

1. Record Nr.	UNINA9910847073103321
Autore	Ometto Aldo Roberto
Titolo	A Systemic Transition to Circular Economy : Business and Technology Perspectives
Pubbl/distr/stampa	Cham : , : Springer International Publishing AG , , 2024 ©2024
ISBN	3-031-55036-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (251 pages)
Collana	Greening of Industry Networks Studies ; ; v.12
Altri autori (Persone)	SarkisJoseph EvansSteve
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Acknowledgements -- Contents -- About the Editors -- Chapter 1: Introduction: Circular Economy as a Part of the New and Sustainable Economy in the Twenty-first Century -- 1.1 Introduction -- 1.2 Introduction to the Content of the Book -- 1.3 Conclusion -- References -- Part I: Business and Systems Transitions -- Chapter 2: A Value Flow Perspective in the Circular Business Model -- 2.1 Introduction -- 2.2 Linear Business Model Versus Circular Business Models -- 2.3 Towards CBM: Building Value in Circular Logic -- 2.4 Challenges and Opportunities for Value Generation in the Circular Economy -- 2.5 Current Scenario and Trends -- 2.6 Discussion and Results -- 2.7 Conclusions -- References -- Chapter 3: The Design of Sustainable Product-Service Systems to Foster Circular Economy for All -- 3.1 An Introduction: System Design for Sustainability as a Key Enabler for Circular Economy -- 3.1.1 Circular Economy and Sustainable Product-Service Systems (S.PSS): Synergy of Approaches and Knowledge Base -- 3.2 Sustainable Product-Service Systems (S.PSS): An Opportunity to Foster Circular Economy Businesses and Technologies -- 3.2.1 Sustainable Product-Service System: A Win-Win Opportunity for Sustainability -- 3.2.2 S.PSS Applied to CE: Examples and Types -- 3.3 S.PSS Win-Win Promising Benefits to Diffuse Circular Economy Solutions -- 3.3.1 Benefits Related to Products' Technical Cycle -- 3.3.2 Benefits Related to Products'

Biological Cycle -- 3.4 S.PSS Win-Win Promising Benefits to Make Circular Economy Solutions Accessible for All -- 3.5 Designing S.PSS Applied to CE for All: Approaches, Skills, and a Method -- 3.5.1 Method for System Design for Sustainability (MSDS) -- 3.6 Discussion and Final Considerations -- References -- Chapter 4: Initiating a Minimum Viable Ecosystem for Circularity -- 4.1 Introduction. 4.2 Theoretical Background: How to Initiate Ecosystems for a Circular Economy -- 4.2.1 Origins and Evolution of the Ecosystem Concept -- 4.2.2 Ecosystems and the Circular Economy -- 4.2.3 Research Gap and Contribution -- 4.3 Method: Identifying Important Activities from the Literature and Three Cases -- 4.4 Results: Activities to Initiate an Ecosystem for a Circular Economy -- 4.4.1 Put Forward a Circular Economy Vision -- 4.4.2 Design an Ecosystem Value Proposition and Outcome -- 4.4.3 Identify and Engage Relevant Actors -- 4.4.4 Develop an Initial Governance Model -- 4.4.5 Develop Fair Value Capture Mechanisms -- 4.4.6 Keep Track of Environmental and Social Impacts -- 4.5 Discussion and Conclusion -- References -- Chapter 5: Organizational Practices, Values, and Mindsets as a Basis for Circular Economy Transition -- 5.1 Starting the Pathway Toward a Circular Business System -- 5.1.1 The Organizational Journey -- 5.2 Organizational Values and Organizational/Consumer Mindsets: Enablers for a Circular Economy Transition -- 5.3 Circular Organizational Practices -- 5.4 The CE Transition Pathway -- 5.5 Final Remarks -- References -- Chapter 6: From Socio-technical Innovations to Ecological Transitions: A Multilevel Perspective on Circular Economy -- 6.1 Introduction -- 6.2 Circular Economy as a Set of Different Worldviews -- 6.3 How to Design a Circular Economy: Eco-efficient Networks or Eco-effective Ecologies -- 6.3.1 Building an Economy on Eco-efficient Networks -- 6.3.2 Eco-effectiveness for an Economy Mimicking Living Systems -- 6.4 Developing a Multi-level Perspective: Which Circular Economy? -- 6.5 From a Circular to a Nutrient Economy: Centralized or Distributed? -- 6.6 Concluding Remarks -- References -- Part II: Business Strategies, Processes, Practices, and Technologies. Chapter 7: The Importance of Circular Economy in HP Sustainable Impact Strategy -- 7.1 Introduction -- 7.2 HP Sustainable Impact Strategy and Its Circular Economy Centricity -- 7.3 HP Circular Economy Approach and Initiatives -- 7.3.1 Product Design -- 7.3.1.1 Increase Materials and Energy Efficiency -- 7.3.1.2 Use More Recycled Content, Tackling Ocean Plastic Pollution as Well -- 7.3.1.3 Replace Materials of Concern -- 7.3.1.4 Reduce Carbon and Water Footprint -- 7.3.1.5 Addressing Impact Over Forests -- 7.3.1.6 Maintenance, Repairability, and Upgradability -- 7.3.2 Product End-of-Life -- 7.3.3 Disrupt Industry Business Models -- 7.3.4 Digitize Supply Chains and Production -- 7.4 Advancing Toward a More Inclusive Circular Economy -- 7.5 Final Remarks -- References -- Chapter 8: Purchasing and Supply Management Journey into Unilever's Circular Economy Strategy -- 8.1 Introduction -- 8.2 Recycled Plastics Agenda: A New Sourcing Ecosystem to Develop -- 8.3 Sustainable Sourcing: Palm Oil Case -- 8.4 Conclusions -- References -- Chapter 9: Circular Economy in the Paperboard Industry: Ibema Cases -- 9.1 Introduction -- 9.2 The Forest and Society -- 9.3 Planted Forests in Brazil -- 9.4 Renewables in the Process: Energy -- 9.5 Ibema Cases -- 9.6 Royal Coppa -- 9.7 Ritagli -- 9.8 Business Evolution -- References -- Chapter 10: Circular Economy Principles in Urban Agri-Food Systems: Potentials and Implications for Environmental Sustainability -- 10.1 Growing Importance of Urban Agriculture Systems -- 10.2 Potential of the Circular Economy in Urban Agri-Food Systems -- 10.3 Circular Economy as a Mean: A Life Cycle Perspective -- 10.4 Benefits

and Trade-Offs: A Series of Cases -- 10.5 Rainwater Harvesting -- 10.6 Closed-Loop Hydroponic Cultivation -- 10.7 Use of Recovered Resources: Struvite as a Secondary Fertilizer. 10.8 Use of Recovered Resources: Alternative Substrates -- 10.9 Added-Value Secondary Products from Urban Agriculture -- 10.10 Circularity Assessment of Urban Agri-Food Systems: How to Link It with Environmental Performance -- 10.11 Importance of Geographical Scales -- 10.12 Identifying and Addressing Environmental Burden-Shifting Processes -- 10.13 Final Remarks and Upcoming Challenges -- References -- Chapter 11: A Systems Perspective on the Industry 4.0 Technologies as Enablers of Circular Economy Transitions -- 11.1 Introduction -- 11.2 Circular Economy: A Systems Perspective -- 11.3 Industry 4.0 Technologies -- 11.4 Enabling CE Through the Adoption of Industry 4.0 Technologies -- 11.5 Final Remarks -- References -- Chapter 12: Psychological and Systemic Factors Influencing Behaviour in Circular Consumption Systems. Lessons from the Fast-Moving Consumer Goods and Apparel Industries -- 12.1 Introduction -- 12.2 Consumer Behaviour in Circular Consumption Systems -- 12.2.1 Circular Consumer Behaviour -- 12.2.2 Behaviour Chains in Circular Consumption Systems -- 12.2.3 Psychological and Systemic Factors Influencing Circular Consumer Behaviour -- 12.3 Psychological Factors Influencing Circular Behaviour: Circular Apparel Consumption Systems -- 12.3.1 Understanding Consumer Types: Human Values -- 12.3.2 Understanding Consumer Perspectives: Human Perceptions -- 12.3.3 Psychological Factors in Context: Clothing Reuse and Recycling -- 12.4 Systemic Factors Influencing Circular Behaviour: Circular FMCG Consumption Systems -- 12.4.1 Enabling Circular Behaviour: Products and Infrastructure -- 12.4.2 Instructing Circular Behaviour: Education -- 12.4.3 Nudging Circular Behaviour: Persuasive Communication and Incentives -- 12.4.4 Systemic Factors in Context: FMCG Reuse -- 12.5 Conclusions -- References -- Index.

---