

## Research on Personal Knowledge Management under Web 2.0 Environment

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**Abstract.** As a general term for the new generation of Internet, web2.0 has been widely used in its technological superiority and has had a great impact on personal knowledge management. This paper expounds the connotation and significance of personal knowledge management in web 2.0 environment, analyzes various knowledge management tools, and puts forward the personal knowledge management mode.

### Introduction

With the development of information technology and the application of computer technology, mankind is entering into an era of information society and knowledge economy. The development of digital and networked technologies has brought about the explosion of knowledge, it also puts us in the awkward situation of "the ocean of information and the hunger of knowledge". Under the network environment, how to effectively organize, control, information transfer and share knowledge, change knowledge information disordered state, improve the utilization of knowledge information, namely how to manage personal knowledge, is the problem we need to think about. Knowledge management is an effective tool for personal ability and social competitiveness, to create greater economic value for us, web technology for the network era, personal knowledge management has opened up new space for development.

### Overview of Personal Knowledge Management under Web 2.0 Environment

**Web 2.0 Concept and Technology.** Web is relatively referred to a new generation of Internet applications, the Internet system from top-down dominated by a few resource controller centralized control, into a bottom-up dominated by the collective wisdom and power users. Web 2.0 focuses on user interaction, and users are not just surfing on the Internet, but also being wave makers. In the mode, the development of writing and co-construction is made by simple reading. By passively receiving Internet information to create the Internet information development, thus more humanized [1]. The classic definition of web 2.0 is the idea of Blogger Don in the web 2.0 concept interpretation: Web is "Flickr, Friendster, sites such as representative, to the BLOG (BLOG), RSS, encyclopedia (Wiki), key, social networks (SNS) and peer-to-peer (P2P), instant messaging (IM), and other social software application as the core, on the basis of six degrees of separation, new theory and technology such as XML, Ajax realize a new generation of Internet mode".

**The Connotation of Personal Knowledge Management.** The concept of Personal Knowledge Management (Personal Knowledge Management) put forward by American professor Paul Dorsey, he points out: "Personal Knowledge Management should be considered as both the logic level and practical level of a set of techniques and methods of solving the problem [2]. On the logical level, personal knowledge management means that individuals collect information that is important to themselves and internalize it as part of their basic knowledge. From actual operation level, personal knowledge management is actually in the process of knowledge management involves the overview, the process including creating, classification, indexing and retrieval, distribution, and to use a value of knowledge.

**The Significance of Personal Knowledge Management of Web 2.0 Environment.** Personal knowledge management under web2.0 environment as a new concept and method of knowledge

management is the use of computer technology, communication technology and network technology to help people effectively manage the rapid growth of information, personal access to all kinds of scattered, random information into a system using the personal knowledge, and make the individual tacit knowledge into explicit knowledge effectively, build up personal knowledge base, to facilitate the storage, use of present and future personal knowledge and communication, which is the identification, acquisition, development, sharing of knowledge, use and evaluation process of [3]. Its purpose is to use the network resource to solve the problem, use the information to make better decision, improve the strain and innovation ability, develop the individual potential.

## **Tools for Personal Knowledge Management under Web 2.0 Environments**

**Network Information Management Tools.** In the complex world of information, all kinds of bad and useless information are flooded on the Internet, giving users the choice and the use of the Internet to bring obstacles. Network information management tools refer to the various network information as the main objects, through certain technical means, to provide more convenience for users in the process of using information. Such as key (Social Bookmark) provides a collection, classification, arrangement, sharing of Internet information resources, it stores the url list and related information, using the tag on site index, make the url resources orderly classification and index [4]. So people can easily manage his own network resources, information collection work much easier and efficient, and as web page content updates, users can easily track to acquire new information.

**Writing Communication Tools.** With the widespread application of the Internet, network sharing and openness that everyone can get on the Internet and store information, people can express their ideas in the form of text, the application of Blog in this aspect is relatively common. As a popular writing and communication tool, blogs have enabled the Internet of personal information and promoted the management of personal knowledge. The personal knowledge release system [5] is very easy to use and maintain. The birth of the Blog does give personal knowledge management has brought a very effective tool, because the Blog in the knowledge network of communication, knowledge sharing, knowledge classification, record and display their own ideas good: can record the momentary inspiration anytime and anywhere; People who are interested in certain kinds of knowledge can gather together to communicate and promote knowledge sharing. Collect knowledge resources through links and so on.

**Social Relationship Management Tools.** Social relations are the public under the mutual recognition and observe the behavior of the standard specification of a kind of interaction, the interaction due to the difference of individual social status and plays a different role, each a man living in the real society, are all using the relationship management. Is the theme of the social relationship management to each person's social relation network formed different degree of sharing for personal or business use, people can in the network by this group have a common hobby own dating link, we can share, and access to knowledge. QQ group, renren and others are widely used social relationship management tools.

**Document Management Tools.** Document management the most simple is stored on a personal computer, and then through the system search when necessary to find documents you want, but the reality is not satisfactory, so the file management tools, has provided many conveniences for document management. Google desktop is the app that allows easy access to computer and online information with the help of Google desktop. Desktop search applications enable full-text search of emails, files, music, photos, chat logs, Gmail, and web pages viewed. By implementing the computer search, Google desktop makes you easily into the search scope, the information without having to manually organize files, email, and bookmarks, use it to search for the computer like use Google search network is convenient. It also helps you gather new information from the Internet by using its complementary toolbar and Google gadgets. The supplementary toolbar and Google gadget can be placed anywhere on the desktop to display new mail, weather conditions and stock information, photos, personalized news and RSS/Atom feeds and other information.

**Photo Management Tool.** Along with the transition of the pace of life, many people have started to enjoy life, feel the natural state of mind of life, in the form of pictures record good in my life has become a trend, the popularity of smart phones for the high pixel behavior provides a convenient take pictures, pictures of management also is particularly important, such as Flickr as an online photo upload, management and sharing of the community, to upload photos to support JPEGs, GIFs and PNGs. Other such as such as, will automatically be transferred to JPEGs [6] after uploading. Tags, Sets and Groups of photos are also available. Sets are collections of photos to facilitate their own management, while Groups are collections of photos Shared with the community, with the same concepts but different objects. There are other places, such as your blog, to link to your Flickr photos.

**Time Management Tool.** In the process of study and life, we must have the concept of time and efficiency, a good time management tools can be of great help to us, for example slim timer as a web based time management tool, can be used to record working time and share with colleagues, effective arrangement of time, can also generate reports on work time. After registering, you can get a bookmark let of Open Timer and save it in your browser's bookmarks or toolbar. Every time want to use Slim Timer, only need to click the bookmarks, a small timer pops out, can join the need to track record of work, work items, click join timing to start, after the completion of the work, click again or close the window directly can stop time, can choose to suspend in the middle, simple to use convenient.

### **The Model of Personal Knowledge Management under Web 2.0 Environment**

The information age develops rapidly, and the personal knowledge management mode also changes greatly. In the context of web 2.0, personal knowledge management mode is mainly carried out from information collection, information organization, information release and sharing and information exchange.

**Information Collection.** Information collection is the first and crucial step in obtaining information in various ways. For individual knowledge acquisition, can according to what you've got the information as the foundation, through communicating with others and learn to get the understanding of information, can also according to their own thinking and imagination to create knowledge and technology; For obtaining information from the Internet, it mainly obtains by accessing site, search engine search, etc. The popular technical support is net pick, RSS, etc. For the information of the organization knowledge base of the individual, it can obtain the required knowledge information by searching the knowledge database; for articles published in books and newspapers, knowledge can be obtained by purchasing books and subscribing to newspapers. These are the main ways to gather information. The quality of information collection is directly related to the quality of information management.

**Information Organization.** Information organization is the ordering and the varieties of information, also is to use a certain scientific rules and methods, based on the information the external features and content to reveal and description, and according to the formula given parameters and sequence arrangement, disordered information flow to the orderly flow of transformation, and gives some scientific information collection implements the effective circulation, promote the effective access to and use of information by the user. In the process of information organization, using the Tag. The Tobu can play a role of great help, the Tag label (network) is a way of Internet information organization, its object is increasingly rich network information, its' function is the classification of the contents in the form of a keyword. The information on the Internet is so vast that it can only be used to classify it. It help people easily description and classification of the content, in order to facilitate the retrieval and sharing, label the information organization rights from the hand of the website manager down to the user, fully embodies the web from bottom to top, the characteristics of user participation in [7].Tobu is an information organization and management tools, suitable for collection notes, adding a to-do list,

program code, diary, and any other types of information, you can enter text or file, the goal is easy to manage a large number of information project.

### **Information Publishing and Sharing.**

Information publishing and sharing is done through a certain platform. For individuals who have become systems of knowledge, they may be able to share their knowledge with others and society in a way that is published in the form of academic achievements such as papers and books. For some personal experience, values such as the invisible knowledge, can use a talk or write blog and other ways to communicate with others, share experience with others so as to promote the transfer of knowledge and learning. Web 2.0 provides a rich platform for knowledge sharing, such as blogs, SNS, P2P, wikis, WeChat, QQ, microblog, etc[8]. These technology platforms accelerate knowledge sharing. The blog is characterized by its knowledge and interactivity, which can promote the timely communication and communication between people with the same interests or the same professional background, and realize the sharing of knowledge. Using P2P technology, people can be directly connected to the other user's computer file exchange, and don't like to connect to the server to browse and download, P2P to directly link between individual and individual, communication and sharing more convenient and quick [9]. With its universality and influence, weibo can realize the rapid dissemination of information and influence of public opinion and appeal, and become an indispensable information exchange platform for contemporary society.

### **Information Communication**

Web 2.0 brings together a large number of platforms for communication. People can use these platforms to communicate and discuss unimpeded. Currently, the popular real-time communication software on the Internet includes QQ, MSN, renren, WeChat, weike, IM, weibo and so on. WeChat is a mobile communications software, support sent voice messages through mobile phone network, video, images and text, can be single and group chat, also can find nearby people, according to the geographical position to bring friends experience of mobile communication, the new is very widely used at present. IM is a real-time communication service that allows users to set up chat links on the web. QQ can send and receive messaging files, voice video, personality display, online sharing, remote assistance, etc. MSN is a kind of instant messaging software, can work with relatives, friends, partners in text chat, voice dialogue, instant communication, such as video conference can also through the software to see if contacts online [10].

### **Conclusion**

Web2.0 in his personal as the center of the network era, personal knowledge management has become an important means to raise the competition ability of the individual, has an irreplaceable role, and more and more people are preparing to or has started his own knowledge management, in order to build its own core competitiveness. Web for personal knowledge management platform provides the opportunities of the development, based on web2.0 structures, personal knowledge management platform, the effective use of web technology and concept, starting from the pattern of personal knowledge management, reasonable development and planning, personal knowledge fully available knowledge, and promote the ability of the individual, to obtain the survival and development of the capital in the information society.

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