



# Process mining to optimise processes in the lifecycle service

Optimisation of order clarification and  
operational purchasing processes



# An overview

Process mining was used to create a digital image of the processes in Krones LCS (Lifecycle Service). The order processing and operational purchasing processes were analysed in detail. The findings are used both in process design and in operational business. In addition, various automation potentials were identified, which were developed in a follow-up project.

## KRONES AG

- Krones AG is a manufacturer of filling and packaging systems for the beverage industry, among others
- 16 thousand employees generate sales of over EUR 3 billion
- Customers worldwide rely on Krones Lifecycle Service for spare parts and retrofits

## Services

- Development of a process model in order processing (focus on order clarification) of Krones Lifecycle Service (LCS)
- Adaptations of the standard purchase-to-pay process model
- Implementation of analyses to identify optimisation potentials

## Results

- Identification of causes for delays in order processing, so that the rework rate in this process could be reduced by up to 22%.
- Identification of an annual potential of 98,725 task steps that can be semi- or fully automated



# Project description

An extensive database from the ERP system is available for the processes in order processing and operational purchasing. As process mining processes in plant engineering are often more complex than standard processes, Rothbaum was commissioned to develop two use cases in Krones Lifecycle Service. The aim of the project was to develop the specific process models and, based on this, an in-depth analysis of the process flows and to identify the potential for optimisation.

## – Procedure

Firstly, the Rothbaum consultants used process walkthroughs together with the Krones analysts to gain an overview of the processes in the specialist departments. The specific data models were developed based on the standard order-to-cash and purchase-to-pay apps. The resulting analyses were used to identify potential for optimisation and automation.

## – Results

Two use cases from the Krones Lifecycle Service were implemented with Celonis Process Mining.

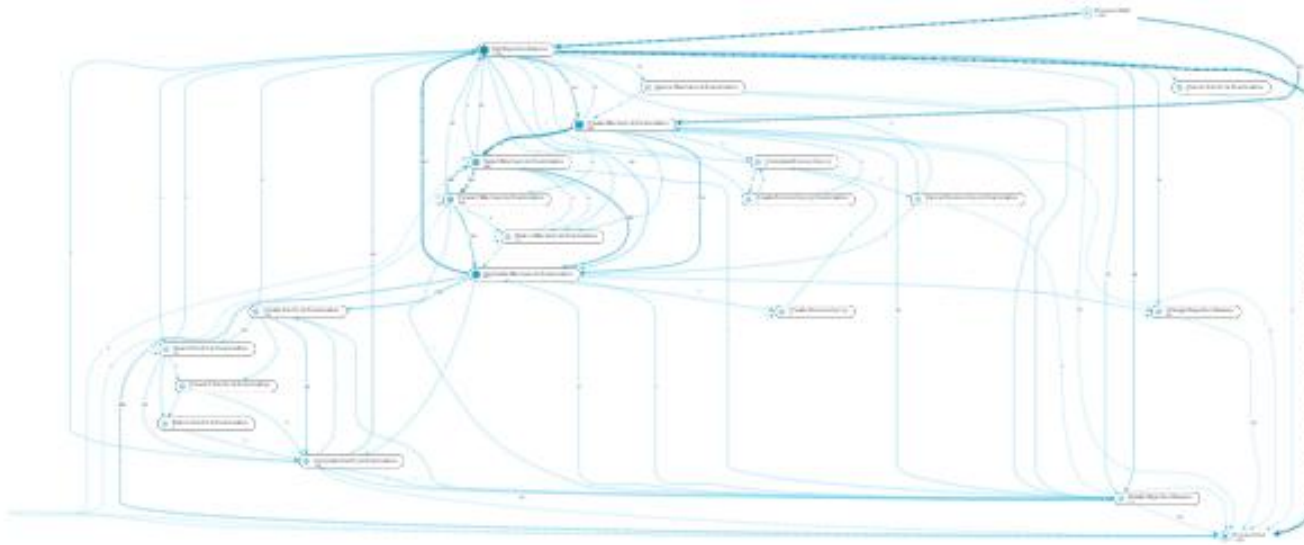
In the context of order processing, the analyses can be used, for example, to show the dependency of the clarification duration on the basis of different parameters. This information is very helpful for planning new projects. Clarification steps that are not necessary in the respective context were also identified. These were eliminated in order to speed up order clarification. Further findings from the analyses help to optimise the basic process design.

In operational purchasing, the focus is on reducing the workload on staff. To this end, 98,725 task steps were identified as having potential for automation in a sub-area of operational purchasing.

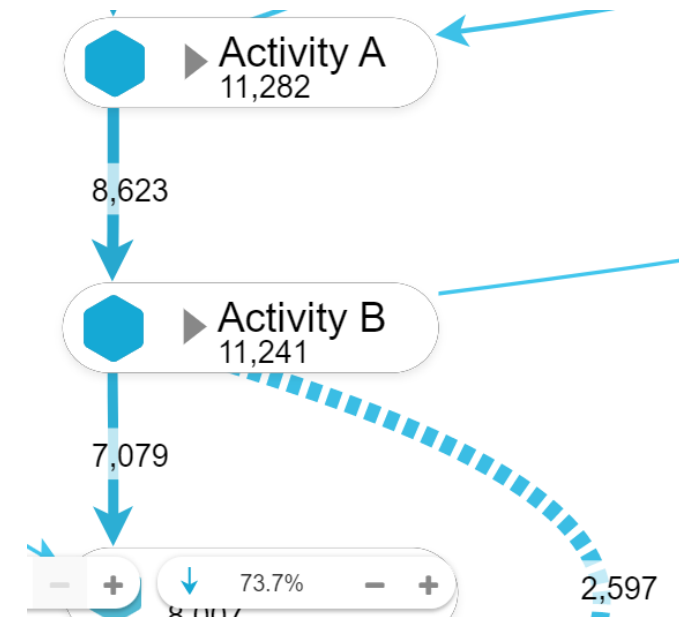
**‘In Rothbaum, we have found a partner on an equal footing who implements sophisticated use cases and taps into potential.’**

Eberhard Semmelmann,  
Krones LCS Performance Network

# Exemplary insights



Exemplary presentation of the processes in order clarification that could be eliminated as a result of the analyses



Example of a process chain identified as having potential for an integrated automation solution

Reduction of activities by **22 %**  
for one in 10 orders.

**98.725** activities offer potential for automation.

# I look forward to your questions!



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