

User report: Optimised stock transfer

Qualicision®-Software at Ulla Popken

Under the slogan "Fashion that suits me", the Ulla Popken group of companies sells ladies' outerwear and presents its customers with changing collections each month. As a multi-channel company, the label sells its fashion range in over 300 branches, by mail order and online, with the help of selected European and international franchise partners, and also with shop-in-shop partners who are supplied with items in various sizes from the central warehouse.

The demand for goods from the seasonal range varies in different branches due to e.g. regional conditions. The demand gives rise to differently structured stocks of items and sizes in the individual branches. With the aim of harmonising the stocks in the branches with the corresponding demand structure, employees in the head office or regional sales directors at Ulla Popken regularly decide which branches send which item quantities to other branches and when.

Process description

Ulla Popken presents changing collections each month, so the branches

receive new goods on a monthly basis. Each branch has each item in stock (specified by model and colour) according to a sales forecast. The head office establishes a target and, where applicable, a minimum stock level per branch for each size of an item. The sales reports are used to determine the branches and items for which stock levels fall short of the target on an ongoing basis. As long as there is sufficient stock available in the central warehouse, further supplies can be obtained from there.

Otherwise branch transfers are generated. The branches with the highest sales potential are identified. These should then be subsequently supplied from the



Qualicision in the fashion world

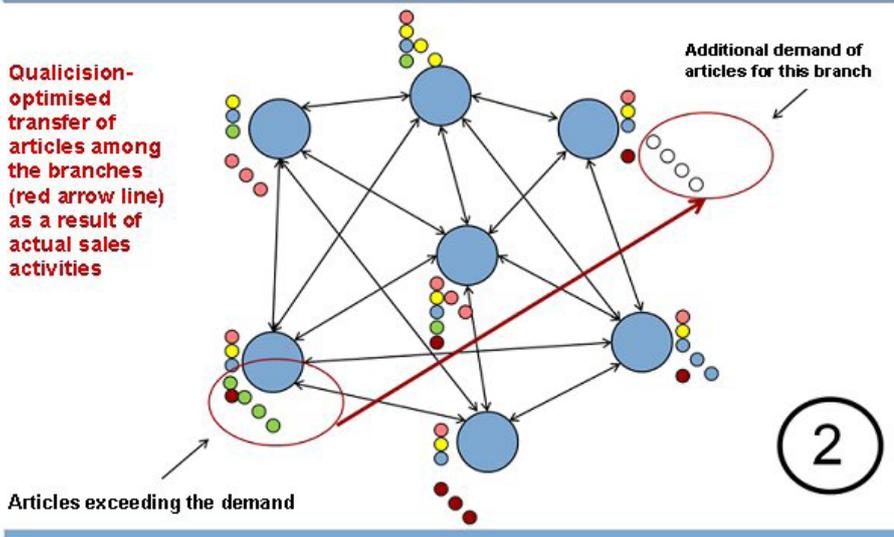
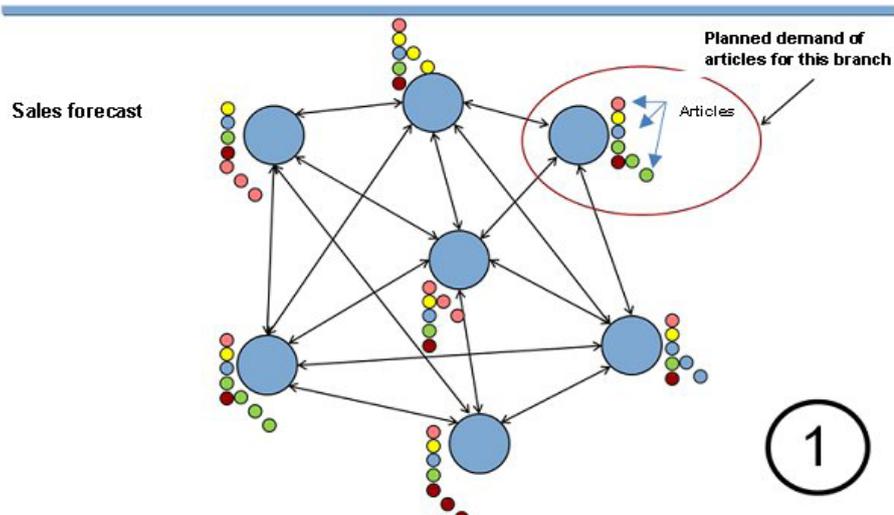
branches that are above the target in the form of a transfer, so that the stocks in the individual branches are equalised after the transfer according to current requirements. Both the receiving and supplying branches must be determined accordingly from the breakdown of the stock situation in the branches and their sales figures.

Qualicision-based optimisation

The original manually scheduled transfer process has been replaced by Qualicision-based optimisation. The optimisation is now working automatically, in a multicriterial way, based on partly contradictory criteria and conditions. These include the attainment of target stock levels (possibly with a slight excess or shortage) and the supply or clearing out of entire size ranges. Apart from these fundamentally sales-



Decision software optimises the transfer of stock between warehouses



Optimised, requirement-oriented stock transfer between warehouses

Source: F/L/S

oriented goals, the shipping costs incurred in this way should be kept as low as possible and the organisational cost of packaging the goods kept to a minimum; this means that in addition to numerous other criteria, packages, quantities, size and fill level play a significant role.

The Qualicision-based optimisation weighs up the opposed criteria appropriately and calculates the required transfers dynamically on the basis of the current target stocks and sales figures. The individual criteria can be weighted by Ulla Popken so that a needs-based transfer can be requested at any time. This is performed in such a way that the individual

optimisation criteria are defined as KPIs (key performance indicators) to which Qualicision priorities can be allocated as optimisation parameters, if necessary.

► **Information**

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Qualicision-Software

Optimisation solutions

Companies are required to make millions of decisions on a daily basis. To varying degrees, these decisions are incorporated into systematised business processes, most of which did not function automatically up to now. The less formalised the company's business processes, the greater the need to systematise the decision-making process. Qualicision technology helps to automate this process, even when it comes to business processes with data sets that are prone to fluctuations and uncertainties.

Software systems created using Qualicision are generally known as decision support systems or optimisation systems. However, Qualicision systems can be configured by the user and adapted to the particular business process without the need for traditional software coding modifications. Software is used to model the decision-making processes before the solutions are integrated into the user's IT environment as well as for any modifications.

If the decisions reached using Qualicision are incorporated into iterative processes and relate to the identification of search directions in search domains, Qualicision-based search and optimisation procedures can then be developed. Unlike the conventional approach, which relies on simplified assumptions regarding the relationship between search and optimisation goals, this approach is particularly advantageous as it uses modelling based on the evaluation of data point quantities. Qualicision can be used in terms of digital image processing for business processes that monitor the flow of materials and control quality, for example. Here, the software is used to identify objects and to evaluate quality in production.