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A View of Cloud Computing

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ABSTRACT: Nowadays cloud computing is a very latest concept in IT industry due to its different sources everyone is thinking about it that how useful is cloud computing. Cloud computing is only a system on the internet which can run applications and store them. Enterprise cloud computing is the application in which business and consumer both use the process of cloud computing. Normally to run a business application it would take a lot of money and need to pay for the update of software and servers. Nevertheless, in cloud computing it make simpler the whole process it reduced the system and store all the data on one cloud on the internet and shared the data in data center. Where customers and employees of business can easily use without spending any money. So the advantage of cloud computing is cost less and it maintains and update its software itself. They are more secure and reliable due to the policy of username and password to access the application on the cloud computing. User can use the cloud from anywhere and anytime. I came to know that privacy, infrastructure, and security in cloud computing are the major factors of the entire procedure. Cloud computing can be the essential technology infrastructure that can convert business, education if it is properly and carefully execute.

KEYWORDS: Cloud, Storage, Network, Application, Security, Sharing, Privacy.

1 INTRODUCTION

Cloud Computing was a dream since a long period. It can convert a large part of information technology and making software even more appealing as a service [1]; [2]; [3]; [4]. The growth of cloud computing is one of the major leading in the economics of using computing as well as in the computing field.

Cloud computing is a phenomenon in the emerging technological world that involves the taking applications and running them on infrastructure other than your own [5]. The cloud computing is a word consists of two words with specific meaning especially when it comes to technology [6]. The term “Cloud” used as a metaphor in the cloud computing technology and many different types of services and applications being deliver in the internet cloud [7]. The simplest of the definition of cloud computing is that Cloud computing is the delivery of computing services over the Internet. So, when we comprehend the concept we will come to know that cloud computing is a phenomenon where companies outsource their computer to another part or to another location and connect them over the internet to be used within the organization [8].

Cloud computing is achieved by gathering the accessories of the computer and making a package of storage and services. The utility computing is phenomenon we know as software as service phenomenon [9]. Amazon is using the concept at low level with software named EC2. An EC2 instance looks much like physical hardware, and users can control nearly the entire software stack [10]. Web application is an important factor that affects the cloud computing. Web application is an application that is accessed via a web browser over a network such as the Internet or an intranet [11]. Computer economics is a term that defined as converting capital expenses to operating expenses by outsourcing the software and technological needs of a company [12]. Software license is a legally binding agreement that specifies the terms of use for an application and defines the rights of the software producer and of the end-user [13]. We will see the impact of all of these factors on the

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concept of cloud computing. How they benefit the concept as well as harm it? The researches have shown that cloud computing is an emerging concept and will benefit the organizations more [14].

Cloud computing have been the burning issue since the companies are more inclined towards the cost cutting technologies. The competitive corporate world has actually made the concept of out sourcing more important for the companies and now the companies do not hesitate in outsourcing their needs in order to enhance the efficiency and effectiveness of the firms operations [15].

2 A VIEW OF CLOUD COMPUTING

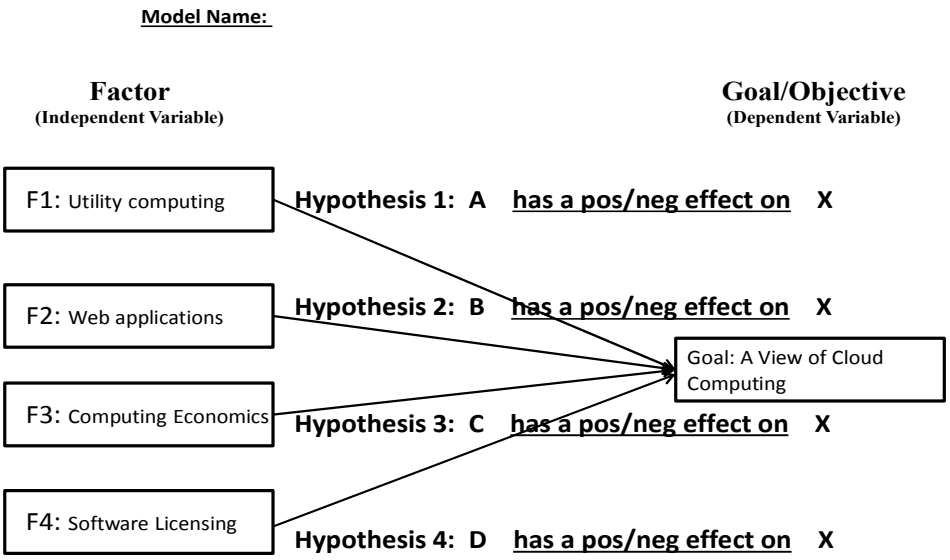

Fig. 1. A View of Cloud Computing and its relation to four independent variables

3 UTILITY COMPUTING

Capacity of a utility is measured or determined by its ability to reassign resources as the users are increased on the computing cloud or computing platform [16]. In cloud computing technology, the provider of service handles the CPU, hard disk and memory [17]. There are many methods by which price can be estimated but the most accurate method is of quantifying and is recommended to use [18]. In the forums of computing utilities price is a major factor that can affect the demand of the applications, and can be used, for the progress and to overcome the hurdles in the way of cloud computing technology [19]. Computing forums have exerted a huge effect on the way of communications and data transfer also in the areas where people were reserved to use new technologies [20]. In evolution of business models is potential role for computing services is of equal importance [21].

4 WEB APPLICATION

Web applications are very popular and being used at a large scale. Web applications not only used by students and education departments but also by the industries all around the world. They are not so simple, they are so complex that some web applications are further used to make the use of these applications as simple as possible for the users [11]. Web-based applications are task-oriented software that is accessed through a web browser and connected to a Hypertext Transfer Protocol (HTTP) for data communication [22]. Nowadays, web-based applications have become much more complex as their

operations are beyond simple browsing of information [23]. The applications include components such as images and objects on their interfaces [24]. Web applications should be functionally provided to the users so that they can easily interact and communicate [25]. Web applications are as much complex they are going to become as much popular also. On the web application there are a lot of software applications that are of great use in education and industrial departments and we can explore a lot of things using web applications [26].

5 COMPUTING ECONOMICS

This is a branch of computing in which computing is used between many users at a cloud computing forum. This concept is not new but when it is combined with the internet, it has gained a lot of popularity and is beng used in economics field [27]. With the advent and advancement in the Cloud Computing there is as well great advancement in the computing and the field of economics also have passed through great revolutions. Cloud computing is being used in many technologies but some of these major technologies are Software-asa-Service (SaaS), Platform-as-a-Service (PaaS) and Infrastructure-as-a-Service (Iaas). So if we are able to understand the importance of these software then we can well understand and explain the importance of cloud computing in the field of economics and can also guess how deeply the cloud computing is rooted in the field of economics [4]. Cloud computing is not only popular in the field of economics but it is as well popular in the field of business and gaining popularity in this field since 2006 [12]. cloud computing is a technology in which software and hardware that are being used are much cheaper and their cost might be further reduced and they do not require any labor to operate them and also there is no need of their maintenance [28]. Cloud computing is a technology and can be defined a computing tool or device that is used for the computing in social studies [29]. in the field of economics all the computing techniques should be utilized altogether then it would be possible to achieve well-structured web oriented computing system [30].

6 SOFTWARE LICENSING

First of all the software was free and all the users can access them but with passage of time and by increasing the users for software, developers have made three categories of license for their web applications are software. There are some types of the License that are associated with the web based software and are categorized as Strong-Copy left, Weak-Copy-left, and Non-Copy-left [13]. In OSS project, types of licenses are of great importance but there is little understanding in open source literature of the license choice from a developer's perspective. There have been developed many systems of protection but they failed to provide a method to user by which a user might be sure to secure and understand the mechanism to share the data over cloud computing forum using internet [31]. For the future work software will be issued to legal authorities and will be password secured and will provide protection against un authorized use [32]. Software are licensed given to the users for a free trial period. This trial period may be of 10 days or more after this trial period the software is due to be registered otherwise after the trial period they will not work. And one license is applicable only for one user [33]. Therefore, it is necessary to monitor licensing evolution [34]. Several models were introduced and proposed for the protection of software on the cloud computing technology but from all these models .NET is the model of coding protection of the software that prevailed and dominated all other models and is still used [35].

7 EXPLANATION AND DISCUSSION

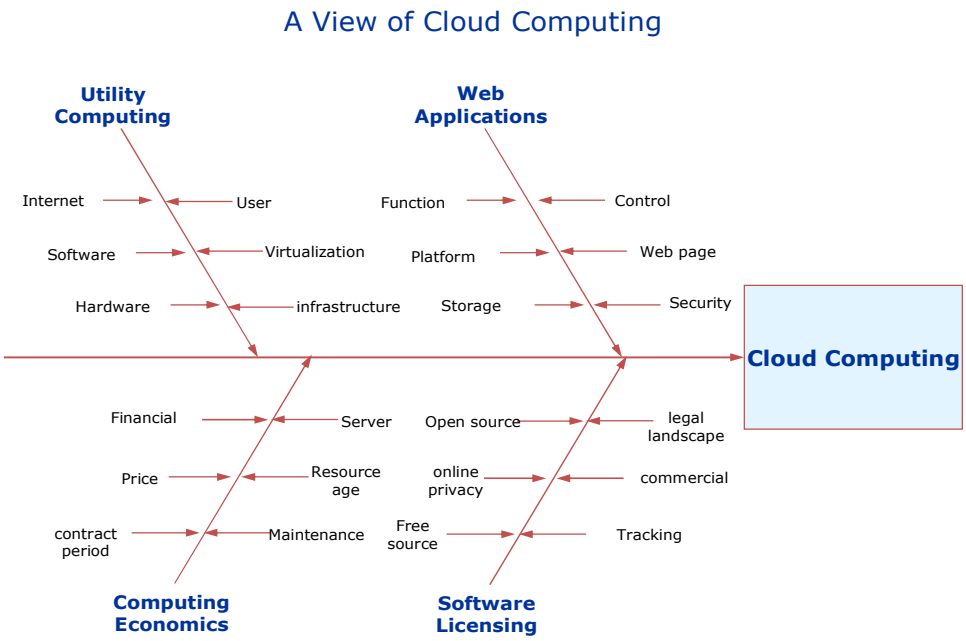

Fig. 2. Cloud Computing

There is plenty to discuss as far as the functions of these specific factors, which play a role in regards to Cloud Computing. The benefits of cloud computing is immense and can be studied via the impact of the factors that is being discussed in the paper [2]. Utility computing is a great phenomenon that affects the concept of cloud computing to a great deal. The concept of utility computing helps to a great deal as it help through meeting the data scarce needs by making the data available [36]. The service on demand is the primaries of the concept and provides managers with multiple resources. The phenomenon is helpful as it provides a fast programming execution but the phenomenon is concerned with many issues especially the security related risks [37].

Web applications is also an important factor that affect the concept of cloud computing. The reason is that phenomenon of cloud computing requires certain web application and protocols. The impact however is positive and it facilitates cloud computing as well as freed the companies from the burden of infrastructure by connecting the applications over the internet [38]. The readily available application will help in making the customer interact readily and efficiently. The harms of web applications lie in it being complex but the benefit of the application is in its use for educational purposes as well as corporate purpose [39].

The concept of computing economics has a great impact on the future of cloud computing. The motive of computing economics is to freed the organization and corporate from the burden of having large infrastructures in order to meet their data requirement [40]. The computing economics will align the concepts of economics with the computing models and will open the opportunities for cloud computing to a great deal. The development of computing economics will help in making computing more aligned to social and environmental context [41].

Software licensing is important to deal with the security risks that attached with the phenomenon. The license has different types and they have different licensing needs. The software licensing is a difficult phenomenon as it requires experts to draft the contract that have the knowledge of law as well as the technology [41]. Software licensing is actually the biggest hurdle in the way of the concept and much has been studied on the issues related to software licensing. The fact is that software licensing related to the concept of cloud computing is very complex and includes several kinds of dimensions like international and national perspective as well as the laws to be applied on the concept and the coherence of these laws [42].

8 CONTRIBUTION AND NEW INSIGHT

I believe that cloud computing can be improved productivity and be use all around. Cloud Computing will become not only financial profit but also more secure for everyone. Cloud computing will contribute a lot to the society and will help the companies in their goals to gain the cost advantages. The phenomenon will have new dimensioned more of the sort of something close to internet of things. Cloud computing is an emerging concept and will enhance the idea of outsourcing to a new level. The concept already has diverse factors to consider and will take time to eventually become the integral part of the organization. The pros and cons of the phenomenon are immense and will require lots of efforts and studies to mitigate the concerns. The contribution of the topic is manifold and will cover many aspects of the technological field. The insight that the study has provided will help the organizations to understand the concept more and to study the concept in perspective of the marketing strategies. The important aspects of marketing related to the concept studied in the paper.

The study would be a great help for the organizations that are still indecisive over the pros and cons of the concept. The financial concerns of the companies also discussed in the paper. It will also change the dimension of the concept as people think of it as a told for the huge companies or the market giants. Another perception about the phenomenon is that the concept is only useful for the multinational companies that have to deal with enormous amount of data. The contribution of the paper towards concept is manifold. It mostly addresses the concept in terms of marketing effects that the concept will bring in. The insights that the concept will provide to the business world as well as the educational one will help in defining the concept of technology in another way.

The future of cloud computing lies in the hands of experts dealing with the security concerns and the risks attached with virus attacks and data theft. The legal terms associated with the phenomenon also requires addressing the issue with lots of effort. Legal laws related to licensing and the diverse conflicts. Arising out of the phenomenon of computing economics will be the issues of core importance. The data will processed in a way of finding the authority that allows the use of material. The Cloud Computing concept has an immense potential and have the concerns and issues assassinated with different aspects of the concepts. The contribution of the concept will be in the form of revolution and will bring a change of its kind in the technological world. The phenomenon will lead to further outsourcing that may include finance and marketing and the processing and having analysis over the phenomenon.

9 CONCLUSION

For individuals and organizations, Cloud Computing offers many benefits. If you are thinking or using cloud service, you should know about how your information can be secure. The concept of cloud computing is being widely discussed in the study and found many sort of impacts that are related to the harms and the benefits that will be witnessed when the factors like software licensing and the computing economics are studied. The concept is greatly influenced by the factors investigated in the study and found out that these factors are further divided into many sub factors that will impact the concept of cloud computing. These factors have implication of various types that opens the insight into other fields of the subject. The factors have their pros as well cons and the previous researcher done a prominent work over the issue. However, there is still a need to do a lot of work on the topic especially when discussing it in connection with the marketing subject. The phenomenon requires lots of investment and will brought huge revenues but is riskier as well.

The factors like utility computing and web application benefited the project in many ways. They affect the concept by means of providing a huge lot of choices for the companies to choose between in order to fulfill their technological needs without investing heavily over the capital resources. The phenomenon also bring concerns along with that. These are the concerns of the security and reliability. As well requires lots of trust on the company providing the service and along with that it needs to deal the matter in a way that customers who are the ultimate user of the application will appreciate the efforts and huge investments of the company. The paper had presented its own model of cloud computing and discussed the important factors in the model in which the clients were the most important of them. Software licensing and computing economics are also discussed and it is revealed from the studies that software licensing have negative impact on the concept while computing economics have a lot of impact but requires the phenomenon to be studied more.

The concept of cloud computing is being successfully practiced by the famous company like Google. Google has launched many software's related to the cloud computing and has received a great response for the concept. The companies in the future world will require being more smart and cunning and for that they will need to support their data with lots and lots of historical data. These historical data will be available by using the concept. The companies will be more required to outsource the work related to the fields in which they do not work. Therefore, they will secured in investing heavily over their capital resources and will convert the capital expenses into operating one.

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