

# From the Intranet to the Enterprise Knowledge Portal

**Carol Ann Barraclough**

*ePages.net (Pty) Ltd, South Africa*

**Udo Richard Averweg**

*eThekwini Municipality, South Africa  
University of KwaZulu, South Africa*

**Angela Frances O'Byrne Spencer**

*eThekwini Municipality, South Africa*

## INTRODUCTION

The Internet (also called “the Web” or the “World Wide Web”) is a worldwide network that allows organisations to send and receive communication (Gray, 2006). Internet technology is becoming increasingly pervasive within organisations. The terms to describe the resulting access to information and suites of applications through the Web browser are having a multiplying effect: intranet, corporate portal, enterprise portal, and enterprise knowledge portal. Technology facilitates the identification, creation, and diffusion of knowledge among organisational elements within and across organisations. For knowledge management, people (and not technology) solve information and knowledge management problems. Wells, Sheina, and Harris-Jones (2000) indicate that less than 5% of employee knowledge is actually captured and accessible across the organisation.

Enterprise portals were triggered by the Internet as organisations sought to replace the Internet portal (e.g., Yahoo!) within an organisation to unify information access and improve management of vast information resources (Harris, Phifer, & Hayward, 1999). Enterprise portals are being presented as the tool to revolutionise access to information and knowledge (Cloete & Snyman, 2004). Currently there is a market hype in portal software technology. The aim of this article is to examine some of the literature of the evolution of the intranet to the enterprise knowledge portal in organisations.

## BACKGROUND

An intranet (or internal World Wide Web) is a network architecture designed to serve the internal information needs of an organisation using Web (Internet) concepts and tools (see, for example, Cortese, 1996). Turban, Rainer, and Potter (2005) indicate that an intranet is a private network that uses Internet software and TCP/IP protocols. Defined technically, intranets

are the application of Internet technology (and specifically the World Wide Web service) for a prescribed community of end-users (Scheepers & Rose, 2001). An intranet is a network designed to serve the internal informational needs of an organisation using Internet concepts and tools (Turban, McLean, & Wetherbe, 2004).

Organisations can use Internet networking standards and Web technology to create intranets (Laudon & Laudon, 2000). They provide the same capabilities as Internet, namely inexpensive and easy browsing, communication and collaboration (Turban & Aronson, 1998), but intranets are used solely for intraorganisational communication activities and information flow (Abraham & Seal, 2001). Intranets can provide a platform for networked applications that can run on many different kinds of computers throughout an organisation (Laudon et al., 2000). Typical intranet applications include:

- publishing corporate documents;
- providing access to searchable directories (e.g., telephone and address lists);
- publishing corporate, departmental, and individual pages;
- providing access to groupware applications;
- distributing software;
- providing electronic mail (e-mail);
- transacting with other organisational computer-based information systems;
- organisation-wide information searches;
- providing a consistent user interface; and
- data warehousing and decision support access.

Turban et al. (1998) and Turban et al. (2004) note that intranets have the power to change decision-making processes, organisational structure and procedures, and help re-engineer organisations. The use of intranets has increased rapidly not only as an internal communication system, but also as a facilitator of e-commerce (Turban, McLean, &

Wetherbe, 1999). Robinson (1996) suggests that intranets can be applied to enhanced knowledge sharing, group decision, and business processes. Information that is most frequently included in intranets *inter alia* includes data warehouse and decision support access (Chabrow, 1998). Many organisations have benefitted from use of the intranet Web-based technology and have made their organisations more efficient (Sprout, 1995).

## THE EVOLUTION OF THE INTRANET

During 2002, KPMG Consulting (2002) reported that organisations were focusing strongly on internal communications projects (such as intranets). Answers.com (2005) indicates that some “corporate analysts have predicted that corporate intranet Web portal spending will be one of the top five areas for growth in the Internet technologies sector during the first decade of the 21<sup>st</sup> century.” This is not surprising since the amount of information that now has to be managed within an organisation is outstripping the capability of the traditional static Internet model. Grammer (2000) notes that the typically static and isolated methods of creating intranet content cannot keep pace with organisational ongoing and dynamic information needs.

The term portal was initially applied to “gateways” on the Internet. A portal is a gateway (Gray, 2006). Answers.com (2005) describe a portal as a “Web ‘supersite’ that provides a variety of services including Web searching, news, white and yellow pages directories, free e-mail, discussion groups, online shopping, and links to other sites.” The Web site indicates that the major general-purpose Web portals are Yahoo!, MSN, and AOL and are the Web equivalent of the original, pre-Web online services such as CompuServe and AOL. A portal may also be a vertical market site that offers the same services as a general-purpose site, but to a particular industry such as banking, insurance, or computers. However, as greater benefits of the portal approach using Internet technology within organisations became apparent, the “portal” term took on a new dimension--the corporate or enterprise portal. Winkler (2001) defines a corporate portal as one, which provides personalised access to selected information of a specific organisation. Corporate portals are really Web sites that contain links to specific portions of an organisation’s data (Gray, 2006). An enterprise portal is only an information technology tool in the implementation of knowledge management (Cloete et al., 2004).

Soon (2005) defines the essential elements that support the use of corporate portals as

- information dissemination or communication facilitated (any channel e.g., Web publishing, message board, chat-room, e-mail, etc);

- creation of business intelligence or competitive advantage;
- focus on central knowledge repository;
- support decision-making;
- business legacy applications and database (e.g., portlet, Web form);
- emphasis on business operations; and
- facilitate end user’s business work processes.

While distinguishing between corporate information portals and corporate knowledge portals, Soon (2005) considers the enterprise portal to be synonymous with the corporate portal. Answer.com (2005) also considers these two terms to be synonymous, citing that “a major industry shift in Web portal focus has been the corporate intranet portal, or “enterprise Web.”” This Web site suggests that some features of enterprise portals are:

- **Single Touch Point:** The portal becomes the delivery mechanism for all business information services.
- **Collaboration:** Portal members can communicate synchronously (through chat or messaging) or asynchronously through threaded discussion and e-mail digests (forums) and blog.
- **Content and Document Management:** Services that support the full life cycle of document creation and provides mechanisms for authoring, approval, version control, scheduled publishing, indexing, and searching.
- **Personalisation:** The ability for portal members to subscribe to specific types of content and services. End-users can customise the look and feel of their environment.
- **Integration:** The connection of functions and data from multiple systems into new components/portlets.

The term enterprise portal is increasingly applied to the collection of applications using Internet protocols to access core and peripheral systems within organisations. Daniel and Ward (2005) indicate that an enterprise portal definition moves beyond intranet in that it is not simply used to provide corporate information to employees. These researchers define enterprise portals as “secure Web locations, that can be customised or personalised, that allow staff and business partners access to, and interaction with, a range of internal and external applications and information sources. Uses of a portal may include improved access to information, increased collaboration, greater use of existing applications, and effective integration between applications.” The spread of enterprise portals promises to bring a sense of order to the corporate information repository. Phelps and Mok (1999) and Horton, Buck, Waterson, and Clegg (2001) report that enterprise portals also provide end-users with the

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