

# CASE STUDY

## THE BACKGROUND

A multi-million dollar, family-owned business based in Jersey City, General Pencil Company has manufactured a broad line of pencils under brands such as General, Pacific, Badger, Supreme, Kimberly and others since 1889: shaping long, semi-circular sticks of California incense cedar wood; routing out channels on the flat sides for the various shades of black/grey and color "leads"; gluing it all together; and cutting the assembled product into the proper lengths.

The company maintains marketing headquarters in Redwood City, California and over time, it has carved out a substantial niche market in the art, school and cosmetic supplies sectors, serving some 1,000 customers of various types and sizes domestically and internationally. Its IT infrastructure includes a Windows 2003 server, a Pervasive Software database and the DBA ERP software package.

## THE PROBLEM

Like many other companies, General Pencil Company was confronted with a mandate as Wal-Mart, its largest customer for some 20 years, continued its quest for efficiency and economy through expansion of its technology resources. In this case, it was electronic data interchange, or EDI, and management at General Pencil learned that to keep Wal-Mart as a customer, they would have to be able to send and receive trading documents electronically.

Moreover, Wal-Mart required that the transactions take place directly, computer-to-computer, not through a third party provider such as an enhanced value-added network. With compliance not an option, General Pencil vice president/IT manager Helmut Bode settled on a PC-resident solution that while automating transmission and receipt, still required significant manual activity. With an EDI solution up and running, a second electronic trading partner was added: Michaels, the national arts and crafts chain and a 10-year General Pencil customer.

"The system was in a sense like a glorified fax machine," Bode says. "It was not an integrated system and it required multiple stages to prepare and transmit outbound documents and to process inbound documents.

"Prior to the Wal-Mart mandate, we had executed our transactions by phone and fax," Bode says. "Our Wal-Mart business is critical, so we obviously wanted to

comply with their requirements. We also needed a solution that we could install, maintain and afford."

## THE SOLUTION

The initial EDI solution, which facilitated inbound sales orders and outbound invoices, underwent several changes of ownership and ultimately the company was informed that the software would no longer be supported. Bode's quest for a replacement led him to examine several potential alternatives, including ACOM's EZConnect EDI-XML e-commerce solution.

EZConnect is a server-based, universal, any-to-any data translation and connectivity tool that establishes a versatile data management and partner communications environment. It supports direct access to multiple databases as well as flat file and XML interfaces to applications systems. It is compliant with all EDI standards, including ANSI X12 and EDIFACT, and it also supports a number of XML repositories, including BIZTALK and RosettaNet, xCML and eb/XML, among others. It is compatible with all data transports, including value-added networks (VANs), proprietary networks and the Internet.

## THE IMPLEMENTATION

"ACOM was more helpful than the others, it was affordable, and it provided us with an automated, integrated solution," he said. "Other companies just told us to download their software and start using it. But EDI mapping is difficult if you have no experience in doing it. ACOM gave us an impressive online demonstration. We discussed our needs with them, we got the right answers and we placed the order. They helped us map our trading partner documents and set up the system and it has worked ever since."

The earlier solution provided the basic ability to send and receive trading partner documents. When sales orders arrived, it was necessary to keyboard the information into the IT system for access by the warehouse staff. When the order was assembled, a turnaround document was prepared as an invoice and sent to the customer. Most shipments go to distribution centers but some go directly to stores.

"It was slow, manual and error-prone, but it satisfied our immediate requirements," Bode says. "Conversely, when we implemented EZConnect, it automated more than 90 percent of the manual activity. It speeded the transactions, eliminated manually induced error and shaved costs."

In implementing EZConnect, Bode opted not to import the customer purchase order EDI documents directly into the management software, preferring instead that EZConnect convert them to the flat file format of the DBA software, which converts them to sales orders and sends order acknowledgements via AS 2 protocol to Wal-Mart and FTP to Michaels. Wal-Mart and Michaels are set up within the DBA software as EDI customers, so when the software generates their invoices they go to a separate database. To issue invoices, the operator simply presses a key and the DBA software sends the flat files to EZConnect, which converts the invoices into EDI 810 documents and sends them to the respective customers.

## SUCCESS!

“This is a much faster, error-free process since it requires little of any human intervention,” Bode says. “Previously we sometimes experienced mistakes in such things as units and quantities but with so much of the process automated this is no longer the case. Nobody touches the data except to press the buttons that launch the activities.”

Plans are underway also to map additional EDI trading partner documents, including an Advance Ship Notice, currently done using a webform. Initially, ACOM set up communications with Wal-Mart for modem transmission and when the customer later established AS 2 as its communications protocol, it was simply a matter of setting up new communications paths.

“We receive 10-to-12 orders four times each week from Wal-Mart and 1 to 2 orders per week from Michaels.” Bode says. “Michaels also sends us so-called endcap orders 3 times a year. Endcap orders require shipments to all of their 800+ stores, which equates to more than 800 single orders, with shipping requiring a very short lead time. Entering the orders manually used to take up to an hour and one-half each day for Wal-Mart orders and up to a week for the Michaels endcap orders,” he says. “Preparing and issuing invoices took the same amount of time. Now, each of these processes takes 7-10 minutes. Sales orders automatically become invoices. Everything is untended and accurate. We’ve been able to reduce office staff by 50 percent and we’re saving a lot of money.”

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