

# INFORMATION CONNECTS

JD Edwards EnterpriseOne Logistics Management



Streamline supply chain logistics.  
Lower costs and increase revenue.  
Improve your bottom line.

## **INFORMATION CONNECTS**

Building a real-time enterprise begins with digitization of business processes for consistent results based on best practices. You connect customers, suppliers, partners, and employees. You integrate across locations, functions, and departments. You break down silos of information to create a single system of record. And when people, processes, and data run in real time, you improve your bottom line.

Leaders evaluate business processes first—then consider technology and software. They make deep process improvements to cut manual steps, redundant data entry, and multiple interfaces. They focus on competitive advantage and customer service. And they bring these business processes online in real time.

# Logistics Management

Although the last decade has seen enormous efforts to make the whole supply chain more efficient, there has been relatively little improvement in the effectiveness of logistics programs. Yet implementation of the right logistics practices and technologies can offer substantial opportunity for lowering costs and increasing revenues.

Logistics—defined as getting the right product to the right place at the right time at the right price in the right condition with the right paperwork—has long appeared to be an afterthought in the overall supply chain discussion. A 2002 survey by The Logistics Institute (TLI) at Georgia Institute of Technology showed that more than half of the respondents were still using manual processes for route planning, load building, dispatching, and tracking. Where businesses have attempted to automate warehouse and transportation operations, the projects have often been “stovepiped” within departments. And if operations were optimized within a company’s four walls, that was generally considered good enough.

It’s not coincidental that logistics still add a significant cost burden. According to the 13th Annual “State of Logistics Report,” published by Cass Information Systems, Inc. and ProLogis, total logistics costs came to 9.5 percent of U.S. gross domestic product (GDP) in 2001 as businesses slashed inventories and work in progress. Although that number is a record low—the figure dropped steadily from 16.2 percent in 1981 to 9.9 percent in 1993, hovering above 10 percent through 2000—it is still substantial.

Successful companies know there is even more to gain by spotlighting logistics efficiencies as part of an end-to-end supply chain process improvement. In particular, those firms see opportunities to cut transportation and warehousing costs, which together account for almost two-thirds of logistics costs. If they can streamline their logistics functions and structure them around customers’ needs by using disciplined processes and the right software tools, they know they can build stronger customer relationships and accelerate cash to cash cycles.

Oracle’s JD Edwards EnterpriseOne software streamlines logistics activities easily and cost-effectively. The internet-enabled applications—such as Oracle’s JD Edwards EnterpriseOne Transportation Management, Warehouse Management, and Sales Order Management—integrate smoothly with other supply chain software, allowing fluid real-time interactions among all relevant parties whether they are production staff or shippers, warehousing specialists, or receivers. Other applications, such as Oracle’s JD Edwards EnterpriseOne Strategic Network Optimization, can model complex supply chain scenarios, with all relevant costs and all potential constraints factored in.

To demonstrate how an effective logistics process adds value, we use the example of a fictional consumer-goods company—Serrator Inc., a \$620 million maker of high-quality kitchen knives. The story begins with Serrator's second-largest retail customer, which is unhappy with Serrator's erratic delivery performance. The scenario shows how Serrator embarks on a rapid but systematic program to upgrade its logistics processes, with positive results.

## The JD Edwards EnterpriseOne Logistics Story

### A Raw Customer Relationship

Ed Raffoni, purchasing director for specialty kitchenware retailer Reina de la Cocina Corp., had been very direct. Bill Westerman, Serrator's CEO, had made the 700-mile trip especially to see what his organization could do to hold onto Reina's business. He had managed to negotiate sizeable orders for two of Serrator's silicon-alloy kitchen knife products. But the news that this might be the retailer's last order had made it feel like an empty win. And the challenge of meeting Reina's tight new delivery requirements—no more than a day late or two days early to two distribution centers—left Westerman feeling downright gloomy. He had to admit that relations have been strained with their second largest retail customer ever since Serrator had missed a big delivery deadline last fall, leaving Reina short for a crucial kitchen-products promotion in stores across the Southwest.

Serrator's poor delivery performance hadn't been news to Westerman. It hadn't been his most pressing priority. But things had just changed. Reina—a Wall Street darling thanks to record earnings growth—was a customer Westerman had to keep. Calling his assistant from the airport, he'd asked her to get the management team together as soon as possible.

### Committing to Change

Listening to Westerman describe Reina's ultimatum, Jay Messier has the feeling another project is coming his way. As Serrator's Manufacturing vice president, he is already deeply involved with a lean manufacturing initiative at two of Serrator's three factories, using JD Edwards EnterpriseOne manufacturing software to improve efficiencies throughout production.

Westerman is telling his top team what Reina's purchasing chief had told him three days earlier: the kitchenware retailer plans big cuts in its warehousing costs in the next year, and its new inventory disciplines will not permit slipshod delivery performance. Part of Reina's rationale is that under mounting price pressure, the company wants to maintain the earnings-growth momentum it has enjoyed to date.

“So what are our options, Jesse?” Westerman asks as he hands the meeting over to Jesse Schmidt, Serrator's vice president of Operations. Schmidt hooks up his laptop to the screen and opens the JD Edwards EnterpriseOne Strategic Network Optimization software that Serrator had used a month ago to evaluate a potential merger. Schmidt likes how the application gives both strategic and tactical decision support regarding supply chain network configuration, asset rationalization, material sourcing plans, and capacity plans. He particularly values the way that JD Edwards EnterpriseOne Strategic Network Optimization allows users to visualize multiple what-if scenarios to determine the most effective way to structure their supply chains.

Schmidt uses the software to walk his colleagues through a scenario in which Serrator meets Reina's delivery window inside six months. The management team watches as the software rapidly calculates the best options, charting them in easily understood visuals. The software incorporates samples of real order data from the JD Edwards EnterpriseOne Sales Order Management software that Serrator has been using for three months.

JD Edwards EnterpriseOne Strategic Network Optimization gives both strategic and tactical decision support regarding supply chain network configuration, asset rationalization, material sourcing plans, and capacity plans.

It quickly becomes clear that if Serrator can better control its warehousing and transportation activities, it can meet the new constraint. The findings trigger anecdotes from the managers. One recalls seeing three different people in Serrator's warehouse assigned to the task of picking one small order; another remembers the time when the trucking firm didn't show up at all.

It's manufacturing chief Messier who lays down the challenge. He points out that making big improvements in logistics does not call for big changes in company culture or behavior. Let's not just meet Reina's delivery window— let's narrow it to two days in six months' time, he says. "So you'll head up the project to get us there?" Westerman's question is hardly a question. Messier nods.

### **Defining the Optimum Logistics Process Flow**

Messier knows exactly who he'll select for his project team. One of his lieutenants had been the distribution manager at her previous employer, and for seven months now, she's been telling Messier that the JD Edwards EnterpriseOne logistics software she'd used there would work well for Serrator. Messier's next recruit: the IT guy who'd evaluated the JD Edwards EnterpriseOne Strategic Network Optimization software last year.

Then the recruiting gets tricky. The manufacturing chief needs to bring in Serrator's shipping supervisor, but he knows he'll have to sell hard. The supervisor is happy with the status quo and doesn't tolerate what he perceives as interference. Messier is tempted to give his "lead, follow, or get out of the way" speech. Instead, he emphasizes the payoff for Serrator beyond keeping Reina as a customer—and he hints at the likelihood of sizeable bonuses if the project succeeds.

Messier's earliest guideline is that all precedents can be ignored. Just because Serrator has always done something a certain way doesn't mean it should be done that way in the future.

The project team quickly uses industry best-practice standards to map an optimal logistics process flow. They identify seven distinct steps: order received, transportation planned, pick request generated, shipment confirmed and documents generated, shipment transported, delivery confirmed, and general ledger updated. Next, they gauge Serrator's past and present performance against the optimum, determining that the knife maker has run as many as eight days late.

JD Edwards EnterpriseOne Transportation Management quickly identifies the most cost-effective transportation options available.

### Laying Out the Transportation Plan

With JD Edwards EnterpriseOne Transportation Management software now in-house, the team begins to build a transportation plan that will meet Reina's declared and anticipated needs. They address the four basic questions that are central to all shipment planning:

- How should the shipment be routed?
- How much will it cost?
- When can the customer expect delivery?
- What special requirements are necessary for this delivery?

They plug the key requirements into the application: twice-monthly deliveries inside a three-day window—one early, two late—to two distribution centers 680 miles apart. Reina has three very specific demands, two of which are new. The familiar demand is that any truck pulling into the old California distribution center must be able to meet a loading dock that was built a foot higher than is usual today. Noncompliance will mean slow and inefficient unloading with the prospect of significant disruption to other deliveries.

The new demands are for Reina's other distribution center. The layout dictates a short tractor-trailer configuration because of new usage patterns at nearby buildings. And the retailer's deliveries are not to be routed along California's I-5 freeway in November because of the risk of fog at that time of year.

Messier smoothly imports the Reina order information from JD Edwards EnterpriseOne Sales Order Management and loads the constraints into JD Edwards EnterpriseOne Transportation Management. The application quickly identifies the most cost-effective transportation options available to Serrator, rating and routing the order according to the kitchenware customer's preferences. The first choice, based on a new preferred shippers list from Reina and on additional suggestions from Messier's team, is for a less-than-truckload (LTL) hauler that is only about eight years old but that has been taking market share away from longtime industry carriers on the strength of an outstanding track record with just-in-time deliveries. The trucking firm's rates are 15 percent higher than the regional average, but part of the reason is that the firm pays higher wages for top-notch drivers and backs them up with the best in tracking technology.

Later that week, the shipping supervisor places a call to the selected LTL carrier. There's a problem: they will be glad to haul for Serrator, but they won't have availability near Reina's second distribution center for another four months—too late for the last part of the Reina order. Messier reopens JD Edwards EnterpriseOne Transportation Management and inserts the new variables. The software quickly comes back with an optimal answer. If Reina can accept box-van deliveries from a cross-docking warehouse within 100 miles of the distribution center, Serrator can contract with the new LTL trucker to get the knives there on time.

The answer comes back from Reina. Box vans will double the frequency of deliveries, but Serrator can live with it for two months.

## **Building the Load**

When CEO Westerman calls looking for a progress report, Messier is ready. He points out that the new JD Edwards EnterpriseOne supply chain analytics that Operations Chief Schmidt had launched last year now integrates data from the JD Edwards EnterpriseOne Transportation Management software. Messier shows Westerman how he can check to see that the Reina shipment is starting to come together.

But Messier's smile doesn't last long. Reina is revising its order—downward by 10 percent—and demanding that the order be split between four direct-to-store delivery drops, one of which is a flagship store in Mexico City, as well as the distribution centers. Messier turns back to the JD Edwards EnterpriseOne Transportation Management software to review his options.

The first part of the Reina order is being assembled already. The large 10-inch bread knives have been in Serrator's warehouse for a few days, and the seven-inch serrated knives are in production now. Messier has been using Oracle's JD Edwards EnterpriseOne Manufacturing Management for some time, and he is impressed at how easily he can integrate the data between the manufacturing and transportation software applications. He is able to excerpt the Reina order, accommodating real-world constraints such as other customers' orders, product returns shipments, and machine downtime.

JD Edwards EnterpriseOne Transportation Management rapidly recalculates and displays new route and rate options, with one new LTL carrier involved. Messier sees that the system has calculated both payable costs—what the carriers are paid—and billable costs—what Reina will be charged.

As the last of the serrated knives finish in quality control, the software makes up the loads for each store and for the distribution centers. As it does, the application automatically checks the destinations of other customers' orders and begins to pool shipments headed to the same region. It instructs the system to assemble ancillary materials—the product instruction booklets and packing materials.

The software also checks to ensure that the loads are compatible. Serrator sells a wood-finish product—oil that is packaged in attractive glass vials, which customers can use to maintain the wooden handles of their knives. Two years earlier, the vials had broken in transit, ruining an entire case of knives. But Messier sees that a feature in the transportation software will automatically identify the different products and compare their compatibility. If one product could damage another in the same shipment, the software recommends packing and loading placements that segregate them.

## **Optimizing Warehouse Activities**

It's clear that the first part of the order—the 10-inch knives in the warehouse of Serrator's main plant—can be staged for shipment any time now. Messier opens JD Edwards EnterpriseOne Warehouse Management to see how he can improve on the manufacturer's erratic warehouse activities. Importing the relevant data from Oracle's JD Edwards

EnterpriseOne Sales Order Management, he watches as his laptop refreshes with a clear description and layout of the optimum pick path. In the previous week, one of his logistics team members had entered the equipment and layout specifications for Serrator's warehouses.

The pick path that the software suggests is much smoother than what Messier has experienced to date. It calls for just one forklift and driver, with no intermediate staging and repositioning of other product, as had been commonplace at Serrator. In addition, the system is activating automatic replenishment, signaling Oracle's JD Edwards EnterpriseOne Manufacturing Management when inventory hits preset levels. At the same time, it sends real-time confirmation updates to Reina and to the trucking firms, as well as to Serrator's packing and shipping staff.

As the first part of the kitchenware retailer's order is being staged near the loading dock, the packing supervisor suggests a stronger cardboard box that was not part of Reina's original shipping instructions. Although the new box costs 11 percent more than what Serrator has been using, the supervisor believes it will save on in-transit damage. The logistics team uses the software to calculate what the new boxes will do to both total shipped cost and to the delivery schedule. The software rapidly confirms that delivery will be fine but indicates that the new boxes will add 1.5 percent to total cost. Messier opts for the new boxes.

#### **Sending the Load on Its Way—the Right Way**

As the first truck loads up, JD Edwards EnterpriseOne Transportation Management helps Serrator's logistics team track four key steps: confirm the shipment, confirm the load, manage the delivery documents, and confirm the delivery.

The software assigns shipment-tracking numbers and automatically prepares the bill of lading and manifest as well as the box labels. The shipping supervisor has changed his tune. The tasks that he once had to handle manually— monitoring order accuracy, for instance— now happen automatically. He still checks to make sure that the system generates the correct delivery documentation—both the papers that transfer ownership to the customer and the customs papers for the shipment destined for Reina's Mexico City store.

The truck has been gone for two hours when a rush order comes in from Reina. The Newport Beach store has sold out unexpectedly—something to do with a cooking show on local cable TV. They need 500 of Serrator's small paring knives next week. The store is replenished from the California distribution center, but there will be no time for unpacking, stocking, and order picking. This order has to be cross-docked. To complicate things further, the Newport Beach outlet has a carton of damaged knife blister packs that it wants to return.

These guys are really pushing us, thinks Messier. His logistics software quickly shows that Serrator can meet Reina's rush order. The paring knives are in stock. Oracle's JD Edwards EnterpriseOne Warehouse Management schedules a pick routine and integrates with Oracle's JD Edwards EnterpriseOne Transportation Management, which combines the order with others for the California distribution center and selects a courier service that can take the rush order right off the dock and on to the Newport Beach store. And, because the logistics applications are integrated to Oracle's JD Edwards EnterpriseOne Customer Relationship Management, an automatic alert is sent both to schedule the courier service to pick up the damaged packages and signal the system to issue a credit to Reina.

At Reina headquarters, Senior Buyer Frances Delgado is tracking the progress of the Newport Beach order. She's running a \$10 bet with her boss, Ed Raffoni, that Serrator can't meet any of Reina's delivery targets. But Serrator's new carrier is already an hour ahead of schedule—about halfway to the California distribution center.

Delgado loses her bet. When the truck pulls in at 8:35 a.m. on the declared delivery date, and the Newport Beach rush order is cross-docked and moved to the store right on time, it's clear that Serrator has made huge improvements. That is confirmed the following week when the rest of the original order arrives at Reina's four main stores—Mexico City included. The week after that, two vans offload at the second distribution center on schedule.

The receiving clerk checks off the pertinent delivery data. When the information is entered into Serrator's logistics software, it automatically launches the knife maker's receivables process. With invoices going out at least two weeks earlier, Serrator can expect much improved cash flow. The system also updates Serrator's general ledger, ensuring that finished product is off the books.

## **Results**

Ed Raffoni calls Westerman that evening. "Nice work, Bill. Looks like you guys have cracked it. Keep this up, and we can talk about getting more shelf space for you," he says.

Serrator keeps it up. Six months later, Serrator's products are on the cover of Reina's catalog, and there is a new plaque in the knife maker's lobby: a "Supplier Improvement" award from the kitchenware chain. Soon after, there is a call from Argentina's largest retailer, asking if Serrator can quote on an order for 6,000 knives and 1,500 knife sets.

Bill Westerman has good news for his board of directors. Serrator's mastery of its logistics processes has yielded big savings. Warehousing costs are running eight percent lower than a year earlier, with 10 percent faster turns. And, the cash to cash cycle shows marked improvement now that the logistics software has compressed the time between delivery confirmation and invoicing.

“Oracle is committed to ensuring customer success and satisfaction by building quality products and delivering cost-effective, results-oriented service and support based on the unique organizational needs of our customers.”

quote name, title

## Oracle Global Services Committed to Your Success

### Oracle Global Services for JD Edwards EnterpriseOne

Global Services provides worldwide, best-in-class services to help customers get maximum value from their software.

### Oracle Consulting for JD Edwards EnterpriseOne

Oracle Consulting can help you implement, optimize, and upgrade Oracle's JD Edwards EnterpriseOne products to improve business performance. Consulting services accelerate time-to-value, maximize functionality, and reduce project timelines and costs. Implementations are tailored to specific business needs. Through a single-vendor relationship, customers gain deeper access to resources and get more value out of their software.

### Oracle University

Executives, project managers, and end users benefit from role-based training that results in increased productivity, reduced risk, and lower support costs. Training delivered where, when, and how your organization needs it increases your overall return on investment. Products and services include project team training classes, end user training classes, the end-user training kit, and course development and delivery services.

### PeopleSoft Hosting

Hosting services provided by PeopleSoft Hosting let you focus on your core business while realizing a superior return on your investment. You get a complete solution that ensures single-vendor accountability and provides world-class service.

### Oracle Support Services for JD Edwards EnterpriseOne

Oracle Support Services never stop working to ensure that your issues are resolved and that you receive the greatest return on investment from your JD Edwards EnterpriseOne systems via the latest technologies, new product features, and industry best practices. You have access to the most comprehensive product and technical problem-solving expertise 24x7, with the real-time support you need for your real-time enterprise. Your business never stops moving forward. Neither do we.



# ORACLE®

Oracle Corporation

**World Headquarters**

500 Oracle Parkway  
Redwood Shores,  
CA 94065  
U.S.A.

**Worldwide Inquiries**

Phone  
+1.650.506.7000

Fax  
+1.650.506.7200

[oracle.com](http://oracle.com)

Copyright © 2004, 2005 Oracle. Oracle, JD Edwards, PeopleSoft, and Retek are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

C14767