The business value of deploying WebSphere Portal software in an SOA environment.
### Executive overview

Although most companies invest a significant amount of resources in their IT infrastructures, many of these infrastructures are not improving business returns. In today's competitive business environment, companies need to achieve a level of On Demand Business to respond with speed to any customer demand, market opportunity or external threat. But rigid IT infrastructures continue to restrict business responsiveness and agility.

Businesses are deploying service oriented architecture (SOA) as a way to simplify and standardize IT infrastructures, making IT a more strategic component of their overall strategy. A portal-based approach can help make this happen by creating an environment in which IT enables responsiveness to new business initiatives and challenges.

As organizations implement technologies with proven track records and demonstrable benefits, the use of portals and portal technology continues to mature across the technology adoption lifecycle. And while portals continue to remain at the top of technology spending priorities, how do you make portal investments pay off? Successful portal projects must be succinctly defined so that both IT and business stakeholders agree on the scope and the expected business value to be delivered.
IBM WebSphere® Portal software provides a key foundational element to businesses that are moving to an SOA to meet their current and future needs. With industry-leading WebSphere Portal services, you can have the flexibility to operate in an On Demand Business environment and maximize investments in SOA. This executive brief will review how the WebSphere Portal solution can help your company achieve a successful portal strategy, deployed in an SOA environment. At IBM, we define a company that has achieved On Demand Business as an enterprise whose business processes—integrated across the company and with key partners, suppliers and customers—can respond with flexibility and speed to any customer demand, market opportunity or external threat.

Why SOA?
Technology has evolved to a point where, for the first time in the evolution of the relationship between business and technology, the business principles and the needs of the organization are driving the way in which technology is executed on those needs. Expanding industry standards and broad industry support are allowing companies to more effectively and affordably tackle business-level interoperability, as opposed to simple connectivity. During this evolution, infrastructure to support self-defined, loosely coupled services has emerged. And tools to incorporate existing assets are now available.
These factors all come together to create an environment in which a framework called SOA comes alive. If achieving On Demand Business is the organizational goal, then an SOA is the answer to the question, “How do I get there?”

IBM defines an SOA as an approach that enables business processes to be assembled from reusable components or “services” that are independent of applications and the computing platforms on which they run. The architecture leverages open standards to create these services, which are application functions packaged as a reusable component for use in a business process. In the banking industry, for example, these business processes may be tasks such as processing a purchase order and verifying a credit card transaction. An SOA can allow these services to be loosely coupled so that the service consumer has no knowledge of the technical details of the service provider. Services deployed through an SOA environment also have well-defined interfaces (preferably standards based) and are reusable.

Gartner predicts that “…through 2007, an enterprise portal will be the first major application of SOA concepts for more than 50 percent of enterprises (0.6 probability).”

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Standards are critical to On Demand Business because they provide the rules that ensure interoperability between disparate technologies and products of vendors. This is one reason support for open standards and adoption of the technologies supporting SOA, namely Web services, is increasing among many IT executives today. One of the biggest challenges many companies face is the inability for IT to be responsive to the business because its infrastructure and business processes are in a highly inflexible state. In these environments, legacy applications cannot be modified in a timely fashion to support the changing business requirements. In contrast, SOA works well in heterogeneous environments, fundamentally transforming IT infrastructure from a business barrier to an enabler of business change.

The evolution of portals
Deploying a portal solution can help your company realize the benefits of an SOA environment. Portals play an important role in providing a component-based model, delivering reusable software assets, simplifying integration and increasing the ability to leverage existing IT assets. To the end user, portals provide an optimized user experience, or front end, to the information and interactions in the context of each business process.
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The evolution of portals can be traced to the late 1990s, when portlets—reusable Web components that display relevant information to portal users—emerged as an adjunct to Internet search engines. Vendors began releasing portal server products to the market, with portlets as the primary interaction point for end users. Today, the portlet acts as a key integration point for accessing, aggregating and orchestrating data, applications and business processes at the user interface. As such, portlets are a rudimentary component of an SOA.

According to Gartner, “As organizations search for a way to leverage a service-oriented architecture, many can use portal products as a first step.”

Portals continue to undergo a natural evolution and transformation as the needs of the business user mature and become more demanding. As organizations improve their infrastructures and operational efficiencies, process-driven portals are emerging as the preferred approach to optimizing collaborative business processes across the enterprise. They accelerate the adoption of best practices by making themselves one of the easiest routes to accomplish the user’s task.
Deploying WebSphere Portal software to enable an SOA

Several key portal standards that provide the technology to enable service-oriented applications have emerged. This is what has been fueling adoption of portals by large and midsize businesses as they deploy customer-, partner-, consumer- and employee-facing enterprise portals.

IBM has extensive global experience working with clients on a variety of successful portal initiatives. These companies have standardized on the industry’s leading portal product, IBM WebSphere Portal software. In fact, thousands of companies in over 17 vertical industries leverage WebSphere Portal software to deliver real business value. And IBM WebSphere Portal software was placed in the Leader Quadrant in Gartner’s evaluation of horizontal portal products for 2005.3

The IBM WebSphere Portal solution helps deliver on a new generation of process-driven portals. It allows you to design a portal based on the perspective of the user. Understanding your audience means providing the right context within the portal and delivering the right content, applications and processes based on the user’s role. This approach reduces the burden placed on the user by hiding the underlying complexity of the various interfaces and applications being accessed. The portal adapts to the user’s needs and delivers a composite view that allows the user to interact with these multiple back-end systems as if they were one. By consolidating access to the content, applications and processes relevant to the user—all in one portal view—you simplify the user’s tasks and provide audience value, resulting in improved productivity and adoption of the portal.
Breaking down process barriers with composite applications

IBM WebSphere Portal technology contains more than the “basics” of information integration, Web content and document management, and application access. It provides an integrated portal business framework—one that encompasses the capabilities necessary to truly impact an organization’s daily business processes. How does it do this? Through the development and deployment of composite applications.

Composite applications consist of the assembly of components and orchestration of processes that automate and optimize common business transactions and decision-making processes. This allows organizations to extend processes to involve multiple constituents both inside and outside the enterprise. It goes beyond just aggregating information into a single view. Composite applications have the ability to link the human component into business processes to give portals an indispensable role in the development and deployment of composite applications.
IBM WebSphere Portal software delivers a set of capabilities that enable the assembly and orchestration of composite applications. Some capabilities are referred to as “on the glass” because the assembly and orchestration are at the user interface layer. Other capabilities that are “under the covers” are provided in the application and business logic layer. These capabilities are provided by the IBM WebSphere application infrastructure platform. The WebSphere Portal solution takes full advantage of these capabilities as it is built on top of the IBM WebSphere Application Server platform. And WebSphere Portal Version 6.0 software will deliver further enhanced capabilities designed to help accelerate application and content deployment, as well as improve operational efficiency and productivity.

**The business value of portals**

In the era of On Demand Business, there is an acute awareness of the need to deliver tangible progress and quantifiable results. The IBM WebSphere Portal offering can help realize this level of business responsiveness by providing dynamic access to information and applications, thereby enhancing collaboration among users and enabling companies to respond in real time to changing market conditions.
IBM is helping customers today build their strategic business design and business case for successful portal projects. WebSphere Portal software represents an excellent opportunity for organizations to improve access and reduce the complexity of today’s computing environments—in their own time, at their own pace, aligned with their short- and long-term business goals. An integrated portal solution can help companies realize the following business benefits.

- **Cost savings.** Build and deploy applications and services faster; consolidate the procurement of hardware and software; and reduce back-office staff and administration costs.
- **Operational efficiency and productivity.** Enable internal employees and external partners to communicate through one channel; link event-based, cross-functional business processes; increase data accuracy; and speed decision making.
- **Revenue generation.** Provide more cross-selling opportunities to employees; leverage the expertise of knowledge experts through enhanced collaboration and learning; and expand market share and move into new markets.
- **User satisfaction.** Increase customer retention through enhanced service capabilities; improve productivity with easier access to information; and gain a competitive advantage through superior customer service.
- **Accelerated application and content deployment.** Enable the quick building of business services; easily modify applications to meet changing requirements; remotely deploy managed applications for users, based upon roles; and facilitate access of business applications whether the user is connected or disconnected—anytime, anywhere.
Summary
Companies like yours are benefiting from portal-based SOA environments today, enabling their employees to be more productive by having the tools they need to do their jobs. And their IT departments are able to respond to new business demands faster while reducing costs.

Consider how a leading auto manufacturer attains a competitive advantage. The business process value it seeks is tied to not only delivering a single model to the market, but also the ability to deliver multiple models by leveraging high levels of parts reuse and process optimization across models and brands. This level of parts reuse and flexibility reduces engineering time, saves money, improves quality and serves global ambitions. This, too, is the value derived from how IT deploys composite applications. Incremental value comes into play when you deploy subsequent projects. This single example of reuse demonstrates the advantages of an SOA, from operational efficiency to cost savings.

An enterprise portal is often the first step toward building an SOA environment. IBM WebSphere Portal software provides an SOA on-ramp for organizations seeking a highly pragmatic approach to their IT infrastructure and the business solutions that run on it. As your organization embarks on a new portal or Web application project, the WebSphere Portal portfolio can provide the tools and technology for the assembly and orchestration of composite applications, as a tactical entry point or stepwise approach to achieving an SOA.

For more information
To learn more about the IBM WebSphere Portal family of offerings, please visit:

`ibm.com/websphere/portal`

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