

An Innovative Thinking About the Management Mode in Colleges and Universities in the Context of “Da Zhi Yi Yun”

Wen Lu^{1*}, Yi Ji²

¹China University of Geosciences (Beijing), Logistics Group, Beijing 100083, China

²China Media Group, CGTN, Beijing 100020, China

*Corresponding author: Wen Lu, luwen5@163.com

Copyright: © 2022 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: In recent years, “Da Zhi Yi Yun” (integration of big data, intelligentization, mobile internet, and cloud computing) has taken the wave of global management technology reform, especially in management decision-making and the education mode in colleges and universities. China boasts the world’s largest higher education; additionally, its internet education and information education are also developing at a rapid pace. Therefore, it offers a suitable environment for the application of “Da Zhi Yi Yun.” In this context, this paper aims at the problems in the management and application of current mobile cloud platforms in colleges and universities and proposes strategies for the effective application of “Da Zhi Yi Yun” from two levels: teaching management and student management.

Keywords: “Da Zhi Yi Yun”; Big data; Intelligentization; Mobile internet; Cloud computing; College and university management

Online publication: June 30, 2022

1. Introduction

“Da Zhi Yi Yun” is a new technology with fundamental characteristics of intelligence and universal interconnectedness. It is the key to promoting modern management toward networking, intelligence, and digitization. With the upgrading and development of China’s fourth industrial revolution, under the all-round development and construction of big data, smart cloud migration has become an important tool in optimizing the education management of modern colleges and universities. It makes full use of the complex and huge data resources in colleges and universities, as well as optimizes the behavior of colleges and universities in management decision-making, teaching reform, and teaching governance through the assistance of artificial intelligence, so as to achieve the goal of promoting the further advancement of higher education ^[1].

2. Analyzing the application of “Da Zhi Yi Yun” in college and university management

2.1. Deficiencies in the application environment

With the advancement of higher education modernization, colleges and universities have enhanced the construction of their information network environment and established wireless networks, digital libraries, online courses, and other service systems, along with databases to record a large amount of data information ^[2]. However, in order to realize the effectiveness of big data analysis, the application environment must be

improved. First, the current data collection capacity of colleges and universities is insufficient. The big data system requires high-level data as support. At present, schools are unable to capture data on the teaching site, and data can only be fed back after class, which makes the data collection process cumbersome, and thus the operation requirements of big data servers cannot be met. Second, colleges and universities have limited data storage capacity. On the one hand, the data collection process lacks automation; on the other hand, there is a lack of cloud service construction. Old data must be deleted regularly to ensure the operation of the information service platform, which results in data waste. Third, colleges and universities have low internal data storage and poor transmission efficiency, thus the real-time analysis requirements of the big data system cannot be met.

2.2. Single artificial intelligence function

“Da Zhi Yi Yun” platform provides colleges and universities with rich course presentation methods and forms a variety of teaching feedbacks. However, in practical application, “Da Zhi Yi Yun” is mainly used in curriculum teaching, place management, and other operations, and it has not formed targeted and personalized service functions^[3]. On the one hand, in teaching management, the platform can create an “exclusive” learning environment for students and solve issues in their project courses, but its intelligence is limited. Different learning scenarios are set since it only views students’ defects as insufficient contents, without having the capacity to judge students’ skills through richer data. On the other hand, in student management, its main function is resource service. Students can obtain school information and complete data upload tasks through the platform but may fail to convert the collected data into application functions.

2.3. Poor integration application effect

Under the background of “Da Zhi Yi Yun,” colleges and universities are constantly strengthening the information construction of school management and establishing various types of information management systems, such as educational administration management system, OA office system, student information system, educational administration examination system, and financial statement system, by designing, developing, and purchasing management software^[4]. However, in practical application, various systems are developed by different subjects or companies, without any integration existing among them, which leads to the failure of cross platform information transmission and the formation of an ideal, information-based management mode.

3. Application strategy of “Da Zhi Yi Yun” in university management

Colleges and universities must coordinate the development of education and practice and utilize the “cloud” to provide an impetus for the coordinated development^[5]. In this context, colleges and universities need to improve the environmental requirements of teaching management and student management.

3.1. Improve the teaching management environment

3.1.1. Integrate resources and utilize big data

Big data is needed as the support for “Da Zhi Yi Yun.” The current data collection issues in colleges and universities hinder the realization of the analytical function of big data. Therefore, colleges and universities must adjust the application environment of teaching management. On the one hand, it is imperative to integrate the existing resources in schools, pursue teacher- and student-centered principles, construct a teaching information system, and arrange the information collection equipment in an integrated way, so as to promote an automated collection of data resources, improve the data level, ensure that the data meets the hardware upgrade of the digital equipment of the big data system, as well as improve the capacity for data storage and transmission. On the other hand, AI and tracking technologies should be used to collect

fragmented information on the classroom site in real time, so as to provide sufficient data information for big data analysis. In addition, the “data island” issue in teaching management requires remedial action, the information channels between various systems need to be broken, students should be regarded as resource units, and the information of both, teachers and students must be processed in a structural manner, so as to create a unified teaching resource information management system [6].

Through the aforementioned optimization measures for the teaching management environment, it is possible to build a big data system, provide data basis for teaching management, and effectively address the single application environment and function issues. First, according to the information analysis and mining of different students, it is possible to have a comprehensive understanding of each student’s personality, psychology, needs, and development trend; thus, data service functions such as “psychological early warning,” “personalized development recommendation,” and “employment and career recommendation” can be established. Teachers can come to value the needs of students using this function, and then provide suitable education and management services. Students can attempt to achieve development based on the suggestions provided by big data, so as to have a more scientific growth path. Secondly, according to the analysis of a large amount of information of students in the school, further comprehensive suggestions on the development prospect, management mode, and teaching objectives of the school can be proposed, so as to provide data support for school managers in their decision-making process.

3.1.2. Ease of use of the platform through application interaction

The goal of “Da Zhi Yi Yun” is to facilitate the teaching and management of all staff, including teachers, provide management strategies through data analysis, and form an intelligent and personalized management and governance scheme. Therefore, in the process of application and implementation, the ease of use and simplicity of its software design should be ensured, so that teachers can master its application methods through simple training [7]. First of all, its interface design should be simple and intuitive, with clear and direct interaction and function modules. This would help teachers to carry out data analysis, task release, scheme layout, and other management work through simple operation, so as to realize the purpose of simplifying teachers’ work. Secondly, in the construction of a big data system and the application of cloud computing technology, schools should fully consider their actual needs. They should take into account the application effectiveness in accordance with the school’s resource supply level and demand for educational services, in addition to supporting the stability of the platform’s operation and ensuring a seamless network [8].

3.2. Optimize the student management environment

3.2.1. Form a new technology management team

In view of the poor integration and application effects in the construction of “Da Zhi Yi Yun,” colleges and universities should form a student management team to promote the familiarization in using new technologies. First, it is crucial to establish a training mechanism to create awareness of internet office management among teachers, organize training activities through the student management team, and encourage teachers to be involved in collective learning. Being familiar with various software platforms and functional modules is crucial, but it is also important to develop data-based management thinking and the skills in applying big data’s decision-making suggestions to replace teachers’ experience and decision-making, in order to solve students’ problems more effectively. Moreover, upgrading the professional level and working capabilities of relevant teaching staff in areas such as logistics management and educational administration management will be beneficial in enhancing the quality and efficiency of student management [9]. Second, management and technology talents related to smart cloud migration should be introduced. With information construction and technology development, it is vital to provide technical

support and network services to address various issues in school development and teaching management, actively integrate technology into management, and further promote the improvement of education quality through the application of technology. Third, in the context of student management, it is also important to establish an information monitoring center and a tracking system through student information feedback, grasp the dynamic changes of students' thoughts and behaviors, as well as respond to the existing issues in the school's internal network. Especially in case of emergencies, students' views and opinions should be known through feedback on the data platform. In that way, appropriate public opinion guidance and control strategies can be used to ensure the safety of students' life, learning, and network use.

3.2.2. Establish a data owner system

In order to further ensure the accuracy and scientificity of the operation and analysis of big data, schools should assign a person to be in charge of the system, so as to ensure the authenticity and reliability of the feedback and the collected information. For the data information of each system, the person in charge should be responsible for any errors, abuses, changes, and other problems found in the data, as well as quickly solve the existing problems ^[10]. Specifically, schools should pay attention to several key issues in the construction of "Da Zhi Yi Yun." First, they should strengthen the protection and management of students' information. Big data is a technology that provides intelligent services by using students' information. Its information and system must be protected from infringement and abuse to avoid problems caused by information exposure. Therefore, it is necessary to establish an internal network protection system to effectively protect students' rights and interests and information security through firewalls, security software, keys, and other means. Second, it is necessary to form a regular overhaul and maintenance mechanism. In the long run, big data and student management service platforms may have faults or loopholes. Hence, regular maintenance should be carried out to avoid system faults, and thus prolong the service life. Third, it will be beneficial to establish norms for the use of information management systems. The school information management system should be standardized, especially the authority management of the database. The scenario of a single-person contact and use should be avoided; instead, multi-person mutual supervision and management should be advocated, so as to ensure the security of information.

4. Conclusion

In conclusion, with the application and promotion of "Da Zhi Yi Yun," the problems in education management in colleges and universities have been addressed. Schools should establish a modular, personalized, comprehensive, and easy-to-use information management platform by optimizing the teaching management and student management environment, so as to provide a convenient working environment for both, teachers and students, as well as realize the intelligent development goals of modern education.

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Tang L, 2020, Research on the Financial Management Mode of Colleges and Universities in the Era of "Great Wisdom Moving to Cloud and Things". *Accounting Learning*, 2020(33): 17–18.
- [2] Luo M, 2021, Research on the Training Mode of Management Accounting Talents in Colleges and Universities Under the Background of "Great Wisdom Moving to Cloud". *Business News*, 2021(01):

179–180.

- [3] Jiang W, 2020, Reform and Innovation of University Management Mode under the Background of “Great Wisdom Moving to Cloud”. *Journal of Tianjin Vocational University*, 29(02): 25–30.
- [4] Chen J, 2021, Discussion on current Situation and Suggestions of Informatization Construction of University Student Management in the Era of Big Data. *University*, 2021(38): 46–48.
- [5] Kong H, 2021, Discussion on the Importance and Implementation Strategy of University Information Management. *Computer Knowledge and Technology*, 17(27): 151–152. <https://kns.cnki.net/kcms/detail/detail.aspx?doi=10.14004/j.cnki.ckt.2021.2739>
- [6] Zhao Y, 2021, Research on the Teaching Mode Reform of Management Accounting in Colleges and Universities Based on the Background of “Great Wisdom Shifting to Cloud”. *Quality and Market*, 2021(20): 37–39.
- [7] Wang L, Zou Y, Yang H, 2020, Discussion on the Innovation of College Students' Educational Management Mode in the Era of Big Data. *Journal of Jilin Radio and Television University*, 2020(01): 122–123.
- [8] Xiao Y, 2017, Thinking on University Management Innovation in the Era of Big Data. *Think Tank Era*, 2017(09): 130 + 132.
- [9] Li AM, 2019, Innovative Thinking on University Management Mode in Big Data Era. *Modern Economic Information*, 2019(04): 131.
- [10] Wang B, 2019, Thoughts on Innovation of Enterprise Management Mode in the Era of Big Data. *National Circulation Economy*, 2019(28): 36–37. <https://kns.cnki.net/kcms/detail/detail.aspx?doi=10.16834/j.cnki.issn1009-5292.2019.28.016>

Publisher’s note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.