

WHITE PAPER

THE EFFECTIVE SUPPLY CHAIN: MAXIMIZING PERFORMANCE

AT A GLANCE

Today's manufacturing supply chain is challenged with quality mandates, cost reductions, and delivery improvements.

Technology plays a key role in a company's ability to build and manage an effective supply chain.

This paper describes the next wave of supply chain solutions, including supplier Kanban Loops which automatically create an electronic pull loop that generates pull signals when parts are needed and supplier web portals for real-time communications.

Included is an example of effective supply-chain management in action, demonstrating how the enterprise reduces costs, lead times, and inventories throughout the entire supply chain.



Challenges to the Supply Chain

Increasingly complex products drive greater dependency on supplier quality management, especially for automotive, food processing, and aerospace manufacturers. In addition, large OEMs drive warranty costs downward through the supply chain, which increases the necessity for documenting quality and processes through every step of the chain.

Cross-organizational traceability – where products/parts can be traced backward through the manufacturing process across multiple suppliers – is an absolute requirement for manufacturers with complex supply chains. This requires a high degree of integration among systems within the manufacturer and with multiple suppliers.

The manufacturing enterprise driven by tight profit margins; a tough economy; escalating energy, material, labor, and operations costs; and increasing competition demands higher levels of performance and greater accountability from suppliers.

Next-Wave Supply-Chain Solutions

Improved communications between customer and supplier let manufacturers address these challenges. Traditionally, this approach has relied on EDI and stand-alone systems to facilitate supplier communications.

However, the next wave of supply chain innovation is the addition of a Kanban Loop, a real-time, electronic pull loop that generates pull signals when parts or materials are needed.

“This model depends on 24/7 visibility and connectivity as part of a web-hosted, on-demand service, along with real-time pull signals for the customer and supplier.”

How Plex Cloud ERP Delivers Next-Wave Solutions

Traceability is a strength of Plex and — coupled with the corrective action/preventive action reporting in our Supplier Quality Management system — it provides the functionality required to deal with traceability of complex products.

Plex's supplier Kanban Loops visually display the status of the loops in real time using an electronic Kanban Rack. The loops are already helping customers reduce costs, lead times and inventories. Shape Corporation is one such customer.

A Supply-Chain Success Story

Faced with ever-increasing pressures to cut costs and improve quality and efficiency, Shape Corporation contracted with Plex to provide a fully integrated system to manage all of its manufacturing operations across multiple facilities.

Shape Corporation is a leader in automotive and industrial component manufacturing and the world's foremost expert in roll forming. Established in 1974, this privately owned corporation has grown to become a major player in

the component field. It employs more than 1,000 associates and has offices on three continents, encompassing four manufacturing plants, a dedicated research and development center, a coating facility, and six associated sister companies.

The web-native technology used to deliver Plex Cloud ERP makes it easy for Shape Corporation employees to log on and resolve issues quickly, from anywhere, at anytime. Plex's Kanban Loops are taking Shape Corporation's manufacturing effectiveness to the next level.

Plex's systems are being utilized in Shape Corporation's metalforming, welding, and injection-molding production facilities across the globe. Shape Corporation is using Plex primarily for quality, program management, shop scheduling, reporting, and shipping processes. The company's goal is to drive performance of the organization and the bottom line, and Plex is delivering.



Bob Currier, former president of Shape Corporation stated:

“After looking at many software solutions to manage manufacturing facilities such as ours, Plex was the clear winner. We needed a solution that provides complete visibility of the entire enterprise from the shop floor to the top floor. Plex offers that complete system, and it allows us to eliminate many stand-alone databases. It is intuitive to use, and more importantly, we are seeing a significant return on our investment.”

ABOUT PLEX

Plex Systems, Inc.[®] is the leader in cloud-delivered smart manufacturing solutions, empowering the world's manufacturers to make awesome products. Our platform gives manufacturers the ability to connect, automate, track and analyze every aspect of their business to drive transformation. The Plex Smart Manufacturing Platform

includes solutions for manufacturing execution (MES), ERP, quality, supply chain planning and management, Industrial IoT and analytics to connect people, systems, machines, and supply chains, enabling them to lead with precision, efficiency and agility. Learn more at www.plex.com