Evolution of Cloud Computing

It has essentially evolved from various computing technologies like grid computing, utility computing, parallel computing, and virtualization. The most recent development of cloud computing has evolved from the Web2.0 technology which caters to web applications that facilitate participatory information sharing, interoperability & user-centered design etc.

Examples of Web 2.0 include wikis, blogs, social networking & video sharing sites etc.

The evolution of cloud computing can be bifurcated into three basic phases:

1. **The Idea Phase**- This phase incepted in the early 1960s with the emergence of utility and grid computing and lasted till pre-internet era. Joseph Carl Robnett Licklider was the founder of cloud computing.
2. **The Pre-cloud Phase**- The pre-cloud phase originated in the 1999 and extended to 2006. In this phase internet was used as the mechanism to provide Application as Service.
3. **The Cloud Phase**- The much talked about real cloud phase started in the year 2007 when the classification of IaaS, PaaS, and SaaS got formalized. The history of cloud computing has witnessed some very interesting breakthroughs launched by some of the leading computer/web organizations of the world.

What is Cloud Computing technology?

The official definition from the National Institute of Standards and Technology reads: "Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction." It enables accessing the Internet anywhere, anytime and being able to use any or all of the data and applications that is desired, without the user's ever having to know much about the technology.

Cloud computing is a technology that puts the entire computing infrastructure in both hardware and software applications online. It uses the internet, remote central servers to maintain data & applications. Gmail, Yahoo mail, Facebook, Hotmail, Orkut, etc are all the most basic and widely used examples of cloud computing. One does not need his own PC or laptop to check some stored mail/data/photos in the mailbox but can use any computer with

an internet connection since the data is stored with the mail service provider on a remote cloud. The technology in essence is a geographical shift in the location of our data from personal computers to a centralized server or 'cloud'. Typically, cloud services charge its customers on a usage basis. Hence it is also called Software as a Service (SaaS). It aims to provide infrastructure and resources online in order to serve its clients.