Knowledge Management Approach and Strategies for College Libraries

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Abstract - This paper focus on the knowledge management approach and strategic framework of the college library. We will take the development model of the enterprises' knowledge management as the reference; the research is on the basis of the descriptions of the explicit knowledge and implicit knowledge management. The analysis has been taken on the elements of the library in the knowledge management: knowledge, users, learning organization, interaction and sharing, managing etc., and the proposition has been given about five knowledge management strategy, including organizational culture construction of a university library in knowledge management, information and communication technology supported service system, collaborative learning organization, performance evaluation of knowledge management, and user and other information storage. The research findings provide a reference for establishing and developing a new model of knowledge management for the college library.

Index Terms - knowledge management, college library, explicit knowledge, implicit knowledge.

I. INTRODUCTION

The definition of knowledge in Webster's dictionary (1976) is "the fact or condition of possessing within mental grasp through instruction, study, research, or experience one or more truths, facts, principles, or other objects of perception," In general, knowledge can be experience, concepts, values, or beliefs that increases an individual's capability to take effective action. The concept and name "Knowledge Management" was started and popularized in the business world during the last decade of the 20th century. It was the business world that first recognizes the importance of knowledge in the "global economy" of the "knowledge age". In the new knowledge economy, the possession of relevant and strategic knowledge and its constant renewal enables businesses to gain competitive advantage. The applications of knowledge management have now spread to other organizations including government agencies, research and development departments, universities, and others [1, 2, 3, 4, 5].

II. THE RISE OF KNOWLEDGE MANAGEMENT

As early as 1965, Peter Drucker already pointed out that "knowledge" would replace land, labor, capital, machines, etc. to become the chief source of production. His foresight did not get much attention back then. It was not until 1991 when Ikujiro Nonaka raised the concept of "implicit" knowledge and "explicit" knowledge as well as the theory of "spiral of knowledge" in the *Harvard Business Review* that the time of "knowledge-based competition" finally came. In his latest book, *Building Organizational Intelligence: a Knowledge Management Primer*, Jay Liebowitz stated:

"The thrust of knowledge management is to create a process of valuing the organization's intangible assets in order to best leverage knowledge internally and externally. Knowledge management, therefore, deals with creating, securing, capturing, coordinating, combining, retrieving, and distributing knowledge. The idea is to create a knowledge sharing environment whereby **sharing knowledge is power** as opposed to the old adage that, simply, **knowledge is power**" [6,7,8,9].

Let us take an example to manage the knowledge of library. The library is one of the earliest places to manage knowledge since from beginning libraries serve as facilities of knowledge preservation, organization, management, mining, communication and utilization. The Classification introduced by libraries is a great contribution to knowledge management. The management of information and knowledge is a principal responsibility of libraries, and the librarians are trained as experts to manage the knowledge consulting, acquiring, organizing, storing, packing, spreading and serving. Managing knowledge is just part function of knowledge management which also

contains knowledge operation, innovation, sharing and rapid learning organization Knowledge management is a new managing mode under knowledge-based economy background, and it is diverse in different fields. The knowledge-management-based library serves not as a traditional books management department but as a human-oriented, information-based and knowledge innovation based center. The emerging knowledge management concept provided opportunities to create knowledge and improve organization benefits for college libraries .this paper focused on knowledge management approaches and strategies, 10, 11, 12, 13, 14].

III. KNOWLEDGE MANAGEMENTAPPROACHES IN LIBRARIES

According to the finding and transferring process of knowledge, it can be divided into explicit knowledge, Intermediate knowledge and implicit knowledge. The users and organization are regarded as main subjects during the sharing and transferring process of explicit, intermediate, and implicit knowledge as Fig. 1 shows.

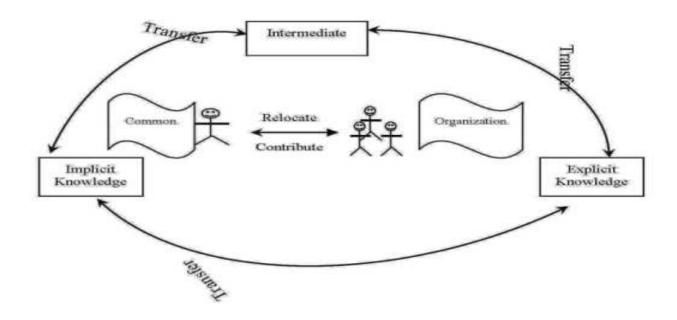


Fig. 1 Modal for movements for knowledge

A. Management approach of explicit knowledge in libraries

One can express the explicit knowledge is more visible and in standardized form, It can be categorized and text recorded through document processing. The explicit knowledge is easy to store, transfer and exchange and thus can be shared and utilized by people.

The procedure of explicit knowledge management can be designed as Fig. 2 indicates

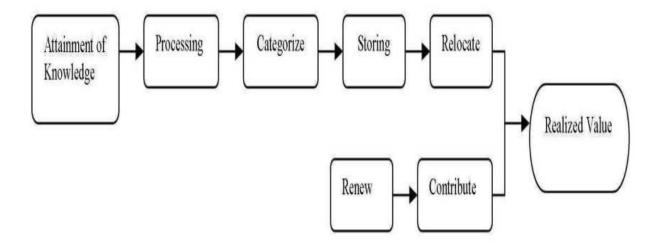


Fig. 2 Explicit Knowledge management procedure in libraries of college

The figure shows management procedure provides a clear mode and basis for explicit knowledge management in college libraries.

B. Management approach for implicit knowledge in libraries

We know that the explicit knowledge is more visible, but implicit knowledge plays the key role actually for creative enterprise operation. Implicit knowledge management in college libraries basically involves knowledge management design, requirement analyzing, mining, transferring, innovating and sharing. The tacit knowledge management procedure is showed in Fig 3 [15,16,17]

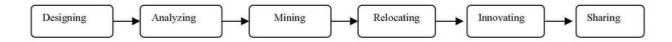


Fig. 3 Implicit Knowledge management procedure in libraries of college

- 1) Implicit knowledge management design: Depends on the learning of current situation and strategies for implicit knowledge management, the goal and strategies should be designed in order to construct organization scheme for implicit knowledge management.
- 2) Requirement analysis: According to the library work flow, the management contents can be defined and the infrastructures can be can be constructed by analyzing user needs.
- 3) Implicit knowledge mining: Through requirement analysis, an effective exchanging mechanism can be provided with exchanging platform, brainstorming link and so on.
- 4) Implicit knowledge Transferring: The relevance of exchanging contents should be identified. The implicit knowledge then transferred to explicit knowledge which can be utilized by users conveniently.
- 5) Implicit knowledge innovating: After converting the implicit knowledge into explicit, knowledge can be further integrated, refined or recombined and thus becomes more systemic.

6) Implicit knowledge sharing: The final goal of the implicit knowledge management is to apply the knowledge during human living or researching. Sharing mechanism and evaluation methods are needed [18,19,20,21].

C. The changing position of university libraries with knowledge management

Knowledge management play transitional roles from "knowledge warehouse" to "knowledge factory" and finally to "knowledge administration office". Knowledge warehouse is mainly considered as storage and indexing place. Knowledge factory is a place which can mitigate some useless or garbage information and refine the knowledge. And through the innovation in college libraries with knowledge management principles, the knowledge administration office is constructed to deal users with various information functions, which makes the library services from mainly physical to intelligence.

IV. KNOWLEDGE MANAGEMENT STRATEGIES IN LIBRARIES

A. Enterprise culture development for library knowledge management

Enterprise culture development is a key factor for knowledge management in college libraries. The enterprise culture should consider experience sharing learning supporting, trusted cooperation and creation encouraging. Experience sharing provides the core values of Library data base. Under the common value and responsibility, the libraries may take the sharing scheme for granted. Learning supporting culture helps the librarians to improve personal learning efficiency. The corresponding heuristics learning method change the education pattern from passive to active. It can then form a continuously creative environment which is an intelligent guarantee for knowledge management in college libraries. The trusted teamwork culture leads to an open environment for libraries which helps in the library research and development works. Creation encourage culture can make the knowledge based libraries keep on evolving and provide more high quality services.

B. Developing knowledge service system using information technologies

Advanced techniques are needed for knowledge management in college libraries. Techniques are particularly necessary for building librarian-user sharing platform, meeting the entrenched knowledge requirement of the user with different services and so on. Knowledge services must give top Priorities to user requirements. The user's information and needs should be investigated and analyzed to get users' current and possible preferences and needs. Then considering users' preferences and requirements, with the help of open link technology, the allied resources are available, and mass of information can be incorporated. Online communicating and learning are basic functions of network technology. It can provide a unique exchanging platform as well as an online academic exchanging capacity. Users can log in the college literature and information sharing websites, and discuss freely about certain focused issues. Because of the secrecy and equality for users, they can fully express their ideas about their own concerned without hesitation. Users can mostly get helpful replies from the others [22, 23].

C. Performance evaluation strategy for knowledge management workers in college library

Performance evaluation is the basis to human resource allocation. It is the benchmark to decide whether the worker is qualified. The performance evaluation system is an essential step to carry out benchmark to decide whether the worker is qualified. The performance evaluation system is and essential step to carry out incentives. The justice of performance evaluation will clearly influence the next era of knowledge management. The evaluation indices may consist of work experience, adaptive achievements, service quality and so on. Different weightings should be adopted over the indices. And input evens evaluation, table based evaluation, and parallel evaluation methods can be implemented [24].

D. Constructing collaborative learning organization

The learning organization is described as a simplified, flat, flexible, lifelong learning, and continuously self-care organization. Mutual learning means peer learners form a learning partnership as a united whole where they can communicate with and encourage each other at a harmonic atmosphere. They can share the research findings as

payback. they can communicate with and encourage each other at a harmonic atmosphere. They can share the research findings as payback.

V. CONCLUSIONS

The knowledge management concept plays an important role into libraries to meet the development requirements of the times. It is a rapidly increasing management mode to adapt the more and more competitive environment. The knowledge management approach can help to improve the self-management and innovation competence of college libraries. The knowledge management approaches and strategies are researched. A relative integral knowledge management scheme for college libraries is proposed. The research findings in the paper provide an idea for library theories and practices. More case studies and experiments will be carried out for future work.

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