



e-business case studies

Ostergaard/Dansk Auto Materiel:

e-business sells auto parts in Denmark



Putting e-business to Work

CONTENTS

Overview	1
Business Drivers	2
Ostergaard's "Pre-Web" Business Processes	3
Adoption Strategy	4
Adoption Timetable	6
Architecture	8
Return on Investment	9

LIST OF FIGURES

Figure 1. Implementation Timetable for Ostergaard Internet Platform	5
Figure 2. Number of Online Customers: Ostergaard	6
Figure 3. Online Revenue: Ostergaard (DK 000s)	7
Figure 4. System Architecture: Ostergaard/Dansk Auto Materiel	8
Figure 5. Benefits of Ostergaard's Commerce Platform	9

OVERVIEW

e-business case studies: Ostergaard/Dansk Auto Materiel

Based in Denmark, Ostergaard/Dansk Auto Materiel (www.ao-dam.dk) is an automotive parts wholesaler with 47 branches across Denmark and annual revenues of approximately \$60 million. Employing 430, Ostergaard serves independent repair garages with a fleet of 130 delivery vans, which are dispatched from its central parts warehouse, located in Odense.

This case study profiles Ostergaard's collaboration with IBM Global Services and IBM Business Partner EDB Gruppen to construct what has become a state-of-the-art Web commerce platform among Danish automotive parts suppliers. In addition to helping Ostergaard manage the flow of more than 120,000 parts, the platform has served as a magnet for new customers.



Steen Noerret, Managing Director and IT Manager at Ostergaard.

Ostergaard/Dansk Auto Materiel

The Company

- Internet-based retail channel with rich product information
- \$60 million in annual revenue

The Web Site

www.ao-dam.dk

- Manages 120,000 parts

The Benefits

- Increased revenue, customer loyalty, and customer satisfaction
- 257% greater order-taking capacity
- Expected 20% market penetration
- Five times faster ordering
- 24-hour delivery of parts not in stock
- 75% reduction in expenditures on paper catalogs
- Expected reduction in inventory, call center and order entry costs
- Decreased administrative and selling costs

The Technology

- IBM AS/400®
- IBM® MQSeries®
- IBM VisualAge® for Java™
- IBM DB2® for AS/400®
- IBM Global Services

IBM Business Partner

- EDB Gruppen

BUSINESS DRIVERS

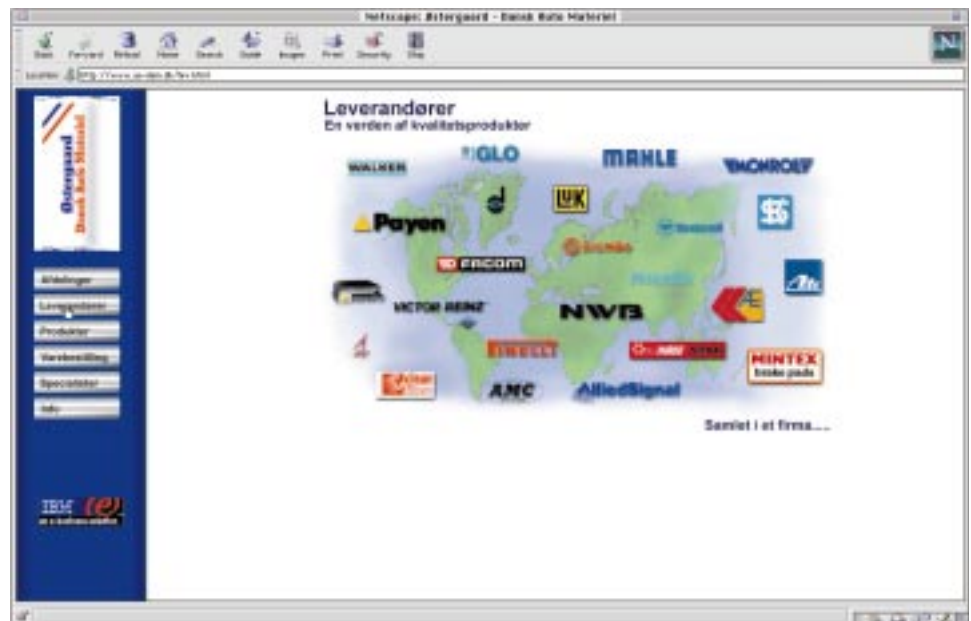
“Using paper catalogs meant that all our salespeople had to go through pages and pages of different car parts.”

— Steen Noerret, Managing Director and IT Manager

According to Steen Noerret, managing director and IT manager at Ostergaard, the key imperative behind Ostergaard’s e-business initiatives was the need to provide value-added services to increase customer loyalty as well as attract new customers. With the advent of Internet technology, channel players such as Ostergaard have arguably faced the most significant challenges to their traditional business model because of the increase of disintermediation – or “cutting out the middleman.” Ostergaard saw this dynamic at work and opted to turn a business challenge into an opportunity.

Ostergaard has succeeded in positioning itself as a strategic partner to its customers by making their jobs considerably easier – mainly on the strength of an IBM-designed transaction and information delivery platform. In addition to giving customers the opportunity to buy 24-hours-a-day, 7-days-a-week, Ostergaard’s Java-enabled system provides customers with rich technical information, including troubleshooting advice.

While the desire to enhance customer loyalty was the core driver in Ostergaard’s e-business strategy, the need for improved operational efficiency also loomed as a concrete business goal. Ostergaard’s manual and paper-intensive customer interface with its heavy reliance on telephone contact and paper catalogs set the stage for inefficiency and errors. “Using paper catalogs meant that all our salespeople had to go through pages and pages of different car parts,” says Noerret. “It was always a painstaking process that took a long time and did not guarantee finding the right part.”



Ostergaard’s IBM solution provides a 24-hour storefront and information resource.

OSTERGAARD'S "PRE-WEB" BUSINESS PROCESSES

Ostergaard's core business processes are selling and delivering car parts, mainly to independent workshops and garages across Denmark. Products are shipped from suppliers worldwide to Ostergaard's central warehouse in Odense, after which they are distributed to its local branches, which are electronically linked to the warehouse over dedicated lines. This network link enables Ostergaard to optimize its inventory strategy, minimizing the risk of inventory obsolescence.

Prior to adopting its electronic catalog technology, Ostergaard's customer ordering process required its customers' mechanics to identify car parts using numerous paper catalogs, then place orders by telephone with an Ostergaard representative. The representative would in turn use paper catalogs to find part numbers, check whether the part was in stock and/or provide a price quote for the product. As the following section shows, Ostergaard's e-business investments radically improved its operational efficiency – to the point of redefining its core processes.

"It was always a painstaking process that took a long time and did not guarantee finding the right part."

— Steen Noerret



ADOPTION STRATEGY

Ostergaard's e-business implementation was rolled out in three phases. The first phase, completed in January 1997, was an electronic catalog jointly developed by Ostergaard and EDB Gruppen (an IBM subsidiary and solutions partner). The catalog "provided enormous help to our branches and afforded us an opportunity to implement plenty of invaluable know-how into our database," says Noerret.

IBM's role grew considerably in the implementation's second phase, which involved extending access to Ostergaard's Web-based catalog to customers, and was completed in June 1997. Following the successful introduction of the e-catalog to internal employees, Ostergaard saw clearly that the next logical phase of its implementation was an electronic link to customers. The actual means of providing this electronic link remained up in the air as Noerret grappled with the need for:

- Adequate security
- Integrating the new platform with Ostergaard's legacy systems
- Simplicity and clarity, thus minimizing the burden of training users

Working in collaboration with the IBM Global Services organization based in Copenhagen and EDB Gruppen, Noerret and his colleagues considered a range of alternatives. The first option – establishing direct, modem-to-modem links with customers – was dismissed as cumbersome. A similar plan to build an intranet linking Ostergaard with its customers was lauded for its security features, but was deemed untenable in terms of cost, complexity and the amount of end-user support that would ultimately be required of Ostergaard.

In May 1997, the Ostergaard/IBM/EDB Gruppen team concluded that the ideal strategy for extending e-catalog access to customers would be to construct a customized data mining solution employing Java and IBM MQSeries middleware. Central to Ostergaard's choice of the solution was its Java-enabled capability to provide intelligent access to the company's 120,000 part numbers and pictures, as well as the preservation of legacy investments made possible by MQSeries. The final phase of the system rollout, the introduction of online transaction capability, was completed in October 1997.

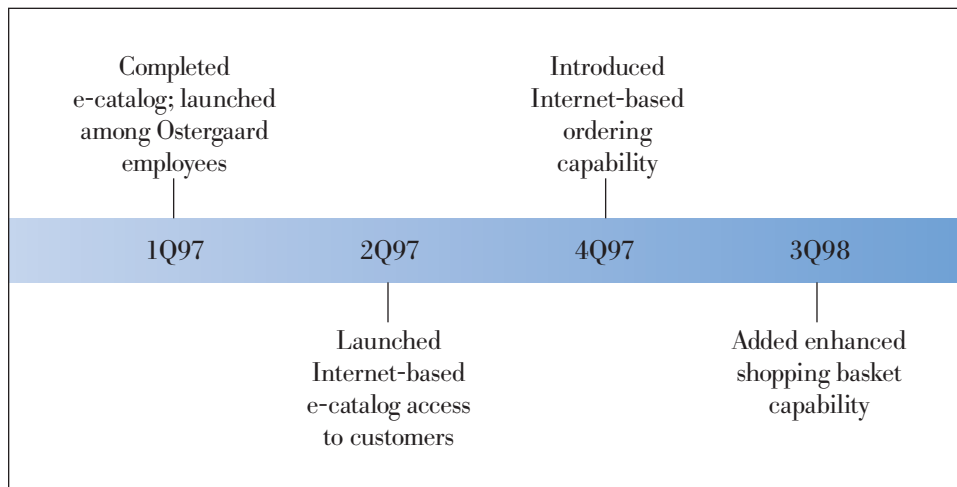
Ostergaard's IBM-designed Internet platform, sophisticated in its own right, is even more remarkable when viewed in the context of Ostergaard's previous practices. "At the time [Ostergaard and IBM were planning the project], we had no Internet connection in the company. This is quite new to us," declares Noerret. But the issue of user adoption was viewed as perhaps more important. "What about our customers, the mechanics?" Noerret pondered. "How on earth would they react?"

Ostergaard's initial assessment of adoption prospects was positive, based upon its research that found a surprisingly high share of mechanics had a PC – although most were old. Noerret correctly surmised that his system's value proposition was strong enough to drive customers to upgrade their systems. Ostergaard began its most concerted push to end users immediately after the platform was launched in October 1997, when it began visiting customers' sites to sell the idea and sign them up.

In August 1998, IBM further enhanced the Ostergaard platform by adding enhanced shopping cart functionality, which allows customers to accumulate orders in their shopping cart over a period of time. The modified platform also enables Ostergaard's mechanic buyers to profile their customers, thus strengthening their own customer relationships.

Overall, Noerret was thoroughly satisfied with the system's development and rollout, performed in what he calls "record time." Speaking of a relationship with IBM that goes back to 1993, Noerret comments "We have found the right solution *together*."

Ostergaard's implementation timetable is illustrated in Figure 1.



Source: Ostergaard/Dansk Auto Materiel, 1998

Figure 1. Implementation Timetable for Ostergaard Internet Platform

"If we get this 20 percent of high-end customers to [adopt the system], we can theoretically derive 80 percent of our business from Internet-based transactions."

— Steen Noerret

Featured IBM Technology

AS/400

AS/400 provides a combination of power and flexibility you can rely upon to help you run your business. The latest AS/400e hardware enhancements and the newest version of the AS/400 operating system have been engineered to provide you with the performance and the tools you need to get a quicker return on your investment.
www.ibm.com/as400

MQSeries

IBM's innovative, award winning MQSeries is the market leader in commercial messaging, providing a key element of enterprise systems and setting the standards against which messaging products are judged. It provides flexible, rapid application integration and allows businesses to integrate disparate islands of automation.
www.ibm.com/software/ts/mqseries

VisualAge for Java

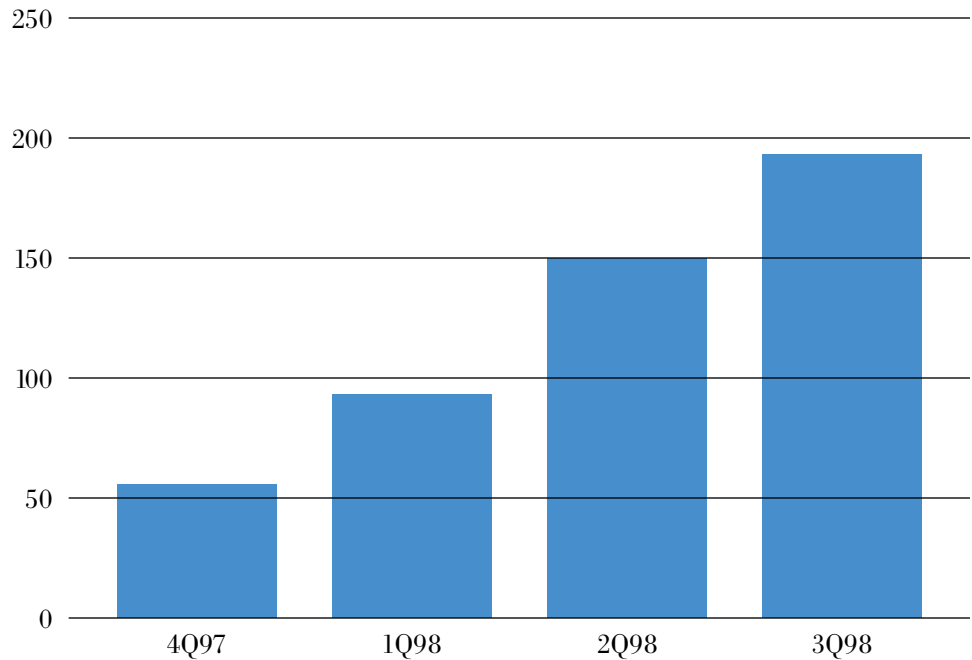
In VisualAge for Java, Version 2.0, IBM delivered specialized Data Access Beans integrated with the Visual Composition Editor, providing step-by-step wizards to help developers work with DB2 databases. The data access beans help developers quickly build connections to DB2, and customize queries to retrieve and update data.
www.ibm.com/software/java

DB2 for AS/400

This advanced, 64-bit relational databases system provides leading-edge performance in data warehousing and data mining environments. It can satisfy every need from the smallest departmental server to the largest enterprise-wide data warehouse.
www.ibm.com/software/data

Adoption Timetable

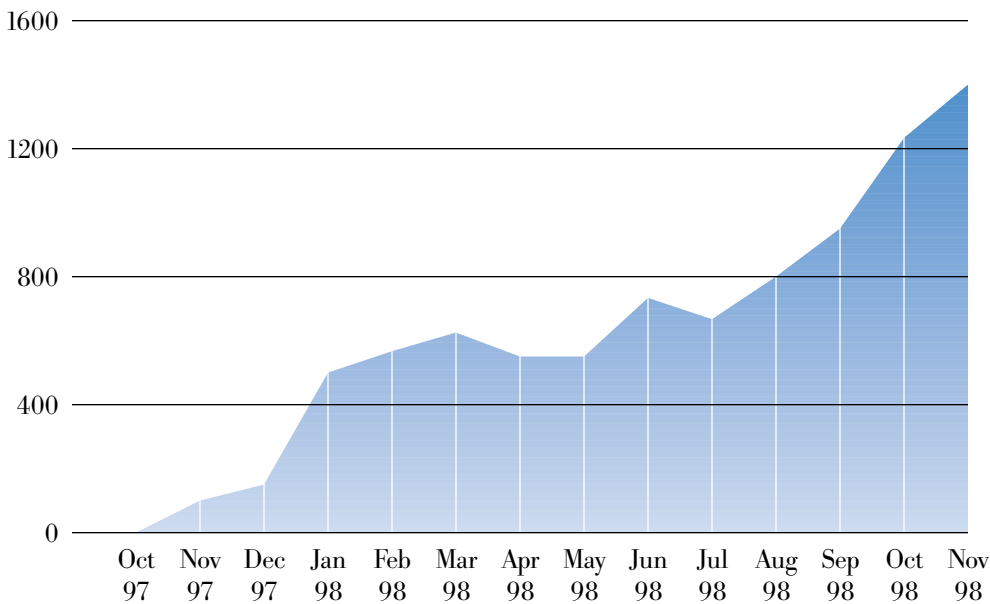
Out of a total of 4,000 to 5,000 independent garages across Denmark, Noerret aims to penetrate 1,000 within the first two years. As shown in Figure 2, the number of users began to grow most significantly six months after launch, reaching approximately 200 garages by the third quarter of 1998.



Source: Ostergaard/Dansk Auto Materiel, 1998

Figure 2. Number of Online Customers: Ostergaard

While the sheer number of online customers is the most obvious manifestation of the system's acceptance, Noerret believes that the system will attract and hold the market's most lucrative customers. These customers, who tend to be larger and more technologically sophisticated, are likewise expected to generate a higher average online revenue (Figure 3). Noerret notes that some of its larger customers already purchase between 70 percent and 80 percent of their parts over the Web. He says that overall Ostergaard's customer base generally follows the "80/20 rule," with roughly 80 percent of revenues derived from 20 percent of customers. The strategic significance of this revenue concentration among high-end customers is clear to Noerret: "If we get this 20 percent of high-end customers to [adopt the system], we can theoretically derive 80 percent of our business from Internet-based transactions."



Source: Ostergaard/Dansk Auto Materiel, 1998

Figure 3. Online Revenue: Ostergaard (DK 000s)

Featured IBM Services

IBM Global Services

IBM Global Services can provide you with people who understand technology and know how to best leverage it for any business situation. You can count on IBM Global Services to create and deliver solutions that will achieve real business results. IBM Global Services can help you capitalize on the power of e-business by helping determine where and how the Web can produce the most positive benefits for your business.

www.ibm.com/services

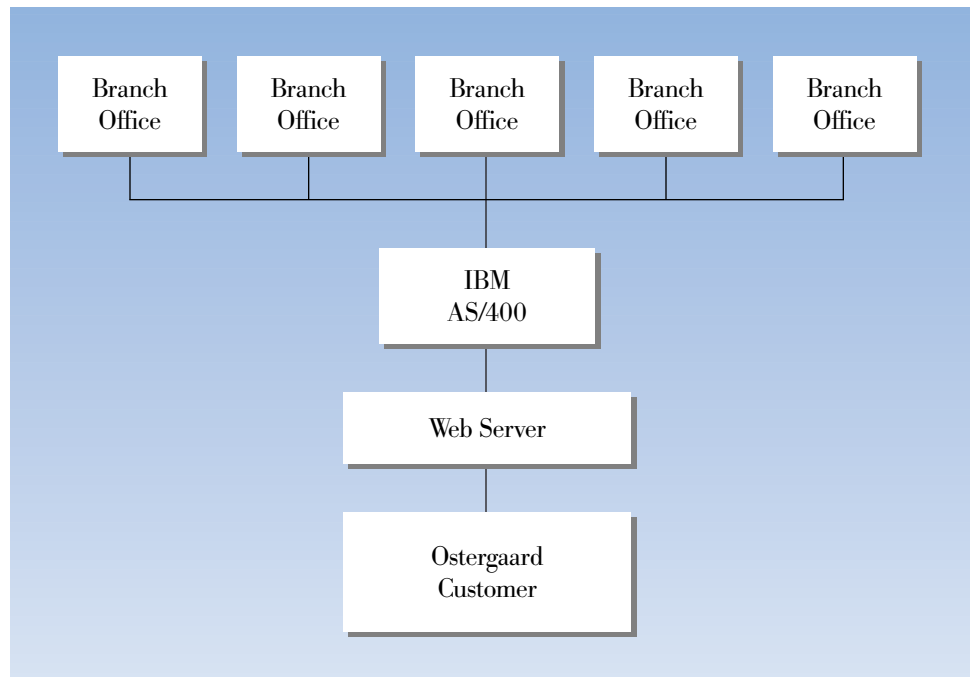
Architecture

“Since we’ve introduced the site, we have already substantially increased our customer base and foresee the business expanding rapidly as a direct result of IBM’s Internet solution.”

— Steen Noerret

Developed using IBM VisualAge for Java, Ostergaard’s ordering solution includes a Web server front end linked to an AS/400 model S10, where the Java-based electronic catalog resides. Parts information and an index to the photos of the parts are stored in an IBM DB2 for AS/400 data base. The platform uses MQSeries to integrate with a number of back end systems, including purchasing, stock management and financial systems. All Web-based transactions automatically generate an invoice and trigger changes in the system that are immediately reflected at the branches and Web site level (Figure 4).

The user interface is strictly browser-based and, because of the large amount of bandwidth generally required to view product pictures, Ostergaard advises its customers to use ISDN service. Access to the system, known as the “IT-Club for the Independent Workshops,” is limited to pre-approved members who gain entry to the site with a password. After accessing the system, users are prompted for a specific car part, which is then displayed on the monitor, allowing a mechanic to visually identify the part.



Source: Ostergaard/Dansk Auto Materiel, 1998

Figure 4. System Architecture: Ostergaard/Dansk Auto Materiel

RETURN ON INVESTMENT

Since the platform was introduced in 1997, Noerret has already seen its benefits quickly mount (Figure 5). Consistent with the platform's initial mandate – to grow and solidify customer relationships – the most significant gains have occurred within its customer base. “Since we’ve introduced the site, we have already substantially increased our customer base and foresee the business expanding rapidly as a direct result of IBM’s Internet solution.” At present, Ostergaard’s Web channel accounts for more than 10 percent of total revenue and is expected to become the primary channel in the long run.

The evidence linking Ostergaard’s new customer acquisitions with its technology investments is compelling. “Many of our new customers came to us and said ‘your competitors have no electronic business, and we want to do business in that way.’ That’s how we got many of our new customers. They see it as an easier and less expensive way for them to buy parts,” says Noerret. In addition to the productivity gains inherent in the Web-based catalog and ordering platform, Ostergaard further augmented the benefits accruing to members by providing them with volume-based discounts.

Ostergaard’s Web ordering platform has also increased sales by lessening the incidence of lost sales opportunities due to inbound telephone bottlenecks. “Reliance on telephone ordering was a weakness, because mechanics all tended to phone at the same time each day,” says Noerret. “Our switchboard was jammed between 9 a.m. and 10 a.m. when we received more than 280 calls simultaneously – the maximum number our telephone system could cope with.” The system’s ability to process orders from 1,000 mechanics simultaneously all but eliminates the incidence of lost sales.

“Many of our new customers came to us and said ‘your competitors have no electronic business, and we want to do business in that way.’ That’s how we got many of our new customers. They see it as an easier and less expensive way for them to buy parts.”

— Steen Noerret

Overall ROI Benefits	
Function	Benefit
Customer base	Larger customer base Higher revenues per customer Increased customer loyalty
Sales and marketing	Increased sales productivity Decreased education and training requirements for representatives Reduced printing and paper costs for catalogs
Order Processing	Increased productivity at branch level Fewer lost sales opportunities Increased administrative productivity

Source: Ostergaard/Dansk Auto Materiel, 1998

Figure 5. Benefits of Ostergaard’s Commerce Platform

“Our representatives now sell the [e-commerce] idea to customers, not just spare parts. We have changed our sales concept, and we believe it will save a lot of money.”

— Steen Noerret

Ostergaard's commerce platform has also provided a major windfall of cost savings and productivity gains. The most basic cost saving achieved thus far has been a 75 percent reduction in expenditures on catalog paper and printing. Noerret, however, believes that the real cost savings will come from increased administrative efficiency. “It's not just the paper,” says Noerret, “it's all the time that had been used to work within this paper environment.”

Perhaps the most dramatic process improvements enabled by its Web platform are seen in Ostergaard's field sales organization, which has been transformed from 30 representatives selling only auto parts, to 15 representatives selling the concept of e-commerce. “Our representatives now sell the [e-commerce] idea to customers, not just spare parts. We have changed our sales concept, and we believe it will save a lot of money.” Much of these savings will come from reduced training costs as Ostergaard is able to shift a significant portion of the technical knowledge base to the Web platform. Noerret also expects to achieve major cost savings in its branch system as employees become more efficient and more transactions are processed through the Web.

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

Visit us at:
www.ibm.com/e-business
www.lotus.com

For information on
Ostergaard/Dansk Auto Materiel, visit:
www.ao-dam.dk

For information on
EDB Gruppen, visit:
www.edbgruppen.dk



©International Business Machines Corporation 1999

IBM Corporation
Internet Division
Route 100
Somers, New York 10589

7-99
All rights reserved

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

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries or both.

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

This brochure 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 Partners. 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 of America on recycled paper containing 10% recovered post-consumer fiber.



G325-1369-00