

Knowledge Management through Knowledge Portals in Libraries: Challenges and Issues

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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. Knowledge portals are used as tools for implementing a knowledge management methodology. This paper discusses the role of Knowledge Portals and other tools and technologies which act as platform to bring people together to share knowledge in the form of expertise, competencies and skills in the field of library and information science.

Keywords: Knowledge Management, Knowledge Portals

1. Introduction

Advancement in information technology has changed the traditional method of collection, organization and dissemination of information/ knowledge. Information explosion and the advancement in various technologies have revolutionized the traditional method of dissemination of information/ knowledge. Information however is static unless knowledge is applied to translate it into something meaningful and with the potential to actionable. The ability to share knowledge to develop ideas, and to become more innovative is increasingly important for Research and Development activities.

Knowledge Portals have emerged as a key tool for supporting knowledge work. Knowledge portals are single- point- access software systems intendeds to provide easy and timely access to information and to support communities of knowledge workers who share common goals.

2. What is Knowledge

Knowledge is the ability to turn information and data into effective action. The word "Knowledge" can mean three things, first it refers to a state of knowing by which we mean to be acquainted or to be aware of, to organic or approached facts, methods, principles and so on. Second, "Knowledge" refers to "The capacity for action" an understanding of facts, method, in the course of making things happen. Third knowledge refers to codified, captured and accumulated facts, methods, principles techniques and so on. Knowledge is broader, deeper and richer than data or information.

There are two basic kinds of knowledge-

1. The kind that is reflected in a person's internal state as well as that some person's capacity for action and.
2. The kind that has been articulated and frequently recorded. This brings the concepts of explicit, implicit and tacit knowledge.

2.1 Explicit Knowledge

Explicit knowledge is knowledge which has been recorded- Say in a book or other document - or embedded (eg in software). Librarians and information managers are familiar with explicit knowledge and information.

2.2 Tacit Knowledge

Tacit knowledge can be considered as personal - or what a person knows. It is the knowledge which is not codified but within the minds of the people. The management of tacit knowledge remains a challenge for librarians.

It is more useful to consider the concept of intellectual capital within knowledge- based organizations and in the information economy generally. In the learning or knowledge based organisation the most valuable component is the knowledge with in the organisation rather than the buildings and raw materials of traditional industrial production. This knowledge needs to be identified and valued as intellectual capital assets.

3. Knowledge Management

Knowledge needs to be managed so that the organisation knows what it knows; and also that it owns what it knows. This is particularly important for human-centered assets. Unlike the other elements of intellectual capital individuals, not the organisations they work for, own their talents, skills, expertise, and knowledge. Research has highlighted the costs to organisations when they fail to record the knowledge of their employees. When key employees leave, relationships with important clients and suppliers are damaged and knowledge of best practice is lost. The effects of this loss can be minimised if the knowledge and expertise of staff have been captured within a knowledge base and have become part of a knowledge management strategy. (Kumar, P.S. G., 2004)

3.1 Key Components of Knowledge Management

- ⇒ **People:** Those who produce and those who use knowledge that will be the basis for action.
- ⇒ **Content** : The flow of data, information, and knowledge important to the success of the business.
- ⇒ **Technology:** The technical infrastructure that enables the capture, storage, and delivery of content to those who need it when they need it.

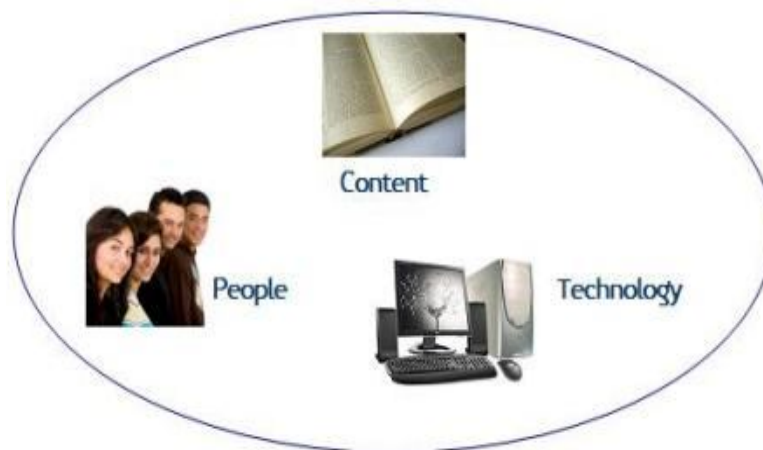


Figure.1 key components of Knowledge Management

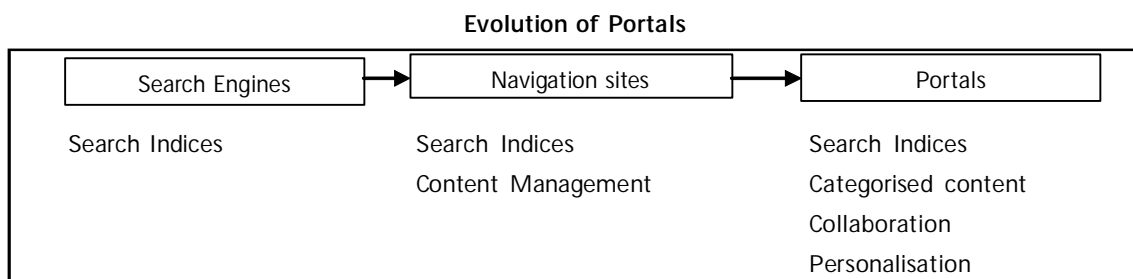
Overall, knowledge needs to be identified and managed because the alternative is too expensive. Successful knowledge management can provide a number of potential benefits to the organisation such as;

- ⇒ Better decision making
- ⇒ Faster response time
- ⇒ Increased profit
- ⇒ Improved productivity
- ⇒ Cost reduction
- ⇒ Sharing of best practices
- ⇒ Increased market share and share price and
- ⇒ Better staff attraction and retention.

4. Knowledge Portal Technologies

The world wide web (www) has paved the way for the information age with a competitive market demanding more information from various quarters, the web has turned out to be a variable resource.

Many still want someone else to aggregate a variety of interesting content in one place instead of creating massive and unwieldy bookmark files in their browser. These new online services are websites, delivering the old formula of content, community and core services, but in a new package and transformed as web portals. (Subha Rao, Siriginide- 2001)



4.1 Key Functions of a Portal

The main goal of a portal is to provide a single point of access to all information sources. Therefore portal must be the ultimate tool for universal integration of all enterprise applications. At the same time because every individual has different information needs and knowledge uses, portals have to deliver a personalised interface, keeping in view the complexity of these challenges portals must include the following functionalities. (Adward, Elias M. and Ghaziri, Hassan M. 2004)

- **Gathering** : Documents created by knowledge workers are stored in a variety of locations. In order to be accessible, data and documents need to be captured in a common repository.
- **Categorisation**: This category profiles the information in the repository and organises it in meaningful ways for navigating and searching. Portals should support categorisation at all levels, including the knowledge worker and customer levels.
- **Distribution**: This facility supports the distribution of structured and unstructured information in the form of electronic or paper documents.
- **Publish**: This facility publishes information to a broader audience, including individuals outside the organisations.
- **Personalisation**: This is a key component of portal architecture because it allows individuals to enhance their productivity. It is becoming a necessity for successful portals. This is due to the proliferation of information available through the portal.

- Search/ Navigate: This component provides tools for identifying and accessing information. The knowledge worker can either browse or submit a query.

5. Knowledge Portal

A knowledge portal provides a gateway to databases, institutional repositories, internal webs content and external websites even if users from remote places will be able to access the same knowledge portal will offer the capability to create, transfer deliver and access information and education without borders. It can also provide a forum for the capture of intellectual capital and self experience, which is so vital in transforming data and information into knowledge. The primary purpose of this portal is to share knowledge and experience, and digital documents. It is also a forum to help each other learn, capture tacit knowledge and convert it to explicit knowledge.

5.1 Knowledge portal has the following functions

- Establish processes for effective knowledge management.
- Helps to capture the technical and managerial knowledge generated in the organisations.
- Provide supporting information to the organisation in strategic and operational planning and policy formulation.
- Finding an expert in various fields and getting their expertise as and when needed.
- Organises the best practices and lessons learned and these can be retrieved as and when needed.
- Acts as institutional digital repositories and as digital library which provides references, useful documents, such as project reports, proposals, product specifications, users manuals, demos price lists etc.
- Provides easy to use interface for sharing knowledge, which will reduce barriers for sharing.

Thus it facilitates knowledge sharing and creation. Knowledge is created through the interaction of users by sharing their experiences and skills. So it is highly essential for a research or business establishments to have a knowledge portal. The portal should be updated frequently with current and relevant knowledge. The obsolete knowledge should be removed from the system frequently. Feedback should be collected from the users on its effectiveness and should be modified accordingly.

6. Knowledge Portal Challenges Before Library & Information Professionals

With the increasing awareness relating to knowledge portal a number of knowledge workers and knowledge ménages are beginning to be recognized as performing a new professional role. These personals

have the skill of research along with sound knowledge of information technologies, subject matters, user's needs and demand, library services, document available in other libraries which enable them to cope with technological development as well as research activities with the organization and aboard.

The Role of library professionals are increasing at rapid rate in the work of collection, organization and dissemination of information. Information is an essential component of the all round development of the society as a whole. So, to ensure the maximum use of information enough attention be devoted to the entire process from the information generation to its effective use.

There are various challenges before library information professionals as knowledge manager such as.

1. Library & information professional should have expertise in collection and management of knowledge.
2. Collection development librarians have to be more proactive by becoming familiar with the environmental changes so that they could adopt better as the changes unfold.
3. It is important for library and information professional 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.
4. The library and information professionals need specific training to understand the implications of the new working conditions and portal technology.
5. Library and information professionals require becoming knowledge worker and knowledge manager,
6. Mind set of the library and information professional has to be changed in order to enter into the portal era by revising professional methods, techniques and tools.

Some Examples

- Stanford school of medicine, Bio Research portal, <http://lane.stanford.edu/portals/bioresearch.html>.
- ISP Knowledge portal, <http://www.photonic.cusat.edu/Links-national.html>.
- Nano port, Building knowledge portals for scientific domain, <http://www.nanoport.org>

- Knowledge portal on solid and liquid waste management ISRO, http://ced.knowledgeportal.org/about_us/
- ILO Local economic development knowledge portal, <http://www.ledknowledge.org>

7. Conclusion

Knowledge is the key source of postindustrial society and the telecommunication is the key technologies. The move towards the information and knowledge society have highlighted the importance of knowledge and need for knowledge management. Knowledge portal is a valuable tool for knowledge seekers, which allows better utilizations of existing knowledge and new knowledge creations. It also acts as knowledge management tool. To inform and update the professionals, it is better to conduct the training and development programme after certain intervals and at the same time initiative is also to be taken for offering periodic users learning programme to make them familiar with the present technology.

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