

As featured in

ASSEMBLY
MAGAZINE

Modine Builds Supply Chain Resiliency and Transparency

About Modine

Modine, a diversified leader in thermal management technology and solutions, is a global company headquartered in Racine, Wisconsin (U.S.), with operations in North America, South America, Europe and Asia. For over 100 years Modine has led the way in researching and developing thermal solutions in pursuit of their purpose: Engineering a Cleaner, Healthier World™.

The Challenge: Streamlining Manual Supply Chain Processes for Efficiency

Modine has faced significant challenges in its supply chain processes. The company's heavy reliance on manually managing most aspects of their supply chain has driven ongoing inefficiencies and hindered overall performance.

The team experienced difficulties in managing shortages due to suboptimal processes and excessive manual efforts, leading to a lag in fulfillment. There was a need to right-size inventory for more efficiency, and the lack of analytics across different sites highlighted a need for more comprehensive and collaborative insights across the supply chain process.

Modine specifically identified the ability to optimize materials and supply chain orchestration with predictive analytics and prescriptive execution recommendations as vital to digitally transforming its supply chain. The organization implemented LeanDNA, an intelligent supply chain execution platform, as its comprehensive solution to overcome these challenges and optimize supply chain execution to become a strategic advantage going forward.



OVERVIEW

Key Challenges

Heavy reliance on manually managing most aspect of their supply chain lead to

- Lag in fulfillment
- Lack of analytics across different sites
- A need to rightsize inventory

Key Results

- 40% reduction in material shortages
- 50% reduction in supplier past dues
- Improved Clear to Build percentages
- 10% inventory reduction



Gradual digital transformation is the path to enhanced adaptability—small wins build confidence and set the stage for broader transformation.

Vatsal Gandhi,
Executive Director of
Global Supply Chain



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“We need to reduce our reliance on spreadsheets. Is this scalable? Is this sustainable? You must invest in smart learning and decision-making platforms like LeanDNA that can help you be more agile,” said Vatsal Gandhi, Executive Director of Global Supply Chain at Modine.

The partnership between Modine and LeanDNA successfully addressed chronic part shortages and inconsistent deliveries. It introduced a supplier fulfillment control tower establishing a structured framework and processes and enhanced communication. This project resulted in tangible and significant improvements, setting up the team to continuously improve and optimize their supply chain.

Modine’s fast-track implementation of LeanDNA was completed within a record time of under two months. Modine’s eagerness to digitize the supply chain execution process has positioned them for strong results that can be built on as the team continuously optimizes with LeanDNA.

Establishing a Supplier Fulfillment Control Tower for Enhanced Supply Chain Resilience

Through the partnership with LeanDNA, Modine developed a structured framework, standard templates, and processes within the Supplier Fulfillment Control Tower. This led to development of supplier fulfillment team infrastructure, strengthening data quality, integration, and analysis capabilities. The digitized solution also brought about improvements in KPI transparency and management. Modine can now effectively track and manage key metrics such as revenue at risk, clear-to-build percentage, and past-due items/shortage reduction. By involving different stakeholders, including material managers, buyers, planners, and procurement, LeanDNA has facilitated cross-functional collaboration, and the platform has become a central hub for addressing critical material shortages at various levels.

“LeanDNA seamlessly integrates with our ERP system and facilitates enhanced supply chain decision making at multiple levels of the organization. It not only provides summary dashboards and intelligence to leadership, but it also empowers front-line employees with superior information and diminishes their workload,” said James Dawsey, Senior SIOP & Demand Management Leader at Modine.

The Supplier Fulfillment Control Tower acted as a catalyst for unified capabilities, processes, and systems that fostered better supplier relationship management, clearer supplier communication, more transparent demand planning processes, and business continuity. It also created a platform for on-site supplier assessments and the development of short-term and long-term improvement plans.

Transforming Supply Chain Performance

The project has resulted in significant, tangible improvements across various aspects of Modine’s supply chain, most notably contributing to **enhanced efficiency, reduced shortages, and improved overall operational resilience**. The digital solution’s diverse functionalities have empowered Modine to proactively address challenges and drive continuous improvement initiatives. Modine factories that have implemented the LeanDNA platform have seen **40% reduction in material shortages and 50% reduction in supplier past dues**.

The introduction of an Inventory Burnoff graph provided valuable insights into potential purchased and identified manufactured inventory reduction opportunities. Modine used this analysis to understand the impact of Inventory Actions on forecasted inventory numbers, enhancing strategic decision-making and allowing Modine to assign and collaborate across teams on essential inventory actions to right-size inventory and improve supply chain performance.

The addition of the digital Clear to Build capability aligns inventory with production readiness to show what can and cannot be built based on current and incoming material. This emerged as a core feature extensively used by the Modine team, providing crucial support to Modine's planning team by enhancing visibility into production readiness and **reducing the risk of production delays**.

With that, Modine has witnessed **significant improvements in Clear to Build percentages**. “By utilizing the enhanced and directed inventory actions coming from LeanDNA’s analytics engine,” says James, “we’ve diminished our capital tied up in inventory and improved our inventory turns.” Modine plants with LeanDNA platform realized **10% inventory reduction** within the first 6 months of implementation.

Closing the Gap: Transitioning from Data Management to Strategic Execution

Modine’s partnership with LeanDNA allowed them to apply 80/20 business principles to their supply chain. Instead of spending 80% of their time building reports and analyzing data, and 20% of their time executing on actions, the team was able to flip these percentages. This project has given the team at Modine more time to focus on intelligently executing and taking effective action rather than heavy reliance on spreadsheets and trying to keep track of offline communication. With predictive analytics and workflows, Modine’s team can now surface the right critical actions to the right team(s), allowing them to focus on the most important work every day, which in turn is driving positive, sustainable business results.

Expanding for Global Supply Chain Optimization

Digital transformation paves the way for true adaptability. Vatsal advocates for a systematic approach saying “Gradual digital transformation is the path to enhanced adaptability—small wins build confidence and set the stage for broader transformation.”

Modine has seen incredible success since implementing LeanDNA and expects to gain even more visibility into global performance and cross-site opportunities to optimize inventory. The opportunity for continuous improvement and larger impact across the company is tangible and quantifiable as LeanDNA is expanded.

“*Supply Chain is swiftly evolving with AI and business intelligence playing an ever more prominent role in expedient decision making. LeanDNA and other BI tools are disruptors to traditional business practices that provide organizations a strategic competitive advantage. The key is understanding the accompanying processes that must be in place to leverage the tools, driving efficient Org Change Management (including training and leadership/frontline adoption), and demonstrating actual tangible KPI improvements upon full adoption.*

— James Dawsey, Senior SLOP & Demand Management Leader at Modine.

