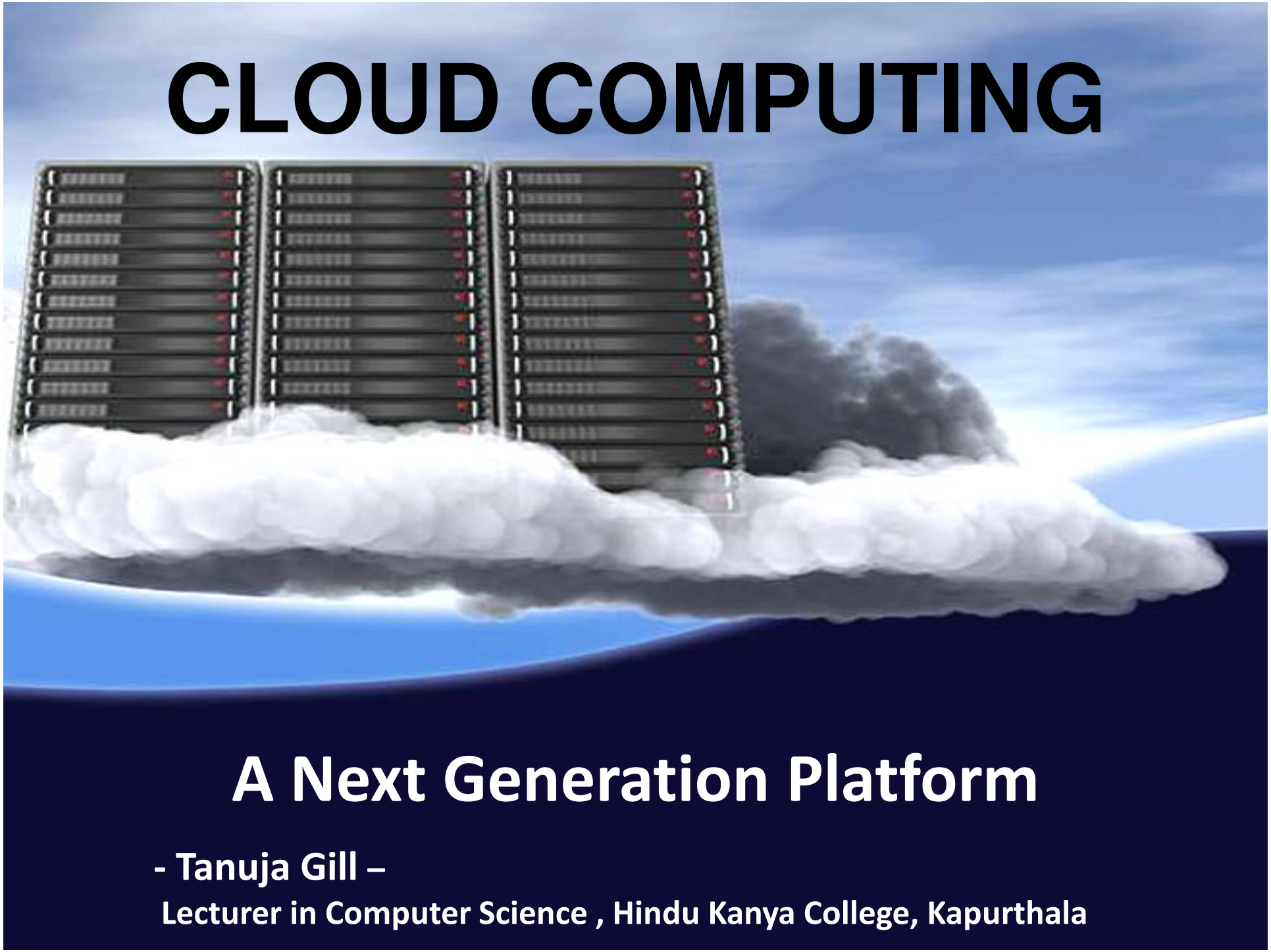
CLOUD COMPUTING



A Next Generation Platform

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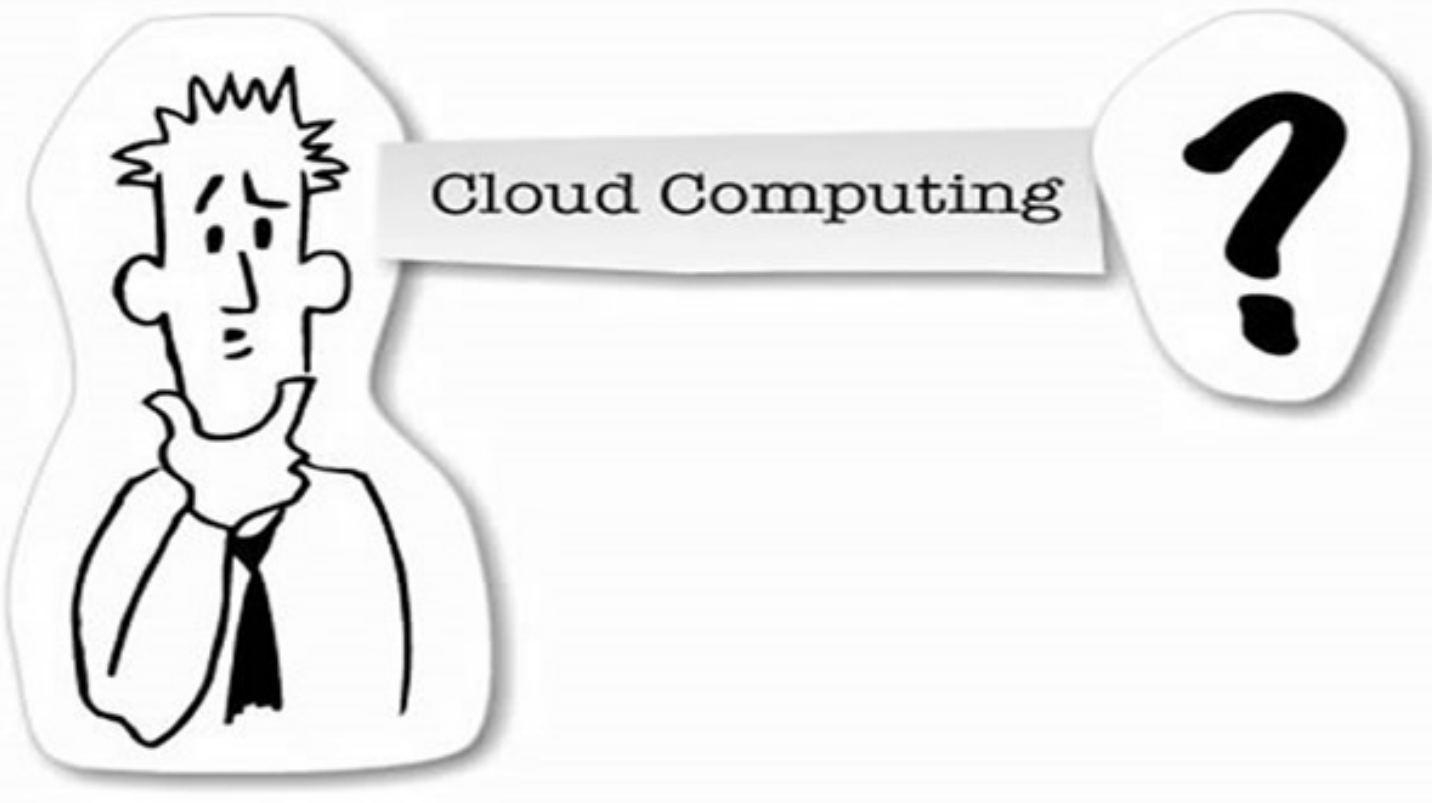
What is ……



…Is it something like this ?

Cloud Computing can be defined as……

- Moving Computing and Data away from the desktop and the portable PC and simply displaying the results of computing that takes place in a centralized location and is then transmitted via internet to user's screen.

- Cloud computing is Internet-based computing, in which shared resources, software and information is provided on-demand to computers and other web enabled devices without the need to store it locally.

we need Cloud Computing ?

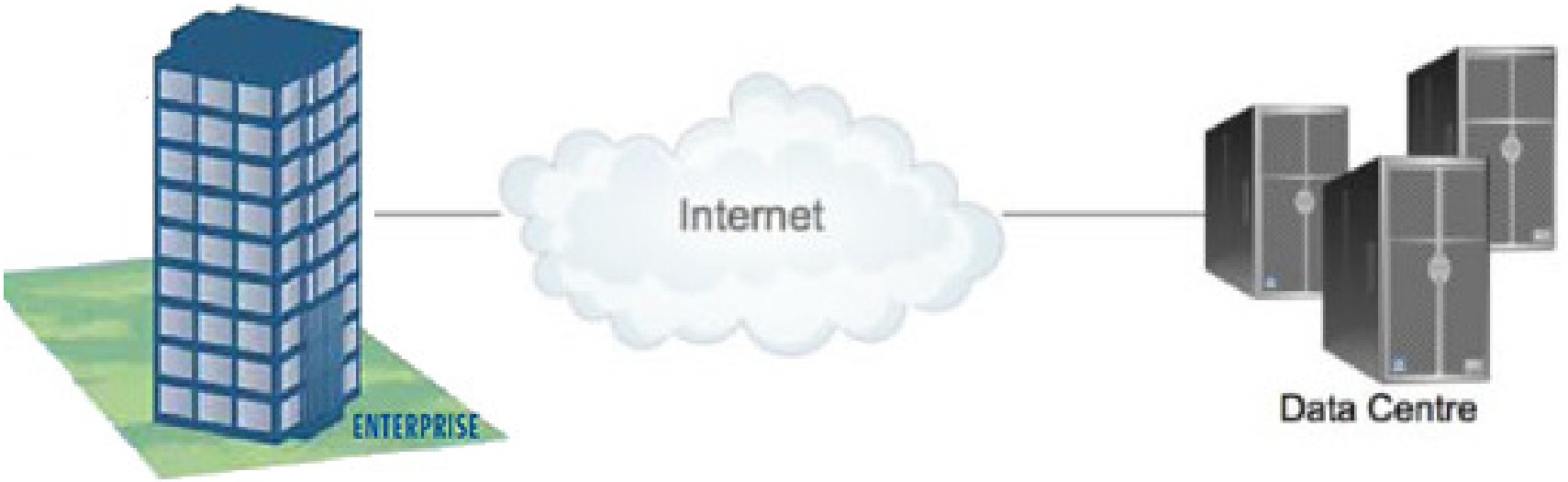
- Cloud computing removes the complexities and constraints of traditional computing environments, including - **space**, **time**, **power**, and **cost**
- Users do not have or need **knowledge** ,**control** and **ownership** in the computer infrastructure.
- Users simply rent or access the software, paying only for what they use.

What is a Cloud?

The *cloud* itself is a set of hardware, networks, storage, services, and interfaces that enable the delivery of computing as a service.

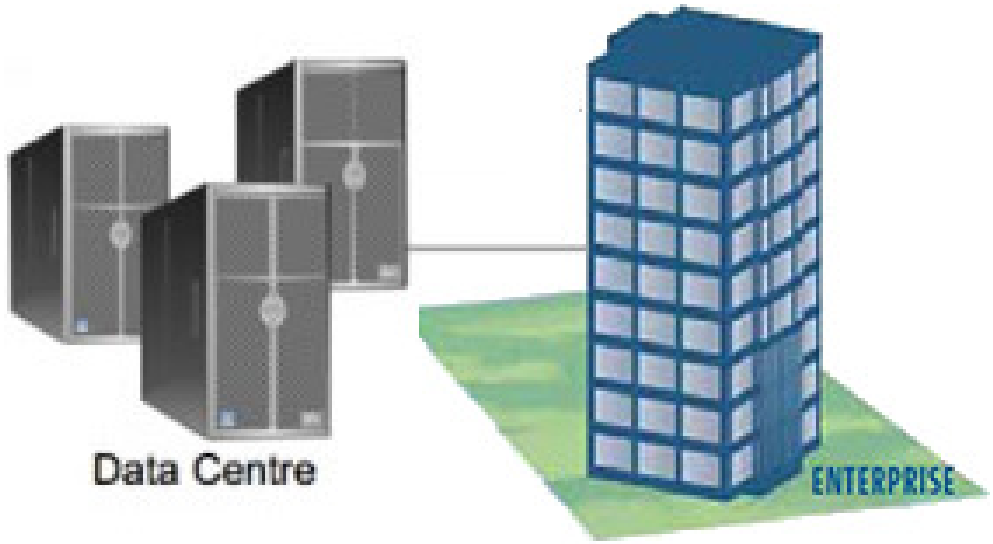
Types of Cloud

1. Public Cloud : In Public Cloud the customer has no visibility and control over where the computing infrastructure is hosted. The computing infrastructure is shared between any organizations.



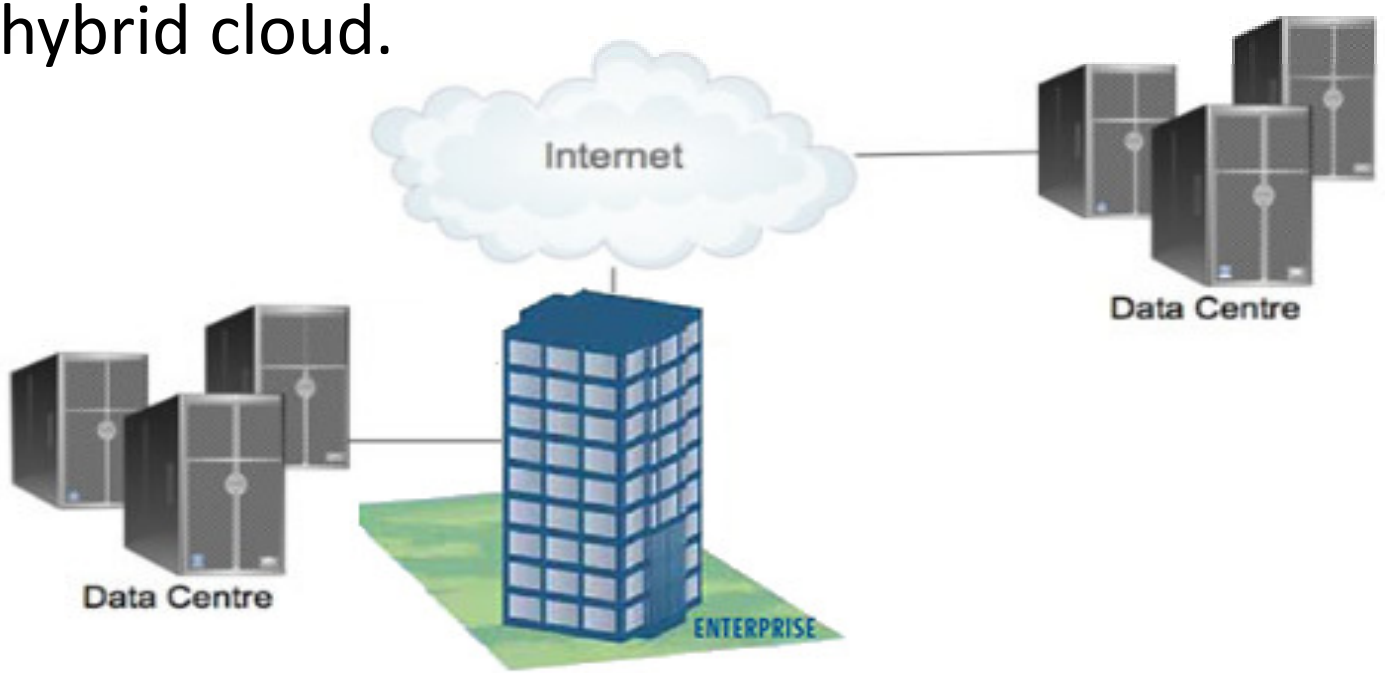
Types of Cloud

2. Private Cloud : The computing infrastructure is dedicated to a particular organization and not shared with other organizations. Private clouds are more expensive and more secure when compared to public clouds.

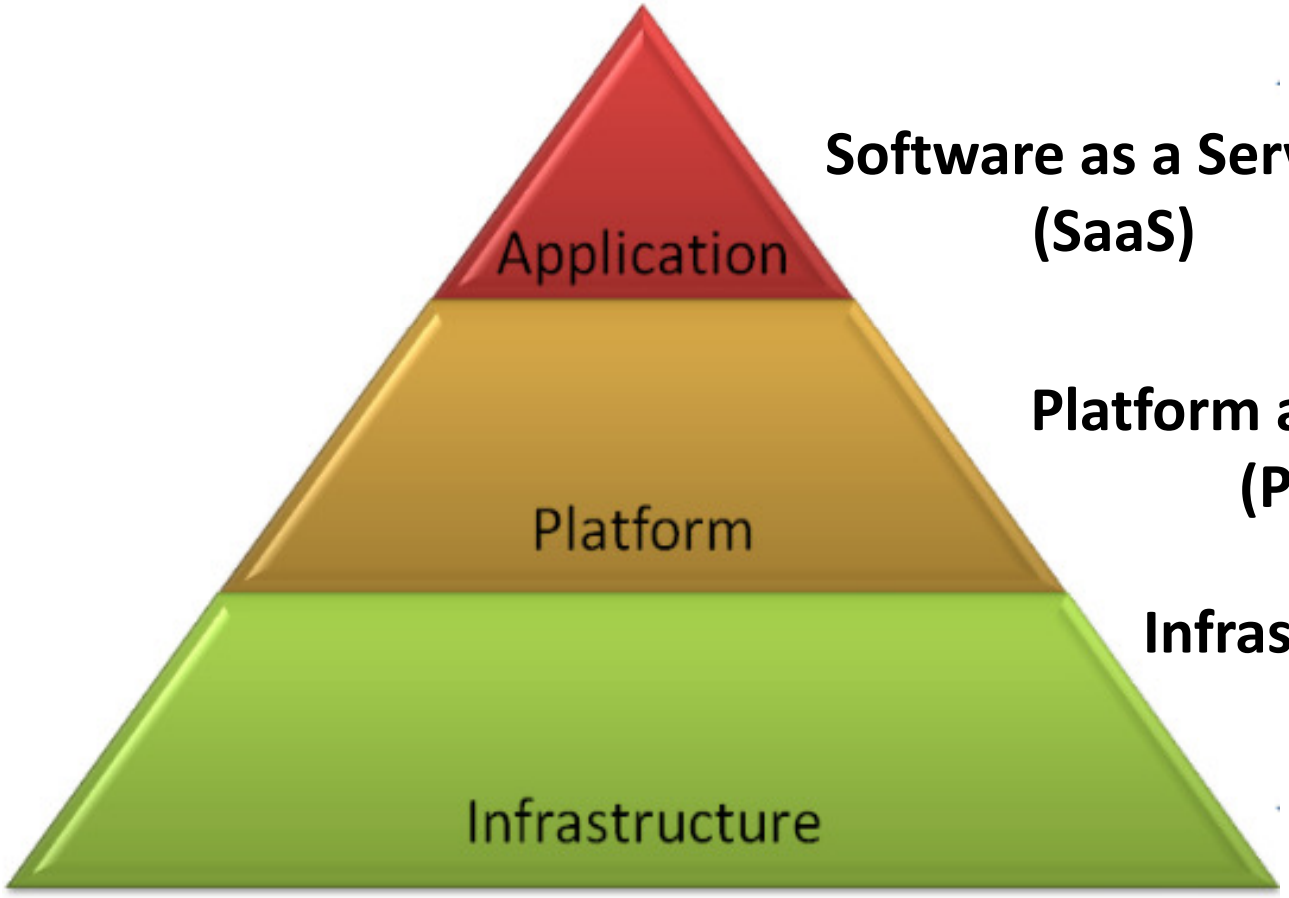


Types of Cloud

3. Hybrid Cloud : Organizations may host critical applications on private clouds and applications with relatively less security concerns on the public cloud. The usage of both private and public clouds together is called hybrid cloud.



Services provided by Cloud Computing



Software as a Service (SaaS)

Platform as a Service (PaaS)

Infrastructure as a Service (IaaS)

Software as a service (SaaS)

1. **Software as a service (SaaS)** includes a complete software offering on the cloud. Users can access a software application hosted by the cloud vendor on pay-per-use basis.

The examples are online email providers like Googles gmail and Microsofts hotmail, Google docs and Microsofts online version of office.

Platform as a service (PaaS)

2. Platform as a Service (PaaS) involves offering a development platform on the cloud. Platforms provided by different vendors are typically not compatible.

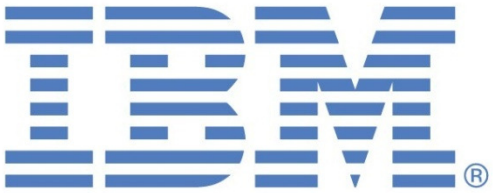
Typical service providers in PaaS are Google's Application Engine, Microsofts Azure, Salesforce.com's force.com.

Infrastructure as a service (SaaS)

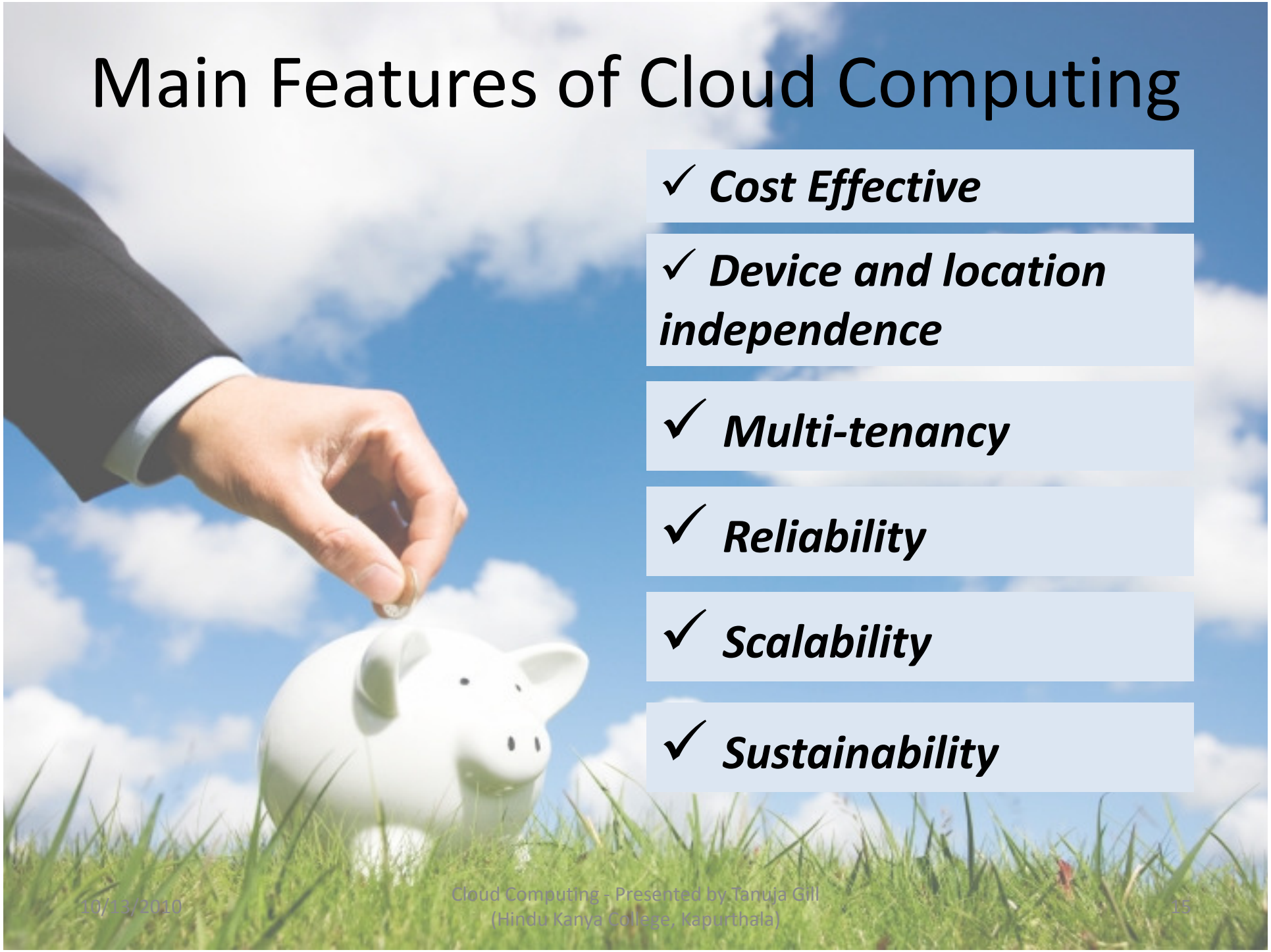
3. Infrastructure as a Service (IaaS) involves offering hardware related services using the principles of cloud computing. These could include some kind of storage services (database or disk storage) or virtual servers.

Leading vendors that provide Infrastructure as a service are Amazon EC2, Amazon S3, Rackspace Cloud Servers, *GoGrid*, and Rightscale.

Major Service Providers of Cloud Computing



Main Features of Cloud Computing



- ✓ ***Cost Effective***
- ✓ ***Device and location independence***
- ✓ ***Multi-tenancy***
- ✓ ***Reliability***
- ✓ ***Scalability***
- ✓ ***Sustainability***

Conclusion

70’s to 80’s There was a Mainframe Era

90’s to 2000 There was a Client Server Era

The Cloud : Truly a new Era in Computing

Cloud computing offers real alternatives to IT Markets for developing the delivery of software applications, platforms, and infrastructure as a service over the “cloud”.

Questions

Thank You

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