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E-LEARNING THROUGH CLOUD COMPUTING

Shivani Sharma

Banasthali University,RAJ,(India)

ABSTRACT

In modern information technology era, e –learning is the best way to implement education modernization. Students can take many advantages of this way of education by directly involvement in the education and it is also an easy way for the teachers and education sector to implement.it even reduces the extra work paper work which any teacher have to face in the formal education system. Which at last become a burden and over all wastage of time also. the teachers only needs to proper monitoring of the student for their help. In this digitalized world it is easy to survive also because it only needs some software, and some hardware which is one time i.e needs to install initially.so there is need to redesign the education system for that we have to implement this vary system is e learning through cloud and by this process the system become very fast and cheap and easy i.e. available to all. This paper is the analysis of two system i.e e-learning and cloud –computing ,when combines , to form a another best system.

Keywords:-E-Learning, Cloud Computing ,Information System ,Digitalize World.

I. INTRODUCTION

In the era of information technology, our problem is to manage the big data i.e. how to store it in a place where it could be easily available to all without disturbing any other system.so cloud computing is proven as the best option for that.it is a type of technology which is web based services that allows user to access hardware and software applications operated and governed by an institute and organization far off areas.so it ease the work for not only for any organization's employee but in education system also because in education they benefits the staff as well as students all over the world. It is one of the new technology trends likely to have a significant impact on the teaching and learning environment It's a network of computing resources—located just about anywhere—that can be shared. Thus by implementing cloud computing technology we can overcome all these short comes and maintain a centralized system where all the authorities can check the education system from each and every aspects and continue monitor and guide the system. They not only check the needs of the institutions but also ensure that quality

education is provide to every student and also his attendance, class performances etc can be effectively maintained without worrying for the infrastructure issue.. In Cloud computing, resources can be either externally owned (public Cloud – as provided by Google and Amazon) or internally owned (private Cloud). Public Clouds offer access to external users who are typically billed on a pay-asyou- use basis. The private Cloud is built for the access within the enterprise where the users can utilize the facility without any charge .

II. CLOUD COMPUTING PROFITS THE EDUCATION SECTOR

Due to the higher accessibility, availability and efficiency of cloud services many universities, businesses are trying to make use of these services. Today's cloud computing providers are offering higher education, the opportunity to substitute their data and information in the 'cloud' for universities with existing data centers, servers and application replacing these traditional campus machines. The universities has to follow all the rules and regulation of the state and country for developing a cloud for education as many countries are very strict in cross broader transfer of information. Once the university establishes where their data will reside and givesthe measure of data security an agreement called **SLA**(Service Level Agreement) can be made with the cloud service provider. The SLA is a document which can ensure educational cloud users regarding the services provided by the cloud. It tries to identify the users need and simplifies complex issues and creates a relationship between the user and the service provider. It helps to specify the privacy, consistency and integrity. Privacy is one of the important factors which have to be taken care for cloud computing, as the service provider may require some personal information which is related to the data on what the user is trying to store in the cloud. So the universities should be very careful before disclosing the data and it should not lose the integrity of educational data. There are many solutions that can ensure the security and protection of sensitive data in the cloud.

These are;

1) Mask or de-identify of the data
2) Firewalls
3) Encryption and decryption
4) Authorization identity management.

Following figure shows the cloud architecture for Education:-

2.1 Cloud Computing to Prepare Lecture

With the development of private and educational cloud,new web applications such as LectureTools, Slideshareetcallows the lecturer to get their work done in their web
browsers rather storing and carrying it on the hard drive. Its
givesthe **benefits** such as:-

1) Access the files from anywhere
2) Create a backup of your data
3) Stop worrying about additional software licenses
4) Share content more easily
5) Get things done without software hassles

2.2 Other Benefits Are

1) Access to applications from anywhere
2) Support for teaching and learning
3) Software free or PAYGO
4) 24 X 7 access to infrastructure and content

5) Opening to various universities and advanced researches
6) Protection of environment by using green technologies
7) Increased exposure of new IT technologies to students
8) Increased functional capabilities
9) Offline usage with further synchronization opportunities

III. CONCLUSION

Cloud computing seems to be worth exploring from small businesses and major enterprises to elite universities and online colleges. Both private and educational cloud can provide the necessary computational facility on demand of the user without any expense and can create a common platform for sharing the various resources from the various institutions.

The cloud is poised to revolutionize the educational sector, and schools and learning institutions.The shift towards cloudcomputing would enable the universities and educationalinstitutions to save money and take benefit of the developingtechnology. Basically, cloud computing will enable learners to formally undergo education even without going to the four-walled classrooms. The main objective of the paper was to identify theessentials of cloud computing which can be considered as anew dawn to the higher education and has the full potential tomake a 'revolution' in the field of education.

In fact cloud can also help those families who travel a lot, cloud computing will allow their children to travel while continually learning lessons, submitting assignment, and getting grades.. Cloud Computing having both strong and weak aspects , we may say that the scalable, portable, payment per use model and the management policies of risks and security , efficiency ,anytime accessibility and several other aspects represent positive factors in taking the decision of using Cloud Computing. In the end,universities may and should value the opportunities offered by Cloud Computing lead to innovation.

REFERENCES

[1]. B. Hayes, "Cloud computing," Comm. Acm, vol. 51, no. 7, pp. 9– 11, 2008.
[2]. E. Tuncay, "Effective use of Cloud computing in educational institutions," Procedia Social Behavioral Sciences, p. 938–942, 2010.
[3]. International Journal of Computer Theory and Engineering, Vol. 4, No. 3, June 2012 474
[4]. S. Mrdalj, "Would Cloud Computing Revolutionize Teaching Business Intelligence Course," Informing Science and Information Technology, vol. 8, 2011.
[5]. D. Cattenddu and G. Hogben, Cloud Computing: Benefits, Risks and Recommendations for Information Security Agency, 2009.
[6]. R. Katz, P. Goldstein, and R. Yanosky, "Cloud Computing in Higher Education," Educause. [Online]. 2010. Available: http://net.educause.edu/section_params/conf/CCW10/highered.pdf