

Original Paper

Research on Application of Cloud Computing Based University Education Informationization

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Abstract

With the development of information age and technological means, people's production and life, way of thinking and working concept are gradually changing. Cloud computing has become one of the hottest topics in the world. Cloud computing based on efficient computing power, scalable storage capacity and high security has become a new favorite in all walks of life. Chinese university information construction should also seize the opportunity to fully combine the advantages of cloud computing technology to strengthen the university campus network construction, enhance the integration of educational resources and promote information sharing. By combining cloud computing technology to expand network cloud service platform, Chinese universities education has greater space for development. Thus, it is an inevitable trend to apply cloud computing technology to Chinese university informationization construction. Based on the above purpose, this paper will start from the technical summary behind cloud computing technology, in-depth analysis and computing technology definition and characteristics. By exploring the application and existing problems of cloud computing technology in university information construction, this paper provides new ideas for university information construction development. This improves the overall development level of education industry, colleges and universities' social influence and credibility.

Keywords

cloud computing, education informatization, application, innovation

1. Introduction

In the context of the era of big data, the actual application of the Internet of things and cloud computing has entered into all aspects of our life, and even revolutionized it. Facing the arrival of information age, Chinese universities' education construction should also be in a positive attitude and take the initiative to strengthen deep understanding of cloud computing technology. It's about finding ways and means

that work for you. By trying to “change and seek development”, organically combining the advantages of cloud computing technology, innovating the inherent working mode, and broadening the working ideas, it makes the efficient information construction can achieve the expected effect. China’s college education information construction progress is slow. The relevant workers lack a comprehensive understanding of cloud computing technology. They can not reasonably apply the advantages of cloud computing technology to the construction of university education information, resulting in the inadequate integration of the two. The results of reform and innovation are not satisfactory. This does not achieve the optimal resource integration, sharing, it failed to broaden the university education services with the help of cloud computing technology platform. After all, cloud computing platforms are different from traditional management models. Cloud computing is more software-based. The following will first analyze the depth of cloud computing and seek the influence of cloud computing technology under the university informatization construction development.

2. Overview of Cloud Computing Technology

2.1 Definition of Cloud Computing

In recent years, China’s Internet industry has developed rapidly and accompanied by information technology. The amount of data is exploding. Great changes have facilitated people’s production and life, but also increased the difficulty of data processing. The emergence of cloud computing is based on the Internet. It provides users with secure, fast and efficient data storage and network computing services based on open standards and services. As a new mode of use, cloud computing is based on IT facilities and collects a large number of data resources. This allows users to access resources through the Internet according to their own needs.

2.2 Features of Cloud Computing

Big data is simply a collection of large amounts of data. These data can not be processed and captured in a certain time by conventional tools alone. Cloud computing has powerful data processing and computing power. In the huge pool of data resources, a large computer network is linked to form a high-intensity server. It can provide safe and efficient services anytime and anywhere according to the needs of users and the fees they pay. Based on the characteristics of cloud computing, such as strong performance, wide application scope, high security and excellent cost performance, the relevant workers of university information construction in China should deepen the comprehensive and in-depth understanding of cloud computing technology and its characteristics. Through analyzing the promotion effect of cloud computing on the current education informatization construction from a variety of perspectives, the advantages of cloud computing technology are seized to develop. This makes the development of our university education in line with The Times development need. It is the focus of further research by relevant workers at present.

3. Application of Cloud Computing Technology in University Information Construction

In the face of the era of huge information, if the construction of higher education still follows the inherent working mode and thinking, it will miss the development trend of the Internet era. Standing pat will only miss opportunities, mistakes and good opportunities to move forward. The emergence of cloud computing technology can make resource collection and sharing become a reality. Using the Internet as a medium, this provides users with secure, convenient, and collegiate data storage and computing services. It allows users to complete information acquisition and transmission anytime and anywhere. This reduces the input of terminal hardware facilities, maximizes the utilization rate of resources, and achieves the best input ratio of economic benefits.

3.1 College Network Construction

Through the establishment of campus network can provide schools with comprehensive, efficient, cost-effective, powerful network media. At the same time, it improves the security, stability and practicability of the campus network in the source environment. At the same time, based on the characteristics of high flexibility and scalability of cloud computing technology, it greatly reduces the investment of school funds to provide a lot of convenience for the construction of campus network.

3.2 Integrate Educational Resources and Promote Resource Sharing

The educational resources themselves are replicable. However, under the traditional education system, it is difficult to realize the sharing of resources, which leads to the serious phenomenon of resource waste and repeated construction. In addition, the lack of centralized storage of educational resources in the past led to the waste of a large amount of storage space and reduced the practical level of resources. By applying cloud computing technology to the construction of university education information, all resources can be integrated into a unified platform. This saves the different space occupied by a large number of copies in the past, realizes the centralized integration of educational resources, and maximizes the sharing of resources. It reduces the unnecessary waste of storage space, including human resources, financial resources, material resources.

3.3 Create Network Cloud Service Platform

Through cloud computing technology, a network cloud service platform is built to provide technical support for personalized e-learning. A large number of educational resources can be shared with learners through cloud platforms. On the other hand, learners can also combine their own actual situation and needs to build a learning environment. Whether through mobile terminals or computer clients, it can obtain data and services anytime and anywhere in the storage space of the cloud platform. They can even realize real-time communication with teachers online, complete virtual teaching and learning. The cloud service platform has won the favor of the majority of learners because of its advantages such as simple operation and no geographical restrictions. This can stimulate the learner's desire for knowledge.

3.4 Establish Distance Education Cloud Platform

With online education becoming a popular trend, higher education reform should also be pioneering

and innovative. Cloud computing technology is combined to build a distance education cloud platform, such as large-scale mobile micro-learning, online streaming media applications, virtual laboratories, etc. This is the infrastructure of distance education in the future, which is conducive to the realization of flexible education services for schools, teachers and students.

4. Problems Existing in the Process of University Information Construction

At present, China's highly effective informationization construction progress is slow. There are many problems in its construction.

4.1 Lack of Uniform Cloud Standards

Cloud education construction generally exists the phenomenon of fragmentation. The industry as a whole lacks systematic cloud computing standards. As the saying goes, "No rules, no radius". In view of the university education informationization, we should also speed up the progress to develop a perfect cloud standard as soon as possible. This allows cloud education work to be carried out in an orderly environment.

4.2 Non-optimal Resource Integration

Sharing of high quality resources in colleges and universities has not reached the ideal state. It is still one of the problems to be solved urgently in the process of university education informationization. If this problem can not be effectively solved, cloud computing technology will be difficult to get sustainable development in the construction of university information.

4.3 Colleges and Universities, such as Course Selection, Grading and other Educational Administration Work often Set Time Limit

When teachers and students centrally access the Intranet, there will be serious network congestion, which will cause server interruption and affect the normal use of cloud computing. This leads to poor experience for teachers and students.

Faced with the unsatisfactory application of cloud computing technology in the construction of university education information, educators and administrators in our country must solve the existing problems in a timely manner. By actively exploring the reasonable application of cloud computing technology in the informatization construction of colleges and universities, we will build a good network platform for the education industry. This will improve the quality and level of educational services, and strive to achieve horizontal broadening and vertical deepening of educational services with the help of network platforms. No matter what form of application of innovation should be based on realistic conditions, any no practical development is meaningless.

5. Conclusion

Innovation is the inexhaustible driving force for the development of The Times. No matter an individual, an enterprise or even a country, in order to break through the bottleneck period of development, it must always keep pace with the development of The Times. Through the establishment

of a new sense of the overall situation, continuous reform and innovation of working methods and forms, break the previous inherent ideology and work mode. It has formulated a scientific working mode in line with the needs of the current era to maximize its competitiveness and achieve social value. It is also true for Chinese colleges and universities education information construction, along with the development of information technology to today's height, Chinese educators face up to the increasingly popular trend of cloud computing technology. In line with the attitude of learning, application of cloud computing technology, with divergent thinking to accept cloud computing. By using the principle of adapting to the situation, the advantages of cloud computing technology will be scientifically and reasonably integrated into the construction of efficient education informatization. Along with the development trend of society, it is necessary to improve the educational ability and level of colleges and universities. This provides a more humanized and timely service for the majority of learning. Even if cloud computing technology applies to our college education informatization road is still very long, during the period also inevitably will have fetters and thorns. In order to better meet the needs of social development, all the above measures are inevitable.