CMPT 733
Introduction to AWS
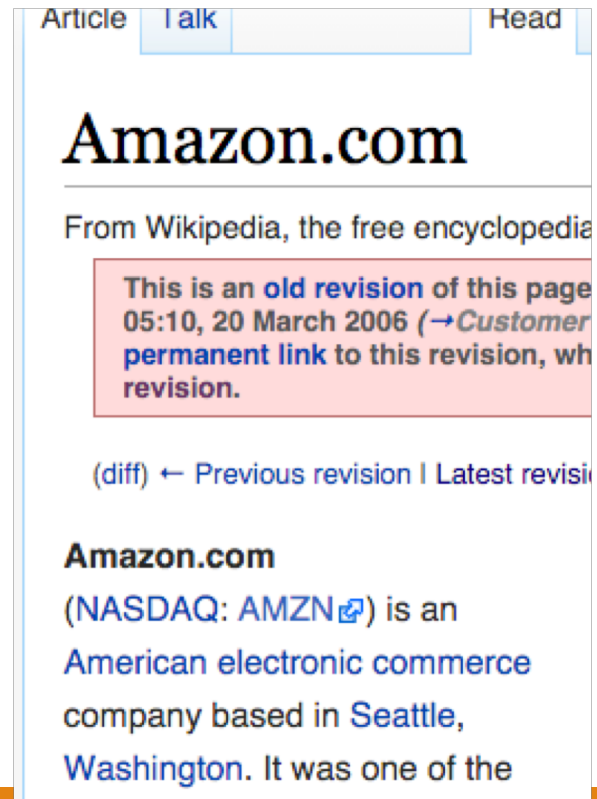
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Amazon

From Wikipedia 2006

Article | Talk | Head

Amazon.com

From Wikipedia, the free encyclopedia

> This is an **old revision** of this page
> 05:10, 20 March 2006 (→*Customer*
> **permanent link** to this revision, wh
> revision.

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Amazon.com

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

From Wikipedia 2016

Amazon.com

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Further information: Timeline of Amazon

Amazon.com, Inc. (/ˈæməzɒn/ or /ˈæməzən/), 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/UOEFXaWHppE?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 = **IaaS** (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, …
○ <u>Highlight:</u> 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 IaaS (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 IaaS

AWS
◦ Putting AWS into the big picture
◦ Why did AWS succeed?