Amazon Leads $150-Billion Cloud Market
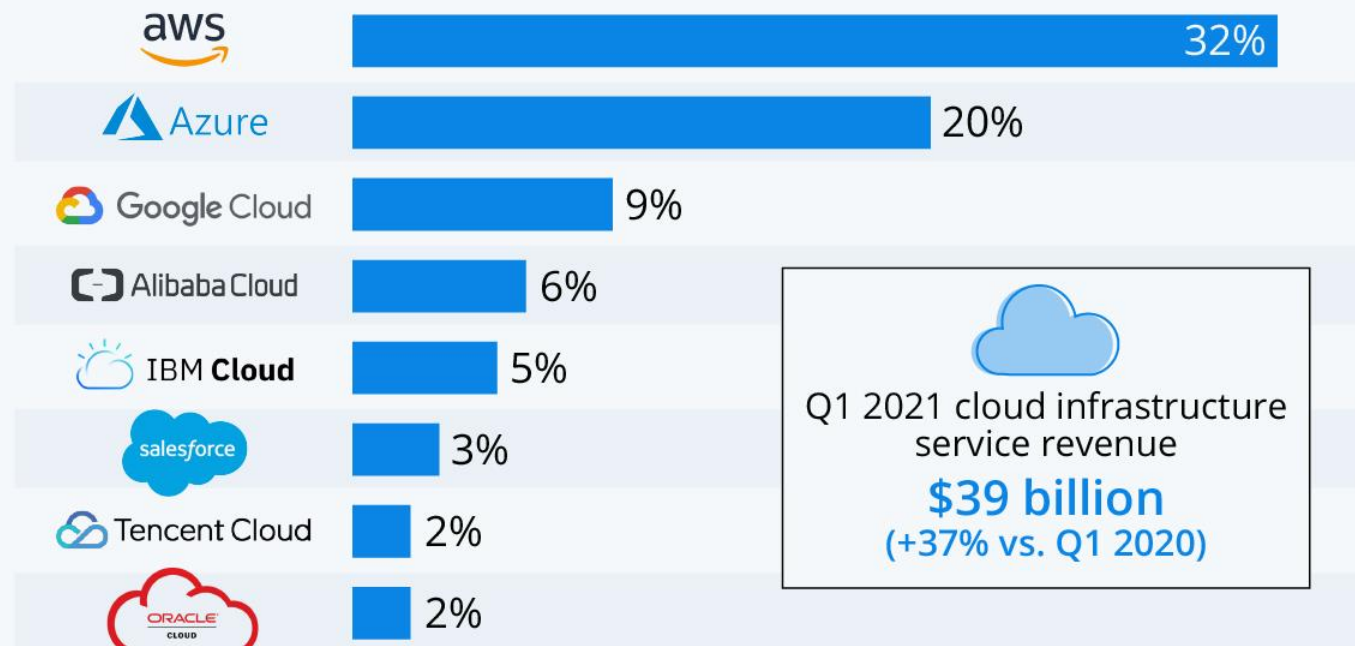
Worldwide market share of leading cloud infrastructure service providers in Q1 2021*

Provider	Market Share
aws	32%
Azure	20%
Google Cloud	9%
Alibaba Cloud	6%
IBM Cloud	5%
salesforce	3%
Tencent Cloud	2%
ORACLE CLOUD	2%

Q1 2021 cloud infrastructure service revenue

$39 billion
(+37% vs. Q1 2020)

* includes platform as a service (PaaS) and infrastructure as a service (IaaS) as well as hosted private cloud services

Source: Synergy Research Group

statista

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AMAZON WEB SERVICE (AWS)

AMAZON WEB SERVICE (AWS)

Includes many services for many applications

- **EC2 (Elastic Compute Cloud):** Provides machines so you can run your software

- **VPC (Virtual Private Cloud):** Make network on Amazon Cloud and run your server in it

- **S3 (Simple Storage Service):** Upload and share files (file storage)

- **RDS (Relational Database Service):** Run and manage databased on cloud (SQL, mySQL , etc)

- **ELB (Elastic Load Balancing):** Service to balance traffic into multiple machines

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AWS IoT

Device software

Connect your devices and operate them at the edge.

FreeRTOS

Deploy an operating system for microcontrollers that makes small, low-power edge devices easy to manage

AWS IoT Greengrass

Build, deploy, and manage intelligent IoT applications at the edge with an open-source edge runtime and cloud service

AWS IoT ExpressLink

Quickly transform any embedded device into an IoT–connected device with minimal design effort using these hardware modules.

Connectivity and control services

Secure, control, and manage your devices from the cloud.

AWS IoT Core

Connect IoT devices to AWS without the need to provision or manage servers

AWS IoT Device Defender

Continuously audit your IoT configurations and secure your fleet of IoT devices

AWS IoT Device Management

Easily register, organize, monitor, and remotely manage your IoT devices at scale

AWS IoT FleetWise (Preview)

Easily collect, transform, and transfer vehicle data to the cloud at scale

Analytics services

Work with IoT data faster to extract value from your data.

AWS IoT SiteWise

Collect and analyze industrial data at scale and make better, data-driven decisions

AWS IoT Events

Easily detect and respond to events from many IoT sensors and applications

AWS IoT Analytics

Run analytics on volumes of IoT data easily—without building an analytics platform

AWS IoT TwinMaker (Preview)

Optimize operations by easily creating digital twins of real-world systems

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AMAZON WEB SERVICE (AWS)

What we will use in this course

- **IoT Core:**
Lets you connect billions of IoT devices and route trillions of messages to AWS services without managing infrastructure.

- **IoT Analytics**
Makes it easy to run and operationalize sophisticated analytics on massive volumes of IoT data without having to worry about the cost and complexity typically required to build an IoT analytics platform.

- **QuickSight**
It allows everyone in your organization to understand your data by asking questions in natural language, exploring through interactive dashboards, or automatically looking for patterns and outliers powered by machine learning.