

# Kawasaki's supplier portal provides quick ROI

**Kawasaki**  
Let the good times roll.

Some companies choose to implement big ERP packages that require them to change their business procedures to what their ERP vendor has determined best business practice. In these environments it often becomes technically and financially challenging to add or customize business functionality. Kawasaki Motors Manufacturing Corp., USA decided to go along a different path and is reaping the benefits.

Kawasaki's consumer products plant in Lincoln, Nebraska, operates on a 'just-in-time' basis to eliminate expensive warehousing and over-ordering of parts. For this, the company needs to work closely together with its suppliers. Using the skills and knowledge of its in-house IT team, Kawasaki's Lincoln plant developed an online supplier portal that paid for itself in just a few months. The supplier portal, underlying ERP system and the entire process of generating purchase orders, packing slips, box labels, invoices and EDI transactions consists of LANSA-based applications.

## Too Many Parties

Kawasaki Motors Manufacturing Corp, USA (KMM), is part of Kawasaki Heavy Industries, Ltd. Kawasaki, the first foreign vehicle manufacturer to open a manufacturing plant in the USA, opened a consumer products facility at Lincoln in 1971. Then in 2001 Kawasaki opened a light rail car plant, also at the Lincoln site. Kawasaki's Lincoln employs over 1,000 people. The Maryville plant, opened in 1989, produces general purpose engines and employs 600 people.

Both the Lincoln consumer products plant (KMM CP) and the Maryville engine plant use LANSA-based solutions on IBM i power servers, but independent from each other and

tailored to their individual needs. KMM CP has been using LANSA ERP Frameworks since 2002. For its communication with suppliers KMM CP uses LANSA EDI Direct, which is now an integral part of the LANSA Composer product.

For those suppliers that cannot handle EDI, KMM CP previously used a third party Web portal. Since there were significant fees involved for the supplier (and for KMM CP), use of the third party portal wasn't widespread. As a result, many suppliers used fax or email, with all the associated inefficiencies.

The third party portal offered some efficiencies, but was still far from perfect.

Paul Kramer, based at the Lincoln plant and Assistant Manager Information Systems at KMM explains, "There were too many links in the chain: the supplier, the third party portal, another EDI processor (used by the portal) and us. If there were hiccups in the connections between any of these systems, transaction files would not arrive."

**"The portal was easy to roll out and is well accepted by our suppliers."**

"Errors could go unnoticed until late in the process and, when finally discovered, it would be hard to trace where things went wrong. Some of the shipments that arrived at the receiving dock could not be processed because we had not yet received the ASN (Advance Shipment Notification), even though the supplier was sure they had submitted it."

KMM CP decided that it would be better to have its own supplier portal. "We could simplify the communication process by eliminating third parties and we could save our suppliers money by offering the portal for free. Consequently, the uptake would be bigger and we could even consider enforcing it. Plus, having the portal under our control would allow us to tailor it to our needs and integrate it with our ERP system," says Kramer.

## Moving the Portal In-house

A project team was put together consisting both of KMM CP's in-house developers and LANSA Professional Services consultants. Using LANSA WAM development technology in combination with LANSA's prebuilt industry standard Web components, the team built a custom supplier portal.

The Material Requirement Module in KMM CP's ERP system recognizes demand and creates purchase orders that are automatically published in the supplier portal. Orders that haven't been acknowledged within a certain timeframe trigger an alert and email a reminder to the supplier. Once the orders are acknowledged, they become part of the supplier's open orders that can be viewed and

The screenshot shows a web browser window displaying the Kawasaki supplier portal. The page title is "Purchase Order Inquiry". Below the title, there are search criteria filters for Status (Open), Order Type (All), Non-Changed (All), Item Type (All), and Item. There are also buttons for "SEARCH", "REFRESH", and "DOWNLOAD". Below the filters, it says "SEARCH RESULTS SEARCH CRITERIA RETURNED 6,082 RECORDS". A table of results is displayed with columns for Item No., Item Name, Order Type, Status, and Date. The table contains several rows of data, including items like "FENDER FRONT-R", "GRIP FIRE EXT", "RADIATOR COVER", "CAP", "COVER", "CAR OIL", "COVER", "COVER", "COVER", and "FENDER REAR".

Item No.	Item Name	Order Type	Status	Date
80488	3584-0142 438 FENDER FRONT-R	EA	▼	10/31/11 35 5 31
80489	3584-0142 438 FENDER FRONT-R	EA	▼	11/02/11 43 43
80419	48275-0702 GRIP FIRE EXT	EA	▼	11/04/11 50 50
80204	1490-0889 408 RADIATOR COVER	EA	▼	11/08/11 28 28
89885	11012-0740 CAP	EA	▼	11/08/11 20 20
89882	11012-1802 CAP	EA	▼	11/08/11 40 40
88781	1491-0881 88 COVER	EA	▼	11/08/11 40 40
89823	1491-0782 52 COVER	EA	▼	11/08/11 59 59
88488	18118-3788 CAR OIL	EA	▼	11/08/11 100 100
81318	1490-0889 82 COVER	EA	▼	11/02/11 9 9
81319	1490-0889 82 COVER	EA	▼	11/02/11 9 9
81318	1491-1811 80 COVER	EA	▼	11/02/11 2 2
80488	3582-1289 FENDER REAR	EA	▼	11/05/11 80 80

Once an order is acknowledged, it becomes part of the supplier's open orders that can be viewed and filtered by several criteria.

filtered by several criteria.

When due dates come around, the supplier goes back to the portal to indicate which orders will be shipped, specify the exact number of items per box, assign box-ids, double check totals and merge boxes if needed. When shipments are confirmed, the portal creates box labels. The labels, PDF documents generated by LANSA Integrator, contain the proper barcodes and all the other information needed to identify a box and its contents. Once the boxes have shipped, the supplier can use the portal to generate an invoice on KMM CP's own system.

"The supplier only needs a browser," explains Kramer. "Also, the supplier doesn't need an expensive barcode printer or complex set of fonts, because the PDF labels already contain the barcode images."

Behind the scenes the portal generates EDI transactions (ASNs, invoices, etc) which then follow the same path as EDI files transmitted directly by non-portal suppliers. "We didn't have to change any of our programs to process the transactions from the portal," explains Kramer.

### Major Efficiencies

"It works really well," says Kramer. "Boxes are identified immediately upon arrival when we scan the box labels. The goods are automatically marked as received and go through a computerized 3-way-match, meaning that when the price and quantity of the purchase order, packing slip and invoice match, the invoice is marked as ready for payment. And obviously, they do match because they are all on our system and based on the same correct data," explains Kramer.

"Previously we spent hours on shipments, because it involved manually marking the received items against the packing slips. Now we can receive and process large shipments in a fraction of the time. Multiply that by the number of shipments we handle a year and it's clear that the labor savings are enormous."

"There are significant savings in straight dollars as well. Because our procedures are now so quick and efficient, we have the ability to negotiate better payment discounts with our suppliers. Using our electronic payment system we can schedule payments just before the due date, allowing us to maximize interest and still pay the supplier within the agreed terms."



Paul Kramer, Assistant Manager Information Systems at Kawasaki Motors Manufacturing Corp USA

### "When you add up the labor savings and payment discounts, ROI was very quick."

"The portal was easy to roll out and is well accepted by our suppliers. It affects many business areas, from how parts are ordered to how they are received and paid for. When you add up the labor savings and payment discounts, the return on investment was very quick. The portal paid for itself in just a few months."

### Suited to the Business Needs

The supplier portal is only a small part of KMM CP's overall solution infrastructure. For its core manufacturing, distribution and financial systems, KMM CP uses the LANSA ERP Frameworks. This ERP solution comes with source code, thus eliminating ongoing maintenance fees. Visual LANSA is used to add Web and Windows functionality, while the core financial modules have been modernized with RAMP.

KMM CP uses LANSA's original EDI Direct tool for exchanging transactions with its suppliers and the newer LANSA Composer product for EDI transacting with Kawasaki's Rail Car Division, which runs SAP. LANSA Integrator is used for PDF generation and also plays a role in KMM CP's electronic banking.

"LANSA's programming language isn't complex at all and our developers

picked it up quickly. We use LANSA's rapid development for Web, Windows and green screen applications. We don't have to use different tools for different types of clients, not even if we deployed to Smartphones or tablets."

"LANSA provides a very good base system and the flexibility to customize it to our business needs. So often you hear about ERP packages where you have to change your business practices to match the way the package works. That's not the case for us. We can build the applications to suit our processes," concludes Kramer. ■

### Snapshot

**Customer:** Kawasaki Motors Manufacturing Corp, USA Consumer Products (KMM CP)  
www.kawasaki.com

**Challenge:** Most suppliers were relying on manual procedures as EDI was too expensive, resulting in laborious procedures for processing shipments and invoices.

**Solution:** A portal for suppliers to respond to POs and generate the EDI files, PDF box labels and invoices.

**Key Benefits:** Significant reduction of labor cost, faster processing and savings from payment discounts.

**Product Used:** Visual LANSA, ERP Frameworks, RAMP, Composer and Integrator.