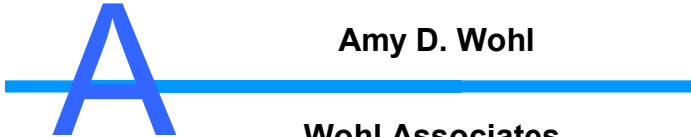# Enhancing Portals
with Productivity Components

A
Amy D. Wohl

Wohl Associates

Executive Summary

This White Paper briefly summarizes Portals, an important tool you may already be familiar with, and then describes a new feature of IBM's WebSphere Portal, *Productivity Components.* It also offers five scenarios of how companies might use Portals and Productivity Components to further their business goals.

As businesses offer their workers increasing amounts of information, navigating this information mountain becomes much more complex and time consuming. If we require users to employ a different application to access each bit of information, keeping track of what's there, what's important, or what's relevant, becomes not just tough, but impossible. Portals, a way to aggregate, categorize, integrate, control, and navigate information, present a valuable opportunity to manage our information assets and reclaim them.

For many workers, the portal can become their main (or even their only) access environment to information and applications. Those users need access to light-weight tools for viewing, editing, or creating rich text documents, spreadsheets, and presentations and productivity components provide those tools as part of the portal experience. Productivity components may also be the basis for functions in larger portal applications being built to improve business processes and productivity.

At portal technology improves with features like productivity components from IBM, portals can increase your organization's productivity , decrease its IT costs, and better support the changing requirements of today's business world.

Business interest in the Portals

Current Portal Applications

Today, businesses use portals for a wide variety of applications. Portals offer employee access to corporate information and applications. Each employee can get to everything his job requires, within a personalized view. Portals typically offer users access to electronic mail, line of business applications, groupware for discussions and collaboration, knowledge management software to catalog and identify sources of information and expertise, and other resources such as employee benefits information and electronic learning. Many companies also use portals to provide access to the Internet, and to company-selected outside information sources so employees can be more productive.

Portals may also provide information to customers or clients. For example, a manufacturer may offer customers the opportunity to sign up at a portal site and create a personalized view of the company's products and services. Depending on the particular customer's interests, the portal might provide notification of events, information about products, and newsletters or other communications customized to the customer's needs. A just out-of-college customer visiting an auto manufacturer's portal

might receive information on inexpensive and sporty cars, low-cost loans, and how to establish credit, while a forty-year-old might get information focused on family vehicles and safety.   Personalized service like this drives customer satisfaction and retention.

Because anyone with a browser and appropriate log-on permission can access a portal, the technology offers a convenient way to provide a shared electronic workplace for teams of otherwise separated colleagues. These workers might have varied relationships with the portal owner: suppliers, contractors, and business partners, professional advisers (consultants, accountants, or attorneys). All combine the need to access shared information, provided securely, with the ability to collaborate.

Benefits

Portals provide a single point of personalized interaction with applications, content, processes and people.

- Portals make multiple applications easier to use because they are integrated under a single sign-on and easier to navigate.
- Applications can be integrated, so that employees can interact with data from multiple applications at the same time.
- Users can complete business processes quickly even if they cross line of business applications and require information from external sources.
- Portal users can find and collaborate with other portal users through instant messaging and web conferencing to resolve complex business problems quickly.
- Productivity Components (more about them later in this White Paper) can improve productivity by adding basic editing and spreadsheet functionality to the portal interface while also lowering the total cost of ownership for applications requiring these functions.
- IT costs for deploying applications can be lowered.

Today's Portal Market

Today's portal market includes a variety of systems and software vendors. Infrastructure vendors like IBM and Sun offer portal software as part of their comprehensive offerings. General software vendors like Microsoft and Computer Associates include portal offerings in their software portfolios. Many original portal vendors were specialists, coming to portals from knowledge or document management.

As larger vendors enter the portal market, and portals become more of an infrastructure play, we expect to see:

(1)   More convergence, with some specialty firms being purchased by larger players.

(2)   Less fragmentation, with both fewer firms and fewer distinct points of view. If portals are an infrastructure play, then portal products need to become larger and more richly functioned. That means, over time, they become more like one another, with each adding in pieces to make its weak or missing pieces stronger.

(3)   Few vendors are likely to field as large a family of portal products as IBM; competing system vendors tend to focus on narrower band of systems and software vendors tend to focus on some narrower portion of the software market.

IBM's WebSphere Portal

IBM's WebSphere Portal provides an IBM-branded product, as part of its family of successful WebSphere offerings.

WebSphere Portal offers business organizations multiple entry points to the portal market. An organization can enter at any level, moving up or down to suit its needs to create a more robust and fully featured offering as it grows or a desire to build smaller, easy to implement and support portals, suitable for ad hoc projects or smaller groups.

- **Websphere Portal Express** is designed for the mid-Market or departmental users. It's good for entry-level or smaller projects.
- **Websphere Portal Enable** offers personalized e-business portals to manage content and process transactions. These support web services and event management and establish a portal framework.
- **Websphere Portal Extend** is designed for e-Business portals requiring robust real-time collaboration, and site and portal analytics as well as instant messaging and aggregated search.

IBM Success is based on Partnering and Internal Experience

IBM's success in the portal market is based on partnerships. It has more than 170 partners, including 102 software partners, 18 systems integrators, 8 vertical market partners, and 41 others. Important portal partners that either OEM WebSphere Portal or provide portlets include Siebel, J.D. Edwards, i2 Technologies, Baan, and S1 Corporation. IBM also provides many portlets for other software vendors including PeopleSoft, and SAP (*See Box below.)

---

*What's a Portlet?

Think of a portlet as a view into the content that results from an application. Any application. It could be a view of your familiar e-mail inbox, the results of a complex business intelligence query, or a live news feed from CNN. A portlet is a piece of an application, compatible with your browser and your portal, which permits the application's content to be accessed and displayed. Depending on how the portlet is written, it may permit you access to some of the function of the software or only to a pre-programmed result; its format may be determined by the application's provider, by your IT department, or by simple personalization tools, provided to you. Technically, it's a Java servlet; it provides a service to your portal you may be entitled (by your role or by specific permission) to subscribe to.

Inside IBM, Websphere Portal powers a number of IBM's own portals, from its own employee portal (with over 330,000 users), to portals for Global Services, the Wireless Community, CFO Business Intelligence, the Software Group's Customer e-Care program, the IGS e-business hosting Connection, and the Websphere Portal Portlet Catalog. A number of additional Websphere-based portals, supporting developers, customers, IBM procurement, and IBM consulting services are under development.

Productivity Components

What are Productivity Components?

Productivity Components are a set of lightweight business tools including a rich text editor, a spreadsheet, and a presentation functions that can be used by WebSphere Portal users within a browser-based environment. They do not require browser plug-ins or any additional client software. Adding tools like the productivity components to WebSphere Portal is a natural evolution of the growing feature set of rich portal environments, however, IBM is the only vendor with this functionality today.

Productivity Components in the Portal Environment

Productivity components are integrated into the WebSphere Portal, Version 5, family of offerings where they serve two very useful purposes:

1. Productivity Components can be used by developers to add rich text, calculation (spreadsheet), or presentation function to portal applications in a simple, quick, and straight forward way.

- A typical application might be to offer a calculation field in a benefits planner for the HR portlet or in creating an ROI calculation for a sales tool portlet.
- Another application could offer rich text editing to increase user activity within a form.

2. They may also be offered to users directly, when a browser-based, casual user has the need for a lightweight personal productivity tool. The Productivity Components delivered in WebSphere Portal are not a replacement for a heavy weight Office Suite; they are not intended to replace or compete with that level of functionality, where the user is accustomed to full Office Suite features and has the need to use them.

- Productivity components can be just the right tool for an occasional writer who needs to write a short document or prepare a few slides for a meeting.
- It allows any user to read a document (and, if necessary, make editorial comments).
- The lightweight spreadsheet can permit a wider group of users to see, and comment and perform calculations on forecasts and other numeric data.

The productivity components in WebSphere Portal V5 are valuable to portal users because they are integrated in the Portal and easily accessible. They are lightweight and easy to learn and use. They are distributed free with Websphere Portal, so they

can be offered to even the most casual user at no additional licensing cost to the organization.

Using Productivity Components

While thousands of portals have been deployed with WebSphere Portal, customers are just getting started with Productivity Components delivered with WebSphere Portal, Version 5.0. To get you started thinking about how your organization might take advantage of them, here are a few possible business scenarios.

1. Communicating to a Far-Flung Manufacturing Empire

Empire Clothing manufactures all kinds of apparel in four states and six foreign countries. Its biggest problem is communicating with its employees – specifications and designs for manufacturing, schedules, orders, and – of course – the constant changes that a fashion-based business demands.

In the past, Empire did this with all kinds of paper-based systems – teletype, fax, and courier services. Then they tried E-mail. It was faster, but it was hard to know just who had gotten just what and harder still to send all the attachments.

This year, Empire installed a supply chain portal in its headquarters location, accessed by browser software from any of its other locations – or by its sales reps and traveling executives, wherever they happened to be.

The portal serves as a giant shared information space.

- Each apparel line for each seasonal line has its own space, complete with designs, specifications, and orders, together with their progress and status.
- A work flow application tracks orders through the system, making sure that orders are meeting their schedule and ship on time.
- Productivity Components allow executives to write notes and reports, salesmen to send queries and inquire as to the progress of orders, and designers and production managers to communicate from any location.

Of course, now that they're so well connected, additional benefits occur. The CEO can send vision statements and messages to the troops. The locations can congratulate and thank each other for jobs well done. When problems arise, expertise software can help locate someone with the experience to help provide a solution. The portal is such a success Empire is looking at how to extend it to suppliers and customers next year.

2. Extending the In-Store Experience

At Cosmos, a large retail store chain, customers think the store is so vast that they should be able to buy nearly anything on every visit to their local branch. Store management doesn't want to discourage them, but local branch inventory is limited – and that means some customers leave disappointed every day.

"We can't have everything anyone might want in the store," confessed one chain executive. "No store is big enough for that." But they have recently installed a virtual store that lets them do nearly that.

A chain-wide portal with a very friendly front-end accesses *Cosmos'* entire inventory, including merchandise on order and on its way to warehouses and stores. When a customer asks a roving clerk for an item, the clerk can look it up at kiosks located throughout the store.

It will tell the clerk where the product is in the store – in itself, a very useful feat – or it will guide the clerk through the process of finding it via the portal. The clerk can then ask the customer whether they'd like to have the merchandise sent to the store for pick-up or shipped to their home. About 90% of the time, the customer is happy to get what they're looking for, even if they can't have it right now. Cosmos store sales are up about 14% so far. Sometimes the customer needs the item right away and they can't save the sale – but surveys tell Cosmos that customers are still pretty happy – they don't blame the store because they can tell their merchant definitely tried.

Sales clerks can also send updates to inventory when they note low stock conditions as they move about the store, use the rich text editor to document customer complaints, and look up benefit and other corporate communications. Both the clerks and the managers also use the Cosmos system to communicate with customers about orders and merchandise. The company would not have bought the system for these side benefits – but they're certainly happy to have them as very positive side effects.

3. European Bank Tries Portal and Productivity Components

At a European bank, the employees are using Windows NT. They will move to Windows XP or Linux as part of a move to a Portal-based system. The bank just completed a proof of concept pilot which included a WebSphere Portal supported with Host On-Demand, Citrix integration and iNotes Web Access.

- Existing banking and customer service applications running on mainframe and Windows systems were accessed via Host On-Demand and Citrix integration portlets
- Productivity Components provided functionality via the portal and its browser interface. The text and spreadsheet editors provided basic editing for the bank's branch employees.

Overall, users liked the portal concept and welcomed the approach as a fresh alternative. The bank will decide whether to go with Windows XP or Linux for their desktops shortly, but they have decided that the Productivity Components could service about 60% of their desktop users in branch locations. They are also interested (as always, with early software) in additional features; a spelling checker and document conversion software were specifically mentioned.

Bank workers are a good example of the types of workers who employ mainly LOB (Line of Business) applications and are, therefore, good candidates for lightweight productivity software in lieu of much more expensive desktop office applications.

4. Making Personnel Applications Foolproof

Every organization knows how time consuming the HR function can be. For each employee, there are dozens of details that may have to be confirmed, updated, or changed each year. Each one is an opportunity for error because of the manual nature of the process – and the likelihood that human beings will slip up when entering small bits of seemingly trivial data.

Yet the satisfaction and good performance of our employees is a critical success factor for our businesses – and there's nothing as likely to be unhappy as an employee whose personal affairs are in an uproar caused by an unpaid medical claim, a password or authorization that doesn't work, or an anticipated raise that's two months overdue.

The answer is developing web-based work flow applications that are automated where possible and designed to catch errors and either fix them – or at least bring them to a human's attention for required processing.

At Hobart SuperFood Stores, all the personnel activities involving employee records are part of simple workflows. The workflows can be initiated by an employee (usually for a change in status or a request for information), a manager (often for initiating a raise or requesting that an employee be moved or promoted), or a personnel department professional.

Forms are created by the HHR (Hobart Human Relations) department in a word processor or forms generator and stored as a web application. Work flows are initiated by accessing the appropriate form on the HHR section of the Hobart Portal. Each form opens a URL which can be filled in using the rich text productivity component which a Hobart IT developer used in creating the portlet. Some forms create E-mails; others create additional forms or send the initiator to another URL for further action. The work flow follows the process until it is completed. If a process is not completed within its allotted time, its owner is alerted so that he or she can manually intervene.

Now, personnel activities are much smoother. Fewer errors occur. Much less gets overlooked. Employees are more likely to be satisfied and productive. HHR is thinking about hooking some of the workflows into other processes, further cutting down on manual work, increasing personnel department productivity, and avoiding more errors and oversights.

5. Helping Government Serve Its Citizens

In Europe, a large city government decided that it would like to save the money it is currently spending on proprietary operating systems and productivity software by moving to Linux operating systems and Open Source. They could also use a portal solution to provide information and application access for its employees.

Some of these employees will be moving to Linux desktop software on their PCs and Linux productivity software suites, available from the Open Source community. This should work well for government employees who produce long documents or do substantial numeric processing with their spreadsheets. Other employees will be using their browser as their only access mechanism to applications.   They could use productivity components as lightweight office tools to create short memos and review numeric data.

The city government also could to use the portal, in a second stage of development, to provide information access to its citizen/clients. Residents of the city would be able to file for welfare and unemployment benefits, pay taxes and fines and acquire receipts. All of these applications could be developed using productivity components as tools to help create rich text and calculators.

Taking Advantage of Portals and Productivity components

If your organization doesn't have a portal yet, we'd predict you'll have one by this time next year. Portals represent the best way of collecting all of the information and applications your business needs and supporting them in an efficient and centralized way, yet allowing your users to access them from literally anywhere. At portal technology improves with features like productivity components from IBM, portals can increase your organization's productivity , decrease its IT costs, and better support the changing requirements of today's business world.

That's an offer it's very hard to pass up, but it's easy to get started:

(1) Go to IBM's Portal site for more information
http://www.ibm.com/websphere/portal

(2) Call IBM or your IBM Business Partner for assistance in planning and implementing a WebSphere Portal with Productivity Components
.
(3) Make a list of the things you'd like to support on a Portal, everything from personalized information for every employee to support for partners, suppliers, and customers, and go ask your IT department how they'd like to participate.

> Wohl Associates is a consulting firm specializing in the commercialization of new and emerging technology. Its lead analyst, Amy Wohl, has been observing, analyzing, commenting on, and writing about the information industry for more than 25 years.