

Analysis of Optimization Approach of Life Science Research Service in Digital Library Environment

Ziyi Wang

Railway Police College, Zhengzhou, 450053, China

Abstract: With the development of economy and society, informatization and technology are advancing continuously, and the transformation of traditional library is on the way. The digital library which can meet the spiritual and cultural needs of the people, highlight the personalized service, and conform to the development trend of the times comes into being. In this context, the research of life science should also be innovated and developed, follow the digital trend, complete the high sharing of information resources, construct high-quality talent team, and realize the rapid optimization of scientific research services. This paper discusses the transformation and development of the current library and the optimization path of life scientific research service, in order to solve the high-speed and high-quality development of life science research in the digital era.

Keywords: Digital library; Life science; Innovative development; Optimization approach

1. Introduction

The rapid development of computer technology, modern communication and emerging media has brought opportunities and challenges to many industries. In the modern network environment, how to connect the traditional library with the information technology, how to comply with the development trend of the times, and how to improve the life science research have become the current problems to be solved. We need to strengthen the library's exploration and real-time sharing of network information resources, quickly and timely provide information guidance for researchers, create a strong academic atmosphere, improve service efficiency and service ability, provide a more reliable and safe platform environment for scientific development, and promote the innovative development of life science research.

2. Development Status of Modern Library and Life Science Research Service

2.1. The development of modern library

The vast majority of new libraries in the current society adopt the development mode of digital library, but the old libraries in many cities still stay in the stage of traditional mode, that is, the form of relying too much on human operation, such as manual registration and manual management. At present, it has formed a kind library operation mode which integrates tradition and modern. Due to fact that the development orientation of traditional library is based on literature, it cannot meet the readers' reading requirements, which restricts the long-term de-

velopment of traditional library. In addition, the infrastructure of traditional library is old and the book coding work is tedious, which makes the library work inefficient; besides the sharing of book resources is poor, the degree of information provision is limited, the search of books is time-consuming and labor-consuming, and it lacks of personalized customized services, all of which makes it difficult to promote the development process of modern economy, technology, culture and education. Therefore it is urgent to promote the new development of traditional library and transform it to digital form.

2.2. Development direction of modern library

In the environment of modern digital development, the traditional library needs to complete the transformation as soon as possible. In the tide of knowledge economy, the process of network digitization and information is speeding up. Traditional library should transform to digital library, fully reflecting the digital characteristics of the times. For example, we should services such as actively push library information with the help of new media platform, register online information for borrowing and returning books, and customized books, showing the progressive style of the times, widening the gap with traditional manual services, giving better play to the library's collection advantages, constantly meeting the increasing spiritual and cultural needs of modern people, and providing more convenient and rapid services for the people which can save people's time and meet people's individual psychological needs.

2.3. Development status of life science research service

At present, the development status of life science research is not optimistic, the regional differences of research are large, and there are large differences in the scientific research capacity between the economically developed areas and the economically backward areas. In terms of the distribution of institutions: they are relatively concentrated in the eastern developed areas, and scientific research institutions, universities and research institutes are closely linked; while in the backward areas of the northwest where there are a wide range of are with few people, a long distance between scientific research institutions, fewer universities, and uneven distribution of research institutes, it has great difficulties to scientific research in the northwest. In terms of the scale of institutions: the economy in the eastern region is relatively developed, scientific research institutions obtained relatively sufficient scientific research funds, the economic investment for scientific research development is more, the scale of scientific research institutions is larger, and the development is better; while the economy of Northwest China is relatively backward, the people's living standard is relatively low, the economic investment in scientific research institutions is less, the scale of scientific research institutions is small, the equipment is old, the renewal is slow, and the development is poor; in terms of foreign exchange, the eastern region has developed transportation, close external ties, and more policy advantages. And the regional government attaches great importance to it, the foreign information exchange of scientific research is more frequent, and the scientific research results are richer and more accurate; while in Northwest China, the transportation is backward, the external connection is not strong, the network development level is not high, and the information is relatively blocked. The local government attaches great importance to improving the people's living standard, thus the degree of attention to scientific research is not high, and the scientific research achievements are less and more single than those in the East.

3. Discussion on the Problems Existing in Scientific Research Service of Life Science

3.1. Insufficient access to information resources

The traditional library takes the book resources as the center. With the book as the information carrier, it is not convenient to search, which makes the earlier researchers spend a long time searching for the materials, and they may not get anything at all. Due to the variety of information resources, researchers often need multiple references in the research process, such as books, periodicals, newspapers and magazines, as well as unpublished meetings, papers, internal materials, and some need to visit experts. The inquiry of multiple information makes the researching results more accurate, but it also greatly in-

creases the researching time. Nowadays, the traditional library is still in the period of transformation, resources uploaded on the internet is not complete, and the integration of information is not enough, all of which make the search of scientific research materials face difficulties.

3.2. Problems in the construction of talent team

In the current rapid development of science and technology, life science plays an important role in promoting the development of modern society with its great vitality. Life science involves many topics, including food, energy, environment, disease and so on, so its breakthrough and development is crucial. Because of its wide range of coverage, it asks high requirements for professional knowledge. However the lack of sufficient talent exploration, talent introduction being unable to keep up with the speed of scientific research demand, growing age of scientific researchers, insufficient talent reserve force, insufficient attention to professional education in colleges and universities, and insufficient cross integration of emerging disciplines, lead to difficulties in the construction of scientific research team.

3.3. Lack of innovative development in scientific research

For a long time, there are common problems in the cultivation of students in colleges and universities, such as weakening the basic disciplines, overemphasizing the theoretical knowledge of the combination of basic disciplines and applied disciplines, resulting in the weakness of students' basic knowledge, the incompatibility between theory and practice, the poor practical ability, and the insufficient ability to solve practical problems. Putting excessive focus on textbook knowledge and taking too more reference to previous experience make students thinking mode relatively single, innovation awareness not strong, and their innovation ability weak. Therefore, in order to realize the rapid development of scientific research innovation, we must start from students. Secondly, innovation is a kind of labor with high requirements for knowledge and technology. Without salary guarantee, the innovation enthusiasm of scientific and technological talents cannot be mobilized. Therefore, we must improve the welfare preference and policy guarantee for scientific researchers.

4. Analysis on the Optimization Approach of Life Science Research Service in the Environment of Digital Library

4.1. Promote the deep development of information sharing

The rapid development of modern information technology provides strong technical support for life science research. Vigorously developing information digitization

can effectively overcome the regional disadvantages of comprehensive research platform and promote the in-depth development of life science research. Firstly, we need to strengthen the construction of network infrastructure, which is the basic requirement of information development. Only with the continuous development of infrastructure, can we provide basic guarantee for life science research. Secondly, we should actively build a comprehensive platform period of scientific research network, sharer information interaction and resource, provide a powerful platform where scientific research experts in related fields can exchange information, and release information in real time. Quickly and efficiently solve the theoretical and practical problems in the process of scientific research, and complete the guidance and mutual assistance role of information sharing. Thirdly, complete the construction of purchase platform related to scientific research. For the equipment and drugs needed in the process of scientific research, through the accurate information related to equipment and drugs contained in the library, provide a safe and reliable purchase platform for scientific researchers, and solve the problem of demand shortage and urgent need. Fourthly, promote the deep integration of information sharing, promote the deep integration of information sharing in economy, science and technology, culture and education, and realize the comprehensive development of scientific research. For example, the deep integration of scientific research and education, is to selectively public the completed experimental results to colleges and universities, provide the scientific research model for students' education, or selectively public the ongoing scientific research projects to colleges and universities to realize the extensive participation of college students. Use the collective wisdom of all to solve the difficulties encountered in the scientific research process, while it is conducive to the expansion of students' thinking and theoretical application.

4.2. Increase the introduction of high-quality scientific research talents

In the wave of information technology, an important feature of society is openness and transparency. It is very important to complete the construction of internal openness and transparency of information, which plays an important role in mining relevant high-quality talents and training reserve forces for scientific research. Achieve the classification and integration of talent information, find the most needed talents in the shortest time, train reserve scientific research forces in a targeted way, expand the scientific research team of life science, and create a more professional, deeper researching and more extensive high-quality team. And open the information platform internally. The internal part refers to that of the scientific research system, not only in China but also abroad, which is conducive to the exchange and devel-

opment of talents. Thus it not only can introduce high-quality talents in China, but also the foreign professional excellent personnel, so as to ensure the professionalism of the scientific research team, increase the richness of personnel, provide more development ideas for life science research and realize the self-renewal and self-improvement of scientific research team.

4.3. Promoting the innovative development of life science research

Firstly, as an important way of personnel training, education plays an important role in the field of life science. Therefore, we should take the education reform as the direction, optimize the personnel training mode of life science, and cultivate a group of excellent reserve talents with solid foundation, high professional quality and strong innovation ability. First of all, teachers' strength should be optimized. The teaching quality of teachers has a direct impact on students' learning results. Teachers in the field of biological science should be evaluated and comprehensively scored to truly reflect the teaching level of teachers. We should properly introduce excellent teachers, improve the overall education level, create a good atmosphere for teachers to teach seriously, and improve the education level in the field of life science. Then, we should promote the reform of educational disciplines, vigorously promote the construction of new disciplines, consolidate the construction of basic disciplines, and encourage students to do more and practice more to realize the all-round development of knowledge, quality and ability. In the teaching content, we should introduce the advanced knowledge and the latest achievements of scientific research, and update the advanced research methods in time; in the scientific research training, we should set up innovation fund projects to provide financial support for students with innovative ideas; in terms of scientific research publicity, use Wechat, Weibo and other new media platforms to release authoritative news and latest research results, encourage students to participate in discussions, regularly carry out academic lectures, and invite experts and scholars in life science to conduct knowledge guidance and interest training; connect with the research institute and recommend professional talents to conduct relevant research in life science. Secondly, in the context of the times when the state vigorously promotes "mass entrepreneurship and innovation", we should actively improve the development environment for talent innovation. We should continue to strengthen the construction of service system, improve the awareness of giving priority to the development of scientific and technological talents, and develop the system and mechanism for the innovative development of talents. Thirdly, we need to establish an open competition mechanism, realize open competition nationwide, create a good social atmosphere for talents, and let everyone who

loves scientific research and wants to devote themselves to scientific research have the opportunity to stand out by their true talents. In the innovation mechanism of talent selection, we should find out talents, collect talents and break the selecting method which only considers education background. Besides we should increase practical talents, stimulate the innovation enthusiasm and vitality of talents to the maximum extent, and provide a broader stage for the young generation to realize their own value. Fourthly, combine innovation awareness and traditional spirit of scientific and technological talents. Excellent traditional culture has a good edifying effect on people's character. We should vigorously develop Chinese excellent cultural tradition, adhere to the policy line of emancipating the mind and seeking truth from facts, and provide a positive cultural atmosphere for the cultivation of scientific and technological talents. We should vigorously carry forward the national spirit with patriotism as the core, and improve the national consciousness, national self-confidence and pride of scientific researchers. Combine the spirit of excellent traditional culture with the spirit of the times with reform and innovation as the core to enhance the confidence and courage of people in the field of life science to face difficulties and accept the challenge.

5. Conclusion

To sum up, it is of great significance to speed up the optimization of service approaches for life science research in the current society of the continuous development of

digital library, which is an important guarantee for the continuous renewal of human civilization. In view of the problems in the current life science research, such as the lack of information resources, the problems in the construction of talent team, and the lack of innovative development in scientific research, we should make use of the advantages of digital library, promote the deep sharing of book resources, actively introduce high-quality scientific research talents to strengthen the scientific research team through internet platform, and promote the long-term innovative development of life science research, so as to optimize the service approach of life science research, meet the needs of the development of modern life science, and promote the rapid development of modern society.

References

- [1] Bai Yang, Ma Jing. On the construction of digital resources of public library in the new era. *China Management Informationization*. 2020, 23(10), 182-183.
- [2] Zou Lixue, Ouyang Zhengzheng, Wang Hui, Wu Ming. Research on the characteristics and services of research data repositories in life science. *Library and Information Service*. 2016, 60(07), 59-66.
- [3] Zhao Houming. Research on embedded subject service of practical teaching of science and engineering department—a case study of life science discipline service of central south university for nationalities. *Inner Mongolia Science Technology and Economy*. 2015, (05), 128-129.
- [4] Li Zhongyun, Gao Chi, Wang Pingxiang. Attach importance to the cultivation of high quality talents in life science. *China University Teaching*. 2002, (01), 27-30.