

Products and solutions: The Qualicision® Functional Decision Design Engine from F/L/S

Qualicision® data modelling based on PSI GUI technology

Qualicision® stands for qualified support with decision-making when optimising business processes. Qualicision® technology is based on fuzzy logic which has been extended to complementary effect and helps to incorporate decision-making expertise in business processes in the form of software. Fuzziness in business processes is not only the result of uncertainty regarding the process data used; it also results, in particular, from the variety of the data and interaction between the options for controlling these processes and the process goals; the 'key performance indicators' (KPIs) in other words.

When business processes are optimised with Qualicision®, such interaction is captured in the form of matrices (impact matrices) using the process data. These impact matrices are combined with mathematical conflict and compatibility analysis to calculate which alternatives should be selected for decision-making to come as close as possible to the process goals. In technical terms, conflict and compatibility analysis allows the so-called combinatorial variety of control options to be managed in relation to optimisation of the KPIs.

Optimisation and decision support technology

Any branch of industry can make use of Qualicision® for the purposes of optimisation and decision support. This may involve the optimisation of production sequences in the automotive industry and the manufacturing sector in general, the management of transport processes and the optimisation of operations at transport depots, e.g. buses and trams. Other examples include maintenance management when managing electrical networks, logistics in underground mines for conveying raw materials, the optimisation of

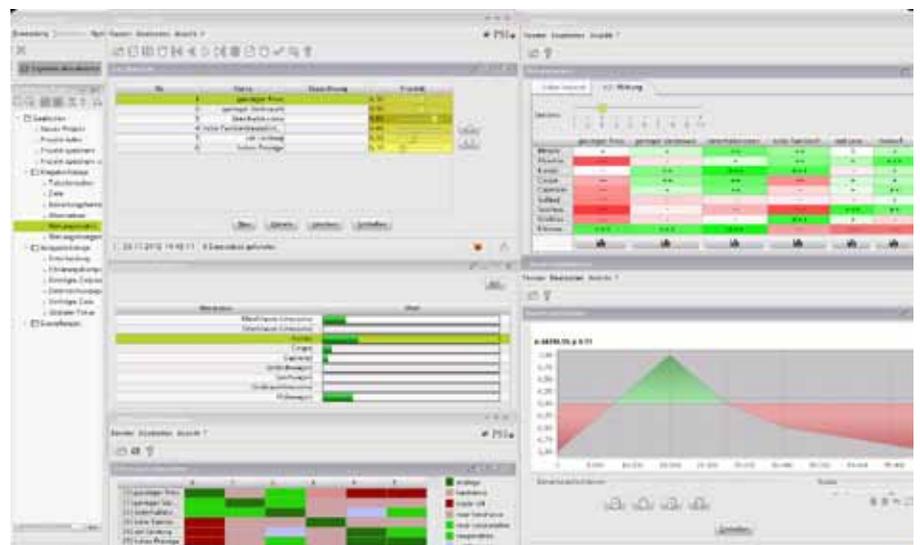
manufacturing control processes and forecasting.

Data modelling

Qualicision®-based data modelling is performed with the help of the Qualicision® Functional Decision

a release based on PSI GUI technology (see figure). This allows all elements of Qualicision® data modelling to be mapped, including KPI target functions, impact matrices, KPI relation matrices, editors, data tables and other visualisation functionalities. The new QFDD release will be presented at CeBIT 2013. A demo version is already available.

Founded in 1992, F/L/S Fuzzy Logik Systeme GmbH now offers in-depth consulting and project expertise in the field of optimisation, where it makes use of proprietary Qualicision® software. F/L/S became part of the PSI Group in 2008. 



Qualicision® Functional Decision Design Engine: modelling elements based on PSI GUI technology.

Source: F/L/S

Design Engine (QFDD). After modelling, QFDD generates a data format that is read by the Qualicision®-based optimisation processes and subjected to further processing. Until now, QFDD was a software tool developed using C++ technology. With support from the PSI convergence strategy, F/L/S is currently working on

► Information

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