
KNOWLEDGE PORTAL: CHALLENGES BEFORE LIBRARY AND INFORMATION PROFESSIONALS

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Abstract

Knowledge has become the key driving force in the present day. Gone are the days when organizations were reluctant and complacent in sharing of information and knowledge. Today, every organization has understood the importance of knowledge. In the modern digital information and knowledge environment, a well-defined mechanism is needed to organize, store, and access information and knowledge. Knowledge portals are used as tools for implementing a knowledge management methodology. A knowledge portal is highly beneficial to make the collections accessible to user who expects all knowledge to be obtainable with just a few clicks from inside a web browser. This paper has just focussed on the knowledge portals, which is a new revolution in the field of Library and Information Science. The knowledge portal definitely has potential and challenging tasks for the library and information professionals.

Keywords : Knowledge, Knowledge Management, Knowledge Portal

1. Introduction

Knowledge portals have emerged as a key tool for supporting knowledge work. Knowledge portals are single-point-access software systems intended to provide easy and timely access to information and to support communities of knowledge workers who share common goals. The role of knowledge portal play in supporting knowledge work tasks and the component technologies embedded in portals, such as gathering of distributed/scattered document, information indexing and text search and categorization. Knowledge portal can serve as powerful tools to help knowledge organizations, such as universities, library, which improve their collaborative activities. They can facilitate knowledge acquisition, sharing and discovery by allowing library users and other people to publish documents, share ideas, seeking information, work collaboratively, and store information and knowledge in easily searchable repositories. Knowledge portals are becoming an increasingly important part of the information technology infrastructure of libraries as they seek to integrate the vast intellectual resources within a central virtual space that is easily accessible via a web interface. It is also rapidly evolving into broad-based platforms for supporting a wide range of knowledge worker task. Knowledge portal is an expanding knowledge workplace.

The world new economy is based on knowledge, it's global and foster intangible things like: "ideas", information and relationship. An increasing number of libraries recently, how much important is to "know what they know" and be able to take the maximum advantage of their knowledge assets and keep them in a safe way to be retrieve them easily for all and for future use.

Knowledge portals are a web-based solution for closing this gap. They represent a concrete realization of existing theoretical Knowledge Management approaches. However, the most important challenge is not the deployment of the latest technology but the design of a platform that actually supports the users in their day-to-day business.

2. What is Knowledge

It is important to define knowledge before going to discuss knowledge portal. Today we are living in the knowledge age. It started during 1990. Knowledge is the vehicle of socio-economic change. In modern society knowledge is valuable input to various types of users to satisfy their information needs. Knowledge comes in many sizes and shapes. It can be stored in databases, printed on paper, integrated into organizations, policies, procedures and reports or contained within an employee's memory.

What is known the whole body of truth, fact, information principles or other objects of cognition acquired by mankind. But all things existing may not be known to the man, but thing beyond man's knowledge are knowable. Thus we may include in the definition of knowledge are kinds knowable, all kinds knower, all the modes of formation of knowledge, and the methods of knowing.

The growth of knowledge is a continuous process. The indefinite growth of knowledge is multidisciplinary area leads to knowledge explosion in this contemporary world. When ideas get organized or systematized in the form of body of ideas, knowledge is formed. Knowledge is created from the interaction between the tacit, is that which is available with persons and is not encountered formalized in concert means, and the explicit (information), is that which can be stored, for example, by means of documents, manuals, data banks and other media, the information facilitates and allow the knowledge construction.

Knowledge is one of the most important resources in an organization, be it academic, research, business or industrial organization. Many countries principally through the advancement and application of knowledge achieve social and economic progress. In educational institutions, knowledge is present in individual faculty, researchers, administrators and decision-makers and other published sources such as books, journals, course materials, curriculums and research reports, etc. The published sources are knowledge assets on an organization and these traditional knowledge assets are being converted into electronic form which can be easily preserved, accessed and reused to strengthen the community of researchers and organizational performance.

Knowledge is analyzed information, linked to other information, and compared with what is already known knowledge operates. Knowledge operates in the larger social context of meaning, which encompasses archetypal patterns and forces, as well, as a social and cultural biases and interpretation.

3. Knowledge Worker

A knowledge worker is anyone who works for a living at the task of developing or using knowledge. For example a knowledge worker might be someone who works at any of the tasks of planning, acquiring, searching, analyzing, organizing, storing, programming, distributing, marketing or otherwise contributing to the transformation and commerce of information and those (often some people) who work at using the knowledge so produced. A term first used by Peter Drucker in his 1959 book, *Landmarks of Tomorrow*, the knowledge worker includes those in the information technology fields, such as programmers, systems analysts, technical writers, academic professionals, researchers, and so forth. The term is also frequently used to include people outside of information technology, such as lawyers, teachers, scientists of all kinds, and also students of all kinds. Now a day's library and information professionals are also called as knowledge worker.

4. What is Portal

While there is no single definition for a portal, it can be defined as a door or gate; hence a way of entrance or exit, especially one that is grand and imposing. Computing dictionary tries to define the term more specifically as "A website that aims to be an entry point to the World Wide Web, typically offering search engine and/or links to useful pages and possibly news or other services. These services are usually provided for free in the hope that users will make the site their default home page or at least visit it often". Popular examples of these portals are Yahoo and MSN. According to *whatis.com* "Portal is a term, generally synonymous with gateway, for a World Wide Web (WWW) site that is or proposes to be a major starting site for users when they get connected to the web or that users tend to visit as an anchor site." *Netlingo*, the Internet Dictionary defines a portal as "a site featuring a suit of commonly used services, serving as a starting point and frequent gateway to the Web (web portal) or a niche topic (vertical portal). Strauss defines a portal as a special kind of gateway to web resources- "a hub from which users can locate all the web content they commonly need." According to Strauss, portals are customized to the role of the user who connects to the portal, for example a student or visitor of the portal might be prevented of entering faculty's workspaces. Not only this but portals also feature personalization i.e. the ability to change on the page or to create a personal profile for current awareness services.

Portals are different from web pages tied to a home page in the sense that a portal is centered around target community of users, whereas, web page is centered around the organization that "owns" the site. Web portal services offer a search box, links, news, e-mail or address books, stock quotes, discussion groups or chat, maps, forums, shopping, calendar or schedules. Large portals often included dozens or hundreds of bundled services. Portals are one -stop destinations for advertisers and marketers, too, offering an endless variety of choices. Companies with portal sites attract much stock market and investors interest because portals are able to command large audiences and numbers of advertising viewers. Portals may be of two types:

- General portals also known as horizontal portals, which are extremely broad but generally, shallow in content. Searchers to find anything they want on the web can use these. Examples of major general portals include: Excite, Lycos, Yahoo, Microsoft Network and Netscape.
- Specialized portals or vertical portals or vortals focussing more on a specific community of users.

A portal is displayed as one or more web pages accessible by any web browser. In most cases has so much information that it would be inconvenient to put it all on one page. A portal page is a collection of related information. Each portal page may be divided into columns of information.

5. Portal Navigation

A portal is displayed as one or more web pages accessible by any web browser. In most cases a user has so much information that it would be inconvenient to put it all on one page. In fact, since a web page can be any size, are the information could be put. On a single page, but then there would be lots of vertical and horizontal scrolling. A portal page is a collection of related information. A user needs some way to navigate from page to page. The most common is to have a tab for each page and to allow a user to click on a tab to display a particular page.

Each portal page may divide into columns of information. For some unknown reason, three columns have become the standard for portals, often with the middle column wider than the other two. But many portals allow this attributes to be personalized, too. If two columns or one work better that format are just a few clicks away.

There is room at the top of the columns for the navigation tabs and for portal wide alerts. Alerts are messages targeted to a subset of portal users. Portal wide alerts are very general. There may also be alerts at the channel level, which the alert occurs.

6. Knowledge Management

Knowledge management concept and its practice is not new, since it has been always used in the organizations in an informal way, but nowadays, it is necessary the practice of a more strategic vision and more formalized application since it becomes clear the relationship between the knowledge management and the organization strategy. The identification of the best practices of knowledge management that should be developed in organizations is based on the need of identifying the critical processes where the practices should be applied, taking into account the organizational strategy. Knowledge management includes the identification and analysis of available and required knowledge, its planning and control to fulfill organizational objectives.

The new trend has crept in basically because of the increase in information and importance related to this information. It is clear from the above statements it is not only information that matters but other areas such as the available resources, technologies, skills, and systems owned by an

organization that also affect the progress of an organization. So, the complete known information related to all these assets, constitute knowledge management.

The technological advancements have a direct effect on the progress of institutions and it is reflected through these assets. The skills made available, the resources and the new technologies adopted for harnessing the information are the latest, and then there can be definite verdict of its being profitable. When these underlying factors have so much of relevance, why should they not be utilized to gain more profit. Along side, we find knowledge management to be more complete in itself, as it provides information that is analyzed and logically laid down utilizing the latest skills and techniques available in a much exhaustive manner. All these factors emphasize the importance attached to this new concept and justify its evolution, too. With such conceptual clarity as being reflected, it is sure to gain importance in most of the profit making organizations.

7. Knowledge Portal

A fundamental aspect of knowledge management is capturing knowledge and expertise created by knowledge workers as they go about their work and making it available to a larger community of colleagues. Technology can support these goals, and knowledge portals have emerged as a key tool for supporting knowledge work. Knowledge portals are single-point-access software systems intended to provide easy and timely access to information and to support communities of knowledge workers who share common goals

The roles of knowledge portals play in supporting knowledge work tasks and the component technologies embedded in portals, such as the gathering of distributed document information, indexing and text search, and categorization.

K Portals are rapidly evolving into broad-based platforms for supporting a wide range of knowledge worker (KW) tasks. Knowledge portal has "knowledge about knowledge". The knowledge portal is a structured map of knowledge source. The knowledge sources contains the actual knowledge, while the portal, simply points to the source. Many companies, libraries or universities have built their own knowledge portals, often using Web-based applications.

Knowledge portals represent a solution to this challenge, as they provide a flexible knowledge environment to a potentially large number of users. The mission of a knowledge portal is not only to provide a library-like pool of information, but also to actively support the user in his or her business processes.

A knowledge portal of a library serve as an access point combining the library catalogue (OPAC), subscription databases (bibliographic and references), subject gateways, electronic journals, linking between library and users etc. It meets the individual needs of users, and either the system itself can tailor the delivery and presentation of information and knowledge content or the users themselves

can customize the type and format of information displayed. Libraries need to build such portals that offer a collaborative and communication space, which can be virtual addition to the existing physical structure, reaching out the patrons and streamlining the access modes, making e-communication and web interfaces much more effective for the users.

8. Building or Installing a Knowledge Portal Infrastructure

Building or installing a knowledge portal infrastructure typically requires a range of software engineering skills, such as database and system administration skills and some level of programming where web clients need to be customized. High level tools should support these administration tasks. State-of-the-art web generation software, such as JavaServer pages, is also critical to rapid customization and iteration on client user interfaces. Once the knowledge portal is running, the skills needed are more in the line with knowledge worker goals and expectations and are less system-related. Domain experts need to develop taxonomies, identify new sources valuable to the community, manage certification, and possibly classify new intellectual capital.

9. Work Methodology of Knowledge Portal

A knowledge portal can develop in the following steps-

- **Selection of the content-** For the definition of portal's content, meetings, gathering of information professionals, knowledge worker, knowledge manager, subject expert have been carried out. Due to their long experience dealing with user's, customers, made them the most capable persons, able to identifying the subjects of great interest to be available in the portal.
- **Validation of the content-** The initial content validation was carried out along with the team of the organization and a different subject areas specialist user group, who have evaluated the content and the proposed structure for the portal. In order to keep the contents updated and adequate to the users needs, the portal maintenance tasks places with the users support through a direct communication channel, where changes, adds, deletions and suggestions of themes and links are made.
- **Definitions of procedures for collection of information-** One of the great challenges for the team responsible for the portal is to always keep information updated. For this task a multidiscipline team was allocated, including librarians and all experience knowledgeable professionals in the specific areas.
- **Content management tools definition-** The structure of databases tables relationship, where the information it composes the portal are stored, presents a certain complexity level. In this reason and to supply flexibility for the administrators of the portal update the information, an administration program was implemented.

- **Definition of portal use evaluation procedures-** Some statistics have been developed in order to measure how much the portal's content is adequate to the users' need. The statistics counts how many hints on the site, which are the links that are more, searched, as well as which areas drives the user's attention. On portal implementation there was a care to have a direct open channel between the user and the team of the organization

10. Function of Knowledge Portal

The functions of a Knowledge Portal may be divided into four main categories: process support, teamwork, document management, and personalization. While personalization concerns the entire portal, the other functions may be needed only in some areas of a platform. However, features like search or discussion should be available throughout any platform.

According to a study by Delphi, active process support and teamwork are the most important features of knowledge portal. Active process support may be achieved through checklists, workflow, and to-do lists (if combined with push delivery). Discussion groups and e-mail are the most common communication functions. Depending on the focus of the platform, additional functions like conferencing and skill management may be implemented. The most typical document management features are search and version control. Integration into office automation software may be needed if every user can add and/or modify documents. Personalization finally offers a wide variety of functions, which enable the users to customize their personal working environment according to their preferences.

11. Knowledge Portal Challenges Before Library and Information Professionals

With the increasing awareness relating to knowledge portal a number of knowledge workers and knowledge managers are beginning to be recognized as performing a new professional role. These personals have the skill of research along with sound knowledge of information technology, subject matters, users needs and demands, library services, document available in other libraries which enable them to cope with the technological development as well as research activities, within the organization and abroad. They may either be directly or indirectly involved within the organization.

Meanwhile, the intervention of this new professional role is feared to spread its feet into the library and information sector. Moreover, it may take over the role of the information managers, as their areas would come lower in hierarchy as they confine themselves to acquiring information, whereas knowledge management tries to analyze as well as, put it in a proper order. And we all know that information when analyzed and logically placed, form knowledge. In such a situation, the librarians should keep a close vigilance over the possible changes that may be expected and the impact it is going to have over our area. If possible it would be intelligent enough if we could merge this development as part of the existing system.

Following are some of the challenges :

- Library and information professionals should have expertise in collection and management of knowledge.
- Collection development librarians have to more proactive by becoming familiar with the environmental changes so that they could adopt better as the changes unfold.
- It is important for library and information professionals to focus on the capabilities enabled by the portal environment rather than the complications brought forth by the complexity of portal based knowledge resources and services.
- The library and information professional needs specific training to understand the implications of the new working conditions and portal technology.
- Library and information professionals require becoming knowledge worker and knowledge manager.
- Mind-set of the library and information professionals has to be changed in order to enter into the portal era by revising professional methods, techniques and tools.

Above all the budding library and information professionals have to concentrate more and more on such challenges and to overcome these challenges is the real problem of the professional working in different types of library and information centers especially in the developing countries like India.

12. Conclusion

In this dot com era, to fulfill the ever increasing requirements of users in most efficient manner, there is a need for every library to provide its services and collection through an easy interface by developing a knowledge portal. It is an important information delivery system and libraries and library and information professionals have to be part of that.

Knowledge portal is a valuable tool for knowledge seekers, which allows better utilization of existing knowledge and new knowledge creation. It also acts as knowledge management tools. Knowledge portal typically associated with a set of administrative tasks, requiring the exercise of various kinds of expertise.

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