THE ROLES OF KNOWLEDGE PROFESSIONALS FOR KNOWLEDGE MANAGEMENT[*]

By Seonghee Kim

Abstract: Knowledge and Knowledge Management have emerged as a current 'hot issue' for many organizations. This paper starts by exploring the definition of knowledge and knowledge management. It then considers the partnership for knowledge management, and especially how librarians as knowledge professionals, users, and technology experts can contribute to effective knowledge management. It is concluded that knowledge professionals will have to move from the background to the center of the organizational stage, to jointly hold the reins of knowledge management.

Introduction

In this information and knowledge age, knowledge is the most important factor in the long term success of both an individual and organization. In fact, knowledge may soon be the only source of competitive advantage for an organization. These knowledge assets reside in many different places such as: database, knowledge bases, filing cabinets and peoples' heads and are distributed right across the organization. All too often one part of an organization repeats work of another part simply because it is impossible to keep track of, and make use of knowledge in other parts. Libraries as major functions of an organization need to know what the organization's corporate knowledge assets are and how to manage and make use of these assets to get maximum return. This paper explores the phenomenon of Knowledge Management(KM) from the viewpoint of a management academic with a professional background as a librarian. Then, the paper proposes new roles of librarians for maximizing the value of knowledge in an intelligent organization.

Knowledge and Knowledge Management

The organization's success depends critically on a successful knowledge management. Knowledge assets are   the knowledge that an organization owns or

---

[*] Paper presented at International Federation of Library Associations (IFLA), 65th IFLA Council and General Conference Bangkok, Thailand, August 20 - August 28, 1999

needs to own to achieve its goals. Knowledge equals information, extracted, filtered or formatted in some way.

Knowledge can be divided into two types. They are tacit knowledge and explicit knowledge. Tacit knowledge consists of the hands-on skills, best practices, special know-how, heuristic, intuitions, and so on. Tacit knowledge is personal knowledge that is hard to formalize or articulate (Polanyi 1973). The transfer of tacit knowledge is by tradition and shared experience, through for example, apprenticeship or job training. Tacit knowledge in an organization ensures task effectiveness -- that the right things are being done so that the work unit could attain its objectives. It also provides for a kind of creative robustness -- intuition and heuristic can often tackle tough problems that would otherwise be difficult to solve. Whereas tacit knowledge is implicit, explicit knowledge is rule-based knowledge that is used to match actions to situations by invoking appropriate rules. Explicit knowledge guides action by answering three questions: what kind of situation is this? What kind of person am I or: What kind of organization is this? and finally, What does a person or an organization do in a situation such as this? (March 1994). Explicit knowledge is used in the design of routines, standard operation procedures, and the structure of data records. Explicit knowledge enables the organization to enjoy a certain level of operational efficiency and control. It also promotes equable, consistent organizational responses. Those forms of knowledge can be found in any organization. The organization however, is skilled at continuously expanding, renewing, and refreshing its knowledge in all categories. The organization promotes the learning of tacit knowledge to increase the skill and creative capacity of its employees and takes advantage of explicit knowledge to maximize efficiency. In effect, the organization has acquired a third class of knowledge - meta-knowledge- that it uses to create and integrate all its intellectual resources in order to achieve high levels of performance.

The organization adopts a holistic approach to knowledge management that successfully combines tacit and explicit knowledge at all levels of the organization. Tacit knowledge is cultivated in an organizational culture that motivates through shared vision and common purpose. Personal knowledge is leveraged with explicit knowledge for the design and development of innovative products, services and processes. Strategic vision and operational expertise are fused in creative action.

Where an organization's performance is heavily reliant on knowledge work then knowledge management is pivotal. Knowledge work emphasizes the use of professional intellect in activities which use individual and external knowledge.

Knowledge Management is a discipline that promotes an integrated approach to identifying, managing and sharing all of an organization's knowledge assets including unarticulated expertise and experience resident in individual workers. In other words, knowledge management is taking advantage of what you know. Knowledge Management involves the identification and analysis of available and required knowledge, and the subsequent planning and control of actions to develop knowledge assets so as to fulfill organizational objectives. Knowledge Management is not about managing or organizing books or journals, searching the inherent for clients or arranging for the circulation of materials. However, each of these activities can in some way be part of the knowledge management spectrum and processes. Knowledge Management is about enhancing the use of organizational knowledge through sound practices of knowledge management and organizational learning. Thus, Knowledge Management is a combination of information Management, Communications, and Human Resources.

The purpose of Knowledge Management is to deliver value to organization. The basic goal of knowledge management is to harness the knowledge resources and knowledge capabilities of the organization in order to enable the organization to learn and adapt to its changing environment (Auster and Choo, 1995). Therefore, Knowledge Management practices aim to draw out the tacit knowledge people have, what they carry around with them, what they observe and learn from experience, rather than what is usually explicitly stated. Managing knowledge goes much further than capturing data and manipulating it to obtain information. Davenport (1993) explains that knowledge management process is about acquisition, creation, packaging, and application or reuse of knowledge. Some examples of each of these types of knowledge management process are:

- Knowledge Acquisition: finding existing knowledge, understanding requirements, searching among multiple sources.
- Knowledge Creation: research activities, creative processes in advertising, writing books or articles, making movies, and so on.
- Packaging: publishing, editing, design work
- Applying or using existing knowledge : auditing, medical diagnosis;
- Reuse of knowledge for new purpose: leveraging knowledge in product development processes, software development.

The partnerships for knowledge management

I have described the concept of knowledge and knowledge management. Knowledge -based systems forge new partnerships that bring together the

organization's capabilities to create and use knowledge, organize knowledge, and build infrastructures that enable the effective management of knowledge.

Three groups of experts who need to work together as teams of knowledge partners are at the heart of the knowledge center. They are users, knowledge professionals including librarians, and technology experts.

Users are the individuals in the organization who are personally involved in the act of creating and using knowledge. Users, including the professionals, technologists, managers, and many others possess and apply the tacit knowledge and explicit knowledge. The knowledge and expertise they have is specialized and focused on the organization's domain of activity. Through their coordinated effort the organization as a whole performs its role and attains its goals. Through their knowledge creation and use, the organization learns, makes discoveries, creates innovations, and undergoes adaptation.

Knowledge professionals are the individuals in the knowledge center who have the skills, training and know-how to organize knowledge into systems and structures that facilitate the productive use of knowledge resources. They include librarians, records managers, archivists, and other information specialists. Their tasks include the representation of the various kinds of organizational knowledge; developing methods and systems of structuring and accessing knowledge; knowledge distribution and delivery; amplifying the usefulness and value of knowledge; knowledge storage and retrieval; and so on. Their general focus is to enhance the accessibility and quality of knowledge so that the organization will have an enlightened view of itself and its environment. The knowledge professionals design and develop knowledge products and services that promote learning and awareness; they preserve the organization's memory to provide the continuity and context for action and interpretation.

The knowledge technology (KT) experts are the individuals in the organization who have the specialized expertise to fashion the knowledge infrastructure of the organization. The knowledge technology experts include the system analysts, system designers, software engineers, programmers, data administrators, network managers, and other specialists who develop knowledge based systems and networks. Their general focus is to establish and maintain an knowledge infrastructure that models the flow and transaction of knowledge, and accelerates the processing of data and communication of messages. The knowledge technology experts build applications, databases, networks that allow the organization to do its work with accuracy, reliability, and speed.

In the intelligent organization, the knowledge of the three groups of users, knowledge managers, and KT experts congeal into a superstructure for

organizational learning and growth. In order to work together in teams of users, knowledge professionals, and knowledge technology experts, each group will need to re-orientate its traditional mindset. Users will need to separate the management of knowledge from the management of knowledge technology. Knowledge technology in most cases has been heavily managed, whereas the management of knowledge processes -- identifying needs, acquiring knowledge, organizing and storing knowledge, developing knowledge services, distributing knowledge, and using knowledge -- has been largely neglected. Users need to understand that the goals and principles of knowledge management are quite different from the objectives and methods of knowledge technology management. Users could participate fully in these knowledge processes, not just as end-consumers of knowledge services, but as active agents in every activity of the knowledge management cycle, especially in clarifying knowledge needs, collecting knowledge, sharing knowledge, and transforming raw data into useable knowledge. Users should share the responsibility of identifying and communicating their knowledge needs, and not abdicate this work completely to the knowledge professionals(librarians) or knowledge technology experts. The most valuable knowledge sources in the organization are the people themselves, and they should participate actively in an organizationwide knowledge collection and knowledge sharing network. KT experts are the most prominent group in today's technology-dominated environment. The management of knowledge technology has remained in the media's spotlight for many years. KT experts have become proficient at fashioning knowledge-based systems that dramatically increase operational efficiency and task productivity. At the same time, the same systems are equally well known for the their inability to provide more holistic information about processes, subject areas, or even documents. Computer-based information systems concentrate on formal, structured, internal data, leaving out the informal, unstructured, external information that most decision makers require. KT experts need to move the user to the center of their focus -- develop a behavior-based, process-oriented understanding of the knowledge user in terms of their needs and knowledge use dispositions. People in organizations are not content with structured transactional data, they also want knowledge technology to simplify the use of the informal, unstructured information that forms the bulk of the organization's knowledge resources. They also want external data: knowledge to help them understand how the external environment is changing, what other organizations are doing, and how the organization is doing. In other words, users want a web of formal and informal data, internal and external data that are meaningful to them for cultivating insight and developing choices.

The intelligent organization understands that the discovery and use of knowledge can best be achieved through strategic knowledge partnerships that combine the skills and expertise of its users, librarians as knowledge professionals, and KT experts. This collective synergy is necessary to weave an knowledge tapestry that draws together structured and unstructured, internal and external, as well as historical, current, and future-oriented knowledge; to create the tools and methods to access knowledge and select the best available knowledge sources; to design knowledge architectures based on a rich understanding of users' knowledge and communication requirements; and to integrate the organization's knowledge processes into a springboard for organizational learning and development. Through strategic knowledge partnerships, the intelligent organization can significantly enhance each of the knowledge processes that make up the knowledge management cycle.

The roles of knowledge professionals for knowledge management

Knowledge Management has emerged as a key concern of organizations. Librarians have long been regarded as part of the support staff of the organization, working quietly in the background, often uninvolved in any of the critical functions of the organization. Information professionals have to recast their roles as an knowledge professional. In other words, librarians need to work as knowledge worker. Knowledge work is characterized by variety and exception rather than routine and is performed by professional or technical workers with a high level of skill and expertise. So those who exercise their intellects in any of these types of activities are knowledge workers. If librarian's work can be or is totally routinized, then they are an administrative worker(for example, gatekeeper), not a knowledge worker. That means that librarian's roles should be not limited to being the custodians or gatekeepers of information. Knowledge professionals will have to move from the background to the center of the organizational stage, to jointly hold the reins of knowledge management with users and the technology experts, to help steer and shape the knowledge policies, structures, processes, and systems that will nurture organizational learning. Knowledge professionals should be able to extract, filter and disseminate vital external knowledge. They also will design and develop workgroup application suites that are effectively platforms for knowledge management. Finally, they will work side by side with users in collecting and analyzing strategic intelligence; and to act as trainers and consultants who transfer knowledge gathering and research skills throughout the organization.

Conclusion

This study described the notion of knowledge and knowledge management and investigated the roles of librarians as knowledge professionals for obtaining

organizational goals. The knowledge professional position will continue to evolve as the knowledge infrastructure develops. The precise role of the knowledge professional will depend on the organization structure and knowledge needs. The emphasis in roles of knowledge professional will likely change according to the needs of the user community and the level of technological sophistication.

References

Abram, Stephen. 1997 Knowledge Management: Is this the Answer? http://www.informart.ca/sla/km/abram

Auster, Ethel and Chun Wei Choo, ed. 1995. Managing Information for the Competitive Edge. NewYork, NY: Neal Schuman.

Birks, Grant. 1995. Value-added Information Services: The Art of Being Synchronous with Your Corporation. Bulletin of the American Society for Information Science 21, no.2: 23-25.

Broadbeht, Marianne. 1996 The Phenomenon of Knowledge Management: What Does it Mean to the Information Profession?

http://informationoutlook.com/may/broadben.html

Choo, Chun Wei. 1995. Information Management for the Intelligent Organization: Roles and Implications for the information professions. http://hoo.fis.utoronto.ca/fis/respub

Choo, Chun Wei. 1991. Towards an Information Model of Organizations. The Canadian Journal of Information Science 16, no. 3: 32-62.

Choo, Chun Wei and Ethel Auster. 1993. Scanning the Business Environment: Acquisition and Use of Information by Managers. In Annual Review of Information Science and Technology , ed. Martha E. Williams. Medford, NJ: Learned Information, Inc. For the American Society for Information Science.

Davenport, Thomas H. 1993. Process Innovation: Reengineering Work Through Information Technology. Boston, MA: Harvard Business School Press.

Davenport, Thomas H. and Lawrence Prusak. 1993. Blow Up The Corporate Library. International Journal of Information Management 13, no. 6: 405-412.

Fidel, Raya. 1994. User-Centered Indexing. Journal of the American Society for Information Science 45, no. 8 : 572-576.

March, James G. 1994. A Primer on Decision Making: How Decisions Happen. New York, NY: Free Press.

Morgan, Gareth. 1986. Images of Organization. Newbury Park, CA: Sage Publications.

Murray, Philip C. 1995. Information, Knowledge, and document management technology http://www.ktic.com/topic6/

Nonaka, Ikujiro. 1991. The Knowledge-Creating Company. Harvard Business Review 69, no. 6: 96-104.

Polanyi, Michael. 1966. The Tacit Dimension. London, UK: Routledge & Kegan Paul.

Polanyi, Michael. 1973. Personal Knowledge. London, UK: Routledge & Kegan Paul.

Seonghee Kim
Faculty of Library and Information Science
Dongduk Women's University
23-1 wolgok-dong, sungbuk-gu
Seoul, Korea 136-714
Tel. (02) 940-4455
Fax. (02) 940-4192
E-mail: shkim@dongduk.ac.kr