



Research School for Operations
Management and Logistics

Planner 2.0 – Future of Customer Supply Chain Management

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We observe that supply chain planning is becoming a joint effort between humans and algorithms. Efforts of companies to automate their supply chains are largely driven by automation of planning decisions and standardization of processes. The realization of this automation and standardization comes with challenges: The human planner is positioned as exception handler but must deal with algorithm complexity he cannot control, and the human planner can overrule algorithm decisions with unknown impact on quality of decisions. We want to gain insight into the following research questions: - What is the quality and impact of human planner decisions in the tactical planning process? (e.g. base-stock-level decisions) - What is the quality and impact of human planner decisions in the operational planning process? (e.g. ordering/allocation decisions) - Which human biases can be identified and which debiasing strategies can be applied to improve human algorithm interaction in these planning processes? - What is the role description of a planner in an increasingly automated supply chain? We will contribute to the existing literature of behavioral inventory research by exploring inventory decisions in the context of spare parts logistics. We will empirically validate these findings by applying our models to a case company (ASML). By creating better understanding in the contribution of planner decisions in an increasingly automated supply chain, this will generate managerial insights for companies that experience challenges in automation and standardization of their supply chains.