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

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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 (https://youtu.be/U0EFXaWHppE?t=7s)
- Berkeley RADLab's paper in 2009 (https://www.youtube.com/watch?v=IJCxqoh5ep4)

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?

laaS

- ∘ 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 did AWS succeed?