



OTTO VON GUERICKE
UNIVERSITÄT
MAGDEBURG

WW

FAKULTÄT FÜR
WIRTSCHAFTSWISSENSCHAFT

Forschungsbericht 2024

Dozentur BWL, Produktion und Logistik

DOZENTUR BWL, PRODUKTION UND LOGISTIK

Produktion und Logistik
G22E, Raum 016
Universitätsplatz 2
39106 Magdeburg

1. LEITUNG

Prof. Dr. Rainer Kleber

2. HOCHSCHULLEHRER/INNEN

Prof. Dr. Rainer Kleber

3. FORSCHUNGSPROFIL

Operations Management, Supply Chain Management, Sustainable Supply Chains, Circular Economy, Remanufacturing, Reverse Logistics, Behavioral Operations Management, Inventory Management

4. METHODIK

- Game Theory and Behavioral Modeling
- Stochastic Dynamic Programming
- Simulation
- Optimization

5. FORSCHUNGSPROJEKTE

Projektleitung: Prof. Dr. Rainer Kleber
Kooperationen: Prof. Dr. Marc Reimann, Universität Graz; Prof. Dr. Joao Quariguasi Frota Neto, University of Manchester
Förderer: Haushalt - 01.01.2024 - 31.12.2025

On the Impact of the Right-to-repair Legislation on Remanufacturing

The novel right-to-repair legislation intends to extend the usage period of consumer durables by enabling customers to repair their products when becoming defective. This right-to-repair requires manufacturers of new product to changes the product design to make it repairable (design for repair), but they also must supply the customers with reasonably prices spare parts. Remanufacturers also might profit from easier access to spare parts. Therefore, the questions arise, how the new legislation impacts manufacturers, consumers, and remanufacturers, and what impact it will have on the environment. To answer these questions, we are use strategic decision models and game theoretic solution approaches.