



Strategies to support next-generation e-commerce.

Software is the soul of e-business.™





Results of implementing an e-commerce solution

- Improve margins by using a lower-cost online channel
- Reduce delivery costs and time associated with paper-based processes
- Reduce float through the use of electronic transfers and just-in-time payments
- Decrease inventory and warehousing expenses by linking directly to vendors
- Give customers faster, more responsive service
- Leverage and extend your brand by offering customer's multiple options for interaction and service

Your path to e-commerce success

It's a different world out there. And one that you might not expect. No longer are old-economy companies scoffed at for their existing infrastructures and detailed business plans. Startups and established dot-coms are taking notice and conducting old-economy business using new-economy tools. Slashing transaction costs. Maintaining existing customers. Reaching new customers. Improving customer satisfaction. And collaborating with other businesses and trading partners.

In this new economy of creating efficiencies, market dynamics dictate a business strategy that embraces all the players in your value chain. With an abundance of IT technologies—including the Internet—business-to-business (B-to-B) and business-to-consumer (B-to-C) companies have unprecedented opportunities to connect and establish mutually beneficial and profitable relationships. The potential for such synergies to exist between these parties is driving the next generation of e-business.

You know the enormous advantages that using the Internet affords: increased accessibility; improved service; closer, lasting customer relationships; global reach to all members of your value chain. And thanks to the Internet, smaller companies can connect and compete with larger companies.

To participate successfully online, you'll need to:

- Operate on a platform that can easily integrate with any of your customers' systems
- Respond to competitive business pressures quickly with a platform that provides fast development and deployment capabilities
- Consolidate information collected across all your commerce channels—in-store, call centers and online
- Promote a strong brand by presenting a consistent image and product—wherever your customers may encounter you
- Effectively and efficiently manage content
- Streamline efficiencies while maintaining profits
- Fine-tune customer service

Building your e-commerce strategy

As competition intensifies and companies are either acquired or disappear entirely, how do you ensure you're still in the game once the dust settles? A good place to begin is with an inventory of your e-commerce needs: a starting point that focuses on your immediate requirements for success — a more forward-looking plan by anticipating where your e-business will be in the long-term. By effectively addressing these concerns, you can map a solid plan for implementing your e-business solution — one that can respond to your current requirements and react and grow with your ongoing, competitive needs.

When you build an effective site, it's likely buyers will come. But how can you keep them coming back? Establishing and managing close relationships with your buyers — whether they are consumers, suppliers, trading partners or resellers — is paramount to achieving online success.

If you don't have the technical expertise or in-house resources to create or support your site, you may want to consider working with a third-party hosting or service provider. Or you may want to start selling and taking orders over the Web or through wireless applications and devices. No matter how you choose to sell to your buyers, you need to build an overall strategy that supports your customers — regardless of business model or channel.



A world of opportunity

- Industry analysts predict that B-to-B e-commerce will range from \$5.7 trillion to \$7 trillion in 2004
- AMR Research estimates that industry leaders will move 60 to 90 percent of their transactions to the Internet over the next two years¹
- Dataquest projects that \$2.7 trillion will be exchanged through e-marketplaces by 2004, equating to 2.6 percent of worldwide sales transactions²
- The Meta Group estimates that businesses will spend \$1.8 billion on integration products and services this year, growing to \$9.1 billion by 2004³

By acknowledging the paths of interaction your buyers may take, you can leverage your business processes across your entire enterprise. Let's consider the possibilities:

Will your buyers and customers interact with you over the telephone or Internet?

If so, evaluate your current strategy to determine if it provides:

- **Integration.** Does your telephone response system support Internet orders?
- **Adequate coverage.** Will the traditional 9 A.M. to 5 P.M. customer-service shift suffice or should you extend those hours? Remember, with the Internet, your business is open 24x7, across all time zones.
- **Service.** Can your customers request assistance, ask questions and receive responses over the phone and Internet?
- **Support.** Can customers access an historical, online view of all orders—whether they were placed online, on the telephone, through the mail or at an in-store kiosk?

Will your buyers interact with you through various B-to-B and B-to-C e-commerce channels?

If so, evaluate your current strategy to determine if it supports:

- Direct selling to various types of buyers: browsing B-to-B buyers with a small or infrequent need, who search your online catalog, order and leave.
- Frequent buyers who have not joined an e-marketplace.
- Customer relationship management (CRM) technologies, including personalization, cross-sell, up-sell and promotions to increase your business.

Will your buyers interact with you through e-marketplaces?

If so, evaluate your current strategy to determine if it supports:

- Defined rules for content, negotiations, invoicing, payments and fulfillment.
- Standards for product descriptions, terms for negotiation and other key processes.
- Demands for contract execution, order, transaction and fulfillment systems.

There are no right or wrong answers. In fact, your buyers may conduct business with you in one of these ways, some or all. Again, the key requirement is to provide your buyers with multiple opportunities to conduct business with you in the way they choose. Begin by implementing a solution that easily integrates e-commerce as part of your overall business strategy. Then, you can begin to meet your customer's needs and the challenges of today's Internet economy, while you grow your e-business.

Objectives of an e-commerce strategy may include:

- Improved customer service with realtime support and interaction
- Increased mind share and brand awareness through customer loyalty programs and online communities
- Enhanced interaction with trading partners by offering online procurement capabilities
- Streamlined supply chain processes to help reduce errors and increase productivity
- Decreased operating costs by aligning technology with business processes and integrating existing technologies
- Expanded geographic reach by establishing global product fulfillment and shipment capabilities
- Increased revenues and market share with personalization, up-sell and cross-sell functionality

Creating a best-of-breed e-commerce site

Your mission is to create an exciting and financially successful site quickly, while simplifying IT management. Clearly, a successful site provides a range of e-commerce capabilities — content and order management, relationship marketing and payment. And while these functions are indispensable, you must also get to market quickly. You need to build, test and deploy e-business applications faster without requiring developers to learn new skills.

To have a successful e-commerce site, you'll need to use data-gathering, personalization and content management techniques to enhance marketing and merchandising efforts. With these tools, buyers can easily access and purchase the products they need most, returning later to reorder lists that reflect the unique contracts, and terms and conditions of your agreed-to relationship.

Consumers will appreciate the convenience of saved shopping lists of favorite and frequently ordered items. After all, if you're a retailer, you know that capturing that first sale isn't the challenge — it's building long-term relationships with your customers to ensure repeat business.

Building a flexible e-business

The IBM WebSphere® software platform for e-business is a comprehensive set of award-winning, integrated e-business solutions. Based on industry standards — like Java™, XML and J2EE technologies — the WebSphere software platform is flexible and pluggable. Whether you are building your business on the Web, or expanding your business to the Web, the WebSphere software platform allows you to adapt on the fly as markets shift and business goals evolve.

Building on this robust platform, you can integrate diverse IT environments to maximize your current investments. Deliver your core business applications to the Web. Grow these applications to meet changing needs and increasing demand. And create an e-business that sets you apart from the competition.



How to enable your business for e-commerce

- Develop a dynamic, database-driven online catalog, linking you to customers, suppliers, resellers and even factories
- Offer online ordering by securely integrating your front-end applications with an order-entry system
- Streamline financial relationships by accepting electronic payment methods
- Increase reach by participating in an e-marketplace
- Support pervasive devices, like mobile phones and personal digital assistants, so buyers can purchase from you anywhere, anytime

Take the lead in a world of e-business opportunity

As the e-business frontrunner, IBM has helped thousands of companies with their e-business transformations. Founded on an open, industry-standard architecture, IBM WebSphere Commerce Suite gives businesses of all sizes the ability to establish effective e-commerce sites in B-to-B, B-to-C, e-marketplaces and service provider environments. From catalog and storefront creation to payment processing and integration with your current business systems, WebSphere Commerce Suite provides the framework to conduct e-business in a secure, scalable environment.

IBM WebSphere Commerce Suite makes it easier for you to conduct business globally, reaching new buyers around the world. WebSphere software is translated into several languages and supports 25 currencies, including the euro, Italian lira and Japanese yen; additional currency can also be supported.

To fully reap the benefits of your e-business, you need a firm foundation. IBM WebSphere Application Server is that e-business foundation, allowing you to transform and leverage the resources and systems you have today into the kind of business you want to be tomorrow. Your development team will value its flexible development environment that breaks the barriers of writing code every time they need a new application. You will appreciate the ability to reuse what they've already created, saving you time and money.

WebSphere Application Server supports all your e-business needs, from simple Web transaction processing to complex, enterprise-wide Web applications. Leverage your existing IT investment to reach new markets and create new opportunities where none existed before.

Another cornerstone of your e-commerce implementation is IBM DB2® Universal Database™. Any type of data, including text, images video and audio, is stored and retrieved easily. With support for Java technology and multimedia objects, DB2® helps your team deliver a total Internet experience that will impress even the most Web-savvy users.

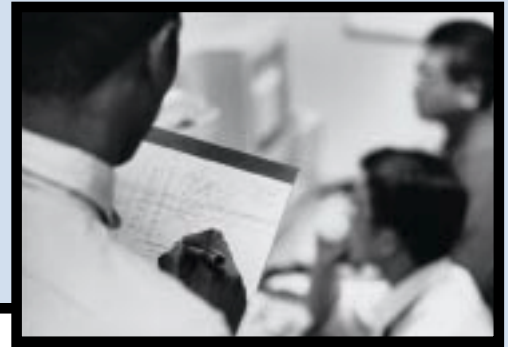
Ease their worries — make payments safe and secure

You want your customers to shop on your site and do business with you not once but repeatedly. For them to feel comfortable providing personal and corporate credit information, you need to make them feel secure. At the same time, you need to protect yourself from fraud and reduce losses from chargebacks.

Included with WebSphere Commerce Suite, IBM WebSphere Payment Manager is a natural extension of your current business systems. With it you have the capability to securely manage Internet payments and easily integrate them into your operations. WebSphere Payment Manager functions like an enhanced electronic credit card processing bank. You can customize specific payment methods and accept multiple currencies with varied financial institutions and adapt to rapidly changing business requirements by seamlessly adding payment options as they emerge.

Create and maintain customer satisfaction

Providing the highest level of customer support is an important factor in ensuring high levels of satisfaction. There are many support tools your site can employ, including generic FAQ files, online Q&A databases, newsgroups and message boards. You can also use e-mail management systems with intelligent routing and automated response, live chat, instant messaging and of course, the telephone.



What to look for in a winning e-business solution

- Easy to use with a quick response time
- Built on open, industry standards with flexible, cross-platform support
- Integrates with all major applications and infrastructures
- Based on widely available IT skills
- Adaptable platform that grows with your goals and business model

Whirlpool B-to-B trading portal significantly slices per-order costs.



The global major home appliance business is an incredibly competitive, \$70 billion industry. Big opportunities. Even bigger stakes. As the world's largest manufacturer and marketer of home appliances, Whirlpool's \$10.5 billion business demands highly efficient operation and the ability to deliver superior customer service to its resellers — resellers who account for 25 percent of Whirlpool's total trading partner base and 10 percent of its revenue. But doing business with its thousands of middle-tier resellers had become cumbersome, time-consuming and costly.

IBM WebSphere software platform for e-business: simplifying business integration

Collaborating with IBM, Whirlpool created a B-to-B trading partner portal that allows resellers to abandon phone and fax orders and place and track those orders on the Web. Building the portal meant integrating with Whirlpool's existing SAP R/3 inventory system and Tivoli system management tools. With WebSphere software platform technologies — including WebSphere Application Server, Advanced Edition, WebSphere Commerce Suite (formerly IBM Net.Commerce), IBM HTTP Server, IBM VisualAge® for Java and IBM Commerce Integrator with IBM MQSeries® — working in concert, Whirlpool developed a fast, easy-to-use Web self-service ordering process that cut per-order costs by 80 percent. And in a three-month period, the portal helped Whirlpool generate \$100 million in revenue.

Value for the long-term

Now Whirlpool has a solid, extendible foundation on which to rapidly develop and deploy future e-business applications.

“Like anything in this Internet space, our applications will probably evolve every six months or so,” says Jim Haney, Whirlpool vice president of architecture and planning. “With the environment we have in place, we'll first look to IBM and its suite of e-business tools to provide the scalability, high availability and capacity needed to support the evolution of our Web applications.”

The WebSphere software platform for e-business helps you operate efficiently and reap significant business benefits by moving business processes to the Web. And maximize investments by leveraging existing applications and systems.

All to differentiate you from the competition.

“There are features that come out of the box in the current suite of IBM tools that, a year-and-a-half ago, we tried to build ourselves. Now, we can bring applications to market faster.”

— Jim Haney, Whirlpool vice president of architecture and planning

WebSphere Commerce Suite supports Lotus® Domino™ for collaboration, e-mail and discussion group capabilities and also provides messaging confirmation to your customers after he's placed an order, assuring him that his order has been received. The Lotus Sametime™ product family offers realtime collaboration that provides instant awareness, communication and document-sharing capabilities. Customers can interact in realtime with salespeople and customer service representatives. With a single click, your customers can request that a sales rep phone them to place an order or gather more product information. With Sametime, customers can get a response immediately, ensuring the satisfaction you need to succeed.

Enhancing your e-business

Using IBM WebSphere Studio as a companion to WebSphere Commerce Suite, you can build, manage and deploy security-enhanced, dynamic, multiplatform Web applications with JavaServer Pages™ technology, HTML, JavaScript™ and DHTML support.

You don't have to be a programmer to take advantage of WebSphere Studio tools and wizards. Using drag-and-drop technology, Web designers and developers can do their jobs easier. Offer customers visually compelling sites with relevant content and catalog data with rules-based, collaborative filtering personalization and merchandising functionalities.

Make the most of what you've got

When you're ready to extend your back-end systems, you can provide realtime, dynamic information to your entire supply chain with business integration. Information and processes are integrated across your enterprise — with partners and customers. As e-business becomes increasingly more collaborative in nature, linking global supply chains, the integration equation can become complex. Few e-business applications have built-in integration capabilities to attain maximum levels of efficiency. To create an environment in which your applications can readily communicate and interoperate efficiently with those of your customers — partners, buyers and suppliers — you need middleware.

Often referred to as one of the most important software technologies to emerge in the Web environment, middleware is the layer of software that fits between operating systems and Web applications. Services like identification, authentication, authorization and security are fused together, enabling otherwise conflicting applications to work together.

IBM MQSeries messaging middleware simplifies the task of connecting your applications across disparate environments, allowing information exchange across more than 35 different operating platforms. Your investments in existing applications and systems are protected, helping speed your time to market while increasing your ROI.

Facilitating sales, supporting supply chain linkages and building stronger relationships with your trading partners can significantly improve your e-business efficiency. Designed to simplify the process of joining these business-critical applications with the Web, IBM Commerce Integrator accelerates the process of integrating ERP systems (such as billing and accounting) with commerce functions (like accepting online catalog orders). A WebSphere Commerce Suite add-on product, Commerce Integrator uses the same approach — integration through configuration, not coding — eliminating redundant maintenance of product, customer, inventory and order information.

Give customers what they want

You've looked everywhere for a specific item and finally find a store that stocks it. To avoid a wasted trip, you call the store and confirm the item's price and availability. At the store, however, the clerk informs you that the item is on back-order and does not know when more will arrive. Unhappy, you leave the store, vowing never to return.

Now imagine this scene on your Web site. You need to make the ordering process as easy, familiar and automatic as possible for every purchaser. Offer up-to-the-minute delivery status and order confirmation e-mails. Let customers know upfront if the product they ordered is unavailable and when they can expect another shipment. A simple and efficient order process that saves buyers time in procuring products will create a valuable experience and will encourage them to return often.

You're busy and so are your customers. Give them what they want — comprehensive, accurate, consistent, current, personalized product information — without requiring unwieldy time commitments and effort from your staff.

With IBM WebSphere Catalog Architect, you can easily create, update and manage complete, consistent, correct and current product information all with a familiar — and simple — drag-and-drop interface. By providing a high degree of efficiency, accuracy and detail, you'll increase the return on your investment and boost productivity. For use with WebSphere Commerce Suite, WebSphere Catalog Architect enables personalization and advanced catalog searching; offers merchandising support for bundling (groups of products that are combined for merchandising or convenience) and packaging (orderable units that cannot be broken up). Support for remote database servers allows multiple users from different product divisions to access and update the database from separate workstations to share information and secure data.

Turn up the excitement level

Adding rich multimedia experiences for your buyers can drive sales and increase customer satisfaction. With the power of IBM HotMedia™ technology, compel users to navigate through such effects as animated GIFs, 3-D object movies, and audio and video clips. Part of IBM WebSphere Commerce Studio, HotMedia facilitates buying decisions and boosts your sales. And you can leverage HotMedia in your WebSphere Catalog Architect implementation. Letting buyers view your complete product offering and any required accessories or components ensures buyers have the necessary information to purchase what they need

May we take your order?

Now that you've developed and organized your site, you're ready to start accepting your customers' orders. Keep in mind, how orders are handled varies depending on the product, customer or buyer and purchasing situation. In a B-to-B environment, buyers want to negotiate price, particularly for large, bulk orders. In a retail situation, you may want to offer a discount or package offer. In an e-marketplace setting, buyers may need to locate a new part and may not be aware of the products or terms you offer.

The best e-commerce solutions should accommodate all these ordering models. And it should handle requests for quotation (RFQ), regularly scheduled orders or one-time purchases quickly. Finally, the ordering process must integrate your back-end business systems, like inventory management and contract pricing.



StaplesLink.com supports customers with personalized ordering system.

A multibillion-dollar retailer that pioneered the office supply superstore industry, Staples realized demand was exceeding capacity of their online B-to-B solution. Staples senior IT and executive management recognized their need for increased scalability and an integrated back-end. The company turned to IBM to design, develop and implement its new Internet ordering system — StaplesLink.com. IBM WebSphere Commerce Suite, a scalable architecture and integration solution with back-end ordering systems, made it possible.

For its B-to-B marketplace, Staples needed to accommodate the business processes associated with corporate procurement and integrate the contract terms and conditions of their individual medium and large customers.

IBM developed a new online ordering system, customized for each contract customer. StaplesLink.com includes a purchase authorization process to help procurement employees who must first obtain approval from various sources within their companies. Approved orders are automatically routed by IBM MQSeries to Staples' back-end order processing and fulfillment systems. Order status is then fed back to WebSphere Commerce Suite by MQSeries, so corporate buyers can see the status of their orders in near realtime.

Today, Staples B-to-B customers enjoy a more efficient purchasing channel.

A winning situation for you and your buyers

By providing customers with products that meet their immediate needs, you develop the basis for positive, long-term customer relationships. Take relationship marketing to the next level. Recommend substitute products if you're out of stock. Offer accessories and special bundles that complement orders and purchases.

If you're a service provider or market-maker, e-commerce auctions are a win for both buyers and sellers — and you. An e-commerce auction implementation enables more buyers to bid on RFQ more easily.

Conducting open-cry, sealed-bid, Dutch and reverse auctions on your site gives you a new channel to sell your products. If you're already in the business of managing auctions, you can decrease communication and settlement overhead while increasing speed and efficiency. Implement auctions as your sole sales mechanism or as a way to move selected merchandise, like discontinued products, overstocked seasonal items or excess inventory. Offer an auction gallery that lets customers, buyers and suppliers view, search and specify bids on items.

The value of easy navigation

Companies with a brick-and-mortar presence spend enormous effort on store layout, product location and presentation. Imagine if physical stores could be arranged for each customer who enters the door. Your e-commerce site can be tailored to the individual—whether it's a retail shopper, purchasing manager, reseller representative or supplier—depending on whom they are buying for and how familiar they are with your product and brand.

Ease of use should also extend to the checkout process. On average, over one-third of Web shopping carts are abandoned, meaning a buyer took the time to select items for purchase but for some reason never completed the process. Important checkout features include capturing buyer information to minimize duplicate data entry and enabling one-click purchasing, easy payment options and error checking. You need to provide customers with the ability to order by phone; and to check accurate inventory status and pricing—including shipping and tax information. Privacy policies and assurances are also critical.

Capitalizing on e-marketplace opportunities

Field-tested and fully integrated, IBM WebSphere Commerce Suite, MarketPlace Edition is built upon the proven B-to-B e-commerce foundation of WebSphere Commerce Suite, Pro Edition. Product capabilities include aggregated catalogs, role-based memberships, workflow, negotiations (auction, request for quotations and proposals, exchanges) and dynamic contracts. With WebSphere Commerce Suite, MarketPlace Edition, buyers and sellers can collaborate in realtime and realize reduced sourcing and transaction costs; trading partners can anticipate fast-moving market conditions. Host rugged auctions that support the use of pervasive computing devices like personal digital assistants and cell phones. And offer robust search capabilities and seamless workflow approvals.

With WebSphere Commerce Suite, MarketPlace Edition, get back a high return on your investment while keeping your total cost of ownership reasonable. More importantly, you'll be able to capitalize on new, revenue-generating opportunities to drive your e-marketplace strategy—and profitability.

Advancing your e-business to the next level

No matter where you are in the e-business cycle, you can rely on the WebSphere software platform to meet customer requirements—and your own. IBM offers best-of-breed solutions for e-commerce, integrated with an industrial-strength application development environment. The WebSphere software platform and its related products provide the functionality, integration and scalability you need to transform your existing technology and information assets into a leading Internet solution for e-business.

For more information

Let IBM help you harness the power of e-commerce to gain and maintain a competitive advantage. We have over 1,000 Certified Business Partners to help you design and implement your e-business solution. Our 100-plus Software Developers add leading-edge functionality and innovation to WebSphere Commerce Suite software products. And through the experienced team at IBM Global Services, you can quickly build and deploy dynamic e-commerce solutions. We are committed to e-commerce and to our customers' successes. Take advantage of the vast opportunities and potential that today's e-business technology affords.

To learn more about IBM e-commerce solutions, contact your IBM marketing representative, IBM Global Services, IBM Business Partner, or visit:

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¹ "B2B Commerce Forecast: \$5.7T by 2004." AMR Research. May 1, 2000.

² "Triggering the B2B Electronic Commerce Explosion." Dataquest. January 31, 2000.

³ "Worldwide IT Trends & Benchmark Report: 2000 Edition." Meta Group.