



Summary

CUSTOMER

UST

CHALLENGE

To optimize supply and demand levels in an unconstrained environment

OUTCOME

Digitally optimized safety stock levels in real time and a balanced production line

UST + InterSystems

InterSystems Partnership and Technology Help UST Bring Supply Chain Optimization as-a-Service to Market

A leading manufacturer and marketer of musical instruments and amplifiers was running out of components on the production line due to demand fluctuations and differences in lead times for different parts. To remedy this situation, the company wanted to digitally optimize safety stock levels and production line balancing. And they wanted to provide planners with the visibility to the right inventory, at the right time, at the right place to ensure that desired service levels are maintained and inventory is minimized across the network to improve working capital. “They needed a high-power inventory and production optimizer,” says Jonathan Colehower, managing director, global operations and supply chain practice at UST. “But a typical solution for them would cost about \$2 million and take years to implement fully. The company needed an affordable solution now.”

UST employs 33,000 people, in 30 countries, with expertise in digital transformation, systems integration, and software solutions for manufacturing and other industries.

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InterSystems™
Supply Chain Orchestrator

“OUR CUSTOMERS ARE GETTING 80% OF WHAT TRADITIONAL SOLUTIONS OFFER AT 20% OF THE COST, WITH IMPLEMENTATION COMPLETED IN JUST A FEW WEEKS”

Balaraj Pudota, Senior Vice President of Supply Chain and SAP Practice, UST

Overcoming Common Objections to Optimization Solutions

The manufacturer of musical instruments and amplifiers engaged UST for help, and UST proposed its InterSystems Supply Chain Orchestrator-powered OPTUM product as the Inventory Optimization as-a-Service solution. In proposing OPTUM, UST knew it would have to overcome common objections to optimization products, including:

- A lack of trust in “black box” optimization algorithms from solution providers
- Modeling of complex scenarios being too slow to provide answers to immediate issues, or too costly to achieve acceptable performance
- Traditional optimization solutions are expensive and take too long to implement
- Staff with domain and optimization expertise, including data scientists, are required

“We chose InterSystems and Supply Chain Orchestrator specifically to address these concerns,” says Colehower. Compared to a different product with an in-memory database that UST had previously used, Supply Chain Orchestrator provided much higher performance. Based on real data that the manufacturer provided for testing, UST could model the manufacturer’s entire production environment in Supply Chain Orchestrator and run and optimize different scenarios in near real-time.

Powered by Supply Chain Orchestrator, OPTUM provides planners and supply chain managers with action options for each scenario it models. It ensures that production lines have the right amount of safety stock, with optimized routes, prices, and other elements within the supply chain. “We’ve taken well-known, proven, and trusted public-domain optimization routines, written in Python, and run them inside Supply Chain Orchestrator, so customer objections to black box algorithms disappear.”

“The InterSystems team is not just a bunch of analysts and quants; they know supply chain inside and out. It was easy to talk to them and for them to understand what we needed”

Jonathan Colehower, Managing Director, Global Operations and Supply Chain Practice, UST

Supply Chain Optimization as a Service

The API and standards-based integration capabilities of InterSystems Supply Chain Orchestrator and other components of OPTUM enable UST to connect it to back-end systems such as enterprise resource planning, human resources, and procurement. Using this data, UST can offer “composable solutions” that deliver just what a customer needs, such as analytics, machine learning, or optimizations, without having to deploy heavy-duty products that offer more than what’s needed and take too long to deliver value. “Our customers are getting 80% of what traditional solutions offer at 20% of the cost, with implementation completed in just a few weeks,” says Balaraj Pudota, senior vice president of supply chain and SAP practice at UST.

Go-to-Market Expertise from InterSystems

Colehower credits the know-how of InterSystems experts for helping UST bring OPTUM to market. “The InterSystems team is not just a bunch of analysts and quants,” he says, “they know supply chain inside out. It was easy to talk to them and for them to understand what we needed.” Delivering answers to resolve supply chain issues, exactly when needed, at the right price, is a win for everyone working toward the highest efficiency and business outcomes.

Learn More

To learn more about InterSystems Supply Chain Orchestrator, visit [InterSystems.com/SupplyChain](https://inter-systems.com/SupplyChain)



