Chair of Logistics and Supply Chain
TUM School of Management
Technical University Munich

At the Chair of Logistics and Supply Chain Management at the TUM School of Management, we are looking for an interested and qualified student to conduct their

Bachelor's Thesis

on the topic:

Circular Supply Chains: Benefits, Success Metrics, and Evidence from Practice

Circular supply chain (CSC) initiatives represent a strategic evolution beyond traditional sustainability efforts, embedding circular economy principles into supply chain design. This approach aims to retain value, reduce resource dependency, and enhance resilience. CSCs are increasingly recognized for their potential to mitigate CO_2e emissions and raw material consumption; however, empirical validation of these benefits remains limited. Recent geopolitical shifts have further underscored their relevance for strategic risk management and resilience.

The objective of this thesis is to conduct a systematic literature review of existing academic knowledge on CSCs and corroborate these findings through an analysis of gray literature. The insights gathered will, in turn, be leveraged to perform an exemplary case study (e.g., in the automotive industry) to assess and quantify the extent to which the purported CSC benefits are realized in practice.

Key project tasks:

- Conduct a systematic literature review on CSCs and the circular economy, along with relevant market-, industry-, and company-level analyses
- Identify and evaluate key performance indicators (KPIs) employed in practice to measure CSC success
- Develop a categorized overview of the benefits associated with CSCs in academic and gray literature
- Quantify and illustrate the findings through an exemplary case study analyzing a key company in the automotive sector
- Contrast the claimed benefits of CSCs in academia with insights generated from both the gray literature analysis and the case study
- Synthesize results, assess limitations and data uncertainty, and derive managerial and future research implications

Requirements:

This thesis is suitable for Management and Technology (MMT) bachelor students with an interest in operations and supply chain management. Candidates should possess the ability to work independently and demonstrate analytical skills. Basic knowledge of, or a keen interest in, CSCs and supplier risk management would be advantageous.

Earliest Start Date: As soon as possible.

Supervisor: Ben Mischeck

Application: Email with curriculum vitae and transcript of records to **logtheses.log@mgt.tum.de**