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Best Practices in Enterprise Information Portal Adoption: 5 Key Drivers

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Enterprise information portals have the potential to change the way we work, but only if they are adopted by the end users. Developers of portal software have done their part by creating flexible, easily integrated components that we can use to develop and deliver portal-based applications. The success or failure of portal deployments now hinges on how well these components are crafted and combined to meet business objectives and how well they fit the way portal users work.

In this article, we will outline five best practices that are present in effective portal strategies and often missing in failed portal implementations. (For more on these issues, see "[Ensuring Adoption of Information Portals](#)," *DM Review*, August 2002, and "[When the Emperor Has No Clothes: Understanding Why Knowledge Workers Do Not Use Enterprise Information Portals](#)," *DM Review*, September 2002.)

Best Practice 1: Address process as well as content. Portals are often deployed with two primary goals in mind: providing access to decision support applications through the Web and managing content across the enterprise. For example, it is now a relatively simple matter to open a data warehouse through Web-based tools such as those from Business Objects, Cognos or Oracle. It is also easy to deploy content management tools through Documentum, Open Text and other Web-enabled document management systems. Applications and content are not islands unto themselves, however; and portal deployments should account for how information is used, how it changes over time, how it can be accessed and manipulated and what controls the overall information life cycle.

For example, product managers regularly report on production performance, resource utilization, costs and other tactical issues. Each of these areas can require several different reports from the data warehouse along with background material kept in document management systems. Ideally, the portal not only manages access to the information in these performance reports but also the process of gathering and sharing it with the end consumers of the information. Workflow or collaboration systems can eliminate ad hoc and all-too-frequent processes of downloading reports and content, packing and compressing files and e-mailing them to the next person in the organizational chain.

This best practice is rooted in the understanding that information available in a portal must often be selected, organized and refined during multiple stages of core business processes.

Best Practice 2: Distribute decision making. Enterprise information portals (EIPs) touch too many organizational and technical points of an enterprise to depend upon centralized decision making. At the same time, organizations need to maintain some level of control over infrastructure and design issues. The choice of portal software, business intelligence tools and single sign-on services, for example, are best centralized into one decision-making body. Basic navigation and labeling frameworks again are best standardized across the organization, although department or team-based adaptations should be accommodated. The design of navigation taxonomies should be shared between enterprise, business unit and department levels with each defining categories for their own domain but leaving detailed classification choices to lower-level units. This type of

federated model balances the need for governing frameworks while allowing business units and departments to make choices most appropriate for their areas.

There is no single federated model that we can point to as the ideal example. Every organization is different and will need to find a balanced model of decision making that reflects their organizational nature. We can, however, identify some of the most salient characteristics of well-designed governance models.

First, governance models address a minimal set of issues including security, meta data standards, search and taxonomy development, and usability issues. Second, governance models should not delve into what is published – that is up to the discretion of content authors and application administrators – nor should models address how services are provided. That should be the decision of system administrators and architects. Third, governance models should be multitiered, and the scope of each tier should be limited both in the breadth and depth of its decision making. The goal of the federated model is to create a minimal framework that ensures interoperability, security, a consistent user experience and high-quality search and navigation services. If these goals are realized, you will have eliminated some of the strongest barriers to adoption.

Best Practice 3: Provide for two modes of collaboration. Two modes of collaboration are emerging as common models in portal implementations. The first is the document-centric approach in which information and knowledge are captured, formally recorded and added to content repositories. The second approach focuses on informal communications between individuals as typified by the proverbial conversation over the water cooler. Both approaches have their benefits, and neither alone will meet the full range of knowledge-management needs in most organizations.

Document-centric approaches leverage the benefits of written language: information is preserved over time, it is easily transmitted and shared with many people, and it is readily revised and corrected. These are exactly the characteristics we need to manage and develop complex processes such as developing new product lines, managing large projects or standardizing quality control measures over multiple facilities. A well-developed document-centric model includes informal documents, such as e-mail messages and threaded discussions. The benefits of document-centric collaboration are that core information and knowledge is readily disseminated throughout the organization. The downside is that regardless of the comprehensiveness of the documentation, it can never give a complete picture of decision-making processes, capture the mistakes and missed opportunities or convey the hard truths that some would rather not have in writing. Of course, sometimes someone just needs a short, fast answer, not a dissertation. This is where informal communications come in.

If you know who to turn to, you can find better answers and get them faster by talking with such a person directly rather than searching and browsing portal content. This is the case when the question posed is well defined: "What is the best way to restart the extrusion process after one of the feed lines has been contaminated?" or, "We're planning on using component A in the new product; why did you use component B in the earlier version?" In situations like these, the portal's role is to provide a directory of expertise. To be an expert does not require a Ph.D. More important is firsthand or in-depth knowledge of a subject important to the organization and a willingness to field inquiries from others.

Compiling a directory of expertise is time-intensive, primarily due to personnel and organizational issues. To get a rapid return on investment (ROI), start with those who understand high-valued operations (e.g., engineers who understand production operations and can help front-line operators diagnose disruptive problems or market analysts who have in-depth knowledge about target markets). Document their expertise and make it easily searchable. Include detailed references to their specific projects and, of course, keep it current.

Be prepared for unanticipated organizational issues. For example, will including people in the directory change their position or status, especially relative to collective bargaining? Will organizational walls hinder frank discussions between employees in different parts of the company? What responsibility do experts bear for how their advice is used? Some characteristics of organizational culture can have a chilling effect on the use of internal expertise; however, other facets of that culture may promote it, sometimes in unanticipated ways. For example, if the content in portal repositories about projects lacks frank discussions about mistakes and failures, users will justifiably question the integrity of the content and turn to other sources of information such as the experts actually involved in those projects.

Providing easy access to in-depth information in multiple ways as well as access to experts who can provide rapid answers and fill in missing pieces of the written record will encourage the adoption of the knowledge-management aspects of enterprise information portals.

Best Practice 4: Adapt to drive adoption. A successful portal will give users the information and tools they need when they need them. Develop metrics to measure which tools and content are used, what users search for and how effectively the portal meets those needs.

To begin, measure who is using the portals and what content or applications they use. Frequently, human resource applications bring a broad audience to the portal for employee information; but that does not necessarily drive the usage of other applications. That must be tested. Likewise, it is impossible to know without testing whether users come from a cross-section of the organization or from a limited number of departments. Analyzing portal and Web server logs, combined with information about users and organizational units frequently found in enterprise directories, can shed light on who is using which elements of the portal.

If statistics show that an application is underutilized, conduct interviews to determine the cause. Some common reasons are a lack of integration with other applications (especially desktop tools), difficulties accessing the application because of multiple logins and poor navigation, and lack of relevant content. We have found that users speak frankly in one-on-one interviews. We tend to avoid focus-group interviews, which can skew the results toward the opinions of just a few members of the group.

Successful portal designers and developers understand that an enterprise information portal is never finished. Software methodologies based on the waterfall method – with fixed start, intermediate and end phases – cannot be applied to the full life cycle of a portal. Portals are adopted and their use continues only as long as they adapt to the changing needs of users.

Best Practice 5: Get the word out. Companies wouldn't think of launching a new product without a marketing campaign. The same should apply for enterprise information portals. Assume the ultimate users of the portal are too busy to browse and explore the new system and need to have the information provided to them. (Those most pressed for time are also those who should benefit the most from the EIP.)

Slick interfaces and wireless access will capture short-term interest, but quality content and services delivered according to user preferences is the foundation of long-term portal use. Successful portals offer concrete benefits: tedious jobs such as filing time cards and expense reports are made less time-consuming; information is available on demand with minimal delay; the portal provides access to a broad range of information and it appears to be organized according to the users' work context; and, most importantly, the information is reliable. Getting the word out about these benefits will help drive adoption, which is the ultimate measure of success.

The promise of portal ROI will only be realized if users adopt the portal in their day-to-day work. Keeping an eye on processes as well as content, sharing the decision making, accommodating two

different modes of collaboration, measuring use and adapting to feedback along with internal marketing are stepping stones toward a well-utilized enterprise information portal.

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