

# Cloud Technology for Teaching training in Educational Institutions

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**ABSTRACT:** Cloud computing is a buzzword now days. It has modified the whole scenario. Cloud computing being “on demand” following in keeping with different “utilities”, along with energy and phone. Not even the business enterprise and several educational establishments were thinking about and some of them even adopting cloud computing techniques a good way to meet their requirements. In such state of affairs a relatively new concept and constantly evolving cloud generation is starting introduce the world over in academic establishments. This pretty brief theoretical paper we have given the eye to possible adoption of cloud computing generation in higher schooling mainly discussed on instructor education university wherein use of ICT is gaining momentum and hobby concept the world.

**KEYWORDS-** Academic institution; ICT, Cloud technology, Teacher Education, Teaching and learning

## I. INTRODUCTION

Cloud Computing refers to both the applications delivered as services over the Internet and the hardware and systems software in the data centers that provide those services. Gartner defines cloud computing as a style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service using Internet technologies. According to Youseff et al. cloud computing can be considered a new computing paradigm that allows users to temporary utilize computing infrastructure over the network, supplied as a service by the cloud-provider at possibly one or more levels of abstraction. The market research company IDC for example defines in [1] cloud computing very general as an emerging IT development, deployment and delivery model, enabling real-time delivery of products, services and solutions over the Internet. Cruz (2011) specified cloud computing as a collection of applications and

technologies which can be accessed and manipulated by a large number of users in real time. Some analysts and vendors define cloud computing narrowly as an updated version of utility computing: basically virtual servers available over the Internet. Others go very broad, arguing anything you consume outside the firewall is "in the cloud," including conventional outsourcing. Cloud computing can also be defined as an IT deployment model, based on virtualization, where resources, in terms of infrastructure, applications and data are deployed via the internet as a distributed service by one or several service providers. These services are scalable on demand and can be priced on a pay-per-use basis. Cloud Computing can be described as the long-held dream of computing as a utility them.

## II. RELATED WORKS

This study a look at refers to an expansion of materials a good way to bring out an intensive and complete literature review in relation to cloud computing in higher education, coaching and learning. Resources are specially drawn from books, educational journals, magazines, information on World Wide Web and many others. Amrit Shankar Dutta has furnished instructional cloud structure and use of cloud computing in schooling. He has additionally provided many examples thru the arena in which educational institutes have taken projects in cloud computing to better serve their faculties, students and researchers. He has additionally notified the benefits of cloud implementation in education. Improvement process until better technical Education attained their aim [2]. Shahid Al Noor et, al has evolved a proposed cloud computing structure for Bangladesh education system and that they have mentioned the impact of their proposed structure on modern-day education device of Bangladesh [3]. Saju Mathew has been achieved a simple research to reveal how cloud computing may be introduced in

the schooling to improve coaching, agility and have a cost-effective infrastructure that could convey a revolution within the discipline of schooling. It additionally attempts to convey out its benefits and limitations [4]. Marinela Mircea has provided an method to apply the mix of SOA, BPM and cloud computing in better schooling. He has presented the current state of Romanian universities regarding the implementation of incorporated solutions primarily based at the trendy technology [5].

P. Sasikala, Makhnallal Chaturvedi have elaborated the idea of Cloud Computing from the perspectives of diverse technologists, cloud requirements, services to be had today, the repute of cloud mainly in better schooling, and destiny implications [6]. Karla Hignite, Richard N. Katz, Ronald Yanosky explore what shape a higher schooling cloud may take and to discover opportunities and models for partnering collectively in their paper [7].

CISCO white paper has mentioned the capacity benefit and assignment to undertake in small faculties apart from lager University that have no longer yet completed excessive levels of computerization, or do no longer have and feature problem recruiting people with adequate IT abilities, or the ones worried about their capability to sensitive and safeguard information. By contracting with a cloud service company (possibly any other, larger college), that small college can adopt modern day applications and services, permitting the college to bypass an entire era of educational computing, thereby bypassing the various high-priced and debilitating demanding situations [8].

S.Rajasekar, the aforesaid techno pedagogical competencies are simplest indicative and aren't exhaustive in nature. In quick, it's far the excessive time for the teaching community to broaden passion in the direction of the application of new generation in coaching and mastering technique, with the intention to make the system simple, easy and understandable [9].

### III. CLOUD TECHNOLOGY APPROACHES

Due to continuously development in IT technologies infrastructure and frequently upgrades in hardware and application software has put more deal on expenses and pressure on educational budgets. Cloud computing services provide higher education institutes/college of the new IT technologies to take advantage at an affordable cost. The following are the benefits of adopting of cloud computing small college university and training college.

#### A. Reduction of costs

Cloud system will reduce the cost by allowing the facility of Pay per use. The user institute/college has to pay only for using of resources to the service provider. As such there is less chance on any financial burden on any part to the institute, government or student.

#### B. Elasticity and scalability of service

In a single moment any stakeholders of the institute/college can store data, and there is no limitation of space. The user's data store capacity is increased to a larger extent. And allocation of resource can get bigger or smaller depending upon on demand. Scalability means application software can scale in terms of increased in user and change in application requirements.

#### C. Availability and quality of service

In any mode service the most important is availability of quality and the same is desired by the educational cloud service user. 24/7 service availability is not the user requirement, but the service is needed without system failure with quality. In the maximum cases where exact necessities have to be fulfilled by the outsourced resources and outsourced services when the users are required.

#### D. Support teaching and learning

It has significant impact on the teaching and learning environment. Teacher could prepare their lecture note, presentation anytime without software hassles and stop worrying about additional software.

#### E. Reduce maintenance cost and resource cost

Cloud computing could help training college to reduce the operation and maintenance cost. In particular maintenance cost is important in IT infrastructure. Using cloud computing technology, academicians can focus on their own research,



respected pioneer in the educational institutes. As part of these philanthropic efforts, the Salesforce.com Foundation makes its products available at the educational institutes at a big discount. Salesforce is being used by higher institutions of all sizes and across all sectors to: a) Work more efficiently, b) Deepen engagement with constituents, c) Measure and share impact and success d) Work more collaboratively, e) Deliver programs and services in innovative new ways. Higher education institutions are using the Salesforce.com cloud computing platform for its instant scalability, ease of configuration, and support for multiple functional roles.

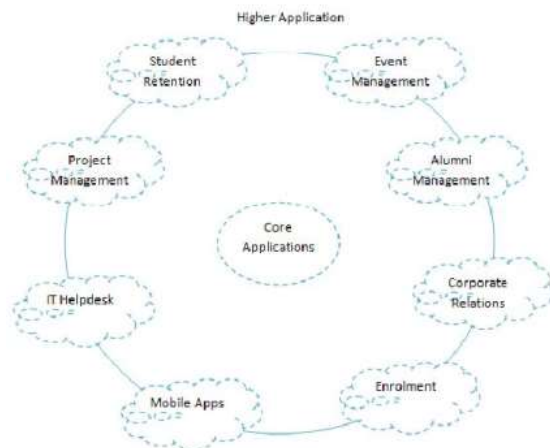


Fig. 3. Salesforce.com cloud computing in education

1) Key Features Of The Salesforce.com Cloud Computing In Education: The salesforce.com can help the students, researchers and faculty manage their tasks more efficiently to provide different features as shown in Figure.3 [16, 17]. The key features of the salesforce.com in education are:

- a) App. Development, b) Team Collaboration, c) Real Time Analysis, d) Mobile Applications, e) Recruitment and Marketing, f) Advancement, g) Student Record Management, h) Student Tracking

#### IV. CONCLUSION

In the technology of “Big data” cloud computing has titanic function in enhancing fine and great educational content material to be had for college kids and research pupils. The achievement and

excessive return on investment (ROI) of cloud infrastructure confers inside the hands of bigger corporations and the public sector specially. The fulfillment of cloud computing in education can be attributed to the recognition of cloud computing via all of us in the field of training with good chunk of support with the aid of government. This paper gives instructional cloud computing and how the colleges and institutions are already taking gain of it, not most effective in terms of price but also efficiency protection, reliability and portability.

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## BioData



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