Product Report: Self-Learning Preparation of Process Data using Deep Qualicision AI

Value-added Business Process Data Analysis

Only when data are in a suitably prepared (labeled) form they can be used for further machine learning procedures and more in-depth forecast-oriented analyses. This key advantage makes the difference between ordinary Business Intelligence (BI), which only describes business process data after the fact, and data processing that is suitable for Artificial Intelligence (AI). The latter learns data correlations from historicized data by qualitative labeling so that they can be used for prognoses and for predictive control of business processes. Only then business process data can be used for value-added machine learning and AI makes possible the optimization of business processes.

Qualitative Labeling is part of the AI learning software Deep Qualicision that recognizes and visualises correlations applying certain process metrics (Key Performance Indicators or KPIs) on raw business process data. The software is user friendly and easy to use. In addition to the provision of business process data, it is only necessary to specify according to which KPIs the quality of the business process is to be evaluated and which KPI value ranges are to be regarded as good or rather as non-standard.

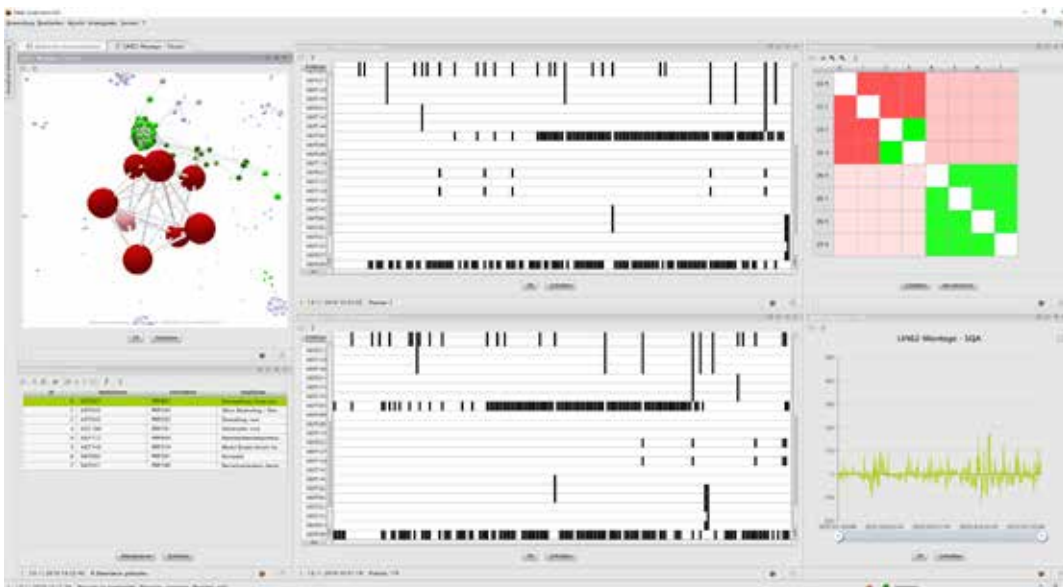### Goal conflict and goal compatibility analysis

These can be both micro KPIs which evaluate small process steps, as well as aggregated macro KPIs which are important concerning the relevant business process. A systematic goal conflict and goal compatibility analysis is part of the software and automatically learns groups (KPI clusters) of positive and negative correlations between the KPIs so that the raw business process data is qualitatively enhanced in the form of visible (labeled) correlations (see figure below).

Business process optimization with labeled data

The existence of labeled business process data is a basic requirement for the targeted value-adding use of AI methods for business process optimization. For example, neural networks without labeled data are useless. With regard to business process data, labeling can not be done manually because the dynamics of the business processes are much too large. Using automatic Qualitative Labeling it is possible to run AI data analysis without having to be an AI expert because the underlying KPIs are derived from the practice of the business process and require no AI-specific knowledge. Thanks to the labeled data of the Deep Qualicision software the user can independently initiate transparent measures for AI-supported business process optimization, and he can make sure his processes are working in a value-added way.

Deep Qualicision GUI.

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