



# *PBD provides e-commerce fulfillment services with IBM solution.*

<b>Application</b>	e-commerce fulfillment services with ERP integration
<b>Business Benefits</b>	100% ROI expected in one year; 70,000 orders processed since launch; order processing cost savings of 25% per order; one-third reduction in development cycle
<b>Software</b>	IBM Net.Commerce PRO IBM DB2® Universal Database™ for Windows NT® IBM DB2 Universal Database for AS/400® IBM MQSeries®
<b>Servers</b>	IBM AS/400
<b>Business Partners</b>	CD Group, Inc. J.D. Edwards

Remember Star Trek and other science fiction classics? Well, until the time sci-fi becomes reality and physical matter can be transported in a heartbeat, online retailers must depend on fulfillment houses to support back-end distribution and customer service functions. So, as e-commerce surges, business is booming for companies like PBD Worldwide Fulfillment Services (PBD).

PBD provides warehousing, fulfillment and distribution services for a variety of commercial businesses, publishers and professional associations.

*“The integration of the online store into our ERP system was vital because we wanted to enable our customers to go online to get updated information about orders and their accounts.”*

*–David Ferguson, Vice President and Chief Financial Officer, PBD Worldwide Fulfillment Services*



*PBD has developed a more efficient and cost-effective business model for warehousing, fulfillment and delivery of products and materials.*

## *e-business — accelerating the pace of business and the pace of change*



*PBD customers can get up-to-the-minute information on orders currently being processed.*

*“We looked at all the alternatives, including Microsoft Commerce Server and offerings from Open Market and BroadVision, but Net.Commerce had the most functionality, ran on the correct platforms and gave us the ability to build integration with ERP systems.”*

*—Dave Huseonica, Executive Director,  
CD Group, Inc.*

A privately held, multimillion dollar company, PBD maintains an extensive infrastructure, including 2 warehouses and 70 call stations. Based in Alpharetta, Georgia, the company has 150 employees and 24 years of experience in the fulfillment industry. However, until recently, a key element absent in PBD's infrastructure was an efficient, interactive e-business link with its customers.

“The lost opportunity cost of not having a state-of-the-art Web presence is significant,” notes David Ferguson, vice president and chief financial officer at PBD. “Today, our customers expect a Web initiative, because trade and communication over the Internet is more cost-effective in the long run.”

Realizing it needed more than its existing, basic Web site to have an impact in the e-business arena, PBD turned to IBM Business Partner CD Group, Inc., an Atlanta, Georgia-based enterprise resource planning (ERP) and e-business consulting firm. The timing could not have been better. CD Group enlisted PBD in its beta program for a comprehensive e-commerce solution. Three months later, PBD had a sophisticated online store, complete with advanced graphics, multiple pricing levels, order tracking and automated e-mail confirmations.

Designed to tie in with J.D. Edwards ERP systems, the solution is based on IBM Net.Commerce (now part of the IBM WebSphere® Commerce Suite family), IBM DB2 Universal Database and IBM MQSeries. Orders from the online store are transmitted automatically into the company's back-end J.D. Edwards ERP system, running on IBM AS/400 servers with DB2 Universal Database serving as the core data management system. e-Integrator for J.D. Edwards, software developed by CD Group, facilitates the transfer of online order information to and from Net.Commerce and the J.D. Edwards system.

“The integration of the online store into our tried and tested ERP system, using utilities such as IBM MQSeries and CD Group's e-Integrator, was vital because we wanted to enable our customers to go online to get updated information about their accounts and orders,” asserts Ferguson. “We intend to continue using our ERP system well into the future, and also extend it so we can provide more online services to our clients. We like the fact that e-Integrator for J.D. Edwards gave us a predefined integration path between Net.Commerce and J.D. Edwards—and that this integration has been designed to accommodate future upgrades or enhancements to any of these technologies.”

### **Tailored B2B online store attracts customers, delivers savings**

Since PBD launched its Web site, it has processed more than 70,000 orders. And customers are showing a decided preference for the online channel — already 10 percent of its customers are regular users of the online store. Also, the cost of processing online orders is 25 percent less than for those received through traditional channels, due to reduced human intervention. “The order processing cost savings are going to directly benefit our customers, as we are reinvesting every dollar into our infrastructure to ensure optimum efficiency,” says Ferguson. “We are also expecting to achieve a 100 percent return on our original investment within one year.”

Another advantage of the solution is the ability to deploy multiple storefronts tailored for individual business customers. “That’s very important in an e-commerce solution, as each client has a unique set of requirements,” explains Ferguson. “With Net.Commerce it’s very easy to turn one online store into an electronic mall in a cost-efficient manner.”

### **A deceptively simple solution**

The commerce server engine, Net.Commerce, which powers the online store, resides on a Microsoft® Windows NT Web server along with DB2, which stores all product, customer and inventory information. Dave Huseonica, executive director, CD Group, explains: “We looked at all the alternatives, including Microsoft Commerce Server and offerings from Open Market and BroadVision, but Net.Commerce had the most functionality. It has an open architecture that enables easy integration with third-party solutions.”

In particular, Huseonica points out the solution’s multiplatform support, which is very important for the large, dedicated AS/400 and DB2 user base. “There’s a very strong AS/400 population in the J.D. Edwards marketplace. So, the multiplatform support of Net.Commerce certainly makes it a superior e-business solution.”

“Both DB2 and the AS/400 have an inherent stability and scalability that are irreplaceable,” he continues. “When we’re dealing with hundreds of order processing requests, this stability is key to maintaining our service quality. That is why we selected DB2 for the Web site as well. We’ve used it extensively in the past, and there is just no question in our minds about its capabilities.”

*“Both DB2 and the AS/400 have an inherent stability and scalability that are irreplaceable. When we’re dealing with hundreds of order processing requests, this stability is key to maintaining our service quality.”*

*—Dave Huseonica*



*By integrating online orders with its J.D. Edwards ERP system, PBD has raised the bar for quality in the fulfillment industry.*

The Web store is integrated with PBD's order processing systems. MQSeries transmits transactions from the Web server to the back end J.D. Edwards ERP system on an AS/400 server, where e-Integrator for J.D. Edwards maps the transaction into a compatible format. "MQSeries was a critical middleware link that helped us reduce the development cycle by one-third," notes Huseonica. "It talks to 35 different platforms and is extremely reliable. People often forget the importance of middleware."

With so many technologies in the picture, the solution could well have become complicated. But it didn't. "There is such seamless connectivity between these different mediums and technologies that it seems like just one complete solution," comments Ferguson.

### **Anticipating customer needs**

With customers readily accepting the online fulfillment services, Ferguson has also realized an important characteristic of the e-business marketplace. "Once customers get used to the convenience of these online services, they demand more. So, we will proactively continue to enhance the services and functionality we offer."

The company is already working to expand its online product and service catalog and is rapidly adding new online stores for individual business divisions and other customers. Next, PBD will enable its customers to check invoices and delivery status online and make payments electronically. With its IBM e-business solution, PBD has the foundation to add the kinds of services customers expect — and to keep up with the latest technological innovations.

"We've invested in a cutting-edge technology foundation that we know will support growth for many years," says Ferguson. "And with the expertise and support of companies like IBM, we'll stay ahead of the technology curve."

**For more information,  
please contact your  
IBM marketing representative or  
IBM Business Partner.**

Visit us at:  
**ibm.com/e-business**

For more information about  
PBD Worldwide Fulfillment Services, visit:  
*www.pbd.com*

For more information about  
CD Group, Inc., visit:  
*www.cdgroup.com*



© Copyright IBM Corporation 2000

IBM Corporation  
Software Group  
Route 100  
Somers, New York 10589

Printed in the United States of America  
11-00  
All Rights Reserved

AS/400, DB2, DB2 Universal Database, the e-business logo, IBM, MQSeries and WebSphere are trademarks of International Business Machines Corporation in the United States, other countries or both.

Microsoft and Windows NT are trademarks of Microsoft Corporation in the United States, other countries or both.

Other company, product or service names may be trademarks or service marks of others.

This case study illustrates how one customer uses IBM products. Many factors have contributed to the results and benefits described. IBM does not guarantee comparable results. All information contained herein was provided by the featured customer and IBM Business Partner. IBM does not attest to its accuracy.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



Printed in the United States on recycled paper  
containing 10% recovered post-consumer fiber.



G325-1813-00