



Creation Technologies partners with Kinaxis to Build a Smart, Efficient Supply Chain

Key objectives:

- Improve demand management, advanced planning, and supply alignment
- Scenario planning to support production
- Assess supply chain delivery implications

Industry:

Electronics manufacturing services (EMS)

Geographies:

US, Canada, Mexico, and China

Employees:

3,500+ employees

An electronics manufacturing services (EMS) provider with 13 manufacturing sites around the world, Creation Technologies provides engineering and manufacturing services to the aerospace, defense, medical, and tech industrial markets.

The company focuses on precision, quality, and innovation with its portfolio of product design and development, manufacturing, testing, and certification services.

Creation Technologies also manages the entire supply chain for its clients—from materials sourcing to production to transportation, and all points in between. The organization works closely with its own suppliers to ensure timely delivery and quality control. Achieving these goals across multiple global manufacturing sites that serve Creation Technologies' aerospace, defense, medical and tech industrial customers is no simple feat with an intricate and complex supply chain network.

Results:



A consolidated MRP execution and scenario planning engine that provides a single source of truth for all global manufacturing sites



Supplier EDI/API integration that provides accurate visibility to current availability in the supply base



Ability to simulate customer demand changes in a scenario and provide shipping estimates based on current on-hand raw materials plus available inventory in the supply base



Can understand the implications of demand changes, liability, and risk before they are realized



Ability to commit scenarios to become the MRP execution plan resulting in accelerated revenue realization and/or proactive inventory management

Making and keeping promises

In 2018, Creation Technologies found itself in need of a comprehensive materials requirement planning (MRP) platform to optimize planning, execution, and decision-making across its end-to-end supply chain. As a long-time user of Oracle's E-Business Suite, the organization was looking for a solution that would integrate easily with its current IT infrastructure and improve its demand management, advanced planning, and demand-supply alignment processes.

Once in place, the new platform would be expected to support the procurement of 200,000+ components annually and more than 1,000 different procurement signals across the 4,000+ vendors that Creation Technologies manages daily. The company employs about 500 supply chain professionals who share the purchasing, planning, and master scheduling responsibilities.

"Our customers have bills of materials (BOM) ranging anywhere from about 70 components to 3,000 components or more," Radhika Kanakamedala, Creation Technologies' director of business systems, supply chain, manufacturing, and engineering, explains. "The lead times for those components can range from 14 days to 18 months, and our customers will drop in demand pretty much anytime they want to."

Once the orders are received, Creation Technologies has about 48-72 hours to let those customers know that 1,000 units of a certain product will be built 1-2 weeks from the order receipt, for example. These communications with customers also include a 'best available ship date', factoring in lead times from Creation Technologies' own suppliers.

"We have to give our customers that information quickly," says Kanakamedala. "This is all part of a bestin-class total solution that Kinaxis helps us provide."



Kinaxis comes out 'leaps and bounds ahead'

Oracle's E-Business Suite served Creation Technologies well on the enterprise resource planning (ERP) front, but the platform wasn't managing the ever-changing customer demand signals very well. For example, it wasn't good at iterating through scenarios that incorporated demand changes, nor did it provide the raw material substitution logic the company required.

The business needed a solution to help it determine supply chain delivery implications based on changes in customer demand, before they committed to meeting that demand.

"In our business, we get demand changes from our customers and the plan regeneration cycle time takes about 20-30 minutes. Then we have to do all of the analysis," Darryl Catellier, VP of business systems, explains. "Our ERP didn't quite meet our needs, not to mention that we were paying additional infrastructure costs for software licensing and maintenance."

After evaluating several options, Creation Technologies found exactly what it was looking for in the Kinaxis Maestro™ platform. "At the end of the day, Kinaxis came out leaps and bounds ahead of the other platforms in its ability to handle very rapid iterations and understand the implications of demand changes before we actually start driving our supply chain," said Catellier.

It all comes together seamlessly

Today, Maestro is Creation Technologies' single MRP engine, with Oracle E-Business Suite managing all transactions. The company utilizes electronic data interchange (EDI) and application programming interface (API) feeds, enabling its top suppliers to share inventory data. "We receive lead times and inventory data on a daily basis from those distributors," says Kanakamedala. "All of that data gets fed into Kinaxis and used for planning."

Creation Technologies now has all the end-to-end advanced planning and demand management capabilities it was missing. Beginning with a single site that immediately began providing positive feedback on the platform, Maestro was rolled out across all the company's sites. "That was our journey," said Catellier, "and it has really paid off in dividends."

One especially big win is the more accurate, reliable demand forecasts that Maestro generates. This is important because even minor variances in those forecasts can translate into substantial added costs, particularly when it comes to inventory.

"We're very wary about the inventory we carry, particularly high-priced items or products with 18-month lead times," Kanakamedala says. "As part of our demand management process, demand is received from customers, analyzed in Kinaxis, and then fed into our ERP."

That demand data is then loaded into Maestro and used to create a what-if scenario. Creation Technologies' supply chain teams then use scorecards to understand the risk and liability metrics, (e.g., what will our inventory projection be two months from now?) that the company uses to conduct analysis and drive procurement signals across its 13 global sites. Planners get the best available solution for a specific customer BOM and a summary report showing the best available finished goods ship date for the order.

"It all comes together seamlessly and flows like magic," says Kanakamedala. "Having Kinaxis as our only MRP engine has helped a lot because it's our single source of truth platform, and it gives us an accurate plan within minutes that we can confidently share with our customers."

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RADHIKA KANAKAMEDALA, DIRECTOR OF BUSINESS SYSTEMS, SUPPLY CHAIN, MANUFACTURING, AND ENGINEERING, CREATION TECHNOLOGIES

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