

Performance Measurement of E-commerce Collection and Delivery Points - Improvements through a holistic system approach

Performance measurement of collection and delivery points currently suffer from suboptimization. Stakeholders connected to e-commerce deliveries lack a holistic perspective due to existing relationships. By collaboration and a holistic system approach synergies could be created and the efficient frontier extended.

In a world where online-shopping has become more common, well performing last mile delivery solutions has become increasingly important. The distribution of e-commerce deliveries has also been put under new pressure due to the ongoing SARS-CoV-2 pandemic. Performance measurement is vital to ensure a well performing and improving distribution network. An important aspect of improved performance is to make sure that the right things are being measured. To investigate what stakeholders connected to e-commerce deliveries measure related to their performance today a thesis on the subject was realized. It was investigated what challenges the stakeholders experience in regard to measuring their performance and how a holistic system approach could make a difference. The stakeholders in focus of the thesis were distribution companies, omni-channel retailers and parcel agents. The three collection and delivery points investigated in the thesis were parcel agents, parcel lockers and in-store pickup. In order to understand the studied field in a better way, observations were carried out, observing the collection and delivery points covered in the thesis. To reach the purpose of the thesis, and understand the current situation, interviews were conducted with regard to the main stakeholders and mentioned collection and delivery points. The collected data was analyzed using a model based on three different levels of performance; societal, strategic and operational. The analysis was carried out by putting the performance indicators identified during the interviews with the stakeholders into the model based on the three levels. When analysing the obtained model it was identified that suboptimization, both within and between different groups of stakeholders, occurred. After reasoning about existing relationships between stakeholders the conclusion was drawn that suboptimization could be avoided if a holistic system approach for performance measuring were to be implemented. The result shows that stakeholders, as well as the society in general, could benefit from an applied system perspective. By applying a holistic perspective a more efficient overall distribution system for e-commerce deliveries could be obtained. Furthermore, the thesis discusses that implementing the suggested holistic system approach can be associated with challenges which affects the feasibility of the realization.