Coordination aspects in Closed-Loop Supply Chains –
The Value of Information

Closed-Loop Supply Chains (CLSC) are defined as "[t]he design, control, and operation of a system to maximize value creation over the entire life cycle of a product with dynamic recovery of value from different types and volumes of returns over time" (Guide & van Wassenhove, 2009, p.10). This means that the classic forward supply chain is extended by reverse flows of products. Therefore, in addition to traditional supply chain actors, companies responsible for collecting, reprocessing, and potentially reselling are involved. Key issues responsible for coordination failures of supply chains consisting of multiple, independent actors include the missing alignment of incentives and information asymmetries. This raises the question of appropriate coordination mechanisms in reverse, as well as in closed-loop supply chains.

Your task in this thesis is to identify coordination issues and highlight the role of information sharing in this context. Furthermore, based on literature as well as internet research, you should discuss how information technology can be used to support information sharing.

Starting literature: