognition) RPA creates a novel level of automation for office and administration processes. Its benefit potential reaches a return on investment (ROI) up-to 800% that is documented in various case studies.