Lean Procurement: The Future of Supply Chain Management in a Demand-Driven World

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"The automation of procurement execution as part of pull-based replenishment of direct materials is driving true process collaboration between manufacturers and suppliers. With the aid of technology ... companies can expect to streamline buyer productivity, eliminate non-value-added activities, reduce direct material inventory across the supply chain, and improve the supply network's capability to meet customer demand as is required for DDSN."

Greg Aimi, Mickey North Rizza, Bill Swanton AMR Research¹

Your supply chain will determine if your company will survive and thrive in today's competitive marketplace.

Maximize throughput while simultaneously minimizing operating expense and investment in a near zero latency environment.

DEMAND-DRIVEN SUPPLY CHAINS AND LEAN PROCUREMENT

In today's demand-driven manufacturing and supply chain world, your company faces growing challenges around market volatility, long lead times and forecasting errors. Your inventory management decisions can make or break your firm's financial bottom line. Lean procurement principles combined with Oracle JD Edwards EnterpriseOne supply chain management solutions lets your company meet these daily challenges and protect your bottom line every day.

THE CHALLENGES OF SUPPLY CHAIN MANAGEMENT IN A DEMAND-DRIVEN WORLD

In today's volatile market, forecast accuracy is almost non-existent.

Companies expect their procurement and supply chain organizations to provide purchased materials and assemblies on time, all the time, to meet their customer demands. Faced with these poor market forecasts buyers often over buy requirements. This creates excess inventories.

Purchasing organizations cannot afford long material lead-times. And if suppliers cannot deliver consistently on time, they will be replaced. Although better than traditional procurement practices, today's "pull" supply chain replenishment processes are not optimized, collaborative or effective.

What is the bottom line for your company? Inventory management decisions can make or break your company's return on assets (ROA), an increasingly important financial metric.

THE OBJECTIVE: A DEMAND-DRIVEN SUPPLY NETWORK

Today, the buyer's responsibilities have changed dramatically. Beyond simply finding the right materials and services at the best price, buyers play a critical part

"DDSN is a system of processes and technologies that enables organizations to sense and respond to real-time demand across a network of suppliers, employees, and customers."

> Lora Cecere and Roddy Martin AMR Research²

Inventory turns of 100 or more should be commonplace and not the exception in a lean procurement environment. A \$500 million firm should be able to reduce inventory by \$34 million for a \$2.4 million carrying cost savings.

Expand the use of your consumption based replenishment processes, e.g., Kanban, VMI and Dynamic Order Point.

Adopt more efficient pay-on-consumption business processes that achieve substantially lower levels of inventory than ever imagined.

in improving the flow of information and materials throughout the supply chain. Through these demand-driven supply networks (DDSN, aka demand-driven supply chains, (DDSC)) their goals are to accomplish the following:

Preventing Shortages

Supply chain deliveries must be flexible in order to meet the changing demands of the demand driven enterprise. In addition to the sheer cost of disrupting production, critical shortages can damage existing customer relationships and significantly weaken market credibility.

Reducing Inventory Investment

Inventory turns of 100 or more should be commonplace, not the exception. Companies are under increasing pressure to reduce inventory levels. In the demand-driven enterprise, inventories should ebb and flow with the changes in customer demand.

For example, a \$500 million firm can reduce inventory by \$34 million and achieve a \$2.4 million inventory carry cost savings. At the same time, the firm can lower administrative costs by about 10 percent (\$340,000) by eliminating 70 percent of all invoices and 80 percent of discrete purchase orders after operating in an environment of 8 to 10 inventory turns.

Trimming Supply Side Lead Times

Long material lead-times should be eliminated. By utilizing postponement strategies, lean procurement solutions provide a more responsive supply chain.

Obsolete Practices

The old way of doing business consists of buyers managing MRP forecasts and communicating requirements to suppliers via phone, fax and e-mail. Spreadsheets and manual reports are passed between the trading partners. These manual processes are slow and cumbersome. They cannot support today's demand-driven enterprises.

Supply chain procurement professionals spend too much time "putting out fires" and reacting to daily problems. They cannot seem to find the time to develop strategic relationships with suppliers and deploy improved business processes that eliminate shortages.

Supply Chain Event Management provides alerts to individuals in the supply chain based on pre-defined logic. Events that fall outside a set of parameters trigger notifications that let individuals take action

"DDSN leaders have focused on crossfunctional, coordinated efforts for demandsensing strategies, demand-shaping processes, and a corporate understanding of how to achieve a profitable demand response. These vary by line-of-business focus, but can be distilled into five essential cross-functional strategies:

- Market driven, not marketing driven
- Developing products that drive demand
 - Channel-driven fulfillment
 - Demand-driven replenishment
- Agile networks for a customer-centric response

... Being demand driven starts with a clear understanding of the customer, market, and product priorities. These strategies are then aligned to demand-sensing tactics, demand-shaping objectives, and processes to drive profitable demand response. After this alignment, demand visibility can then become the guiding light to become demand driven.

Lora Cecere, Debra Hofman, and Roddy Martin AMR Research³

THE SOLUTION: SUPPLY CHAIN EVENT MANAGEMENT THROUGH LEAN PROCUREMENT

Advances in technology and process are ushering in a new era in supply chain improvement. With lean procurement your company can proactively manage supply chain events using Supply Chain Event Management (SCEM) principles embedded within Oracle JD Edwards EnterpriseOne technology and lean procurement practices from Oracle-certified partner CSS International to achieve the following:

- Remove the obstacles to the free flow of information to your supply chain;
- Create real-time visibility into inventory in motion;
- Transition your supply chain from "push" to "pull" consumptionbased replenishment models;
- Manage by exception by providing your buyers and planners with proactive real-time, exception messages that strengthen their replenishment processes;
- Eliminate the long lead-times for critical materials and assemblies;
- "Cover the upside" of your material forecast;

THE LEAN PROCUREMENT SOLUTION

Lean procurement is based on three core principles that are derived from demanddriven manufacturing and supply chain initiatives:

1) Migrate from "push" to "pull"

Strengthen and improve your "pull" supply chain processes by deploying supply chain event management solutions that enhance collaboration with your suppliers.

Operating in real-time mode, JD Edwards EnterpriseOne Supply Management Buyer Workspace and Supplier Self-Service collaboration portals connect people – buyers, suppliers and partners – directly to their "pull" business processes anytime, anywhere. These collaboration portals allow buyers and their suppliers to communicate the following supply chain "exception based" signals in real-time.

Proactive Alerts: These alerts notify the trading partners of a potential stock-out. As an example, a proactive alert can notify a trading partner of a potential stock out, e.g., the Kanban Replenishment Capacity program allows you to track the production capacity of a Kanban and compare it to the demand pattern of the item. The system displays an alert for all items that cannot meet the new demand.

- Reactive Alerts: Alerts that identify critical supply chain exceptions. For example, a reactive alert can identify critical supply chain exceptions, such as late shipments, past due Kanban acknowledgements and supplier "under-commits" to the MRP forecast.
- **Execution Alerts:** These alerts provide updates on business process transactions. Consider the example where an execution alert is used to provide updates on business process transactions such as Advance Ship Notices (ASN).

2) Develop a flexible and responsive supply chain

Help your procurement professionals eliminate long material lead-times by adopting postponement strategies. With the fully automated Oracle JD Edwards EnterpriseOne Supply Management Suite, including Supplier Release Scheduling, Buyer Workspace and Supplier Self-Service collaboration portals, buyers can:

- Deploy a more responsive supply chain. When customer demand unexpectedly goes up, your supply chain can meet that increase.
 When forecasts go down you are not left with excessive levels of inventory;
- Reduce the long lead-times normally associated with offshore procurement;
- Proactively manage potential shortages through automated real-time forecast collaboration solutions;
- Receive proactive alerts when suppliers cannot support requirements;

3) Eliminate all waste in the procurement cycle

Without lean procurement, buyers spend the majority of their time on nonstrategic processes like tracking down order status, purchase order entry, and maintaining "private" spreadsheets for analysis. As a result, they miss opportunities for mutually beneficial supplier negotiations and process efficiencies.

Eliminate discrete purchase orders;

Adopt more efficient pay-on-consumption business processes that achieve substantially lower levels of inventory than ever imagined.

Improve the process of procuring materials from low cost countries.

- Use JD Edwards EnterpriseOne Supplier Self-Service to grant suppliers 24 x 7 x 365 access via the web so they can respond electronically with critical business process information. This ends over-reliance on phone, fax and e-mail;
- Use enhanced workflow in the JD Edwards EnterpriseOne Purchase Order acknowledgement approval processes;
- Develop "no touch" processes that automate and eliminate 50 percent of purchase orders and 70 percent of all invoices;

By adopting these strategies, procurement professionals can spend 90 percent of their time on strategic activities.

GETTING STARTED WITH A LEAN PROCUREMENT PARTNER

An Oracle partner specialized in lean procurement can help you:

- Set up your JD Edwards EnterpriseOne Buyer and Supplier Collaboration portals with your internal and external users;
- Provide up-to-date training on consumption-based replenishment processes;
- Train your internal and external users and suppliers;
- Conduct business assessment reviews of your internal facility;

ABOUT CSS INTERNATIONAL

Manufacturing and distribution managers with many years of end-user experience implementing ERP systems started CSS International in 1996. CSS brings extensive business knowledge since all their clients engage in some form of manufacturing and distribution activities. CSS consultants help clients capture value from leading edge process breakthroughs and technology enhancements. More information on CSS is at www.cssus.com.

ACRONYMS AND ABBREVIATIONS

ASN Advanced Ship Notice

DDSC Demand-Driven Supply Chain

DDSN Demand-Driven Supply Networks

ROA Return on Assets

SCE Supply Chain Execution

SCEM Supply Chain Event Management

SCP Supply Chain Planning

VMI Vendor Managed Inventory

REFERENCES

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³ "The Handbook for Becoming Demand Driven", Lora Cecere, Debra Hofman, Roddy Martin, AMR Research, July 19, 2005

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