Real-time Data-driven maintenance logistics
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Since IoT has become a useful tool, the field of maintenance has become much more interesting again. Using Data Science, it is possible to predict component failures, resulting in new situations and dynamic environments. For many companies, the transition from static time-driven processes to dynamic data-driven processes comes with difficulties. The infeasibility of maintaining the same resource allocating plans in the new situation causes the demand for new methodologies in this field. In this research we will focus on redesigning maintenance logistics processes for companies, from the field of Business Process Modelling, combined with optimizing these processes, from the field of Operations Research. This research project will think one step further compared to other Operations Research projects, as we will consider the application of certain OR-specific solutions directly through the redesign of the used business processes. From the BPM perspective, we no longer force ourselves into theoretical frameworks, but already try to think of practical consequences such as the field of OR often tries to solve. The main goal of our research is to develop a maintenance logistics control system (MLCS) to assist human decision makers in a dynamic environment.