



NUCLEUS  
RESEARCH

# WHY THE OPTESSA AND ONE NETWORK PARTNERSHIP MATTERS

## ANALYST

Charles A. Brennan

## THE BOTTOM LINE

The Optessa and One Network partnership integrates Optessa's manufacturing optimization software with One Network's supply chain management platform. This integrated solution enables manufacturers to optimize production scheduling across complex supply chains. Manufacturers can achieve new operational responsiveness and resilience levels by combining demand-driven manufacturing capabilities with end-to-end supply chain visibility and coordination. The collaboration exemplifies the operational value of integrating specialized manufacturing solutions into multi-tier supply chain platforms.

## ANNOUNCEMENT

In August 2023, One Network Enterprises, a leader in supply chain management applications, partnered with Optessa, a software company that helps manufacturers plan and schedule production more efficiently. By partnering, both software companies can leverage each other's technological strengths to offer customers improved visibility, coordination, and optimization from sourcing raw materials to manufacturing finished goods. For manufacturers, this partnership enables closed-loop optimization between supply and production planning. Optessa's scheduling algorithms can maximize efficiency on the factory floor while considering supply constraints and priorities identified by One Network's control tower. This will lead to lower inventory costs, improved service levels, and higher productivity overall. Additionally, the ability to create and share optimized plans across the network, from original equipment manufacturers (OEM) to suppliers, will improve forecast accuracy and responsiveness. Suppliers can synchronize with demand signals instead of reacting to short-term changes. With major automotive companies already using Optessa's and One Network's solutions, this partnership positions One Network and Optessa to drive digital transformation initiatives at leading complex manufacturers. Extending optimization from planning through execution can help manufacturers achieve flexibility, resilience, and efficiency in volatile economic and geopolitical times.

## OPTESSA

Optessa offers a cloud-based solution that provides manufacturers with advanced production planning, scheduling, and sequencing. Its software leverages attribute-based modeling to define production, supplier, and logistics limitations across the supply chain. This facilitates efficient order selection, allocation, and work-in-progress management on an enterprise scale. Specifically, Optessa enables master production scheduling and capacity planning to match forecasted demand with supply. It can calculate promise dates and optimize order slotting to achieve precise production leveling. The software allocates orders across multiple sources to balance capacity constraints. Optessa offers detailed solutions with customizable business rules for scheduling for each production line.

## ONE NETWORK

One Network is a leading vendor in supply chain management, recognized for its usability and functionality (Nucleus Research w152 - Control Tower Technology Value Matrix 2022 -

September 2022). It supports retail, food services, consumer goods, automotive, manufacturing, healthcare, aerospace and defense, and logistics organizations. One Network provides organizations with a comprehensive control tower solution, the Intelligent Control Tower, that oversees and optimizes decisions and executions across the supply chain ecosystem. One Networks Intelligent Control Tower offers end-to-end visibility across supply chain partners, real-time collaborative information sharing, early warning alerts and exception management, predictive and prescriptive decision-support through analytics, autonomous decision-making and control, and cognitive features like self-correcting supply chains powered by machine learning. Its NEO platform provides a comprehensive supply chain planning and execution system. This platform seamlessly integrates key functions like sales and operations planning (S&OP), demand planning, supply planning, logistics management, and inventory optimization.

## ANTICIPATED BENEFITS

Nucleus predicts that the partnership between Optessa and One Network will enable existing customers to enhance supply chain management, lower inventory costs, and improve production efficiency.

- **Enhanced operational resilience.** The partnership between Optessa and One Network will empower existing customers to optimize production scheduling and drive down inventory costs. Businesses gain comprehensive visibility into material flows, production capacity, and constraints by seamlessly integrating One Network's Intelligent Control Tower with Optessa's advanced manufacturing planning and scheduling technology. With a unified view and machine learning capabilities, it will swiftly detect disruptions and formulate optimal recovery strategies. One Network facilitates real-time rerouting of orders and inventory reallocation based on supply or demand changes. At the same time, Optessa adapts production sequences to align with revised supply-demand plans. This dynamic re-optimization minimizes backorders and customer wait times, amplifying supply chain resilience.
- **Lower inventory costs.** Integrating One Network and Optessa technology brings synchronized planning and scheduling to the supply network for manufacturers, effectively tackling supply-demand mismatches that often lead to inventory surplus. The real-time visibility of One Network's Control Tower into upstream supply conditions and evolving demand changes enables swift adjustments to production schedules. Optessa's algorithms promptly re-optimize production sequences and capacity utilization, averting the accumulation of excess inventories. The integration enables joint customers to identify and resolve supply-production discrepancies,

allowing potential shortages based on delays or spikes to be flagged. Optessa's agile adjustments to production plans minimize buffer stock and eliminate stoppages.

- **Improved production efficiency.** Optessa's algorithms optimize production sequences, line balancing, changeovers, and batch sizes to maximize output and minimize downtime to raise throughput. Constraints and material availability from One Network's supply plans ensure Optessa has the inputs needed to identify the most efficient production schedule. The integration also enables "what-if" scenario modeling to continuously improve schedules by considering alternate production options, equipment assignments, and product mixes. The higher throughput from these optimized schedules allows manufacturers to scale production to meet demand without adding costs.

## WHY IT MATTERS

The strategic partnership between One Network and Optessa underscores the increasing significance of integrated solutions for digital supply chain optimization. As manufacturing becomes more complex and customer demands grow more dynamic, siloed software tools are no longer adequate. The partnership highlights the value of combining planning, scheduling, production, visibility, and collaboration to maximize responsiveness and performance. More partnerships between enterprise and specialized software vendors may emerge, merging capabilities across planning and execution to drive efficient synchronized optimization. This will be key as manufacturers pursue smart factories, real-time supply chain synchronization, and mass customization initiatives. It also reinforces the need for open platforms to integrate best-of-breed applications flexibly.