



Resolution clinches online fulfillment link with Net.Commerce.

In today's consumer market, it takes only a handful of people to generate massive demand for a product. But it requires a veritable army to fulfill the demand of the masses. It's no wonder then that, in

the United States alone, direct marketing fulfillment is a multi-billion dollar industry, with order processing and customer support generating a major part of revenues.

revenues – shrink as their clients link their e-commerce sites directly to automated in-house order processing systems. Intent on retaining its full-service role in its clients' businesses, one fulfillment house, Resolution, is counting on a unique e-business application that makes it easier for its clients to continue outsourcing their order processing.

As companies move their marketing channels to the Web, many fulfillment houses can see their roles – and

Application Web-based fulfillment and customer support services

Business Benefits 250% growth in Web orders; dramatic reduction in clients' per-transaction order processing costs; Web orders expected to exceed paper-based orders in six months or less; retention of full-service fulfillment business

Software IBM® Net.Commerce
IBM DB2® Universal Database™ on Windows NT®
IBM DB2 for AS/400®
IBM Net.Data®
IBM HTTP Server

Hardware IBM AS/400



By providing the robust fulfillment solution required for successful e-commerce, Resolution enables its clients to focus on their core capability – marketing.

It's about business, not just technology.



Resolution stocks more than 30,000 items for its 50 major clients.

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– Dave Usher, Vice President for Order Networks Management, Resolution

Based in Burlington, Vermont, Resolution is a company specializing in retail and wholesale fulfillment and information management for nationally-branded television networks and newspapers, such as A&E, CBS, NBC, *U.S. News & World Report*, *The New York Times* and others. The merchandise these media companies offer primarily consists of videotapes, CD-ROMs, books, educational products and DVDs.

Over the past 15 years, Resolution has made a point of anticipating its clients' diverse merchandising strategies and accommodating them with convenient ordering options, ranging from mail-in order forms and call centers to fax services and “self-service” interactive voice response systems.

When Resolution's clients considered selling merchandise on their Web sites, Resolution was quick to support them with an e-business solution from IBM. Using IBM Net.Commerce, IBM DB2 Universal Database, IBM Net.Data and IBM HTTP Server, Resolution established a Web-based fulfillment system. “We already had a Web-based shopping cart application,” explains Dave Usher, Resolution's vice president for order networks management. “But we realized we needed a more robust system that would have the hooks and tools to integrate with our existing back-end ordering system. After evaluating the state-of-the-art solutions in the marketplace, we selected Net.Commerce.”

Usher notes that Resolution's choice was based not only on the technological merit of the software, but also on the credibility of the vendor behind it. “We have major brand-name clients, and we were not willing to take a risk with a start-up e-commerce package,” he says. “IBM made a very serious commitment to electronic commerce, a commitment I believe is deepening. That was an important consideration.”

Resolution's 50 clients are rapidly moving to e-commerce. What's more, Resolution has been able to introduce the Web-based service at a price that is significantly lower than the price for traditional channels. This has added to Usher's confidence that e-business is helping to ensure Resolution's place in its clients' supply chains well into the next millennium. “We are becoming a Web-centered company for order processing,” he says. “Indeed, in a one year period we've recorded an amazing 250 percent growth in Web orders. And, I expect that these will grow to rival paper orders within six months, maybe sooner.”

A Web site with a split personality

What's elegant about this solution is that it hasn't required Resolution to change its fulfillment model. Resolution's online order processing service is essentially a Web-based version of the service it has been providing all along. For example, when a cable television channel offers a videotape of a recently aired documentary, customers can order through a toll-free telephone number or log on to the channel's Web site.

If they phone in their order, a Resolution agent representing the channel will enter the order into Resolution's ordering system, which is powered by a DB2 database residing on an IBM AS/400 server. Customers who choose to order from the online store place items in the online shopping cart and proceed to checkout. After providing payment and shipping details on a secure Web page, they click on a button to confirm their order. Once the order is shipped, Resolution representatives can answer any customer inquiries on order status.

What customers don't see, as in the case of the phone orders, is that Resolution is actually processing the order. (Resolution does not host its clients' Web sites; it takes over from the point when an order is actually being placed.) As soon as customers place an item in the online shopping cart, the transaction is transmitted from the client's Web site to Resolution's Web site. The secure order page still looks like the client's Web page, but the order is actually being processed by Net.Commerce on Resolution's Web server.

With the help of Net.Data, the HTML-based order information is translated into SQL queries, which record the information in DB2 Universal Database residing on a Microsoft® Windows NT server. When an order is completed, it is replicated from the Windows NT server at Resolution to the main AS/400 order processing server, where it is filled in the same manner as the phone-in orders.

Keeping all orders on one system is key to maintaining Resolution's comprehensive service capability. "In addition to taking the orders and shipping the product to the customer, Resolution provides sales and financial reporting for its clients," Usher explains. "Orders generated on Net.Commerce are integrated with our central business system, thus providing a full-service operation for our clients."

Although the ability to provide full-service fulfillment was Resolution's primary objective in developing the online service, Usher notes that there is also a significant added benefit for clients. "Because we are doing less hands-on manual work on a transaction basis," he says, "we can charge our clients substantially less for a Web order than we do for a phone order."

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Online, telephone and paper ordering converge in Resolution's streamlined fulfillment process.

Net.Commerce provides a robust ordering solution

In 1996, when its first client expressed a desire to market products over the Web, Resolution developed a shopping cart application. But that application ran on a remotely hosted Web server and wasn't integrated with the AS/400 order processing system. As a result, Resolution had to download the information from the remote server and enter it into the AS/400 database. Since then, Web orders have increased dramatically. "We could see what was happening," Usher recalls, "so we automated quickly to make online order fulfillment as hands-off as possible."

Resolution's developers used the basic DB2 schema that came with Net.Commerce and built the application on top of shopping cart functions that had already been developed. "The fact that Net.Commerce had the facility to do that was attractive," Usher says.

Usher also points out the benefits of having DB2 running both on the AS/400 and the Windows NT server. "The assets in the AS/400 business system were too valuable to expose to the Web, so we placed the Net.Commerce server on a different platform," he explains. "But that means we have to populate the database on the Net.Commerce server with client and product information that resides in the AS/400 database. The fact that these databases are remarkably similar has made life easier. With the DB2 schema, frequent updates between the two systems are pretty straightforward."

The bundling of Net.Commerce with DB2, Net.Data and IBM HTTP Server made it a very attractive investment. And it's an investment that will retain its value in the face of business changes Resolution might encounter. Usher explains, "If we suddenly took on another very large client, we could go to an RS/6000,[®] or another AS/400 or add processors to our Windows NT server. One of the benefits of Net.Commerce and DB2 is that they provide several options for growth, and the flexibility we need to provide Web-based fulfillment and customer support services."

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