# CMPT 733 Introduction to AWS

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# Amazon

# From Wikipedia 2006

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#### Amazon.com

From Wikipedia, the free encyclopedia

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#### Amazon.com

(NASDAQ: AMZN☑) is an American electronic commerce company based in Seattle, Washington. It was one of the

#### Amazon.com

From Wikipedia, the free encyclopedia

Further information: Timeline of Amazon

Amazon.com, Inc. (/æməzon/ or /æməzən/), often referred to as simply Amazon, is an American electronic commerce and cloud computing company with headquarters in Seattle, Washington. It is the

# What is Cloud Computing?

## The buzz word before "Big Data"

- Larry Ellison's response in 2009 (<a href="https://youtu.be/U0EFXaWHppE?t=7s">https://youtu.be/U0EFXaWHppE?t=7s</a>)
- Berkeley RADLab's paper in 2009 (<a href="https://www.youtube.com/watch?v=IJCxqoh5ep4">https://www.youtube.com/watch?v=IJCxqoh5ep4</a>)

## A technical point of view

Internet-based computing (i.e., computers attached to network)

### A business-model point of view

Pay-as-you-go (i.e., rental)



# Three Types of Cloud Computing

CourSys

Application + Cloud = **SaaS** (Software as a service)

Database

Platform + Cloud = **PaaS** (Platform as a service)

Servers

Infrastructure + Cloud = **laaS** (Infrastructure as a service)

# How does AWS fit into the picture?

### IaaS

- EC2, S3, ...
- <u>Highlight:</u> EC2 and S3 are two of the earliest products in AWS

### PaaS

- Aurora, Redshift, ...
- Highlight: Aurora and Redshift are two of the fastest growing products in AWS

### SaaS

- WorkDocs, WorkMail
- <u>Highlight:</u> May not be the main focus of AWS

# Why did AWS succeed?

# Starting from laaS (i.e., S3 and EC2) is the key

 Although there are many SaaS and PaaS companies before AWS, in most of the time, people still want to have a full control of computing resources

## 10-100 less expensive than alternatives (2006)

Apply the existing \*unused\* resources (that are for Amazon.com) to cloud computing

# The speed of provisioning is really fast

Similar to "1-click buy"

# Summary

# **Big Picture**

- Cloud Computing
- SaaS, PaaS, and laaS

### **AWS**

- Putting AWS into the big picture
- Why does AWS succeed?