



WebSphere® software

**Choosing a business integration
solution that can help you earn a
quick return on your investment.**



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Executive summary

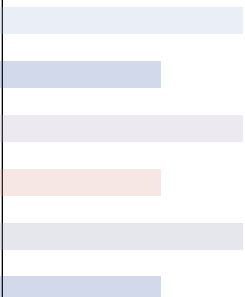
In every industry and sector of global business today, leaders are searching for ways to make their organizations more nimble. They're rethinking their fundamental business designs to help make their value chains more fluid and interwoven. They want to streamline operations. Lower costs. And deliver better service to customers. But, as an Aberdeen Group report suggests, a requirement for business agility, enterprise integration is also widely – and fairly – recognized as an expensive and labor-intensive endeavor.¹

e-business on demand™ can help you see and manage your company as an integrated whole – even if important parts of it are outsourced to others. Not just to increase operational efficiencies. But to build a dynamic infrastructure that allows you to create new business processes and leverage existing processes cost-effectively. An effective business integration strategy offers you the flexibility to manage your processes more efficiently, while reducing costs and time to market.

As new e-business opportunities and strategies appear, integrating your business – people, applications and processes – is more critical than ever. This executive brief discusses how the right integration strategy lets you leverage your existing IT infrastructure. Adapt on the fly as your business needs require. All while keeping costs in check. And how WebSphere® business integration software from IBM can help you achieve a quicker return on your investment – and lower your total cost of ownership – by delivering end-to-end integration capabilities. Capabilities that can address today's projects – and tomorrow's challenges.

Reduce the hidden costs of integration

To bridge between applications – and between applications and people – many companies have traditionally relied on labor-intensive approaches. Point-to-point integration. Writing custom code to integrate billing with customer service. Human resources with financials. To add in scheduling. And support trading partners. An approach that is expensive to maintain and modify as your needs changes. As your integration needs evolve, the time and expense to develop and maintain custom links between applications increases.



Analysts estimate that 35 percent of an enterprise's software maintenance budget goes to customized coding to build links between applications. However, most companies don't realize what they're spending. The costs are hidden with application maintenance costs. If you effectively integrate existing IT investments, your company can increase efficiencies while lowering operating costs. By moving integration requirements out of homegrown connections and into efficient integration software, you can speed your time to market, earn a quick return on your investment and lower your business risk.

Tap into your most important assets

Companies that achieve success in fully integrating their enterprises recognize that every department doesn't need – and really shouldn't have – its own databases for suppliers, data center and customer information. An efficient and flexible combination of resources optimizes operations across and beyond your enterprise. Integration allows you to connect your most critical assets:

- *People.* Support for integrated business processes means employees, customers, partners and suppliers can interact with your business more efficiently.
- *Processes.* Your organization can't afford to develop and maintain isolated, independent, vertical business processes. As an on demand business, you can manage and coordinate your entire enterprise horizontally—and your IT infrastructure can keep pace.
- *Information.* Integration gives everyone along your value chain realtime access to disparate, distributed information so both people and processes can leverage data and content resources from a variety of repositories.

Integration across people, processes and information may not be a new concept. But the return-on-investment value has never been higher. According to Aberdeen Group, surveys of Global 2000 CIOs consistently identify the cost, complexity, and integration time of enterprise application integration (EAI) and business-to-business (B2B) integration as one of their top concerns. Even with tightening budgets and lower profit margins, the business benefits of a solid integration strategy are so compelling that CIOs predict they'll spend between 35 percent and 60 percent of their budgets on integration projects.²



Because integration of business-critical applications and processes impacts almost every facet of your business, making the right choice can mean the difference between leading the pack – or lagging behind. Develop a solid strategy and your business can respond faster. More efficiently. And reduce your total cost of ownership in the process.

With a solid business integration strategy, you help to ensure that your e-business applications address your business problems – regardless of what they may be. Rather than running in isolation, these applications tap into your existing IT assets to provide the functionality you need to run your business smoothly. Through an integrated software infrastructure, you can connect your assets more easily – and get more for your money from the applications you’re currently running.

By streamlining your IT infrastructure, you can save money and increase organizational productivity – and fund growth. Taking out costs associated with expensive homegrown IT infrastructures and their management lets you reinvest that money in other aspects of your business.

Improve your ability to implement business strategy cost-effectively

The costs of hand-coding connections between applications drains IT resources heavily. Reuse is rare and usually nonexistent. Assuming you’re looking at two-way integration, the number of possible integration points between any given applications can grow exponentially. For two software components, the minimum number of connections between them is two. For 10 components, the number of connections can be as many as 90. For 20 software components, the number grows to 380.³

Now factor in future growth. Building, maintaining and upgrading current connections is only the beginning. You can speed the return on your integration investment by implementing a solid business integration solution that requires fewer hours to complete – and helps you achieve a closer fit between your business strategy and IT systems.



Whirlpool B2B trading portal significantly slices per-order costs

The global major home appliance business is an incredibly competitive, US\$70-billion industry. As the world's largest manufacturer and marketer of home appliances, the Whirlpool US\$10.5-billion business demands efficient operations and the ability to deliver superior customer service to its resellers—resellers who account for 25 percent of the Whirlpool 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.

Collaborating with IBM, Whirlpool created a business-to-business (B2B) 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 the Whirlpool existing SAP R/3 inventory system and Tivoli® systems management tools. With IBM WebSphere software platform technologies 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 US\$100 million in revenue.

Now Whirlpool has a solid, extendable 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."

"In our business, the supply chain is as important to our competitive advantage as the quality of our products. Our WebSphere software-based partner trade portal dramatically improved ordering time and cut our costs by more than 80 percent," Haney continued.

- *Model existing processes, or design and implement new ones quickly and cost-effectively. Test the ideas using simulation to see if you can get the right business results—all without expensive custom coding.*
- *Integrate to link your people, processes, applications, systems and data—and improve end-to-end enterprise efficiency.*
- *Connect to your customers and trading partners, and reuse your internal processes to reduce costs and increase productivity.*
- *Monitor your processes and leverage process metrics to gain greater control and improve operational decisions.*
- *Manage your business more effectively—and forecast improvements—by continually analyzing process performance.*

Justifying expenditures in a tough economy can be difficult. Tighter budgets force you to set priorities. You must concentrate on how to make your business more agile. Responsive. Competitive. Even as you minimize your risk. However, the return on investment for streamlining business processes and automating integration capabilities across and beyond your enterprise is significant. With a robust, business integration solution, you ready your company for future growth. Meet your time-to-market objectives. And lower your cost of doing business in the process.

Meeting the challenge of diverse IT systems

The same computer systems that once brought giant strides in efficiency and speed within your organization can also make integration with your customers, trading partners and suppliers challenging. That's because IT systems consist of a broad mix of hardware, operating systems and software that should work together, but often don't. Unless your organization properly implements the right integration strategy, building collaborative relationships among these components can require extensive resources, broad skill sets and experience.

A solution based on open standards can help you avoid being locked into using offerings from a single vendor. Open standards give you flexibility. To change or modify your technology as your business strategies evolve. To better integrate your existing or disparate systems, whether inherited or purchased. And to free your company from being tied to any one vendor or platform that may—or may not—be compatible with your future business strategies.

A business integration solution based on open, industry standards allows you to start with a simple, cost-effective solution – one that can address the challenges inherent to your industry. And then grow and integrate that solution with a comprehensive infrastructure as your needs dictate. When business integration products are designed to leverage and complement each other, you can more easily integrate the applications and processes your developers create using them. You can add design, maintain, repair and overhaul information to the manufacturing process so that you can more efficiently manage the entire lifecycle of your products.

Using business integration software can help you achieve substantial IT cost savings and breathe new life into existing application investments. Your developers spend less time and effort building, maintaining and modifying systems today and tomorrow. And with open standards-based business integration software, you can further speed your time to market and your return on investment while lowering your business risk. The result? Everyone along your value chain can have the in-depth understanding of your products and services required to meet your performance, time-to-market and cost objectives.

Advanced business integration tools and leading technologies from IBM enable you to develop a business integration strategy that preserves your competitive advantage. To respond quickly to changing market conditions. And achieve your business objectives. WebSphere business integration software from IBM can help your enterprise integrate business processes and streamline supply chains throughout. Build cost-saving, time-saving, e-procurement systems. And develop profitable, international channels.

With a business integration solution based on WebSphere software, you can:

- *Slash cycle times and costs by reusing existing assets.*
- *Respond to customer needs faster.*
- *Adjust your IT systems to the speed of your business ideas.*
- *Save money as you bring your products and services to market ahead of the competition.*
- *Minimize costs and time spent on modifying business processes.*

Protect and extend existing investments

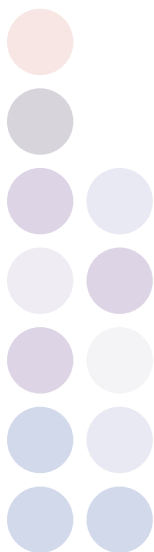
As your business evolves, consider the impact of mergers and acquisitions. New business relationships and alliances. Diverse legacy systems. Or other purchased applications – whether they stand alone or integrate with your other applications and processes. Factor in the cost of updating these existing systems. Add support for emerging technologies, increased functionality – and build in room to grow. The time and resources you expend to stay in step with unpredictable market changes and to adapt to industry-specific dynamics can upset your strategic growth plans. To facilitate collaboration – and to ease and improve business decision making – IBM offers end-to-end business integration and supply-chain management solutions. Designed to help you maximize operational efficiency. Consolidate redundant systems or operations. Automate or replace manual processes – and integrate with trading partner systems. To improve the speed and efficiency of your entire supply chain.

With tooling to enhance your infrastructure’s reach, integration and application creation – all critical to your growth – WebSphere business integration solutions can help you:

- *Enhance revenue growth by increasing your ability to innovate.*
- *Compress time to market and reduce overall product lifecycle costs.*
- *Shorten product development times while increasing development, build and support efficiency.*
- *Link enterprise processes and applications with those of your customers, trading partners and suppliers so you can reuse product and process knowledge.*

IBM’s experience shows that using a hub-and-spoke architecture can reduce costs significantly. Using the exponential cost model discussed before, a hub-and-spoke architecture can reduce 380 connections to just 40 connections. This many-to-one integration model demonstrates that the cost savings compared to point-to-point integration can be enormous – as much as 63 percent on every integration point. And the more complex your integration needs are, the more you can save over time.

Think about it this way. Most integration projects allow for 30 percent reuse. If you had 100 integration points, with 30 percent reuse, you’d only have to build 70. If the average integration point requires 375 hours to build (point-to-point) and you eliminate 30, you save 11,250 hours. Translate this to cost-per-hour and you’re looking at potentially millions of dollars in savings.





Build an integration solution based on proven technology

As a Gartner report points out, solutions that begin with the business process context, for example, that integrate, automate and manage processes, typically offer the greatest strategic benefits. This is because, beyond the integration benefit, these solutions become the critical bridge between an enterprise's business processes and its IT department. When using traditional, technology-oriented integration solutions, business analysts reengineer and streamline business processes using their own modeling tools, before turning them into process specifications that go to the IT team to carry out required integration in a separate environment. This disconnect can – and often does – lead to miscommunication and frustration at the discrepancies between what a business says it needs and what IT ultimately delivers.⁴ By building an integration solution based on proven technology, you can facilitate collaboration to help ensure that shared objectives are met more effectively. And avoid the expense and complexity of point-to-point integration.

You already have the pieces of the integration infrastructure you need. Build on your existing foundation – don't rip it out. With WebSphere business integration software, IBM can help you cost-effectively integrate, leverage and extend your existing assets to achieve the agility you need to meet your business goals. Through an integrated software infrastructure, you can simplify and connect your assets – and get more for your money from the applications that already run your business.

Develop a business integration strategy that allows you to align your business processes with your core business objectives. Efficiently model, manage and develop processes – and refine them as your business needs evolve. Help reduce costs and time to market. Earn a faster return on your investment. Lower your business risk – and your total cost of ownership. Reinvest the money you save in other parts of your business. And ultimately build stronger business relationships with everyone in your value chain.

A total e-business on demand

WebSphere software – the leading platform for e-business on demand.

- *Deliver your products and services to meet individual customer demand fast – ahead of the competition.*
An integrated environment helps your developers get applications up and running quickly.
- *Quickly respond to market fluctuations and new, industry supply-chain requirements – in realtime.*
A robust platform lets you easily adapt to new technologies and integrate your business with that of your partners.
- *Improve operational efficiencies with dynamic and automated processes.*
Leading process integration software makes it easy to create, change and publish new business processes.
- *Give everyone along your value chain access to the same view of information, applications and services on the fly – regardless of location or device.*
Sophisticated portal technology provides a single interface that simplifies information and application access.
- *Use the business expertise and assets you already have.*
Modular, market-leading solutions let you start small and grow your business at a pace that suits your needs.

With the WebSphere software platform, you can address your business challenges in entirely new ways. And create an on demand e-business – regardless of the business you're in.

For more information

To learn more about the cost benefits and business value of WebSphere business integration solutions from IBM, visit:

ibm.com/software/info1/websphere/index.jsp?tab-landings/roisplash



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Somers, NY 10589
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06-03
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¹ Tom Dwyer, Using Composite Applications to Lower Integration Costs, Aberdeen Group, (April 2003).

² Tom Dwyer, Using Composite Applications to Lower Integration Costs, Aberdeen Group, (April 2003).

³ Plug and Play Business Software Integration: The Compelling Value of the Open Applications Group, Open Applications Group, (2000).

⁴ James Browning and Robert Anderson, Application Integration Becomes More Strategic for SMBs, Gartner Research, (September 16, 2002).