Exploration and Analysis on Informatization Construction Strategy for Higher Education Management in the Context of Big Data

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Abstract: Since the beginning of the 21st century, along with the generalization of the information technologies, as well as the facilitation of the digital process, cloud computing has been gradually implemented in the informatization management in institutions of higher learning. In the education field, institutions of higher learning have progressively applied informatization construction and educational system revolution. Thus, under the historical background where the age of big data has come, it becomes extremely important for higher education to figure out how to deepen the informatization management. This article summarizes the informatization construction strategy for higher education management in the context of big data through further analysis.

1. Introduction

The arrival of the age of big data has furtherly provided an effective supporting force for the educational and teaching reform for the institutions of higher learning. In order to improve the level of informatization management in institutions of higher learning, we should deeply combine big data technology into it, take pertinent measures to achieve a better management pattern which could finally enhance the level of other works in the campus continuously. On basis of working practice, this article deeply dig into specific explorations in the hope of realizing a highly efficient informatization management, so that a good and solid foundation would be set for the future development of the institutions of higher learning. The detailed analysis is listed below.

2. Technical Analysis on Big Data

2.1. Definition of Big Data

Per the arrival of the informatization age, big data has been gradually applied to various fields, and the its covering range has become more and more broad. The field of higher education management makes no exception. The emergence of big data, not only improves the integral mechanism of education, but also optimizes the innovation awareness of education. Therefore, China currently carried out the analysis for the big data technology, and has learned its characteristics such as various types and fast loading and saving speed etc. In general, the basic categorization of data has following aspects: furtherly get to understand the construction of informatization system of education management; truly satisfy the individualized analysis on big data system; analyze education system. In the process of the research on these topics, we can deeply comprehend the status of its resource information by analyzing data resource and information, so that we can find the valuable foundations to ensure the stabilization of the chosen method.

2.2. Characteristics of Big Data

On the basis of data, big data is able to acquire the information that is favorable for informatization management for institutions of higher learning through smart equipment and social coordination analysis. Large data capacity: in the context of the age of big data, internet and computers have become usual software at present, and have expand the big data capacity.
capacity is an important section to carry out statistics and analysis for big data. While using big data, we should emphasize on putting the informatization management of higher education as the center, and make well-focused data summary and application. Fast data processing: big data could be very fast in data processing. It combines valid network, makes use of data analysis software, therefore can swiftly process data in order to guarantee the quality of informatization of higher education management. In this way, it furtherly enhances the development of teaching work of higher education in institutions of higher learning.

3. Informatization Construction Strategy for Higher Education Management in the Age of Big Data

Big data basically means to achieve the improvement of software utilization technology in the base of traditional software application. Meanwhile, in the application process of the big data technology, we need to blend informatization education into the higher education management, improve the educational managing method on informatization, so that the informatization construction of higher education management shall meet the basic needs of big data, the platform design of informatization is enhanced, and the optimization and innovation of education system are achieved. The specific analysis on informatization construction strategy for higher education management in the age of big data is as follows.

3.1. Establish a clear idea on big data for higher education management

In the trend of the optimization of higher education system, big data plays a very important role. In order to make education management project systemized and scientific, while implementing strategic analysis on higher education management, we should establish three data concepts. First, analyze an effective construction on data-driven culture in institutions of higher learning to help teaching staff and students in these institutions make detailed analysis on big data, fully acquire the functions of relevant project contents in the context of big data, and make big data the truly main resource in the teaching management. Secondly, on the premise of the optimization of higher education management measures, managing staff of institutions of higher learning should form a benign atmosphere where they manage based on data, so that a further reform on higher education system is facilitated. In this way, the construction of management information resources of higher education can be ensured to be smart and meticulous, and the education management level can be comprehensively enhanced. Thirdly, when the big data platform is constructed, we should well analyze the resources of big data process, avoid information leak by students in the context of data, and impel a steady constriction of the data resource management platform.

3.2. Achieve an improved construction on data information platform in higher education management

The basic precondition of data information platform construction in institutions of higher learning is the structure optimization of big data resource in higher educations. But for some institutions, a situation is commonly discovered where the abundance of capital and the lack of talent management resources co-exist during the design of informatization management platform. This situation makes the ideas to build a data information platform always fall behind the development step of the time, therefore it is always in a laggard status. As a result, while improving current education system, we should make the construction of a big data platform as a precondition in the higher education management objectives, then furtherly combine big data technology with higher education, in order to help the higher education management data platform concretely follow the track of informatization design. Next, we should use high-efficient integration to carefully analyze the currently owned teaching resources in the institutions then gradually adjust the development structure of the schools to make them have their own feature. Under the fact that much information is analyzed, we should keep putting data resources into the system platform, to keep ensuring the design of the data system platform is more open in order to provide reliable foundations for the good maintenance and consistent update for the data system in the future.
What’s more, we should analyze campus financial resources, and gradually introduce sound data analysis system into the application, really improve the high adaptability of data system in institutions of higher learning, push a good optimization of data resources, so finally a scientific system management can be realized in the higher education.

3.3. **Cultivate a professional team for digital teaching management staff**

To design a higher education management platform, the main body of the platform should be teachers themselves, and we should let teachers progressively improve the core ideology of big data management, so data resources can be specifically and effectively analyzed, and provide a strong point of support in the maximum extension. In general, to carry out a teaching staff construction for the institutions of higher learning in the context of big data, there are two aspects for the team to finalize: one is a professional team in teaching and scientific research; the other one is in the context of big data, when we implement the optimization of talents, we should focus on the cultivation of scientific research and technical talents, especially the scientific teachers should be included, and let teachers be able to have orientation and thoughts on data resource management, keep enhancing their good operation skills therefore be a nice support for information exchange. In the context of big data, institutions of higher learning should also do full introducing work for the professional teachers, actively participate in the big data teaching practice. Use the big data teaching platform to help collection of information resources and stimulate teachers to correct disadvantages of education management in routine teaching. In summary, institutions of higher learning should focus on cultivating professional talent of big data, take advantages of deep cooperation with companies to increase developing paths for technical talents on big data, and to raise professional talents for the country, as well as achieving the talent raising objective of the institutions on big data resource application.

4. **Conclusion**

In all, in the context of big data, the teaching work of higher education in institutions of higher learning embraces a new opportunity. In order to keep improving informatization level of educational management, one should focus on combining work with implementation, keep enhancing cognition. Only in this way, we shall keep improving management efficiency through big data technology. Hope through these effective explanations, the article can provide more helpful references for the teaching staff, so as to cultivate more highly qualified talent with comprehensive strong practice capabilities.

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**References**

