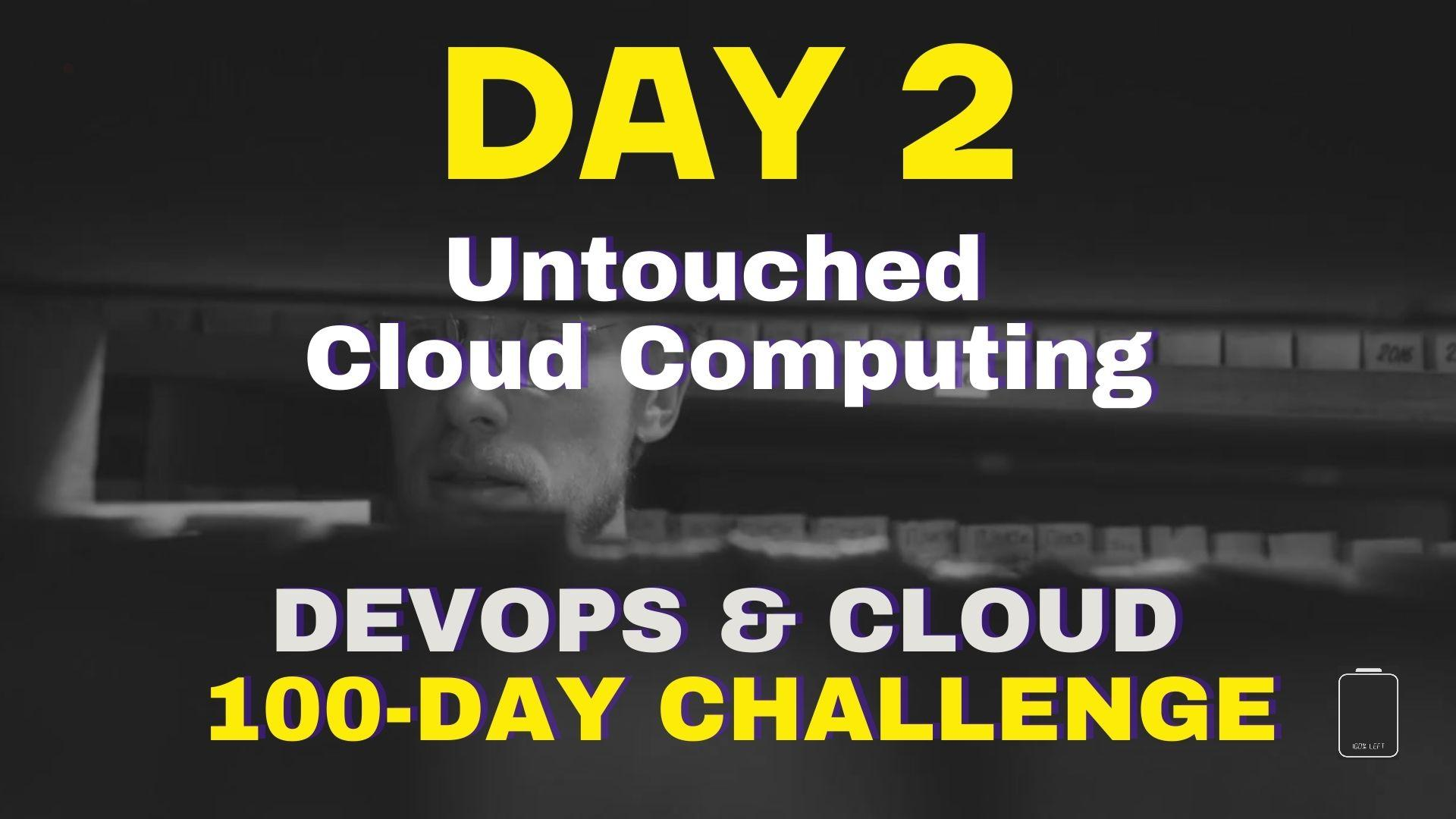

DAY 2
Untouched
Cloud Computing
DEVOPS & CLOUD
100-DAY CHALLENGE

Introduction to Cloud Computing

Today, we will explore the world of Cloud Computing, understanding its meaning, its different models, and examples of its use. We'll also analyze the benefits and drawbacks of using the Cloud and the major Cloud providers in the market.

What is Cloud Computing?

Definition

Cloud Computing is the delivery of computing services (servers, storage, databases, networking, software, analytics, intelligence, and more) over the Internet ("the cloud") to offer faster innovation, flexible resources, and economies of scale.

Examples

Some examples of Cloud Computing include applications like Dropbox, Microsoft Office 365, or even social media sites like Facebook and Instagram, all of which store user data online in Cloud servers, providing instant access from any device with an Internet connection.

Advantages

Cloud Computing allows businesses to be more flexible and efficient by reducing infrastructure complexities, lowering costs, and improving overall productivity. It also enables organizations to scale their resources on-demand, adapt faster to changes in the market, and focus on the core of their business.

Benefits of Cloud Computing

1

Scalability

The Cloud offers scalability and flexibility to scale up or down the computing resources you need according to your business needs, without overprovisioning or overspending.

2

Cost savings

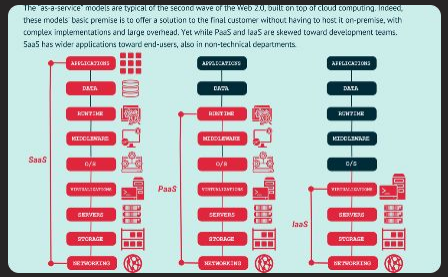
The Cloud allows businesses to save costs on hardware, software, and maintenance, as well as IT personnel by moving infrastructure management to Cloud providers.

3

Collaboration

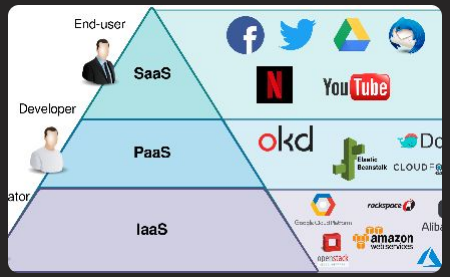
Using Cloud-based solutions improves communication and collaboration within teams, allowing them to share files, documents, and resources in real-time.

Cloud Service Models



Infrastructure as a Service

IaaS provides computing resources such as servers, storage, and networking over the Cloud and lets customers manage the applications and data running on top of them.



Platform as a Service

PaaS enables users to build, run, and manage their applications without worrying about the underlying infrastructure, including operating systems, runtime environments, and middleware.

Software as a Service

SaaS delivers software applications over the Cloud, allowing users to use them through their browsers without installing or managing them on their devices.

Cloud Deployment Models

1

Public Cloud

Public Clouds are owned and operated by Cloud providers and offer computing resources to multiple customers over the Internet, providing flexibility and cost savings. Examples include Amazon Web Services, Google Cloud Platform, or Microsoft Azure.

2

Private Cloud

Private Clouds are dedicated computing infrastructures owned and operated by individual organizations or third-party providers, offering higher security and control over the infrastructure and data. They are also more expensive to maintain and manage.

3

Hybrid Cloud

Hybrid Clouds are a mix of Public and Private Clouds, which allow businesses to run some applications or workloads in Private Clouds while taking advantage of Public Cloud resources to others, providing flexibility, control, and cost optimization.

Real-World Cloud Examples

Netflix - Amazon Web Services (AWS)

Netflix runs its streaming services over AWS to offer fast and reliable access to its customers, while also leveraging its computing resources to support its data analytics and recommendations systems.

Salesforce (Platform as a Service)

Salesforce is a leading CRM software provider that runs its services over PaaS to provide a flexible and scalable infrastructure that enables customers to build and customize their apps on top of Salesforce.

Dropbox (Software as a Service)

Dropbox is a Cloud storage and file-sharing service provider that runs its applications over the Cloud to provide instant access and synchronization to its users' files across multiple devices.

Zoom (Hybrid Cloud)

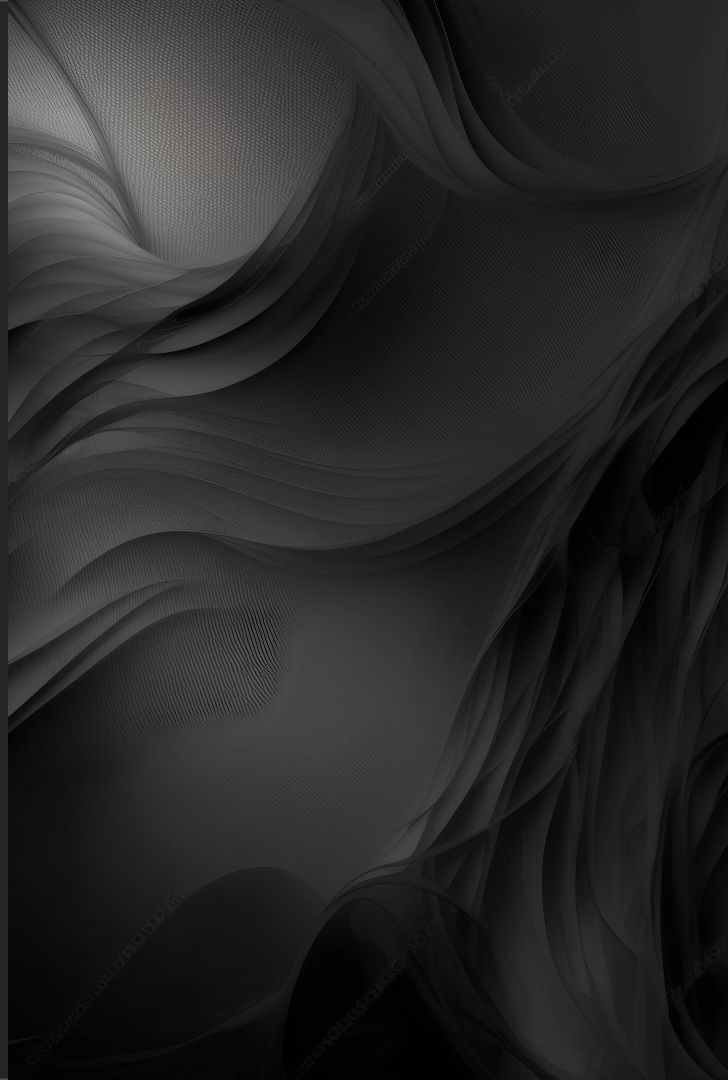
Zoom uses a Hybrid Cloud approach to run its video conferencing services, utilizing Private Clouds to store its customer data, while leveraging Public Clouds to provide video transcoding and metadata processing services.

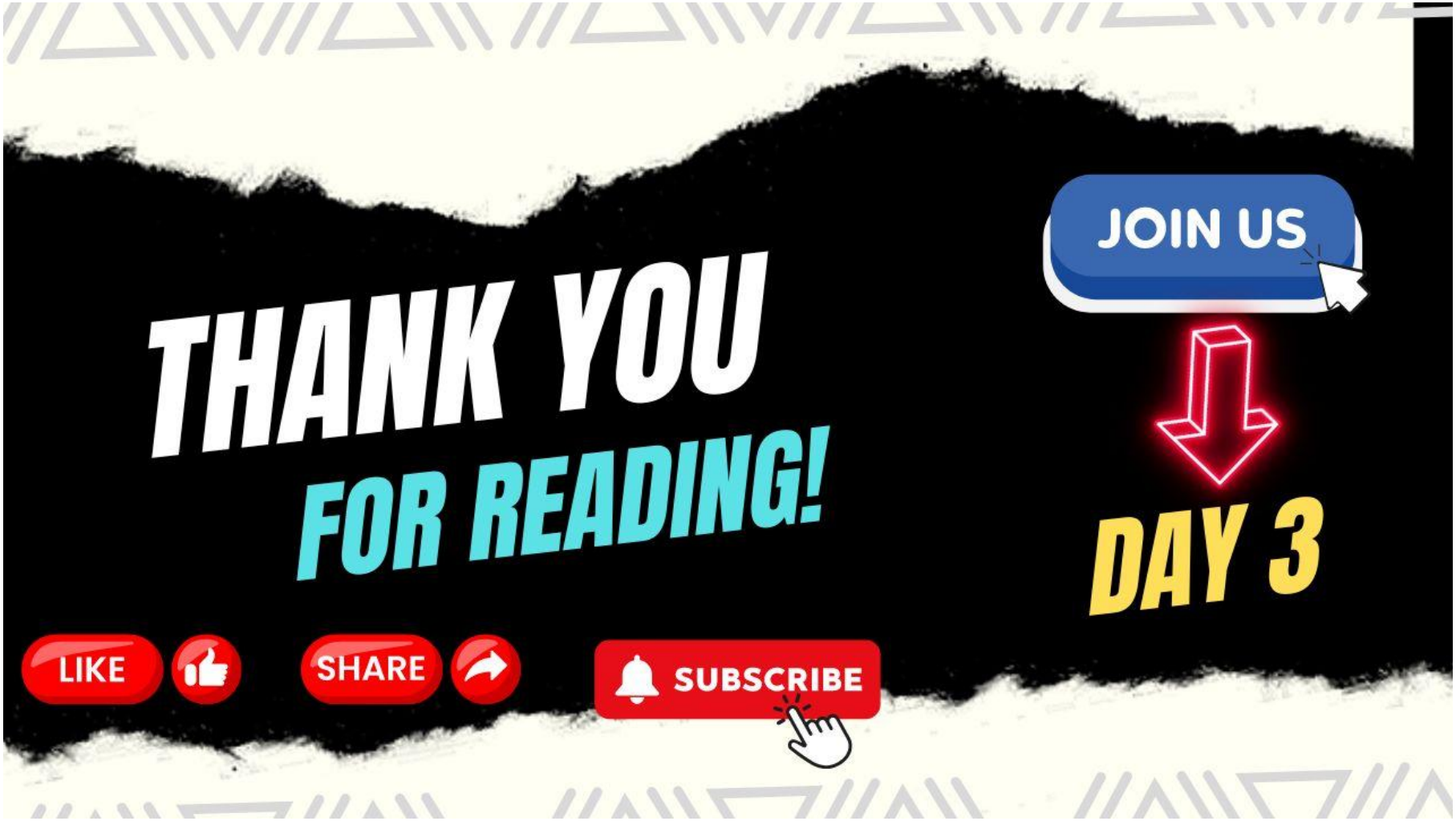
Key Cloud Providers (How to Choose)

Provider	Service	How to Choose?
Amazon Web Services	Public Cloud	Strongest in compute and storage services; extensive partner ecosystem.
Microsoft Azure	Public Cloud	Best-in-class Windows compatibility; broad range of services and tools.
Google Cloud Platform	Public Cloud	Strongest for container use; AI and Machine Learning tools.
IBM Cloud	Public and Private Cloud	Strong for legacy applications; choice of bare-metal servers or virtual instances.
Oracle Cloud	Public and Private Cloud	Best for easy migration of Oracle databases and applications; Autonomous Database services.

Thanks For Watching!

Cloud Computing is changing the way businesses operate, offering more flexibility, scalability, and cost savings. While different Cloud models suit different business needs, the key providers are Amazon Web Services, Microsoft Azure, Google Cloud Platform, IBM Cloud, and Oracle Cloud. Embrace the Cloud and discover new ways to innovate and grow your business.

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DAY 3
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