

Taking replenishment of fresh products to the next level in a central warehouse environment:

Case Study - Tuko

Batch level inventory control and simulated spoilage for fresh products

Tuko Logistics is a Finnish food wholesale and supply chain service operator providing purchasing and logistics services for retail outlets. Altogether, Tuko logistics serves over 1.000 outlets and approximately 4,500 foodservice, hotel, restaurant and catering clients. In 2012, Tuko was investigating ways to improve the replenishment of those products at their central warehouse with the shortest shelf-lives. Tuko's aim was to provide fresher goods to their customers and consequently master spoilage – both through better harnessing the sell-by date information in a replenishment process that was already otherwise automated.

The original replenishment process of fresh products required the collection and monitoring of inventory levels, sell-by dates and other replenishment information in separate systems. Combining the information and drawing conclusions from it to support daily replenishment operations was a tedious and labor-intensive task, as hundreds of different fresh lines are replenished in the central warehouse environment. Furthermore, the risk of missing some details in the process was a real worry.

The solution RELEX implemented, together with the Tuko central warehouse replenishment team, was built around the capabilities of batch level inventory control. The batch level stock information is available in real-time via Tuko's warehouse management system and was integrated to RELEX replenishment. In addition, the sell-by dates of batches were imported into RELEX from another back-end system, thus giving additional muscle to RELEX's replenishment calculation routines and enabling it to consider the life cycle of each batch. In this way RELEX anticipates the spoilage of batches in advance through simulations – and moreover, the simulated spoilage triggers additional replenishment orders automatically already before the actual need manifests itself.

Once the new process was brought into production use, the labor intensiveness arising from the replenishment and follow-up of fresh products was reduced drastically. At the same time, the availability of the short lifecycle goods improved while spoilage rates were kept under control. The batch level process benefits not only Tuko's internal turnover management at the central warehouse, but also Tuko's suppliers, as more accurate - fresher - demand can be shared upstream in the supply chain.

