Diagram showing: Users, Client Interface, SaaS, PaaS, Billing Q, Billing Service, Launch Q, launch Codr, Monitor Q, Monitor Codr, IaaS, Status DB, Master, Worker, Distributed file System, DaaS

* The Iaas, Paas & Saas cloud service models at different service levels.

* Cloud computing delivers infrastructure, platform, and software (application) as services, which are made available as subscription based services in pay-as-you-go model to consumers. The services provided over the cloud can be generally categorized into three different service models; namely IaaS, Platform as a Service (PaaS), & software as a service (SaaS).

* <u>Infrastructure as a service</u> :

* This model allows to use virtualized resources for computing, storage, & networking. In short, the service is performed by rented cloud infrastructure. The user can deploy & run his applications over his chosen OS environment. The user does not manage or control the underlying cloud infrastructure., but has control over the OS, storage, deployed applications, & possibly select networking components. This IaaS model encompasses storage as a service, compute instances as a service, & communication as a service. For eg.:- Amazen· EC2, S3 storage., GoGrid, FlexiScale & Aneka..

* <u>Platform as a Service (PaaS)</u> :

* To be able to develop, deploy, & manage the execution of applications using provisioned resources demands a cloud platform with the proper soft. env.. Such a platform inc. Operating System & runtime library support. This has triggered the creation of the PaaS model to enable users to develop & deploy their user application.

* The platform cloud is an integrated comp. System consisting of both hardware & soft.

infrastructure. The user application can be developed on this virtualized cloud platform using some programming languages & soft. tools supported by the provider.

- The PaaS model enables a collaborated soft. development platform for users from diff. parts of the world. For eg :- Google app engine, salesforce.com's, Amazon elastic map reduce.

* <u>Software as a Service (SaaS)</u> :

- This refers to browser - initiated application soft. over thousands of cloud customers.

- The SaaS model provides software applications as a service. As a result, on the customer side, there is no upfront investment in servers or soft. licensing. On the provider side, costs are kept rather low, compared with conventional hosting of user applications. Customer data is stored in the cloud that is either vendor proprietary or publicly hosted to support PaaS & IaaS.

- The best eg. of SaaS service include google gmail & docs, microsoft share point & the CRM soft from salesforce.com.