1. Record Nr. UNINA9911026375803321

Autore	Gupta Arun
Titolo	The New Manufacturing Value Chain : Leveraging AI, Machine Learning, and Advanced Analytics for Success
Pubbl/distr/stampa	Chicago : , : J. Ross Publishing, Incorporated, , 2025 ©2025
ISBN	1-60427-865-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (260 pages)
Disciplina	670.427
Soggetti	Industry 4.0 Manufacturing processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Title Page -- Copyright -- Dedication -- Contents -- Foreword -- Acknowledgments -- About the Author -- WAV™ Page -- 1. Why Focus on Manufacturing? -- Introduction -- Manufacturing and Advanced Manufacturing -- Definition and Concept of the Manufacturing Value Chain -- Key Components of the Manufacturing Value Chain -- Primary Activities: Creating and Delivering Value -- Support Activities: Enabling Efficiency and Effectiveness -- Summary -- 2. The Manufacturing Value Chain -- Introduction -- Overview of the Manufacturing Value Chain -- Starting the Manufacturing Value Chain—Conceptualization -- Procurement in the Manufacturing Value Chain -- The Production Stage in the Manufacturing Value Chain -- Distributing Products Made in the Manufacturing Value Chain -- Sales and Marketing in the Manufacturing Value Chain -- After-Sales Service in the Manufacturing Value Chain -- Summary—Stages in the Manufacturing Value Chain -- Industry 4.0 and Advanced Technologies -- Challenges, Opportunities, and Considerations -- Success Stories
Sommario/riassunto	This book explores the integration of advanced technologies like Artificial Intelligence (AI), Machine Learning (ML), Business Intelligence (BI), and Advanced Analytics into the manufacturing industry to optimize processes and improve efficiency. It provides a comprehensive overview of the manufacturing value chain, detailing primary and

support activities, procurement methods, production, distribution, sales, and after-sales services. Key concepts include predictive maintenance, quality control, supply chain optimization, and energy efficiency. The author, Arun Gupta, aims to guide professionals and organizations in leveraging cutting-edge technologies to address challenges, drive innovation, and stay competitive in Industry 4.0. This resource is tailored for industry professionals, data scientists, and business leaders aspiring to enhance manufacturing operations and adopt future trends.