Parts Supplier Weathers Tough Economy with Help from Custom EDI Integration

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Bo/Gar Enterprises produces parts for Caterpillar, which updates its suppliers daily with a 13-month forecast of parts requirements. Manually managing that data volume was a time-consuming and error-prone challenge. Bo/Gar worked with WilloWare to design a custom solution for Microsoft Dynamics GP that imports and reconciles the electronic forecasts, resulting in dramatic time and cost savings that have helped Bo/Gar weather a tough economy.

Business Needs
Bo/Gar Enterprises is the kind of business that helps drive the U.S. economy — a family-run precision machining and assembly company that employs 60 people in America’s heartland.

Based in Wyoming, Illinois, Bo/Gar began in the mid-1980s as a parts supplier for Caterpillar (CAT), the world’s largest maker of heavy machinery such as tractors, off-highway trucks, excavators, and industrial engines. Bo/Gar grew into a successful business by consistently providing precision assemblies that meet high quality control standards and other increasingly stringent vendor performance measures. CAT provides its suppliers with a 13-month forecast of daily shipment requirements by part. This electronic file is an EDI (electronic data interchange) document called an 830. Each day, CAT may change the required date or quantity of any part in the forecast, requiring Bo/Gar to make changes in production and purchasing. While the 13-month forecast held the promise of long-term planning, the volume of data meant Bo/Gar could just keep up with a small part of it.

“We’ve traditionally had one full-time person whose only job was to manage the 830s,” says Marsha Dwyer, Special Projects Manager and co-owner of Bo/Gar Enterprises. “We printed the 830s, and then manually reviewed them for changes. It took seven or eight hours to compile the information. There was so much information that we could only manage and see about six
weeks ahead. We could not handle the 13 months worth of information that CAT provides.”

As a result, planning had to be done by projecting historical numbers. Just keeping current with CAT’s immediate needs was overwhelming, and sometimes led to mistakes. “Errors affect our relationship with CAT,” says Dwyer. “It was a hard job. We actually lost an employee who left because of the stress.”

Solution
Bo/Gar looked for an existing EDI package for Dynamics GP that could handle the 830. But when they learned the existing products did not address this specific document type, they turned to WilloWare Inc., a Microsoft® Registered Partner based in Bloomington, Illinois, to design a custom solution.

WilloWare created an integrated module using Dexterity, the programming language for Dynamics GP. The custom module reads the 830 files from CAT, and then reconciles the new files against previous transmissions to identify parts that have new or changed release dates and quantities. Each file can contain hundreds to thousands of individual item releases. The resulting data is integrated into the Dynamics GP Sales Order Processing module, and Manufacturing’s Materials Requirements Planning.

A seamless integration between Dynamics GP SmartList and Microsoft Excel templates provides the users with advanced analysis capabilities. The solution also retains a complete electronic record of the 830s, enabling users to quickly locate specific CAT purchase orders, and even compare different versions of each purchase order created when CAT sends updates.

The project took about one month from initial requirements conversations until deployment.

Benefits
Deploying the custom EDI integration from WilloWare solved an immediate challenge, delivered recurring savings, and triggered downstream changes that had unanticipated benefits. The direct labor needed to manually handle the 830s was virtually eliminated. The accurate and timely import of the full 13-months of data improved order and shipping accuracy, and enabled long-term planning, forecasting, scheduling and ordering. And the electronic record keeping eliminated paper and file maintenance activities while freeing storage space.

Reduction in Labor Costs
The EDI 830 integration from WilloWare allowed Bo/Gar to achieve substantial cost reduction by nearly eliminating the time needed to manually process the 830s.

“A process that used to take up to eight hours now takes about 20 minutes,” says Dwyer. This 95 percent labor reduction enabled the company to redeploy a person to other value-added activities. “That saves us the equivalent of one full-time employee salary, or about $30,000 annually,” she says. “We redirected the person who used to do the job into other activities, allowing us to get more done with the same staffing.”

Accurate and Timely Information
By automating the integration and reconciliation of the 830s, Bo/Gar has for the first time been able to get the full 13-month picture of CAT’s production landscape. “In the past we were always guessing about our production planning and purchasing because we could only see about six weeks out,” says Dwyer.

Having the full 13-months of requirements from CAT allows them to pro-actively plan labor requirements, make strategic investments in plant and equipment, and execute purchasing decisions more wisely. Dwyer notes that the enhanced planning capability is especially helpful in today’s economy because it “helps us see what we should not be making.”

Additionally, CAT grades their vendors on, among other things, shipment accuracy, directing more projects towards the highly rated vendors. The accuracy of the automated EDI software has played an important role in Bo/Gar remaining in the top tier of CAT vendors. “I certainly would have talked up the WilloWare solution last year,” Dwyer says. “This year, in the current economy, we might not be alive without it.”

Reduction in Waste
Bo/Gar used to print hundreds of pages of 830s per day, storing the physical copies in case issues arose later requiring a reference back to the source documents. Today, the EDI module stores an electronic version of the source 830 and keeps versioning each document so that subsequent transmittals of the same 830 can be compared to earlier versions.

“In the past, if someone wanted to find information about a purchase order [a CAT 830], they would have to dig through crates of paper files,” says Dwyer. “But now it’s easy to simply go into the inquiry view on Dynamics GP. If someone in management wants to view a purchase order, they enter the PO number or item number and it shows up on the screen. It’s a much faster and more efficient way of managing information.”