

Portals Are More Than A Convenience

The 'Must-Have' Imperative of Portals Within Enterprise Systems

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This paper describes the 'must-have' imperative of portals within enterprise systems. The portal acts as the cornerstone of enterprise architecture to insure control and create unity among fragmented islands of data, applications, and especially business processes. The argument is that the portal is the essential cornerstone for the Intelligent Enterprise, which aims at being responsive to the business environment, pervasive in business interactions, globalized in business scope, and integrated across business processes.

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Over the past five years, the technology and application of enterprise information portals or simply portals has matured greatly. Portals have evolved from a simple data integration technique to the cornerstone of the Intelligent Enterprise. This paper argues that portals are more than a convenience and have become a 'must-have' component within any enterprise system.

Portals are difficult to understand. Influenced by the Web analogy and early portal applications, executives and even IT professionals will often misunderstand the fundamentals of current portal technology. They will often under-value the capability of portals, under-plan the effort for designing and deploying portals, and underestimate the potential business benefits. In other words, they will often miss the vision that portals play a unique role in enterprise architecture.

Misconceptions About Portals

Let's start by dispelling a few misconceptions about portals to lay a foundation for explaining this unique role.

More Than An Entrance

In many ways, the word 'portal' itself is the worst enemy to understanding what a portal really is. Webster's Dictionary defines the word *portal* as an *entrance* or *doorway* coming from medieval times for a large gate into a walled city.

The recent use of the word portal comes from the early websites, like Yahoo. They did act as an entrance into the overwhelming complexity of the Web. With millions of websites to choose from, starting with a relevant one is quite a challenge, one that Yahoo and others are solving. Hence, corporate users are first exposed to these Web portals and to their function as an entry point for Web surfing.

An enterprise information portal certainly acts as an entry point into the enterprise's information resources. However, the portal's usefulness does not end once a visitor has entered. Portals today have evolved into much more than an entrance, extending across a broad range of functions as:

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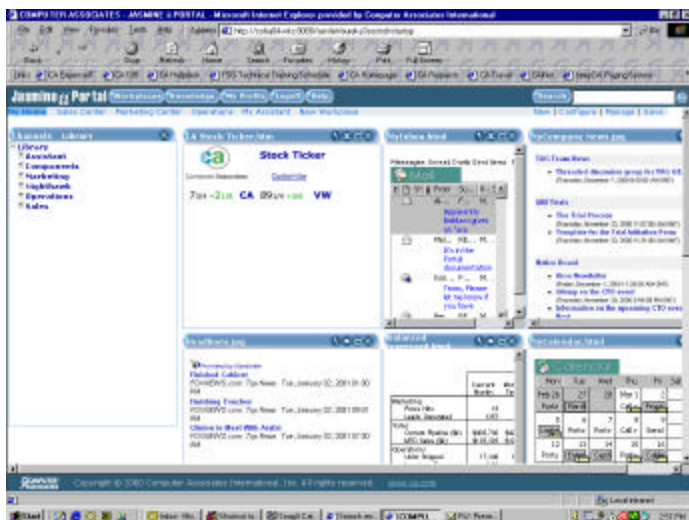
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- **Presentation** – unifying the view of and interface to all information and processes throughout the enterprise
- **Data Integration** – compiling structured and unstructured data from internal and external sources into a coherent collection
- **Search** – accessing specific information with a high precision and recall
- **Categorization** – organizing information into an enterprise taxonomy for quick and productive usage
- **Publishing** – creating, managing, and distributing content in multiple formats among internal and external users
- **Process Integration** – initiating and managing end-to-end business processes upon disparate applications
- **Personalization** – customizing the work environment to the user's job role, personal preferences, and past behavior
- **Collaboration** – facilitating the interaction and sharing of information among all users, both internal and external
- **Security** – authenticating users with a single sign-on and authorizing access to multiple databases and applications
- **Administration** – designing, deploying, and maintaining the portal environment for a large and complex user base
- **Internationalization** – supporting multiple languages, currencies, and time zones to localize portal functions globally
- **Scalability** – expanding portal coverage from hundreds to thousands of users while maintaining adequate capacity

More Than Pretty Pixels

The next stumbling block to understanding portals is moving beyond all those pretty pixels (i.e., the presentation function) is. Whenever a portal product is described, the vendor starts with a screen shot of their portal in action. Most people only see the pretty boxes and pretty charts. In other words, the function of presentation often dominates over the other functions performed by portals.

The figure shows Jasmine Portal from Computer Associates with multiple workplaces. Note the multiple rectangular areas called *portlets* that organize



information for ease of use.

Blinded by the pretty pixels, they miss the complex infrastructure required underneath to support thousands of user across multiple databases. And more importantly, they miss the need for powerful tools to design, administer, and maintain the portal environment.

More Than A Fad

A fad is both a blessing and a curse within the IT profession. A fad is a blessing when it highlights a new technology so that people can become educated about its characteristics without investing in its particulars. However, a fad is a curse when it negates rational evaluation of a technology and reinforces its blind adoption.

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Portals have certainly gone through several stages of fads, both good and bad. Over the five-year history of portals, we have seen portals appropriately nurtured and then inappropriately oversold. With each of these iterations, the technology has matured, and the architecture has solidified. Having paid its dues, portals are now more than a fad, delivering a mature technology and occupying a unique role within the enterprise architecture.

Today we have numerous examples of portals solving some messy problems, especially in organizing and accessing diverse information. Portals are also impacting the delivery of business intelligence from data warehouses and analytical applications.

More Than A Convenience

Finally, let's summarize these misconceptions by addressing the bottom line. Are portals more than a convenience? Are they something that is nice to have but not really necessary?

The answer is that the portals do perform a unique role in making businesses smarter, better able to compete in today's markets. In particular, portals enable the four key drivers required for the Intelligence Enterprise.



Cornerstone For the Intelligent Enterprise

The Intelligent Enterprise is a concept that has been used and abused by many in the management literature. The term often means everything to some and nothing to others. If we sharpen its definition, the concept of the Intelligent Enterprise can help us understand the portal's unique roles.

In his 1992 seminal book on *Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry*, Prof. James Brian Quinn argues that the Intelligent Enterprise will derive sustainable competitive advantage from service-based core competencies that maximize the focus and effectiveness of intellectual assets. In simpler words, companies are to leverage their information resources through the service components associated with their products. This is what portals can enable your company to do.



We define an Intelligent Enterprise as a company who is responsive to their business environment, pervasive in their business interactions, globalized in their business scope, and integrated across their business processes. Every company must strive toward these key drivers, as described below.

Responsive

The first driver toward the Intelligent Enterprise is being responsive to significant changes in the business environment. Most businesses fly on autopilot until a serious crisis develops. Doing business as usual is often the default corporate strategy. However, excellence this week may be stupidity next week in these turbulent times.

The challenge is three-fold: being aware of changes, understanding the dynamics, and deciding upon a course of action. In past years, the time required to respond to changes was comparatively unhurried. In recent years, the pace has steadily quickened to where many industries are measuring responsiveness in minutes or even seconds. When a customer is in direct touch with your company, you have only a minute or two to deliver the appropriate service.

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be stupidity next week.

Portals are an essential technology for enabling a company to be responsive to business changes. Part of any robust portal environment is the use of dashboards that display key performance indicators, filter news streams, and trigger alerts to significant events.

Here is a current example of a portal application that is responsive to its client's requirements.



The Retirement Plan Services of J.P. Morgan | American Century support the HR staff in client companies with easy administration of retirement plans for their employees. Using the Jasmine Portal, five hundred clients currently (and doubling by year end) have secure and personalized real-time access to participant data, contribution percentages from employees, summary-level funds in/out flows, and even relevant industry news.

The delivery time for on-demand reports has shortened from twenty business days after the first to the first day of the month – an amazing improvement. The ROI for the first full year is over \$2,250,000 and is estimated at an annual savings of \$3,000,000 thereafter.

Pervasive

The second driver toward the Intelligent Enterprise is being pervasive in doing business anywhere with anyone at anytime. Portals are an essential technology for enabling a company to be pervasive across all touch points in its business interactions with customers, suppliers, and other partners.

Whether visiting a branch office, surfing the website, or calling from a mobile phone, your customers should feel that all their interactions with your business are consistent, coherent, and concise. The revolution occurring in mobile or wireless devices will further accelerate the mandate for being pervasive in business interactions.



For example, Revman Industries is a leading supplier of bed and bath products for the high-end home furnishing market. Their sales force is highly mobile, and their partners are quite diverse. The Jasmine Portal allows up-to-date information to be instantly accessible via the Internet by their sales force, partners, and even consumers. The system can accurately track order status

and instant availability of goods anywhere in the world. In addition, the portal replaced a 200-page status report that consumed large amounts of IT staff time. It is now a one-page summary with full drill-down for details. Custom reports are now generated with no IT staff involvement.

Globalized

The third driver toward the Intelligent Enterprise is being globalized in dealing with employees, customers, suppliers, and other partners across the world, in any language, culture, currency, date/time format, character sets, and time zone.

Being globalized is considerably different than being pervasive. Most American companies have a web presence in China simply because there is access to their American website from China. However, English describes Made-for-American products measured in English units. And, questions are only answered from 8 to 5 EST. And, payment must be in US dollars against a US bank. This company may be pervasive via the Web, but it is certainly not globalized.

Being globalized implies an appropriate business use of the proper language within the proper culture, localized to the proper region. For instance, the use of Spanish to conduct business in Madrid is slightly different than in Barcelona, is certainly different than in Buenos Aires, and is definitely inappropriate in São Paulo.

Portals are an essential technology for enabling a company to be globalized in its business scope.

For example, Hessian Internet Center for Children and Young People located in Darmstadt, Germany, provides an invaluable web-based information service to school-aged children. Called “Boys and Girl Interactive” at www.BOYNG.com, the Jasmine Portal support virtual consulting session moderated by qualified adult counselors from various specialties. Kids can create their own personalized and highly secure BOYNG account, which dynamically generates relevant content each time they access the





service. Hessian Internet Center has received praise for their socially responsible initiative, in addition to promoting Internet literacy with the youth.

In another example, a global financial institution is using Jasmine Portal to provide a secure, personalized, unified interface to all of their mission-critical applications by their 80,000 employees in Europe, Asia, and North America. The portal promotes inter-office collaboration, including chat, email, and discussion groups. The ability to capture intellectual property and centralize management of project files allows project teams to be more effective and efficient. The support by Jasmine Portal of multiple languages and currencies was critical to its success, along with content categorization and search.

Integrated

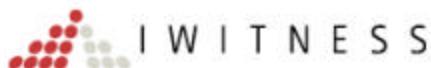
The fourth driver toward the Intelligent Enterprise is being integrated so that there is a single point of contact across any business processes. In other words, a customer or any partner should feel that their interaction with your company has been tailored to their unique requirements.

First, this requires data integration across organizational units, across business functions, and across operational-information systems. Second, this requires application integration across the various system and networks. And third, this requires process integration across the entire value chain. This is quite a continuing challenge for an IT group!

Portals are an essential technology for enabling a company to integrate its data, applications, and processes. In fact, portals are the only technology that is focused on integrating the infrastructure primarily for a user, rather than for the system. Portals are a 'user-facing' architecture, which is a powerful statement when you consider that users could be employees, customers, suppliers, distributors, and anyone else who interacts with your company.

From an internal perspective, portals for process integration are starting to deliver on promise of ERP systems. Where ERP has failed, portals in an incremental, bottom-up way can bridge those application stovepipes.

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For example, iWitness, Inc., is a pioneer in Electronic Records Management (ERM) software, located in Colorado. They enable companies to create the digital equivalent of a paper trail—managed record files that protect against fraud, deception, and error. With a growing sales team based throughout the United States and two offices in the Denver metro area, iWitness recognized the need for one central repository where documents could be published and stored, providing a single source for all employees to access information and publish content.

Jasmine Portal is the core framework for the intranet at iWitness, utilized for data analysis, business intelligence, and report distribution. Used by everyone in the company including executives, it is the primary communication tool and central repository for all content. By adopting a portal, iWitness has been able to achieve increased productivity and efficiency and better enforcement of corporate standards, without increasing head count in the IT group.



Another example is a large telemarketing call center. With over 3,000 users currently and growing to 10,000 users, the use of Jasmine Portal is in full operation, providing a 24x7 service. The portal integrates several internal legacy systems, a third-party application called Intramart, and several in-house applications. Access is provided from offices, smaller satellite offices, and mobile devices. Any data originated by an employee can be shared with all. This improves productivity and lessens work duplication, thus shortening the business cycle. A large-scale training program led to a successful deployment with few difficulties, mainly because the Web-based portal environment was already familiar to most. Given the benefits apparent so far, the system was highly praised by top management.

From an external perspective, there are similar opportunities to integrate the interactions with customers so that they feel your company understands their unique requirements and will deliver on their promises. The benefit is building trust and loyalty with your customer base, thus retaining existing customers and securing new ones. In a different context of the value chain, the same is true for supplier and distributors.

These points on the external perspective were highlighted in the previous examples of J.P. Morgan | American Century and Revman Industries.

There is an emerging set of portal integration technologies that are based on web protocols, such as SOAP, UDDI, WSDL, and WSUI. These technologies will play a key role for portals in achieving this integration.

Key Thoughts

Portals are more than an entrance, more than pretty pixels, more than fads, and more than a convenience. These and other misconceptions often lead people to under-value the role of portals in enterprise systems.

The proper perspective is to view portals strategically as an essential component that enables a company to mature as an Intelligent Enterprise. In particular, portals enable an enterprise to drive toward being responsive, pervasive, globalized, and integrated.

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Suggested Actions

Here are some suggested actions.

First, think about the business impacts on your company if significant improvements were made in the four key drivers. For example, improving responsiveness in resolving customer problems would increase customer satisfactory, repeat business, and positive image of your company.

Second, decide how you can achieve these impacts. Portal technology will play an essential role in achieving those impacts.

Third, formulate a long-term plan for portal adoption. This plan should be compatible with your enterprise architecture efforts and your business intelligence systems.

And finally, remember that portals are more than a convenience. Portals have matured into a 'must-have' component for moving your company toward an Intelligent Enterprise. How will you educate your senior management about this vision?





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