

# Fundamental Cloud Concepts for AWS

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## UNDERSTANDING CLOUD COMPUTING



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# Overview

**Reviewing the course resources**

**Creating an AWS account for personal use**

**Examining how organizations leverage traditional data centers**

**Exploring the benefits of cloud computing**

**Reviewing cloud computing models**

**Understanding cloud computing deployment models**



# Setting Up an AWS Account

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# Demo

**Creating a new personal AWS account**

**Activating the new account**

**Configuring a budget alert for the account**



# Traditional Data Centers

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# Globomantics Social Network



**GLOBOMANTICS**

**Launching a new social network for professionals**

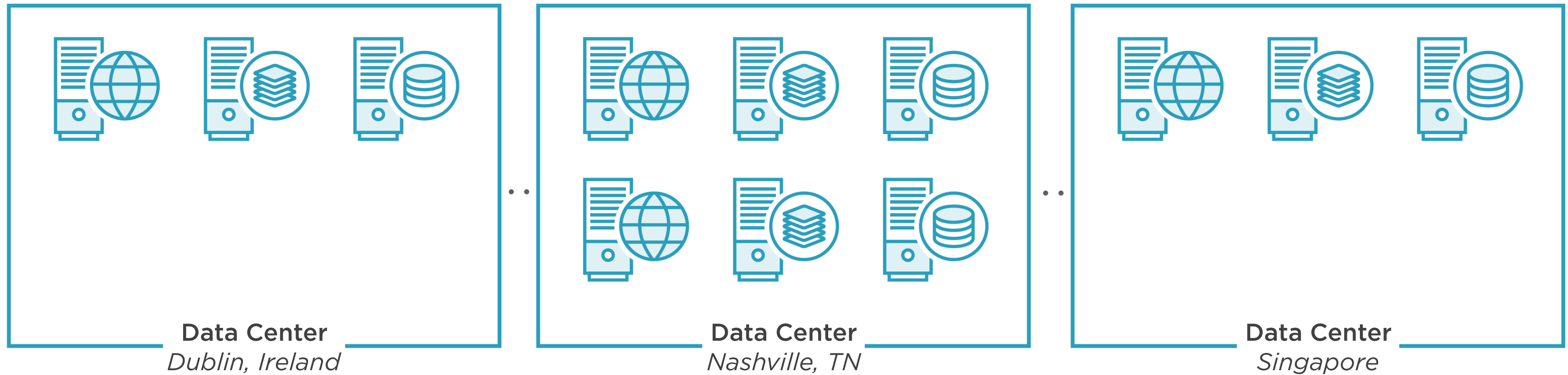
**Focusing on the United States at launch**

**Looking to expand into Europe and Asia if launch is successful**

**Securing funding for the initial infrastructure**



# Social Network Data Centers



**Large up-front investment**

**Forecasting demand is  
difficult**

**Slow to deploy new data  
centers and servers**

**Maintaining data centers  
is expensive**

**You own all of the security  
and compliance burden**

## Traditional Data Centers





# Benefits of Cloud Computing

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**Trade capital expense for  
variable expenses**

**Benefit from massive  
economies of scale**

**Stop guessing capacity**

**Increase speed and agility**

**Stop spending money  
maintaining data centers**

**Go global in minutes**

## Advantages of Cloud Computing



“**Elasticity** is the ability to acquire resources as you need them and release resources when you no longer need them. In the cloud, you want to do this automatically.”

**Well-Architected Framework, Amazon Web Services**



# Reliability

A solution's ability to provide functionality for its users when it is needed. Amazon's global infrastructure is built to maximize reliability for your cloud workloads.



# Agility

**The cloud lowers the cost of trying new ideas or business processes**

**Reduces the time required to maintain infrastructure**

**Reduces risk for the organization around security and compliance**

**Provides access to emerging technologies**



# Types of Cloud Computing

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“**Cloud computing** is the on-demand delivery of compute power, database storage, applications, and other IT resources through a cloud services platform via the Internet with pay-as-you-go pricing.”

**Amazon Web Services**

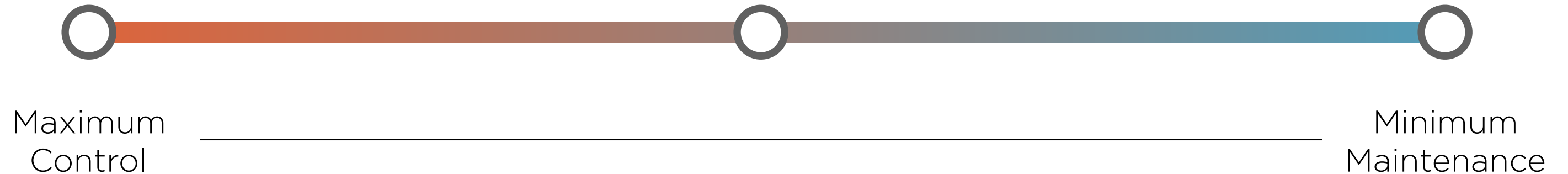


# Cloud Computing Models

**Infrastructure as a  
Service (IaaS)**

**Platform as a  
Service (PaaS)**

**Software as a  
Service (SaaS)**





# Cloud Deployment Models

## Public Cloud

Deployed onto a public cloud provider like AWS

## On-Premises (Private Cloud)

Cloud-like platform in a private data center

## Hybrid

Cloud applications connected to a private data center



# Cloud Computing Scenarios

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# Scenario 1



**Roger's company runs several production workloads in its data center**

**They are using VMWare to manage infrastructure in their data center**

**They want to use AWS and integrate it with their data center for new workloads**

**Which cloud deployment model would his company be following?**



## Scenario 2



**Eliza's company is trying to decide whether to fund a new line of business**

**Eliza's team is looking to monetize a new emerging technology**

**This new line of business will require new infrastructure**

**What benefit of cloud computing would be most relevant to her company?**



# Scenario 3



**Jennifer is the CTO at an insurance company**

**They are considering moving to the cloud instead of colocating servers**

**They want to make sure they have maximum control of the cloud servers**

**Which cloud computing model would they need to leverage?**



# Summary

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# Summary

**Reviewed the course resources**

**Created an AWS account for personal use**

**Examined how organizations leverage traditional data centers**

**Explored the benefits of cloud computing**

**Reviewed cloud computing models**

**Understood cloud computing deployment models**



# Scenario 1



**Roger's company runs several production workloads in its data center**

**They are using VMWare to have cloud-like infrastructure in their data center**

**They want to use AWS and integrate it with their data center for new workloads**

**Which cloud deployment model would his company be following?**

**Solution: Hybrid Cloud**





## Scenario 2



**Eliza's company is trying to decide whether to fund a new line of business**

**Eliza's team is looking to monetize a new emerging technology**

**This new line of business will require new infrastructure**

**What benefit of cloud computing would be most relevant to her company?**

**Solution: Pay as you go**



# Scenario 3



**Jennifer is the CTO at an insurance company**

**They are considering moving to the cloud instead of colocating servers**

**They want to make sure they have maximum control of the cloud servers**

**Which cloud computing model would they need to leverage?**

**Solution: Infrastructure as a Service (IaaS)**

