Path Choice of Computer Network Development of Academic Journals in Internet New Media Environment

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Abstract: Computer networking of academic journals refers to the traditional paper academic journals, which publish electronic texts at the same time as paper academic journals, so that relevant researchers such as experts and scholars can quickly and conveniently share journal results and information through network means process. In the internet new media environment, the computer network development of academic journals faces many problems and challenges. It is necessary to actively adapt to the development trend of internet new media, and better promote the computer networked development of academic journals through the construction of websites, academic platforms, and the use of WeChat platforms.

1. Introduction
New media is a form of communication and media that provides information services to users. New media also provides opportunities and challenges for the development of academic journals due to its convenience and interaction. How to make good use of the new media, make it play a greater role in dissemination and guidance, and help the network development of academic journals is a question that should be seriously considered. At present, the research on academic journals 'network has achieved gratifying results, but the research on some of the basic and deep issues is not enough, which has affected the in-depth development of academic journals' network. We must deeply understand the characteristics and development trends of new media, learn new media technologies, and combine the characteristics of academic journals to explore a path suitable for the networked development of academic journals.

2. Overview of Academic Journal Networking

2.1 Connotation
The networking of academic journals is the manifestation of network development in the field of academic research. The networking of academic journals in China began in the 1990s. After more than 20 years of development, preliminary results have been achieved. On the whole, scholars' research on the networking of domestic academic journals is relatively shallow, especially with the rapid development of the new round of network technology, the research results and existing electronic resources are difficult to meet the needs of scientific and technological development. At present, there is no universally accepted definition of the connotation of academic journals as a network. Some scholars believe that the network of journals is a form of periodical publication and publication on the Internet, and provides users with remote or local online browsing, online copying, Internet fax and e-mail services. Some scholars believe that the networking of journals refers to the networking of all the work related to the editing department and publishing of scientific and technical journals, that is,
the computer networking of the journal from the process of drafting, receiving, reviewing, editing, processing, and publishing. These definitions have basically touched the essence of the network of academic journals, and each has its own emphasis. The former focuses on the network circulation of academic journals, and the latter focuses on the network production of academic journals. This article believes that the network of academic journals refers to the traditional paper academic journals, which publish electronic texts at the same time as paper academic journals, so that experts and scholars and other relevant researchers can quickly and conveniently share journal results and information through network means. A process. In general, the networking of academic journals is the network of editorial management, editing, and publishing. From the writing of the journal to its publication, to the quality feedback and improvement of the journal, all work is done on the Internet.

2.2 Basic Forms of Networking of Academic Journals
At present, there are three main forms of academic journals in China. The first is to use a large database of authoritative journals as a platform to network the parent of digital paper journals. The second one is based on computer, communication and network technologies to complete editing, production and publishing, and to publish directly online in the form of network digital text. The third one is the self-built website of the printed periodical to go online. Each of the three forms has its own characteristics and each has its own basis. The networking of academic journals focuses on the following points. The first is to publish information about the journal so that the audience can fully understand the situation of the journal. Second is the digitization of academic content, including the digitization of printed content, as well as priority publication and online journals online. The third is to use an online editing platform to achieve online submission, online review, and remote interactive processing of manuscripts. The fourth is to provide reader services. The last one is) network operation and management, online subscription, online payment, related statistics, etc. Therefore, to achieve the purpose of networking academic journals, we can consider constructing from the above aspects.

In terms of specific forms of existence, there are four main forms. The first is to establish an independent website. With the development and popularization of network technology, since the 1990s, academic journals in China have begun to attach importance to the construction of portal sites. Many journals have established portal sites with independent domain names. As of 2012, the proportion of China's 8,169 academic journals with websites has reached 59.5%. The second is to join the network database. At present, most of China's academic journals have added a large network database to achieve the integration of data and information. China Knowledge Network (CNKI) has collected 10,927 academic journals, and can also set up a website for academic journals through secondary links. The third is through public digital platforms such as blogs and Weibo. Blogs and Weibos are a new type of instant communication tool in the Internet age. Many academic journals have opened official accounts for blogs and microblogs, which are used as external display windows to enhance their social influence. Fourth, mobile clients such as WeChat and APP. With the development of mobile Internet technology and the popularization of smartphones, WeChat and APP clients have become a new trend. Many academic journals have developed WeChat public accounts and mobile application platforms. Through peer-to-peer communication, the latest academic consultations are provided to subscribers, which is of great benefit to the mass communication and effective communication of journals.

3. Research status of academic journal network
The networking of academic journals began in the mid-1980s. According to statistics, there were 110 journals on the Internet in 1991, 24 in 1993, and 10,000 in 1998. China's online journals started late, but their development speed is very fast. The network of academic journals in China has reached a considerable scale. By analyzing the academic research of academic journals on the Internet, we can find that the research in this area mainly focuses on the following aspects.
3.1 Research on the connotation of academic journals network.
There is a broad sense and a narrow sense of what constitutes "academic journal networking". Most researchers agree with the broad understanding that the networking of academic journals should include the networking of a series of processes such as manuscript submission, editing, publishing and distribution, and management of advertising, not only the networking of published content, but also the networking of the publishing process. This understanding reflects that researchers have a deeper and comprehensive understanding of the impact of the Internet on academic journals, and they have a clearer distinction from the "digital" and "digital publishing" of academic journals. Some researchers use "digitalization" and "digital publishing" in the broad sense to equate to "networking" and "web publishing". This article believes that "digitalization" and "digital publishing" emphasize the content of communication, and "networking" emphasizes the carrier and method of communication. It is a type of editing and publishing and management mode of traditional paper academic journals using network technology change.

3.2 Research on the significance of academic journals network.
Researchers have reached a consensus on the necessity or significance of "networking of academic journals". At the macro level, "academic journal networking" is a requirement for academic journals from the development of the information society and network technology. This requires that academic journals, which are one of the media of communication, must change the original single carrier form to meet the needs of readers in the Internet age. At the meso level, "academic journal networking" is a requirement of journal management departments for academic journals, and it is necessary to actively develop digital production and network communication of the publishing industry. At the micro level, "networking of academic journals" is a requirement for the transformation of the management model of academic journal publishing units. It can be seen from the above research that, although the perspectives are different and the focus is different, the network development of academic journals is undoubtedly the general trend.
3.3 Research on the degree and form of network of academic journals.
Some researchers believe that in 1983, China began to explore the electronic network of academic journals. The Internet access of the three domestic full-text databases is the official start of the networking of academic journals. Regarding the current development of "academic journal networking" in China, one thinks that it has developed rapidly and has reached a considerable scale. The other thought that development was slow and the degree of networking was still low. Regarding the network of academic journals, most researchers believe that there are two types: First, they are delivered to large-scale online journal databases for online dissemination. The second is a self-built website that prints the contents of the Internet. The author believes that "networking" should be a process of transformation and development. It can be seen that with the popularization of the Internet and the improvement of network technology, the network of academic journals has been continuously enriched and expanded.

3.4 Research on the problems and countermeasures of academic journals network.
Some problems that academic journals have encountered during the process of networking are of great concern to researchers and are urgently needed to be solved in the practice of networking. These issues are mainly concentrated on "attention, talent quality, technical security, website maintenance, editing methods, copyright protection" and so on. In response to the above problems, researchers have proposed corresponding countermeasures. The networking of academic journals is not only "networking of publishing content", but also "networking of publishing process". Therefore, it is also necessary to actively establish a networked information management platform for academic journals, to truly realize the networked and informatized management of journal workflows such as submission, review, editing, publishing, browsing, and subscription. In order to change the current passive situation of being constrained by large databases, some researchers believe that a portal website for academic journals should be established to move towards the higher-level goal of "combination of journal databases and networks."

4. Status and problems of academic journals' network construction in the context of new media

4.1 Impact of New Media on the Networking of Academic Journals
On the one hand, new media pose challenges for academic journals. An academic journal is a peer-reviewed journal that focuses on publishing academic papers. Academic journals are the main platform for publicizing research results in various fields, and their main content is articles in the form of original research, review, and book reviews. In the new media environment, academic journals, which are traditional print media, have been greatly impacted in terms of publishing models, distribution methods, communication channels, and operating mechanisms. With the widespread application of new media and the continuous integration of media, new media is becoming more and more popular. The challenges faced by traditional academic journals in the new media environment are mainly reflected in the following aspects. The first is the slow spread of information. Secondly, the form of expression and dissemination is single, and the expression of traditional academic journal text + pictures is too monotonous to attract more readers’ attention. Third, the two-way interactive communication is poor, and the user participation is low, which has led to the loss of some readers.

On the other hand, new media brings opportunities to academic journals. While the new media has impacted academic journals, it has also brought opportunities for the innovative development of academic journals. The advantages of academic journals are authoritative content, professional and authoritative information sources, a professional and mature editorial team, and a relatively fixed readership and authorship. In the new media environment, if academic journals want to achieve further development, they should actively apply new media technologies on the basis of ensuring content advantages, so as to continuously improve themselves. In short, in the new media environment, academic journals should make full use of the technical characteristics of new media, overcome their existing weaknesses, change traditional concepts and operating methods of journals, and make
academic journals more suitable for the development of the new media era and the diversity of users' needs, fully highlight the content advantages of journals, and strive to expand the popularity and academic influence of journals.

4.2 Status and problems
The first is the lack of attention and similar ideas for construction. At present, the progress of the network construction of academic journals is still relatively slow. Some academic journals are simple in form and content, whether they are websites independently established or relying on databases, or instant communication tools such as Weibo and WeChat. They are still in the stage of handling academic information and lack initiative and creativity. In general, the current academic journal websites have the disadvantages of poor interactivity and lack of interactive functions. In addition, the publishers of academic journals have actually become passive participants, causing the content and platform to become disconnected. Some academic journals have only realized the digitization of paper content, and the content homogeneity between existing major databases is serious.

Secondly, the existing academic journals have a single networked form and the resources are updated slowly. The digital platform for academic journals in China mainly relies on various database websites, such as China Journals Network, Wanfang Digital Journals Group, and full-text database agents to access the Internet. This is obviously very different from seeking academic resource sharing and making full use of network communication resources. Due to the limitation of the traditional journal operating model, academic papers are published slowly in journals, and database resources are far behind compared to print editions, which cannot reflect the timeliness of academic journals' dissemination of scientific and technological information. At the same time, various academic journals have their own policies and lack of unified standards, which makes it impossible to manage them uniformly, which affects data exchange and resource sharing, brings great obstacles to the digital construction of academic journals, and is not conducive to information interconnection, interoperability and sharing. Not conducive to the effective integration and supervision of resources.

Third, the research on journal network is relatively lagging behind, and there are few two-way talents. Existing scholars' research on the networking of academic journals mainly stays in the theoretical analysis stage, which has a poor guiding effect on practice. With the rapid development of today's network, we must constantly update and change in order to gain an advantage in the fierce competition. In addition, the degree of digital construction of academic journals in China is generally relatively low. From the perspective of professional fields, most of the editors of academic journals in China study majors in journalism, editing, publishing, and Chinese literature. The editors of most academic journals do not know much about computer operation, which leads to insufficient talent training and unsustainable.

Fourth, network management is chaotic and lacks unified laws and regulations. With the rapid development of the Internet, the digitization of academic journals not only provides users with convenient retrieval and download services, but also brings certain difficulties to the protection of intellectual property rights. However, China's existing laws and regulations have not yet made clear provisions on digital infringement, which makes it difficult to protect intellectual property rights, and the interests of authors and publishers are infringed but cannot be investigated. The existing legal provisions on copyright protection cannot be adapted to the Internet. Requirements of the new era. This opens the door to convenience for lawbreakers. Various types of infringements, such as counterfeiting of journals, multiple submissions, and plagiarizing of other people's achievements, are common. In recent years, this phenomenon has intensified, which has seriously hindered the healthy development of academic journals' network.
5. The Path to the Networking Development of Academic Journals in the New Media Environment

In the new media environment, in order to better realize the network development of academic journals, it is necessary to follow the principle of content as the king and innovate service methods; people-oriented and play the role of journals to develop in a professional and international direction, so as to leverage the power of new media To make it easy for users to get the quality content they need.

5.1 Actively adapt to new media and increase initiative to integrate new media.

At present, China's academic journals and academic publishing circles are not well adapted to the new media environment to some extent. Academic journals should keep pace with the times on the basis of "content is king", actively embrace new media, and quickly and widely disseminate outstanding scientific research results, so that they can produce social benefits and get user feedback as soon as possible. It is necessary to attach importance to the new model of academic journal website construction, actively participate in professional communication and publishing platforms, deepen the development and utilization of new media, and improve the existing online platforms, and further develop and utilize new media to adapt to the diversity of users in the new media environment. Demand for published products.

5.2 Build an all-media service system.

At present, academic journals are trying to build an all-media service system including paper journals, portals, Weibo, WeChat, clients, online and offline activities, etc. We must persist in opening up on the road of networked development, and do a good job of networked services step by step and focused. To optimize paper periodicals, add network elements, highlight the overall visual effect of paper media, and move towards quality publications. It is necessary to innovate and develop journal websites, adhere to connotative development, innovate service methods, attract more readers, increase the
influence of journals, the efficiency of the editorial department, and the level of service to authors and readers, so as to enhance the influence of journals. We must actively develop WeChat platforms, pay full attention to the advantages of WeChat's large number of users, convenient interaction and communication, and use anytime, anywhere, etc., improve the functional construction of WeChat public platforms, and meet the new needs and new habits of users in the new media environment.

5.3 Strengthen system planning and seize development opportunities.
It is necessary to increase the degree of attention, change the outdated concept of running journals, establish awareness of propaganda, increase their own propaganda efforts, increase their awareness of the network construction of academic journals, increase the amount of retrievable information and indicators by digital means, and establish brand prestige. It is necessary to strictly abide by international standards and form universal specifications between different databases to ensure the quality and efficiency of the development and utilization of network information resources, and to accelerate the process of the network construction of academic journals in China. It is necessary to speed up the formulation and improvement of relevant laws and regulations, the establishment and improvement of copyright registration systems, to strengthen the protection of intellectual copyright, to establish a legal system for the copyright of online journals, and to fundamentally maintain the process of digital construction of academic journals.

5.4 Improve the network ability and quality of journal workers.
The digital construction of academic journals in the new period has put forward new requirements on the professional ability and quality of journal workers. It is necessary to improve the ability and quality of networked workers in academic journals so that the office environment and hardware equipment can keep up with social progress and adapt to the development of the times. It is necessary to pay more attention to the cultivation and absorption of human resources. It is necessary to continuously cultivate the professional skills and new media technologies of the existing staff of the editorial department, and also to introduce network technical personnel to meet the needs of digital development.

5.5 Enrich the digital system of academic journals.
Establish a portal website, establish an academic forum, and strengthen communication and interaction.

Figure 3. The path of academic journals' network development in the new media environment
The portal website should be networked by the operator, so that readers can conduct unified retrieval of documents, materials, and periodicals within the station, thereby greatly improving the efficiency of the network. We must pay attention to the construction of academic forums, enrich the environment for the construction of periodicals, promote academic exchanges and discussions, and build the forums as a platform for the exchange of high-level talents. It is necessary to make full use of new media, carry out practical operations based on the non-profit characteristics of academic journals, maintain the high quality and purity of the literature, publicize and develop the networked results of journals, and accelerate the process of networked academic journals.

6. Conclusion
In the new media environment, traditional academic journals have been impacted by the Internet, and at the same time, they have brought opportunities for the networked development of academic journals. The editorial department of academic journals should recognize the characteristics and functions of fresh media, actively adapt to the development trend of new media, take the initiative to embrace it, and use it reasonably, so that academic journals are people-oriented and rich in service methods based on content, with steps, Focus on network development to increase the impact of academic journals.

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