Twitter Thread by Alex Lieberman ■■

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Amazon Web Services (AWS) is a $54 billion behemoth.

It's bigger than Marriott, Netflix, and Twitter...combined.

Yet 99% of us don't actually understand the business.

THREAD: The story of AWS & lessons we can learn from it
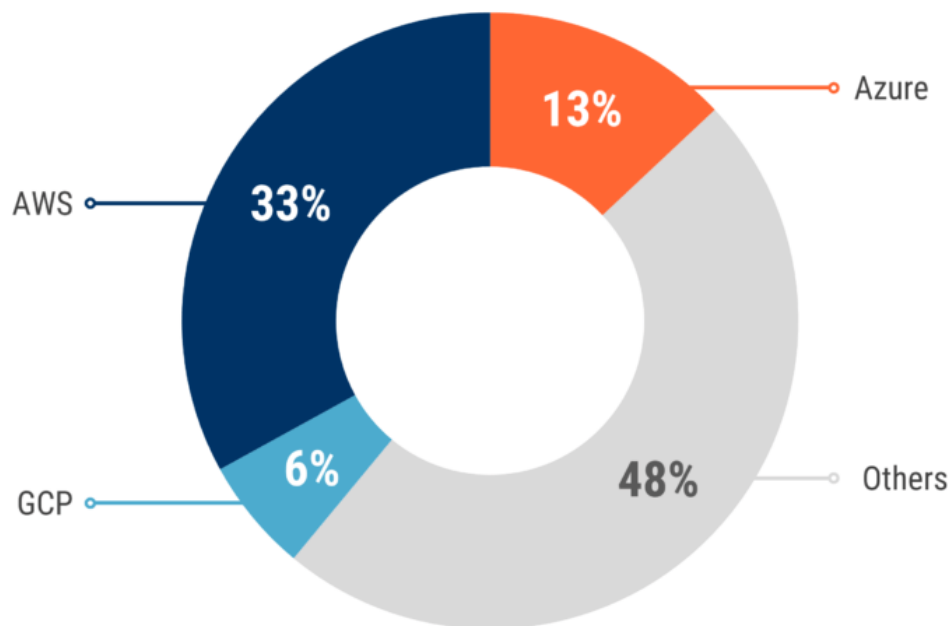
AWS is electricity for the internet.

It is the largest provider of on-demand, cloud computing services in the world.

With 33% of a $150 billion global cloud market, AWS makes our digital lives possible.

AWS maintains 1/3 of all IaaS & PaaS market share

Estimates as of April 27th, 2018

AWS 33%
Azure 13%
Others 48%
GCP 6%

CBINSIGHTS

While you may not be AWS's customer, you sure as hell use it every day.

Here are some of its clients:

- Netflix
- Zoom
- Verizon Wireless
- Coinbase
- Vanguard
- https://t.co/Dqrc2Fvb9B
- Morning Brew
- GoPro
- Samsung
- Pinterest
- Snap
- FanDuel

So now, you hopefully buy why AWS important.

But how did it start?

Let's hop in our tweet thread time machine....

It's 2003.

You're Jeff Bezos & your business is growing like a weed.

1999: $1.64 billion (revenue)
2000: $2.76 billion
2001: $3.12 billion
2002: $3.93 billion
2003: $5.26 billion

But you have a serious problem...

IT is a bottleneck to Amazon's growth.

Employees are spending 70% of their time on tech infrastructure.

- Building servers
- Provisioning databases
- Scaling databases

Everything but focusing on Amazon's customers.

Save them time & you can:

1) Help 3rd party retailers build their own web stores

2) Focus on faster customer innovation internally

3) Handle peak traffic during the holidays

You need someone to solve this problem.

Someone you can trust.

Enter Andy Jassy.

Yes, the same Andy Jassy who was named as Amazon's newest CEO on July 5, 2021.

Jassy joined Amazon in 1997, right around the company's IPO.

His first job was in Marketing, working on the launch of Amazon Music.

His second job was as Jeff Bezos's Chief of Staff.

And his third job was to solve this tech headache plaguing the company.

By late 2003, Jassy shared a vision for an "Internet Operating System."

The idea: take this tech mess & simplify it into a shared platform with 3 building blocks...
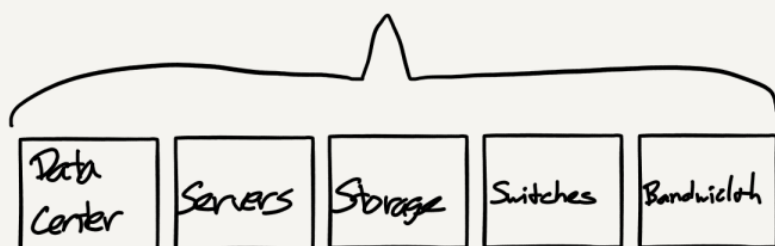
- Storage
- Computing
- Databases

Employees could now spend 70% of time serving customers vs. racking servers.

Ultimately, Amazon got really good at managing tech infrastructure.

Good enough, where Jassy said something along the lines of...

"Hey we're pretty good at this IT thing. It was a pain in the ass for us & it's a pain in the ass for others. Why don't we make this a product?"

So in 2006, AWS was born.

It was the first pay-as-you-go IT infrastructure, shepherding a new era of cloud computing.

Here's the OG announcement ■

Announcing Amazon S3 - Simple Storage Service

Posted On: Mar 13, 2006

Amazon S3 is storage for the Internet. It is designed to make web-scale computing easier for developers. Amazon S3 provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web. It gives any developer access to the same highly scalable, reliable, fast, inexpensive data storage infrastructure that Amazon uses to run its own global network of web sites.

AWS was an instant unlock for customers.

1) Fixed costs became variable costs
2) Economies of scale lowered costs
3) On-demand created flexibility & speed
4) You didn't have to maintain servers
5) Global reach & performance
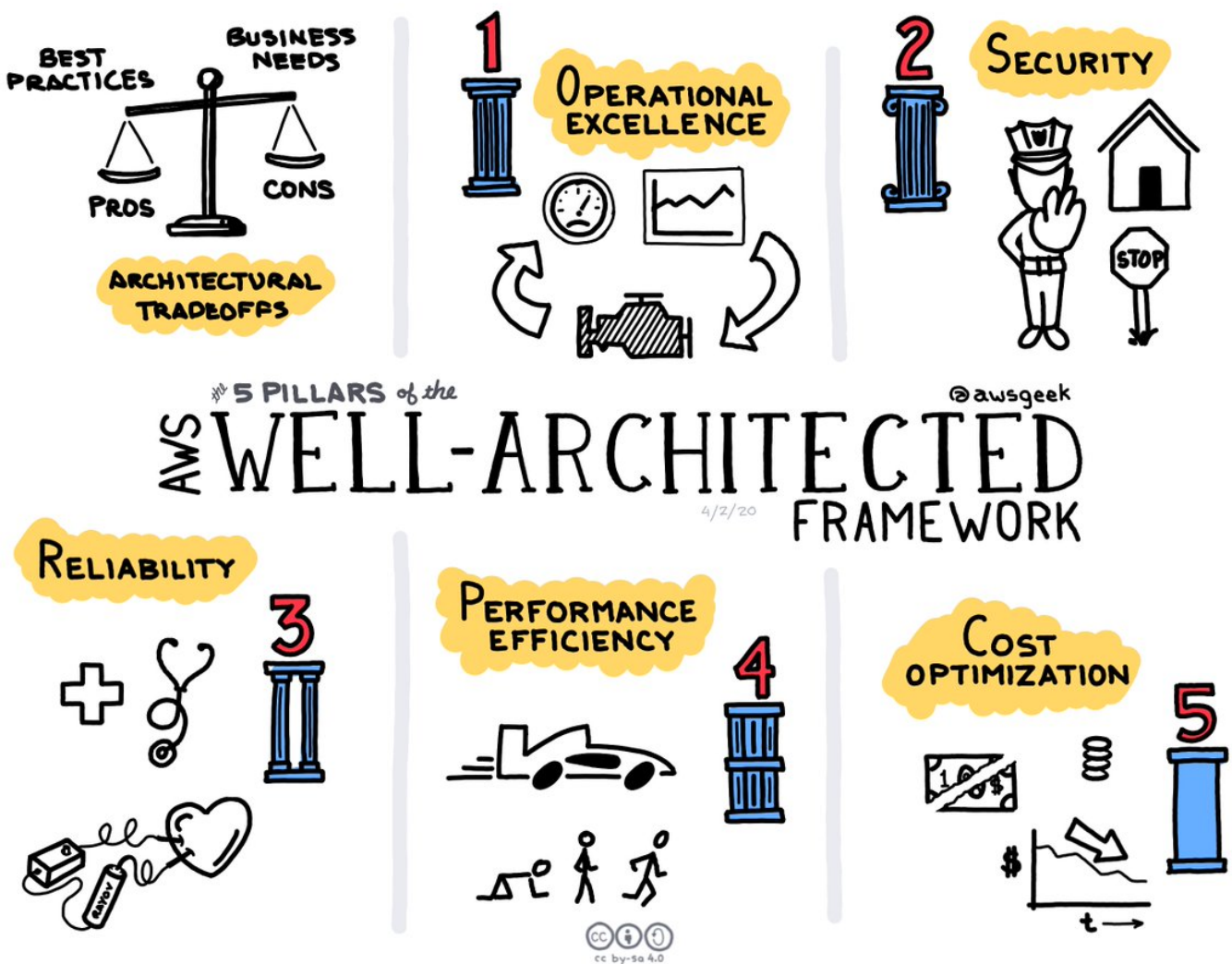
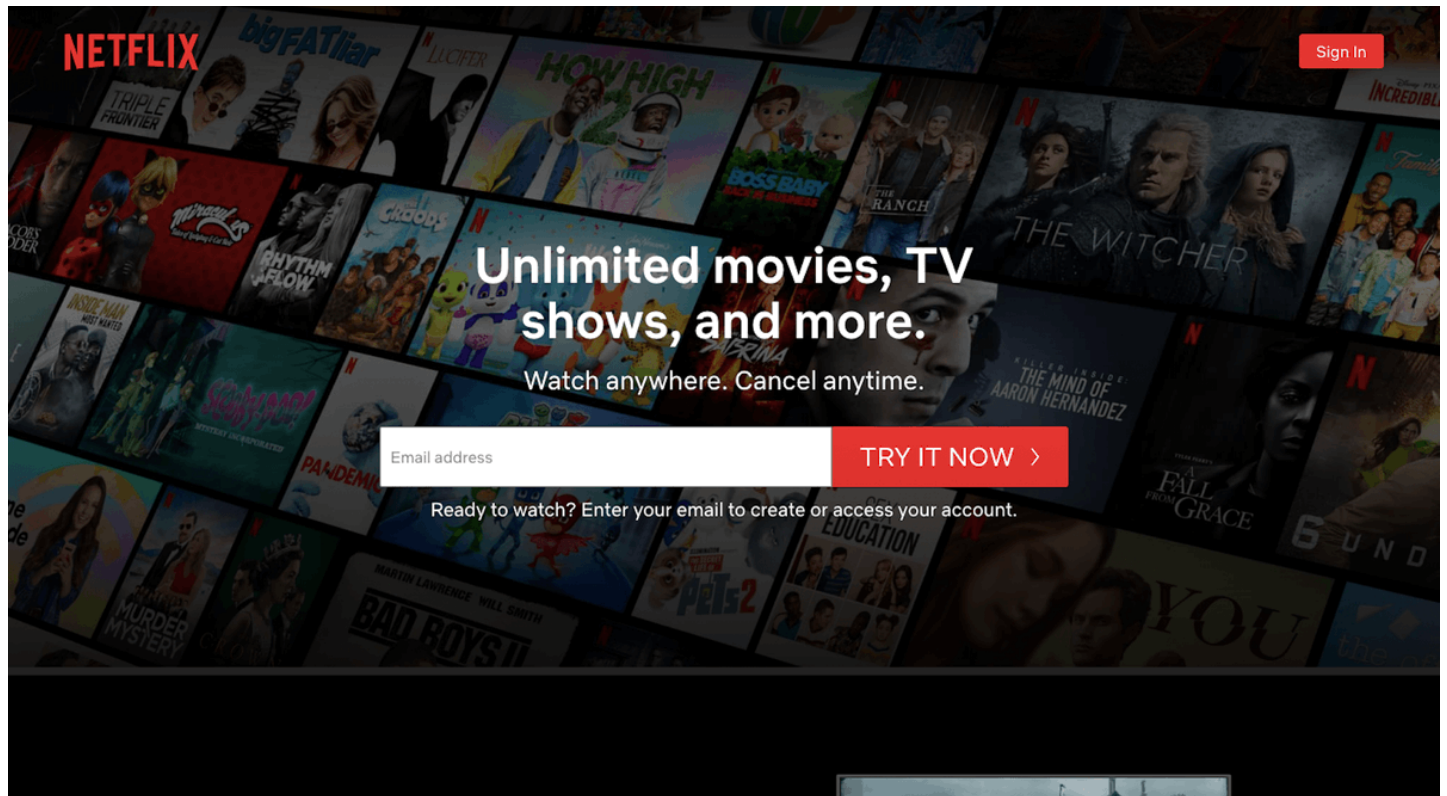Take Netflix—a big AWS customer—for example.

If you go to https://t.co/safVVDRpI5, you're seeing that homepage because of AWS.

Your computer is actually connecting to an AWS server via the internet.

And that server hosts https://t.co/safVVDRpI5 on behalf of Netflix.

It's simple, but so powerful.

First, Netflix is significantly more cost-efficient because of AWS.

Without AWS...

Netflix would purchase thousands of physical servers, pay for real estate to house them, and hire people to maintain them.

Second, Netflix has far more flexibility.

Let's say Netflix projects 300mm customers in 2022.

It would have to buy enough servers to satisfy 300mm customers.

Let's say 2022 actuals are 250mm.

Netflix lit millions of $ on fire by predicting too much demand.

That is why AWS exists.

Rather than buy compute power or storage, you rent space from AWS based on your server needs today.

Now that you understand AWS, there are two final lessons we can learn from this business.

Lesson 1: Dogfooding is a great strategy for launching new products.

AWS was founded out of Amazon's frustration with its own tech situation.

Everyone was spinning up resources (like servers) for each project versus scaling, sharing, and reusing servers.

Andy Jassy & co built out a set of shared services that engineers could access easily as needed.

https://t.co/Dqrc2Fvb9B was customer #1 for this service, a service that would end up becoming the operating system of the internet.

Lesson 2: AWS is a textbook beneficiary of Scale Economies.

The business has massive fixed costs from owning and maintaining millions of servers.

As it attracts more customers, the economics get better & the moat gets bigger.

Step 1: pay a shit ton for servers

Step 2: as biz grows, spread massive costs across more customers

Step 3: as per customer costs decrease, lower price of AWS for customers

Step 4: as price of AWS decreases, competitors put in shitty spot

Step 5: world domination

[exhales]

We made it!

If you enjoyed this thread & want more business breakdowns, follow @businessbarista!

And if you want to go deeper, here are a few more resources for you...

Listen to the story of Andy Jassy (Amazon's new CEO): https://t.co/2ZmjB1g1tw

Listen to a full breakdown of AWS: https://t.co/LnTfH5xEMa