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A Review on Cloud Computing Model

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Abstract: - **In recent year cloud computing has been an emerging computing model in the IT industry such as google, Amason, Microsoft. Cloud computing is emerging as a model of "everthing as a service" (XaaS). This paper present a study on service model and deployment model of cloud computing. The paper also attempts   to layout the   prons and cons of cloud computing.**

*Keywords-***Cloud computing,SaaS,PaaS,IaaS,Hybird**

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I.   INTRODUCTION

Cloud computing is model of computing that use the internet for sharing of information,software and resources to compter and other devices upon demand.This enable the end user to access the cloud computing resource anytime from any platform such as cellphone,mobile computing platform or the desktop.The current major cloud service provider are Microsoft,Hewlerr Packard, IBM, Amason,Google.The evolution of cloud computing can handle such massive data as per on demand service[1].This paper describe the study of different service and deployment model of cloud computing.

This paper is organized as follows.Section 2 describe the different service model of cloud computing.section 3 contain the deployment model of cloud computing.section 3 identify advantages and disadvantages of cloud computing.and section 4 describe the application of cloud computing.

II.   SERVICE MODEL OF CLOUD COMPUTING

Cloud service model can be classified into 3 different class acoording to their abstraction level and resourse provided.
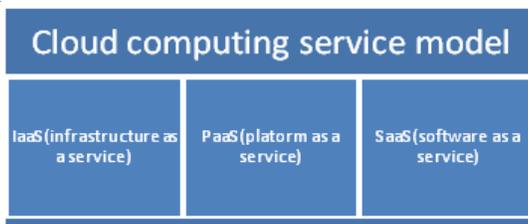

Figure 1- Cloud computing service model

A .Saas-Software as a service

In Saas model a software provider license a software application to be used and purchased on demand.Applications can be accessed through network from various client(web browser,mobile phn etc) by application use[2]r.It doesnot require client installation just a browser or other client device and network connectivity .

B. PaaS-Platform as a Service

The difference in PaaS from SaaS is that SaaS only host completed cloud application where PaaS Offer a development platform for both completed and inprogress cloud application . PaaS offer an environment where developer can developers can create and deploy applications and donot need necessarily to know how much memory and how many processor their application will be using.PaaS model give benefit to developer in term of develop complement software life cycle from planning to design to building application to deployment to maintenance . Paas model offer higher level of abstraction[3].

C. IaaS-Infrastructure as a service

IaaS model focus on enable technologies . IaaS model offer a service to get a virtual server in few minutes and pay only for the resources they use .In IaaS model consumer can directly use infrastructure components(storage,firewall,network etc).

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IaaS as a service provider offer virtual server containing one or more cpu running several choices of operating 3-Deployment model of cloud computing:-
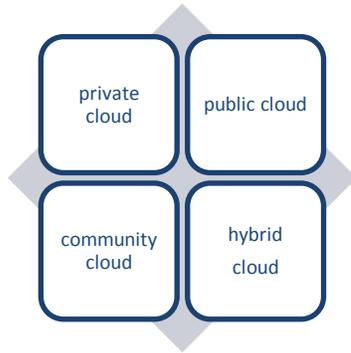

Figure 2-Depoyment model of cloud

• Private cloud-The private cloud represent a model where a single organizations stand up cloud capacity and only the member of organizations are allowed to consume the capacity.This is a common model for government and large enterprise .private cloud are good in security concern,It may exit on premise or off premise.

• Community cloud:-the community cloud is shared by several organization and support a specific community that has share concerns.It may be managed by organization or a third party.

• Public cloud-The cloud infrastructure is available to general public.Its a cloud that anyone can use like google,amason.Public cloud implementation are large cloud implementations around[5].

• Hybrid cloud-The Hybrid cloud are combination of two or more cloud model(private,community,public) that remain unique entity but are bound together by standrized technology that enable data and application portability.

III.   ADVANTAGES AND DISADVANTAGES OF CLOUD COMPUTING

A.   Advantages Of Cloud Computing

• The cloud computing environment are scalable.

system and a customized software stack[4].

• Back up recovery is very easy in Infrastructure as a service (IaaS) provider,hence there is efficient incident response whenever data need to be recovered.

• Reduced setup costs can be considered as a major advantage for cloud computing ,Since the cost involved in setting up a data centre are not very high.

• In addition to the IT industry,even small scale business can adopt this environment(model)

• Considering cloud computing from the aspects of power management ,it serves as a virtual server which is easy to implement as compare to physical servers.

• Hardware management failure can also be localized and rectified with relative ease.

• Various data centres are spread throughout the country   and thus it make easy for business to Use preferred sites.

• The assessment of data can be done an time and is highly beneficial for the IT industry in reducing the workloads.

B.   Disadvantage of cloud computing

• A major disadvantage in cloud computing is that it is under the maintenance and supervision of a third-party.Hence the confidentiality and security measures are less secured[6].

• In cloud environment the data is not specifically segregated.It is distributed throughout the cloud network and causes the problems when specific data needs to be segregated.

• Another major drawback is the dependence on network connectivity .Network failure can result in loss to the company by causing extensive time delays.

• The Quality of service is a key determining factor in the efficiency of a cloud network.A reliable service provider providing desired quality of service may be difficult to source and the process set-up could turn out to be time consuming[7].

IV.   CONCLUSION

Cloud computing is the promising paradigm for delivered IT services as computing utilities.Cloud are designed to provide services to external user;provider need to be

compensated for sharing their resources and capabilities.This paper give an overview of cloud computing service and deployment model to evaluate and improve the existing systems.

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