

At the Chair of Logistics and Supply Chain Management of TUM School of Management we are looking for a group of interested and qualified students to conduct their

Project Study

on the topic

Material/waste exchange through online platform

Repurposing/reuse/recycling industrial waste helps mitigate its potential negative impact to the environment by avoiding disposal via landfill or incineration. Most companies accumulate a certain amount of waste and surplus materials. Unfortunately, these items have suffered from low repurposing rates due, in part, to a failure to match the generators of this waste (sellers) with its potential users (buyers). Online material and waste exchange platforms offer one possible remedy to this problem. In these online exchanges, the sellers post items for “sale” and buyers contact sellers directly to obtain additional information before making a possible exchange/transaction. While this process appears straightforward, many Online material and waste exchange platforms, such as [MNExchange.Org](https://www.mnexchange.org) and [ReuseMarketplace.Org](https://www.reusemarketplace.org), continue to experience low exchange rates. The goal of this project is to seek for the factors that influence exchanges in these unique markets. Understanding the factors that influence exchanges can help inform policies to better design and manage online exchanges.

Key project tasks:

- Literature review on relevant fields of study
- Investigate the factors that lead to successful online exchanges
- Test the impact of these factors on the likelihood of a successful exchange using data from one of the online exchange platforms
- Analysis of results, managerial and policy implications

Requirements:

The project study is for students at TUM School of Management with a focus on Operations and Supply Chain Management. The ability to structure the research (e.g., exploration, focusing, validation and detailing), to work independently, as well as analytical skills are required. Experience with Python & R is a plus. The thesis should be written in English.

Begin: as soon as possible

Supervisor: Chunting Liu

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