

Integration of capacity planning in the order process of modernization projects

Student



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Introduction: Syntegon Packaging System AG is a leading company in the field of process and packaging technology. They offer modernization projects as a service, which serve to improve or expand customers' packaging machines. These modernization projects are handled in Beringen from planning to shipping. The spare parts commissioning department is responsible for the pre-assembly of the modernization projects. Since modernization projects have increased in recent years, the process is to be recorded within the department. Based on the process recording, weak points are to be identified and then eliminated.

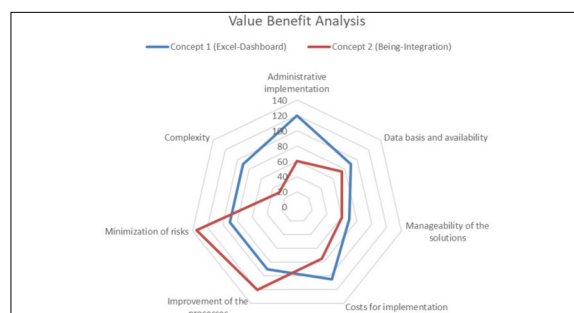
Approach: First, all stakeholders in the existing modernization process were identified. Then, all stakeholders were interviewed on site to identify possible weaknesses and problems. Based on the information gathered, the process was defined within the department and the greatest weakness in the process was identified. The planning of the modernization orders proved to be a very volatile and unplanned process-step. Therefore, two concepts were developed to improve the planning of the orders. The two concepts were evaluated with a value benefit analysis, which led to the decision-making of one concept. The selected concept was then implemented.

Result: The result is an automated Excel capacity planning tool. The tool is populated with SAP data using SQL queries. This data contains planned orders in a time window of two months, which have all relevant inputs for the calculation of the assembly effort. Based on the defined criteria, the planned orders are distributed fully automatically in a calendar. The distribution shows the upcoming orders and their

efforts, so that bottlenecks can be identified and communicated at an early stage. The detected bottlenecks can be eliminated by controlling the total capacity or the capacity for modernization orders of the department.

Concept evaluation using a Value Benefit Analysis

Own presentation



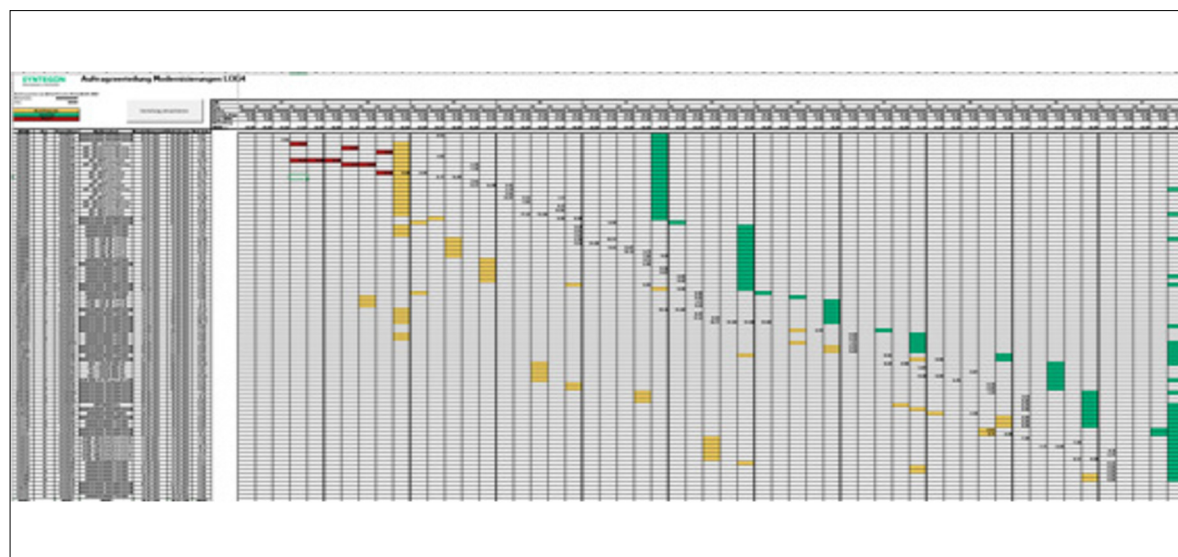
Mapping of capacities and workloads

Own presentation



Completely filled calendar through automated distribution of planned orders

Own presentation



Examiner

Prof. Dr. Katharina Luban

Subject Area

Innovation in Products, Processes and Materials - Business Engineering and Productions

Project Partner

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