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UST Optum



Supply chain
optimization as a
service

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UST Optum optimizes supply chains and improves your bottom line



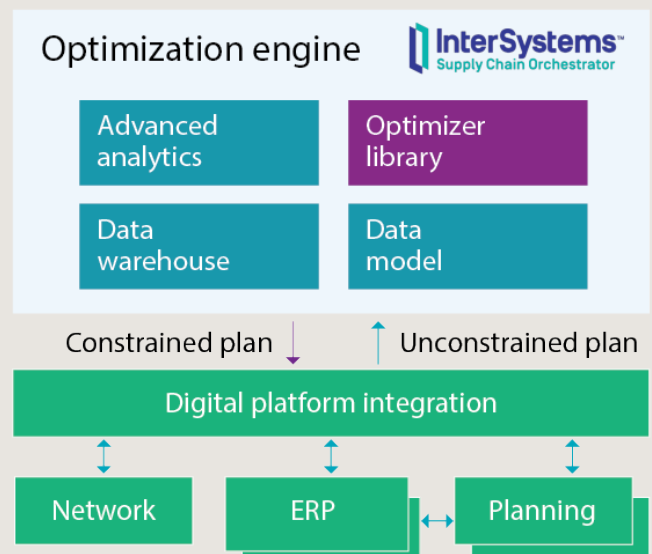
Managing supply chains in volatile times

Supply Chain disruptions are here to stay. Business leaders today face challenges on multiple fronts, including decades-high inflation and interest rates, geopolitical issues, recessionary trends, and vulnerable supply chains, to name a few. Unique and unprecedented challenges are impacting supply chains across industries. Past lessons have limited value today when it comes to operational resiliency, and organizations need the capability to simulate and optimize their operations for these situations. Moving from “Now What” to “What If” will become the key differentiator for supply chain leaders looking to move their organizations to the next level of maturity.

UST Optum provides outcome-based optimization as-a-service, leveraging the power of SAP Business Technology Platform (BTP) and InterSystems Supply Chain Orchestrator™.

How can UST Optum help?

With UST Optum, our clients optimize different areas of supply chain operations, including inventory, network, price, logistics, and shop floor. Leveraging industry-leading optimization solvers, Optum extracts unconstrained plans from an organization’s siloed systems and delivers a constrained and optimized plan. Our best-in-class data platform and industry-grade integration provide scale and speed to crunch vast amounts of data and bring insights that elude traditional information analysis methods. Optum brings out the power of machine learning in simulating and creating various scenarios, enabling planners to understand the implications of actions and visualize their outcomes.



What are the benefits?

Supply chain techniques like multi-echelon inventory optimization (MEIO) have improved key metrics like inventory reduction, customer service levels, and working capital. Benchmark studies, such as [this report](#) from McKinsey, have demonstrated these benefits, especially when faced with changing business environment and business priorities. Domain knowledge and optimization expertise are key factors for a successful implementation. We understand that not every organization can deploy a team of data scientists to solve supply chain issues. UST Optum brings together our supply chain expertise, SAP's Business Technology Platform capabilities, and the world-class data platform by our partner, InterSystems, to provide the right solution for an organization's needs.



Increase supply chain throughput by 10 to 15%



2 to 5% increase in EBITDA margins



Reduce operational costs by 5 to 10%



Better on-time delivery and quality



Reduce CO2 emissions by 10 to 15%



Increased resilience and value capture

Source for benefits: Multiple benchmark studies and industry reports

Building trust and confidence is key

SC leaders look at advanced modeling as a 'black box'



Optum's simulation-based modeling builds trust and confidence

Sales teams fear impact on customer service and churn



Service level exceeded by having timely order fulfillment

Logistics heads optimize individual nodes: Local optima



MEIO can improve inventory turns by 28% on average*

SC planners believe it gets computationally intensive



The InterSystems Supply Chain Orchestrator optimization engine models scenarios in real time

Supply chain optimization is not new. Inventory optimization techniques have been developing since the early sixties. However, adoption has been low due to a lack of trust in black box solutions. Moreover, computation power had been lacking for modeling complex scenarios, and most optimization had been limited to simple scenarios or single echelons.

The advent of powerful optimization engines, like the one built into the InterSystems data platform, recent developments in AI/ML techniques, and

greater awareness of supply chain techniques have reduced some of the hurdles around optimization. Optum is designed with end users like planners and supply chain teams in mind and builds trust through insightful analytics and simulations. The ability to model based on business needs, like service levels and turnaround time, ensures that teams can see the impact of optimization on all key metrics relevant to business.

Case: Multi-echelon inventory optimization for a leading manufacturing firm

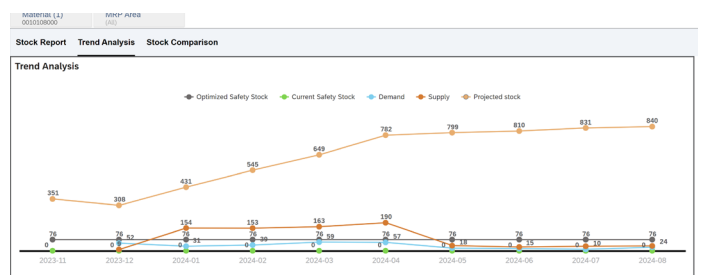
UST provided inventory-optimization-as-a-service for balancing the production line of a leading manufacturer of musical instruments. The client faced challenges in planning at a component level for some of its models. Using a multi-echelon inventory optimization (MEIO) engine, UST Optum recommended the right amount of safety stock at plant and MRP levels, ensuring that planners have the proper visibility of the right inventory at the right place. Both master and transaction data were seamlessly fed into the solution using SAP's Business Technology Platform (BTP) engine. A robust supply chain model built on InterSystems Supply Chain Orchestrator provided scalability and performance for running the optimization engine. The power of SAP's Analytical Cloud (SAC) was leveraged to provide intuitive self-service analytics and deliver insights at the point of decision.

Material (2072) MRP Area


Stock Report Trend Analysis Stock Comparison

Safety Stock Optimization


Material	Material Description	MRP Area	MRP Area	Month	Optimized Safety Stock USD	Optimized Safety Stock	Current Safety Stock USD	Current Safety Stock
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2023-09	191,293	45,873	0	0
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2023-10	191,293	45,873	0	0
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2023-11	191,293	45,873	0	0
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2023-12	191,293	45,873	0	0
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2024-01	191,293	45,873	0	0
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2024-02	191,293	45,873	0	0
0015575000	SCRW 38A8 4x1/2 CRP Ni and D40	(No Value)	(No Value)	2024-03	191,293	45,873	0	0




UST Optum use case




Inventory optimization




Route optimization




Price optimization




Network optimization




Sequence optimization



Pallet optimization



Load optimization



Parcel hub optimization

Summary

UST Optum tackles the myriad problems supply chain managers face each day, like the right inventory levels, optimal routes, best prices, and many other situations that can be improved through optimization. By introducing real-time improvements in the operations of a multi-stage supply chain, your organization can benefit from moving to the next level of supply chain capabilities.

For more than 24 years, UST has worked side by side with the world's best companies to make a real impact through transformation. Powered by technology, inspired by people and led by our purpose, we partner with our clients from design to operation. Through our nimble approach, we identify their core challenges, and craft disruptive solutions that bring their vision to life. With deep domain expertise and a future-proof philosophy, we embed innovation and agility into our client's organizations—delivering measurable value and lasting change across industries, and around the world. Together, with over 30,000+ employees in 30+ countries, we build for boundless impact—touching billions of lives in the process.

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