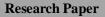
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# Research on the Status Quo and Countermeasures of University Information Management under the Background of Big Data

Zhi Liping Chen Pengrun

School of Computer and Information Engineering, Anyang Normal University, Anyang, China Correspondence: Zhi Liping, School of Computer and Information Engineering, Anyang Normal University, Anyang, China. Tel: 1-350-372-8754.

**ABSTRACT:** In the context of modern big data information era, China's information technology is constantly rising rapidly, and the information management work of colleges and universities is also developing towards the direction of network data and information. However, there are still many problems in university information management. As the national training of fresh talent blood transmission base, colleges and universities should keep pace with The Times, in the era of big data, keep up with the pace of The Times, promote the perfection of school information management, with modern information as the benchmark, to achieve the rapid progress of modern information technology. Relevant practitioners should also take into account the development level of educational technology in the era of big data, choose a reasonable way to take a road that conforms to the actual situation of Chinese university management, and promote the construction and improvement of university student management. This paper analyzes the current situation of school management information construction under big data, and puts forward corresponding suggestions for reference.

**KEY WORDS:** Big data; Information management; Higher education; 2.0 Information age; Integration innovation; Data Network Library

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#### I. CONNOTATION AND CHARACTERISTICS OF UNIVERSITY MANAGEMENT INFORMATIZATION IN THE ERA OF BIG DATA

The characteristics of college student management in the era of big data are as follows. First of all, the capacity of big data is relatively large, which has exceeded the traditional definition of the scale of data, which determines the university student work managers to carry out effective data management and analysis according to different needs. At the same time, in the process of data management and analysis, university student work managers should recognize the characteristics of big data and adopt various ways to achieve effective data management in the process of analyzing structured and unstructured information such as geographical location. Secondly, university student work managers should realize the richness of data types when they manage student information and related data. As data types emerge in endlessly, student management should properly process and systematically analyze student information, so as to extract effective information from a large amount of data information. Realize the digitization of information network, so that the basic information is handed over to the data network with memory.

# II. THE CURRENT SITUATION AND PROBLEMS OF UNIVERSITY INFORMATION CONSTRUCTION

Along with the advance of large data of computer network technology, the domestic various universities also further keep up the pace, further attention to strengthen the computer network, in the university management mode of the past, big data, and the application of computer network information technology, information resources platform construction, resources sharing, data management and new mode of higher education are developed. The effect of high efficiency, and achieved no small results. At present, the status quo of information construction results show that the system construction of big data network information information has a certain basic prototype, the campus network is also basically covered in the universities, campus has also realized the one-card service. Therefore, data network information management is gradually

developing in universities, modern data network system is also growing. China's university information construction has made great progress in recent years, the school began to pay attention to the construction of data network information, in the relevant majors to pay attention to, some schools began to re-create the computer department major, big data analysis, software development, information management and information system began to re-establish and expand the enrollment of students. Almost all universities in China have computer majors, including information management and information system majors, which shows that universities are investing more in data network information management. The traditional teaching mode is somewhat incompatible. If only the textbook teaching, students' learning efficiency may not be significantly improved. Only the combination of theory and practice can realize data-oriented teaching and informatization and practice of written teaching. The data spoken through time is presented in the way of PPT on the projector in class, which not only reflects the authenticity of data but also more persuasive, so that students can intuitively feel the results of time and improve the efficiency of teaching expression. The realization of data network information education is not only reflected in teaching, but also in basic information management and digital books. At present, the informatization construction of colleges and universities in China is developing rapidly, and the network basic equipment of colleges and universities. According to according to colleges and universities surveyed (243), more than 90% of the colleges and universities has been using the campus one-card service, 88% of colleges and universities set up covering the school campus safety monitoring system, with 82% of colleges and universities to provide name suffix E-mail system, 74% of the establishment of a unified identity authentication system in colleges and universities, nearly 80% of the purchasing the school-wide network teaching platform.

# III. THE DEVELOPMENT STRATEGY ANALYSIS OF UNIVERSITY EDUCATION MANAGEMENT INFORMATIZATION

### 3.1 College education management informatization strategy to build a network information platform

University education has a huge data information, such as students' files, teachers, staff information, etc., to achieve the effective use of data information, requires universities to establish the corresponding flow data platform, can establish information management of the educational administration information management system, student or teacher of APP, the official WeChat public data management platform for data storage and management, implement the indifference of the message Communication. A lot of information management is basically realized in the school network, such as online course selection, grade query, elective online courses and so on. At present, there are many apps in the university campus for students' college life network management, more common are: Today campus, PU campus, wisdom tree, Dingpin, Tencent conference, learning, etc. Today's campus APP realizes the data network for the control of students during the epidemic period, such as the cash-back application before returning to school and the positioning check-in and leave cancellation after returning to school, which greatly reduces the cost and energy of management. PU campus APP is the implementation of data statistics on college students' participation in extracurricular activities, solitary college students participate in extracurricular activities and practical activities, prevent addiction to the Internet, conducive to a healthy life.

#### **3.2 Integration innovation strategy**

Education 2.0 information age has arrived, indicating that the education information stage has entered a new stage of integration and innovation. Broadband network access and multimedia teaching environment in colleges and universities have long been available, and cloud computing, virtualization, big data, wireless network and other new technologies have been widely used in the construction of college information. In recent years, there have been a lot of integrated innovative teaching mode and management mode, and has been popularized to a certain extent. In the field of teaching informatization: guided by the government, built by enterprises and purchased by colleges and universities, a large number of online teaching platforms in line with The characteristics of Chinese education have emerged, as well as MOOCS that use the Internet to implement cross-regional teaching cooperation. In the field of scientific research informatization: Cloud technology has been paid more and more attention. Cloud computing and distributed technology are used to carry out scientific research informatization, strengthen collaborative work and knowledge management, unify resources, improve computing and storage efficiency, and lower the threshold of scientific research. It can be seen that the application of university informatization has been deepening, how to further promote the integration of information technology with education and teaching, knowledge management, logistics and life service and other aspects of innovation, is an important issue for the future development.

#### 3.3 Ideological integration of data network informatization

The continuous evolution of new information technology has also catalyzed the rise of more innovative business models and the application of the concept of digitalization. Digital transformation, on the other hand,

means leveraging digital technology (information technology) to optimize or redefine the value (operations, sales, products and services, etc.) that an enterprise delivers to customers. There are three aspects to the difference between "digital thinking" and "traditional information thinking". The first one is to have an open mind to realize that new information technology produces a large amount of acquired data and information that can be used. Second level: Informatization is no longer simply from existing manual to automatic, but the optimization and iterative upgrading of existing processes. Third level: after a large amount of digital information is analyzed, knowledge that can assist decision making is generated, and then the existing business model and organizational form may be reconstructed. At the same time, we should pay attention to network security education while realizing the data network informatization in colleges and universities. The virtual network world is also full of a lot of deception. To improve the awareness of network security is the indoctrination of educators to students' ideas in the information age. The diversification and integration of education is not only limited to the dissemination of knowledge, but also should impart technological innovation and network time to students. Realize the concept fusion of digital information network and promote the development of digital education information.

# IV. INFORMATION CONSTRUCTION OF STUDENT MANAGEMENT

Big data plays an important role in the informatization construction of college student management. College student management teachers should be good at analyzing various types of data, make full use of big data, standardize the amount of data processing, and promote the diversification and innovation of information processing. In the era of big data, the information construction of student management mainly includes the following aspects. Improve the student management work in the era of big data and information management and information construction has become a college student work management an important means of data analysis and observation, analysis of large data, student management workers can make scientific judgment, deep mining data management information, and the induction and summary of this system. Big data can play an important role in the process of mining student information. In the modern society where big data is increasingly developed and perfected, whether in the field of economy or e-commerce, big data can give full play to the role of basic data analysis, improve the traditional management mode and practice mode, and bring great help to people's work. At the same time, as the main body of university students' management, must also be aware that from the traditional experience management and institutionalized management mode, combined with the new era under the background of the reasonable application of big data, modernization means, improve the efficiency of analysis and decision-making, and improve work efficiency, promote the development of university students' management work and perfect. In the students' learning activities, for example, student work management considerations on the professional study and practice of students, should pay attention to the variety and form of rich content, make full use of diversified information network, play to the role of the modern information technology, the traditional paper report model for subversion and innovation, and promote the improvement of the informatization construction. At the same time, combining with the actual situation of students and the actual situation of college student management, using data to achieve scientific analysis and systematic summary. The establishment of a student management team with big data analysis ability is essential for the student management in colleges and universities. Through the professional student management team with big data analysis ability, the student management work can be gradually improved and the efficiency continuously improved. Therefore, as college administrators, we should constantly improve the level of college student management team, try to create a big data processing student group. In this context, relevant work managers can achieve the effectiveness of student management in the context of big data analysis, and through the introduction of advanced technology, achieve the perfection of student management in colleges and universities. In addition, during the training of college student management team, managers have to choose the reasonable training plan, help the students management staff to grasp certain analysis method, the related theories and tools to master large data, and finally realize the cloud computing based students information management platform and effective application of the management system.

#### V. RESOURCE CONSTRUCTION OF UNIVERSITY LIBRARY UNDER THE BACKGROUND OF FIVE BIG DATA

Globalization has entered the era of the current data, various industries are also beginning to focusing on the analysis of industry data source, which is convenient to promote its development and improve, the university library is the main source of user access to information resources, teachers and students in the resources construction, information resource service and resource management and other aspects are faced with new challenges.

Building of the new era of big data characteristic construction of university library, you can create a resource relative openness of library, confined to the school teachers and students to individual student number or employee number login system platform to purchase resources and self-built database is an important

prerequisite for practical, for colleges and universities, scientific research and teaching is always top priority, therefore in the process of resources construction to grasp the research of the school In terms of the direction of scientific research and the major setting of schools and departments, the main resources should be set up according to these two directions. Secondly, the dissemination of basic knowledge is also very important to realize the extensive dissemination and utilization of knowledge. However in a wide range of book information utility is unusually large, realizing digital books some difficulty, to data information records, the books will be the name of the book, put the position, the book Numbers and publication information are stored in the database, so that make it easier for readers to consult, fuzzy query can be set in the database, more convenient to meet the needs of readers. To realize the information management of books, convenient for readers to consult the location information of books, quickly find the location of books. Establish a complete return system, build a data network information platform, convenient to remind readers of the return time and return date. The establishment of a huge database system and information registration platform is to realize the digitalization of books, greatly saving the high cost of storage. Establish the whole library information network system to realize information inquiry, real-time reminder, digital storage and other functions.

# VI. CONCLUSION

The advent of the era of big data realizes the digitalization of information, provides digital services for life, facilitates people's life and improves work efficiency. It is necessary to introduce new scientific and technological talents in order to improve the informatization and digital management of higher education. In order to realize this huge and complex concept system to keep up with the pace of big data, improve the university's data information technology, improve modern management facilities, to meet the needs of contemporary educators and students at the same time to further instill the concept of big data management to educators and students. To realize the huge digital information management mode, it is necessary to further improve the management mode of colleges and universities, and make full use of modern network information technology to realize the intelligent management of colleges and universities.

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