

Strategy Research of the Digital Archives Construction based on Knowledge Management

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Abstract: With the Development of knowledge economy ,the new management model, knowledge management ,emerged .As a carrier of knowledge ,digital archives is becoming more and more important and it has a more and more closer relationship with knowledge management in the knowledge economy .At first ,This paper expounds the meaning of knowledge management and the association between the digital archives with knowledge management ,then analyzes some problems of digital archives construction in our country .Finally , I will Propose strategy for the construction of digital archives based on knowledge management.

Keywords: Knowledge Management; Knowledge Economy; Digital Archives

1. Introduction

Knowledge management is a kind of new management concept and mode which arises in the era of knowledge economy, and is highly valued by management scholars, economics and academic library and intelligence files in recent years. In the construction of digital archives, in order to the challenge of knowledge economy era gravitas, it is wised to know how to use the concept of knowledge management and absorb the successful experience of the knowledge management in enterprises using to guide and optimization to improve the construction of digital archives, to improve the core competitiveness of the strain capacity and environment is digital archives.

2. The Connotation of Knowledge Management and its Associated with Digital Archives

2.1. The Connotation of Knowledge Management Theory

With the advent of knowledge economy, knowledge management has become a research hotspot, people from all fields of people for the connotation of knowledge management definition is twittering. Special knowledge management is mainly aimed at the management of knowledge itself, which is a system management contains recognition and acquisition, organization and storage, exchanging and sharing, application and innovation[1].

However, General knowledge management includes not only the management of knowledge itself, but also includes all kinds managements of resources related with knowledge and the intangible asset, such as knowledge

organization, knowledge facilities, knowledge assets, knowledge of personnel management which is whole processing and comprehensive .Knowledge management is based on the artificial center of person and is a unity of the management of information, technology and knowledge and the management of person. In order to realize the knowledge sharing, knowledge creation, knowledge diffusion and knowledge increment, knowledge management sets up bridges that between information and information, or between information and people, forming a huge knowledge network.

2.2. The Link between Knowledge Management and Digital Archives

1) *Digital Archives is the Development Trend of Archives Organization Form*

From the 1990s, archives' developing environment of has taken fundamental changes. With the booming of the knowledge economy and the rise of information technology, the digital archive has been arisen as a new archives form debut.

Digital archives is based on resources of entity archives, and it relies on modern information processing technology such as computer network technology, the communication technology, the multimedia technology, and database technology to digital archives information or collect digital files. It is a new type of file management and service mode that realizes the integration of information sharing to maximum utilization of archives information resource by the network spreading and the different digital archives collecting.

2) *Knowledge Management is the Development Direction of Digital Archives Construction Idea*

In the 13th international files on congress, Canada archives scholars Terry Cook made a concept that "the after safekeeping model "of "source as the center, knowledge as the center"[2]. This model not only contains archives workers work characteristics, but also the knowledge management concept. The construction of digital archives, being based on the knowledge management, emphasizes the knowledge service on digital archives on the basis of the arrangement and sharing of archival knowledge. Terry Cook inferred that: knowledge management is the developing direction of the archivist circle in the first China doctors' symposium on BBS discussion. Obviously, knowledge management is the way to provide public digital archives adaptable personalized service, is the development trend of the idea of the construction of digital archives.

3) *The Digital Archives Construction based on the Knowledge Management is a Inevitable Choice that be Faced with Challenges in the Era of Knowledge Economy*

By applying the knowledge management theory and method to the construction of digital archives and unifying the construction of digital archives and knowledge management concept, it can construct the digital archives based on knowledge management, which can better strengthen digital archives service functions, and rich digital archives management methods, improve archives in a constantly changing digital environment of strain capacity. In a word, it is not only is the important measure to deepen digital archives construction practice, but also is the inevitable selection for archivist circle to cope with the challenge of knowledge economy era effectively[3].

3. The Construction Strategy of the Digital Archives based on the Knowledge Management

In the knowledge economy era, in view of the problems of the construction of digital archives in our country mentioned the above and combining the related theory of the knowledge management ,the author puts forward the strategies of the digital archives building based on knowledge management.

3.1. The Strategy Facing the Museum Construction

1) *The organizational system construction of digital archives based on the knowledge management*

Traditional archives organizational system used more functional departmentalization organizational structure, so this structure is managerial stronger and rank characteristics prominently. File personnel in the intervening activities must be strictly according to level. On the network environment, digital archives organization structure should turn the fixed level of traditional archives to the

network mode flat mode. Namely digital archives of implementing knowledge management, we must break through the traditional pyramid organizational structure to build knowledge organization mode which to support knowledge management. In knowledge management practice, one thing is setting a position named "knowledge in charge ", the other thing is to set up task group. In the new situation, it is necessary for digital archives to set up a new post to carry out knowledge management and its responsibilities and clear goals. In digital archives structure introducing the system of the chief knowledge officer (the CKO) is an effective approach. Generally the CKO is the chief of he archives, its duties mainly include: first, deciding the policy and development strategy of digital archives knowledge management; Second, establishing and making techniques of environmental system to promote knowledge production; Third, supervising and ensuring the contents of intellectual products quality; Fourth, strengthening the knowledge integration and innovation, promoting the knowledge sharing; Fifth, setting up the position and image of digital archives knowledge center, hosting various knowledge service activities.

In order to play the positive role of digital archives, according to its own operations law digital archives must set up the digital management and decision model. Task group members from different departments, the personnel under the guidance of the same target play the unique role, the common pratice the team is not only sharing in the files between librarians but also a process that librarians enrich their tacit knowledge through the process of "action learning".

2) *Based on the knowledge and knowledge flow as the object to constructing the archives business*

Archives business service is relevant service that provided to primarily looked on the internal of archives and other related business departments (such as the companies which need hand over files to the archives) which is through every point of the archives work link. Using the theory of knowledge management, digital archives need to undertake the business construction by the knowledge base and knowledge flow. In order to realize the knowledge increment in construction of digital archives, in the archives information management system it is not only need to build knowledgebase, still need establishing digital archives based on its business management system, and its core is knowledge management system and content management system.

3) *Human resources construction of digital archives based on the knowledge management*

Archives plays a key role in the construction of digital archives based on knowledge management personnel, and file manager with high comprehensive quality is to make knowledge service implementation of effective protection. Therefore, digital archives human resources

construction need to use the knowledge management theory to guide.

Firstly, human resources construction of digital archives based on the knowledge management first people-oriented. Thoughts putting people-oriented on human resources construction can make archives management ability play better and form a kind of collective creativity and innovation ability. Secondly, we should strengthen knowledge training. Archivists must constantly training, through the related brain absorption archivists transfer the dominant knowledge into tacit knowledge and establish their own knowledge resources advantage, obviously this is the internal source of knowledge digital archives[3]. Knowledge training can greatly influence the working personnel of treating knowledge and knowledge management attitude, therefore further influence to the implementation of the knowledge management level and progress.

4) *Construction of library knowledge management platform*

Construction of knowledge management platform in digital archives should add or improve certain features based on the original information management platform, for instance, use file management system, the workflow system, museum network, group software, BBS to support the implicit and explicit knowledge acquisition storage and explicit knowledge tacit knowledge and the mutual transformation, etc[4]. Knowledge base construction is the core of constructing knowledge management platform. Knowledge base store not only knowledge, but also description of the background knowledge, space-time and the basic assumptions, etc. So as to generate the map of knowledge museum, it should establish the corresponding associated storage further. Because of archival science theory and practice the unceasing development, the knowledge base should also update timely [5]. Construction process must take knowledge production and processing technology as basis to construct knowledge management platform. All kinds of information should be in systematic integration according to certain standards, so that readers can enjoy true knowledge sharing.

3.2. Construction Strategy Facing the Social Public

1) *Provide basic services*

Basic services means the most basic services that archives provide, mainly including: archives, full-text retrieval problem recording and gaining, categorization browsing, information retrieval stand inside, FAQ (Frequently Asked Questions), etc. These services is primarily oriented toward the social public, through these services users can get file text and relevant information, meeting the users' basic file information needs.

2) *Provide knowledge service*

The digital archives based on the knowledge management needs archives turn originally providing files in-

formation service into providing file knowledge service. Archives knowledge service is higher levels of digital archives service, which is also based on the knowledge management of the construction of the digital archives core modules. In this module, there is mainly including characteristic project service and reference consultation service.

3) *Provide knowledge value-added services*

In order to make full use of digital archives for users of digital resources and provide more high-quality service, digital archives needs to provide the public value-added services. The value-added services based on the knowledge management mainly includes business value-added service and knowledge value-added services: business value-added services mean all kinds services related with archives records management business, such as file digital process, electronic files safe storage, electronic files for long-term preservation and utilization, etc. Knowledge value-added services mainly refers to the archives as a provider of SDI (Selective Dissemination of Information), generation check and inspection agency services, such as file resources is mainly to collect, analyze and mining, assist users access files knowledge value . Knowledge value-added services of digital archives has stronger professional and targeted, it can solve the demand of different information between users and better satisfy information demand of different users, mainly including: personalized user interface, information customization and delivery, the user feedback pertinent service, etc. Digital archives broaden the business surface by developing value-added services and increase the economic benefit and social benefit, it has become a digital archives service breakthrough and growth.

3.3. Construction Strategy Facing the Environment

1) *Standard system construction*

Knowledge sharing is a very important concept for knowledge management. To realize the digital archives resource sharing standardized problem is a necessary condition. In the standard system construction, we should first determine standard construction principles, methods, strategies and content, and formulate standard directory library of digital archives standard construction include digital archives construction standard, technical standards and management standard and data using exchange equipment; then integrate existing relevant standards of outdated standards, inspect and changes, the vacancy of the standard of research project, etc.

2) *Technology system construction*

Technology system construction is the core of the digital archives constructing based on the knowledge management, it can design for a consists of three layers framework and eight subsystems composition connected system.

Layers framework refers to knowledge portal layer, knowledge management and technical support layer. Knowledge portal layer is the portal system that user use digital archives knowledge management, it equivalent to user-oriented window. Because this layer is user-oriented, in construction process it should be abided by "user center" principle. Knowledge management is the operation treatment system for archives workers work around the users to provide the knowledge service and do archives business activities. This layer is facing the archives staff, in construction process it should try to consider the convenience for archives do management operation. Technical support layer is the network infrastructure and technology support system in digital archives of knowledge management. The network infrastructure includes network environment construction, hardware infrastructure construction and system software construction.

Eight subsystems include: knowledge acquisition system, the processing of knowledge system, knowledge storage system, knowledge development system, knowledge innovation system, knowledge sharing system, knowledge service system and knowledge assessment system. This technology will greatly improve the mechanism of digital archives knowledge management efficiency and level.

3) Organization culture construction

Digital archives on the introduction of the concept of knowledge management operation must establish people-oriented concept firstly, establishing the learning and sharing type of digital archives for organizational culture environment. In this culture, the archive librarian can learn new knowledge and express tacit knowledge on their own initiative, they are positively to contribute their strength for organization of knowledge innovation and knowledge accumulation knowledge service, so as to improve the overall knowledge digital archives service capability.

In order to establish the learning and sharing type of digital archives for organizational culture environment, it is important to focus on the following job: first, establish a learning mechanism to promote information communication and knowledge sharing between various departments, librarians, encourage the transfer of knowledge and innovation, such as building a librarian communication platform, etc. Second, create a kind culture of knowledge learning, exchanging and sharing. Third, establish a set of incentive mechanism and the evaluation standard for employees, so that knowledge creator and contributor have priority in promotion, income and reputation in other areas affirmation and compliment. By doing this it not only fully respect the personal interest and creativity, but also emphasize the cooperation based on organizational objectives and team spirit. The harmonious organization

culture is indispensable for digital archives of knowledge management of lubricant.

4) Construction of knowledge sharing security system based on the alliance of digital archives

It is far from a true sense of digital archives based on knowledge management if it is only limited to construct archives business process systems and archives website based on archives entity. Based on the knowledge management of the digital archives, in a national scope it should be a knowledge sharing with the comprehensive security system based on the alliance of digital archives, namely it is the construction of institutions archives digital archives respectively based on the archives and special archives, department archives, enterprise archives, then come into being digital archives alliance from various kinds of digital archives together constitute to protects the system among each system and internal knowledge sharing of the archives. At the same time, it needs to strengthen the international cooperation and communication and establish contact with foreign digital archives in relevant project construction, expand the coverage of digital archives alliance

Conclusion

The time has come for digital archives management of knowledge in the digital archives, the role and position is to any other management mode can't substitute. With the continuous development of digital archives, knowledge management has become more and more important role. Only the archivists improve knowledge management means and methods, technology, idea, etc, can the digital archives level of optimal management and provide users with knowledge service. So knowledge management theory has the great significance for digital archives construction. It is necessary for construction of digital archives by using knowledge management related theories and methods to deal with the inevitable challenges and opportunities in knowledge economy era.

References

- [1] TANG yanfang, ZHANG dong,mei. Newsletter archives[J]. Knowledge management and digital archives2003, (3):88-90
- [2] LI ze feng. Newsletter archives[J]. Framework for building digital archives based on knowledge management.2007, (2):79-81
- [3] YANG le,YAO leye. Newsletter archives[J]. Construction of digital Archives Service based on Knowledge Management 2010,(1) : 58-60
- [4] YAO leye,CAI nayuan. Sichuan University learned journal (Social Science Edition) [J]. Research on the Strategy of Digital Archives Construction Strategy based on Knowledge Management2008,(2):124-128