

Production Plan Optimization for Repackaging



InterSystems technology will automate and optimize your repackaging production plan by improving fill rate up to 15 points in less than two months.

InterSystems Supply Chain Orchestrator™ digital data platform will **significantly accelerate time to value** in service, revenue, operational and logistics costs, quality, and productivity.

Existing commercial-off-the-shelf (COTS) optimization applications require changes to how the business is run. Our approach does not require changes to existing processes. We automate them natively into existing organizational workflows and embed optimization capabilities within your existing ERP systems and the systems/applications of your repackaging facilities.

The Challenge

Many food and beverage and retail grocery companies do not have optimization systems with the necessary flexibility to operate in a supply constrained environment.

Manufacturing facilities need to send multiple components to repackaging facilities for the multipack process to produce finished goods. Planning optimization tools assume unlimited supply, creating inefficiencies across the supply chain whenever shortages occur. Sometimes repackaging facilities can't get all the components they need to make finished goods. Instead of scrambling to move inventories in their supply network after the components are shipped, they want to optimize the planning before the initial component shipments leave manufacturing.

Current processes are often very manual, generating production sequence plans on spreadsheets with limited ability to optimize carrier network for the most optimal movement of product. Typically, service levels are hard to meet without extensive human intervention, which all leads to low order fulfillment and poor end-of-life product freshness.

Key Benefits

Typical benefits will be centered around four key areas:



Service

Optimizing component allocation which leads directly to improved fill rate and increased revenue, typically in the tens of millions of dollars



Cost

Improving replenishment efficiency with a direct impact on transportation cost and reduction of out-of-date product shelf-life



Quality

Significantly improving product shelf-life availability at retail level



People

Transforming work from reactive to proactive efforts. With less time spent on processing, this frees up more time for strategic thinking to improve fill rates and reduce transportation costs

The Solution

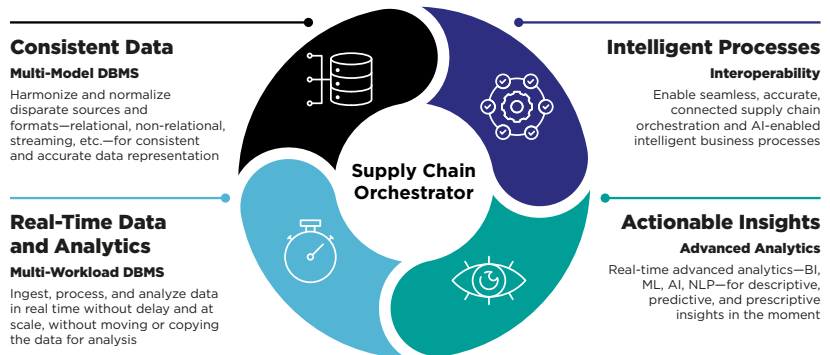
This is where Supply Chain Orchestrator comes in. It enables component inventory to be rebalanced in the most efficient manner through the supply chain network and within the repackaging facilities to optimize production sequencing. By integrating real-time optimized data into existing systems, companies can build out production plans based on **true forecast and supply** to maximize fill rate without resorting to manual methods.

Companies can also feed their current component inventory positions through a machine learning algorithm that provides an optimized production plan. With four key embedded technologies acting as a single capability, organizations achieve integration, ingestion of data at rest and in real-time, full interoperability, and provision of unprecedented insights to the line-of-business.

For example, Supply Chain Orchestrator can quickly harmonize and normalize disparate finished goods (F/G) data throughout the network with current repacker production planning data. This can then be digitally provided to the line-of-business user, and integrated into existing systems within seconds for an optimized production planning sequence of F/G product. At the same time, optimized transportation network alternatives will be accessed in real-time to provide the most cost-effective transportation routing for fulfillment.

Supply Chain Orchestrator allows production sequence automation (staging harmonized data in KPI views) and production planning optimization through machine learning. This uses different constraints including transportation cost, or component inventory allocation. All this combined provides the ultimate in repackaging fulfillment to optimize product shelf-life, productivity, cost, and revenues.

InterSystems Data Platform



For more information, visit InterSystems.com/SupplyChain

