1. Record Nr. UNINA9910986138103321 Autore Jensen Henrik Hvid Titolo Circular Economy Opportunities and Pathways for Manufacturers: Manufacturing Renewed / / by Henrik Hvid Jensen Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9783031752797 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (469 pages) Collana Future of Business and Finance, , 2662-2475 Disciplina 658.5 Soggetti Production management Technological innovations Industries Environmental economics Production **Economics of Innovation** Sector and Industry Studies **Environmental Economics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto The Future of Manufacturing: Clean(er), digital, and circular models change production, consumption, and trade -- The Imperative of Circularity for Modern Manufacturers -- Manufacturers' competitiveness hinges on being clean(er) - Generates growth for manufacturers through decarbonization -- Integrating Digital Capabilities in the Circular -- Economy: A Comprehensive Approach --Digital Aspects in Circular Business Models for Manufacturers. Sommario/riassunto In today's rapidly evolving manufacturing landscape, the future competitiveness for manufacturers hinges on three interlinked paradigms: 1. Circular Economy Models for Zero-Waste Product Lifecycles: The shift from traditional linear models to circular ones is increasingly crucial. Circular strategies extend product lifecycles, optimize resource use, and open new revenue streams, ultimately bolstering resilience, competitiveness and customer relationships. 2. Sustainable Manufacturing Through Decarbonization: As global

awareness around sustainability grows, the push toward decarbonized

manufacturing processes is no longer optional. Such an approach minimizes environmental impact while aligning with international sustainability goals. 3. Digital Enablement for Paradigm Transformation: Digitization serves as the lynchpin in realizing cleaner manufacturing and circular economy objectives. Tools like the Digital Product Passport (DPP) empower manufacturers to achieve transparency, encourage collaboration, and create unmatched business value, expediting the transition to sustainable and circular manufacturing. One of the most pressing challenges for manufacturers today is achieving the transition to cleaner and circular business models in a financially viable way. This book delves deeply into the business opportunities circularity presents and the pivotal role of digital solutions in enabling a smooth and cost-effective transition. It emphasizes how digitization can address economic feasibility concerns while driving operational efficiency and sustainability. By breaking down these critical elements, the book provides actionable insights and frameworks, serving as a practical guide for manufacturers striving to align economic priorities with environmental and operational demands, ensuring long-term competitiveness and resilience.