AWS Academy Cloud Foundations

Module 1: Cloud Concepts Overview

Module overview

Topics

- Introduction to cloud computing
- Advantages of cloud computing
- Introduction to Amazon Web Services (AWS)
- AWS Cloud Adoption Framework (AWS CAF)

Knowledge check

Module objectives

After completing this module, you should be able to:

- Define different types of cloud computing models
- Describe six advantages of cloud computing
- Recognize the main AWS service categories and core services
- Review the AWS Cloud Adoption Framework (AWS CAF)

Module 1: Cloud Concepts Overview

Section 1: Introduction to cloud computing

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What is cloud computing?

Cloud computing defined

Cloud computing is the **on-demand** delivery of compute power, database, storage, applications, and other IT resources **via the internet** with **pay-as-you-go** pricing.

Infrastructure as software

Cloud computing enables you to **stop thinking of your infrastructure as hardware**, and instead **think of (and use) it as software.**

Traditional computing model

- Infrastructure as hardware
- Hardware solutions:
  - Require space, staff, physical security, planning, capital expenditure
  - Have a long hardware procurement cycle
  - Require you to provision capacity by guessing theoretical maximum peaks

Cloud computing model

- Infrastructure as software
- Software solutions:
  - Are flexible
  - Can change more quickly, easily, and cost-effectively than hardware solutions
  - Eliminate the undifferentiated heavy-lifting tasks

Cloud service models

IaaS
(infrastructure as a service)

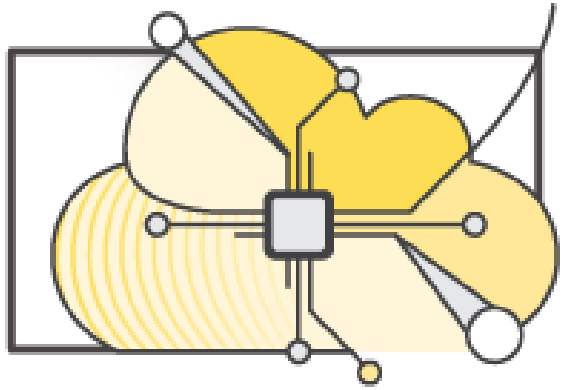
PaaS
(platform as a service)

SaaS
(software as a service)

More control over IT resources

Less control over IT resources

Cloud computing deployment models

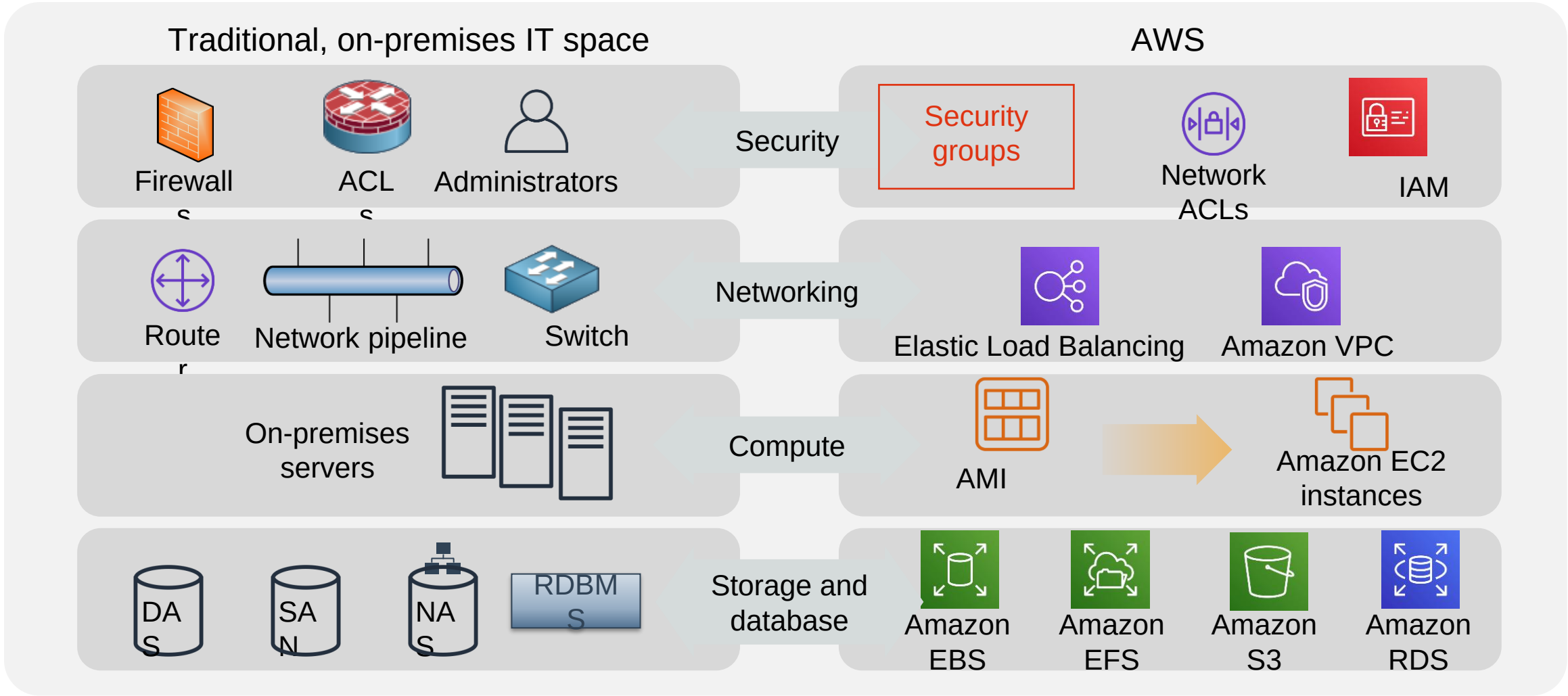


Cloud

Hybrid

On-premises (private cloud)

Similarities between AWS and traditional IT



Section 1 key takeaways

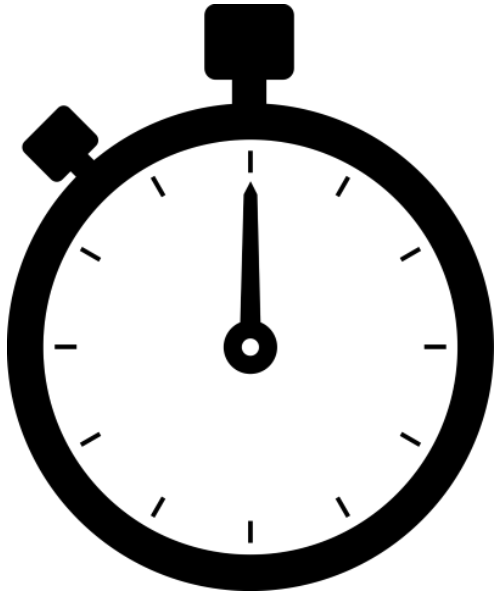
- Cloud computing is the on-demand delivery of IT resources via the internet with pay-as-you-go pricing.
- Cloud computing enables you to think of (and use) your infrastructure as software.
- There are three cloud service models: IaaS, PaaS, and SaaS.
- There are three cloud deployment models: cloud, hybrid, and on-premises or private cloud.
- Almost anything you can implement with traditional IT can also be implemented as an AWS cloud computing service.

Module 1: Cloud Concepts Overview

Section 2: Advantages of cloud computing

Trade capital expense for variable expense

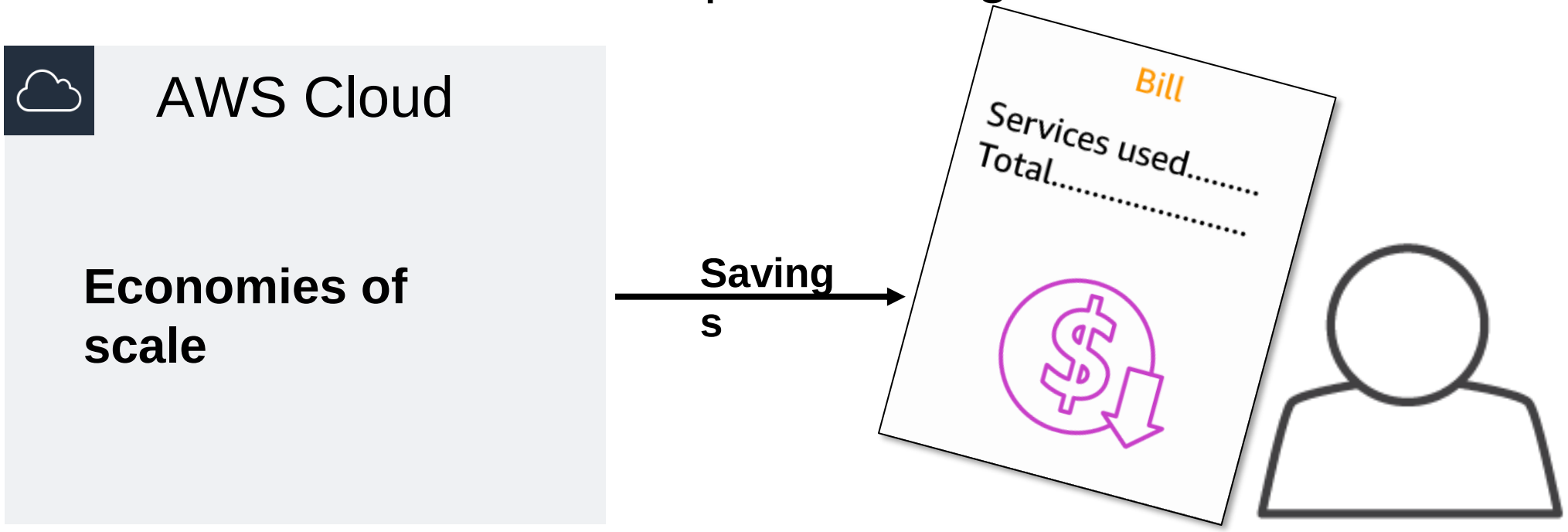
Data center investment based on forecast



Pay only for the amount you consume

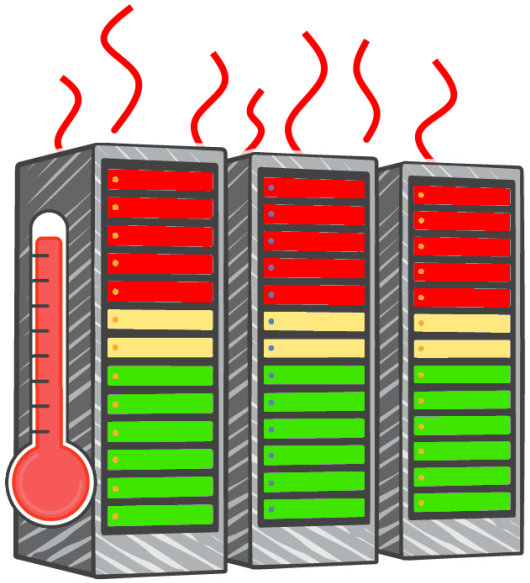
Massive economies of scale

Because of aggregate usage from all customers, AWS can achieve
higher economies of scale and pass savings on to customers.

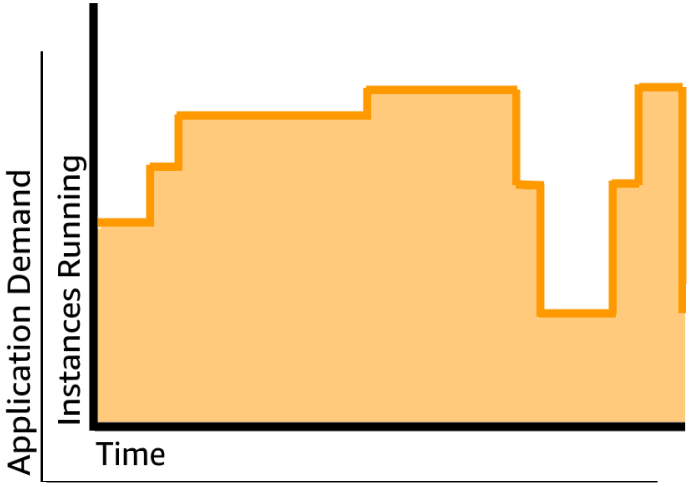


Stop guessing capacity

Overestimated server capacity



Underestimated server capacity



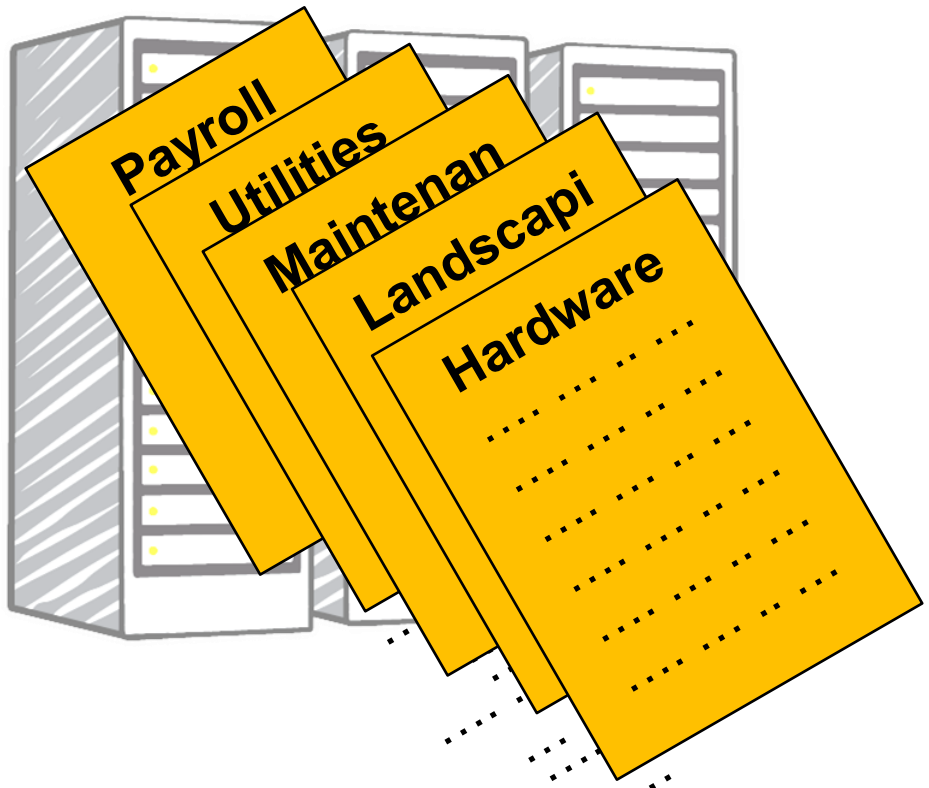
Scaling on demand

Increase speed and agility

Weeks between wanting resources and having resources

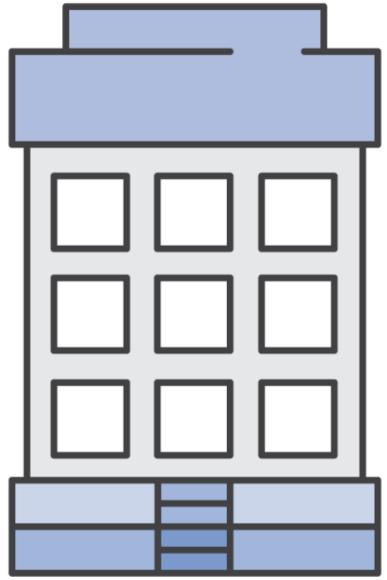
Minutes between wanting resources and having resources

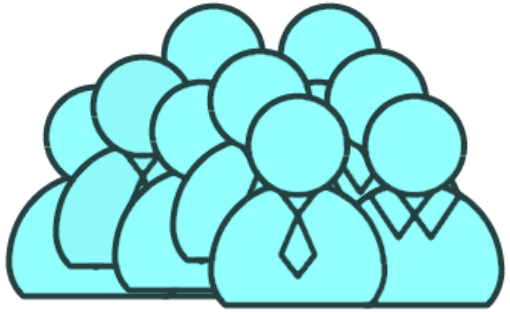
Stop spending money on running and maintaining data centers



Running data centers

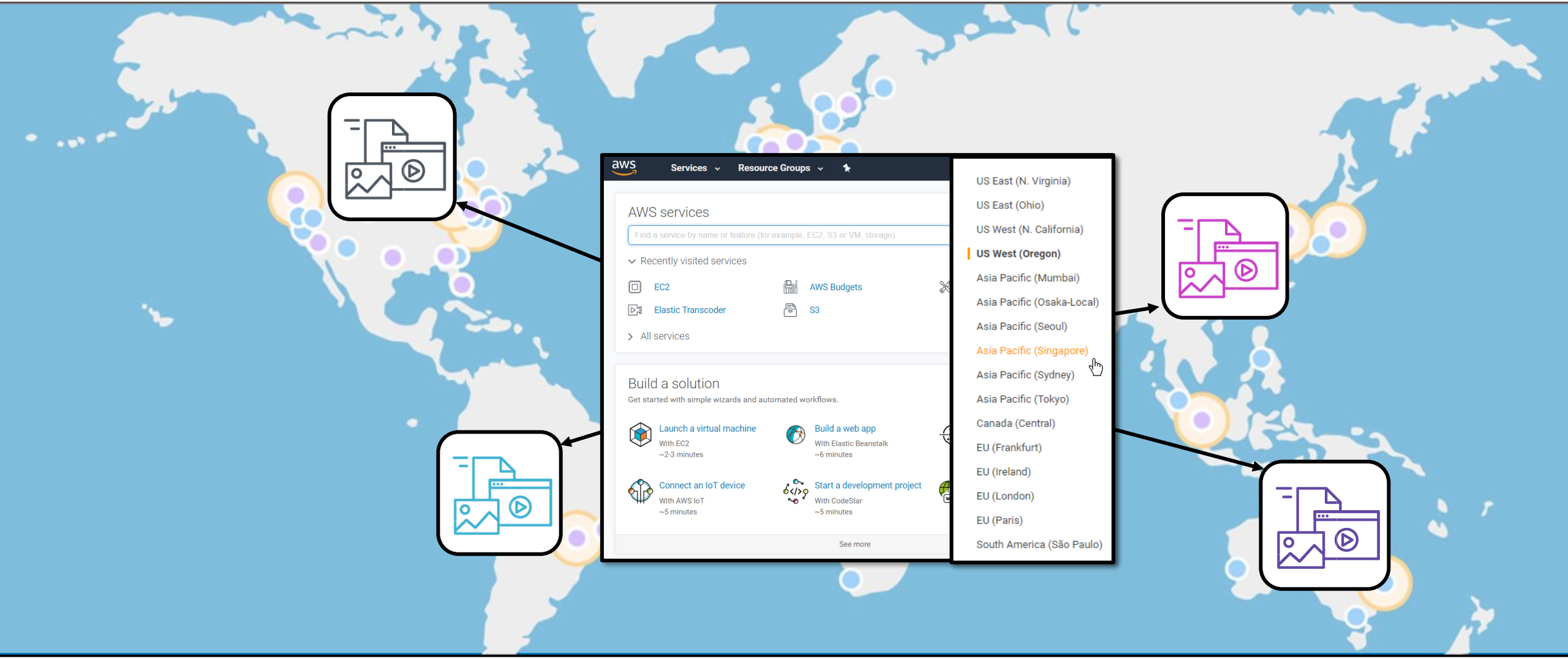
Investment





Business and customers

Go global in minutes



Section 2 key takeaways

- Trade capital expense for variable expense
- Benefit from massive economies of scale
- Stop guessing capacity
- Increase speed and agility
- Stop spending money on running and maintaining data centers
- Go global in minutes

Thank You

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