What is the cloud?

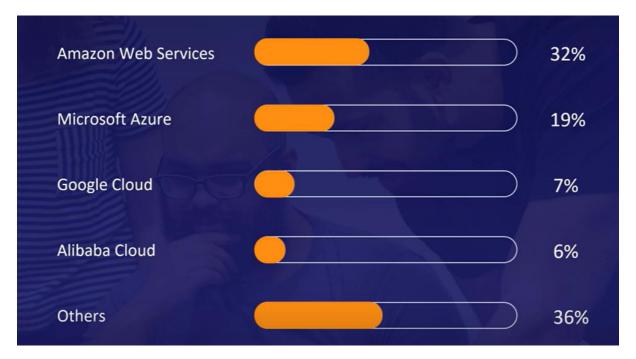
- A collection of services which create a platform
 - 1. Virtual servers
 - 2. Media services
 - 3. Security
 - 4. Databases
 - 5. Networking
 - 6. Data Storage
 - 7. Analytics
 - 8. Machine Learning

AWS is the worlds most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centres globally, millions of customers – including the fastest growing start-ups, largest enterprises and leading govt agencies are using AWS to lowers costs, become more agile and innovate faster.

Pay as you go pricing:

- Billed by second for using services
- 60 second minimum
- Use 83 seconds, get charged for 83 seconds
- Lambda recently moved to per millisecond billing

Market Share:



AWS Service Timeline:





Regions and availability zones:

Regions:

- AWS Regions are separate geographic areas that AWS uses to house its infrastructure.
- These are distributed around the world so that customers can choose a region closest to them in order to host their cloud infrastructure there.
- The closer your region is to you, the better, so that you can reduce network latency as much as possible for your end-users. You want to be near the data centres for fast service.

Availability Zones:

- An AWS Availability Zone (AZ) is the logical building block that makes up an AWS Region. They are isolated locations— data centers within a region.
- Each region has multiple AZs and when you design your infrastructure to have backups of data in other AZs you are building a very efficient model of resiliency, i.e. a core concept of cloud computing.



