



Amazon's Culture of Innovation

Jeff Barr

VP & Chief Evangelist

Our mission:

to be Earth's most
customer-centric
company



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Where innovation begins:

start with the
customer and work
backwards



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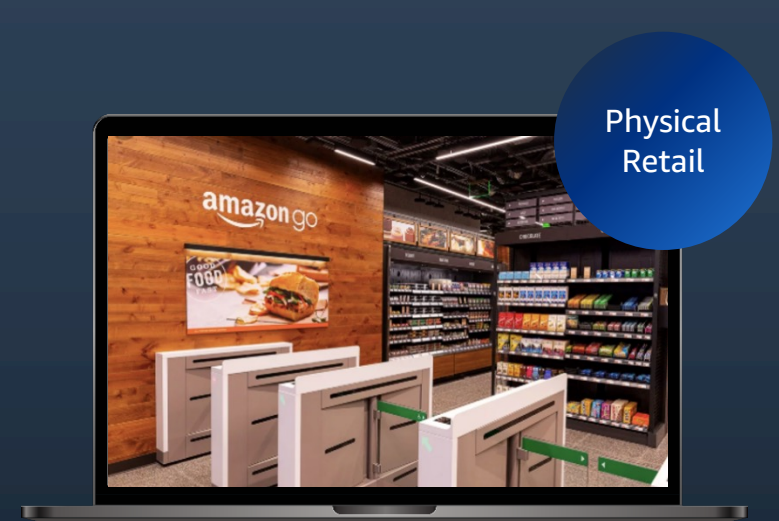
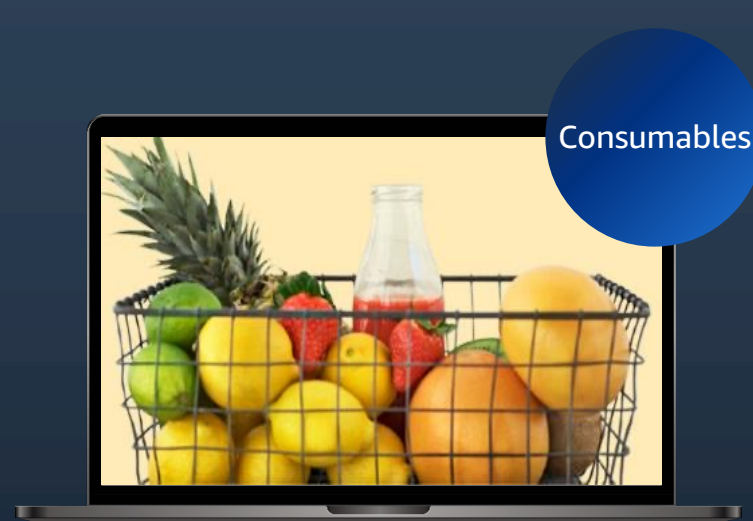
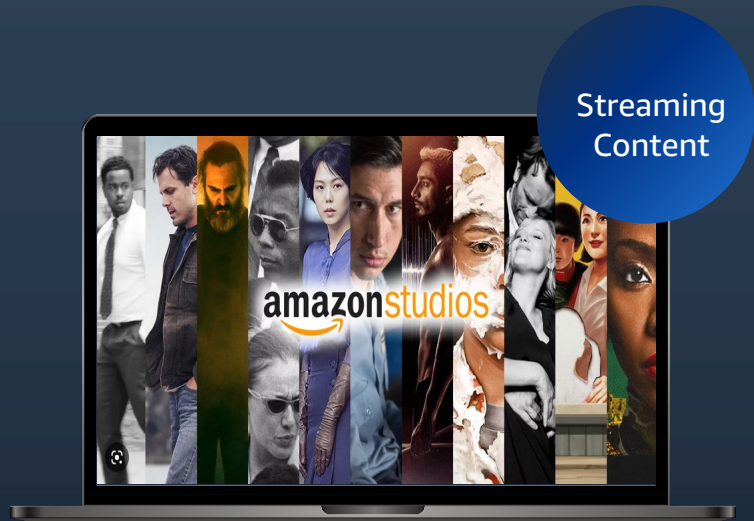
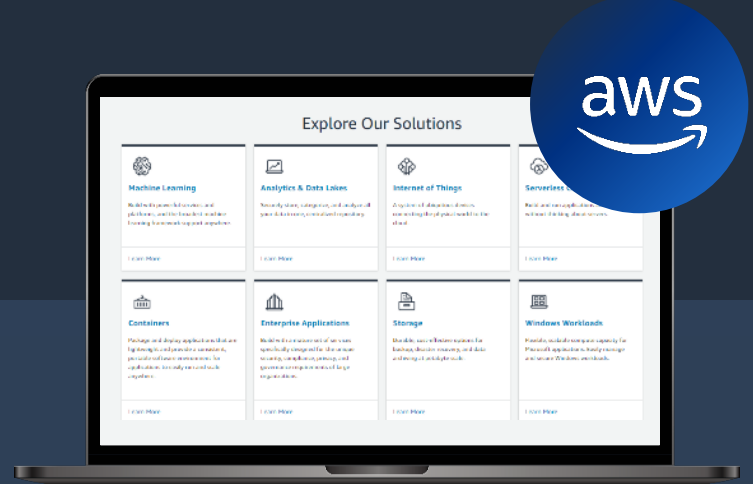




“There are many advantages to a customer-centric approach, but here’s the big one: **Customers are always beautifully, wonderfully dissatisfied**, even when they report being happy and business is great. Even when they don’t yet know it, customers want something better, and your desire to delight customers will drive you to invent on their behalf.”

- Jeff Bezos, Founder and Executive Chair, Amazon.com, Inc.
2016 letter to shareholders





Growth Flywheel



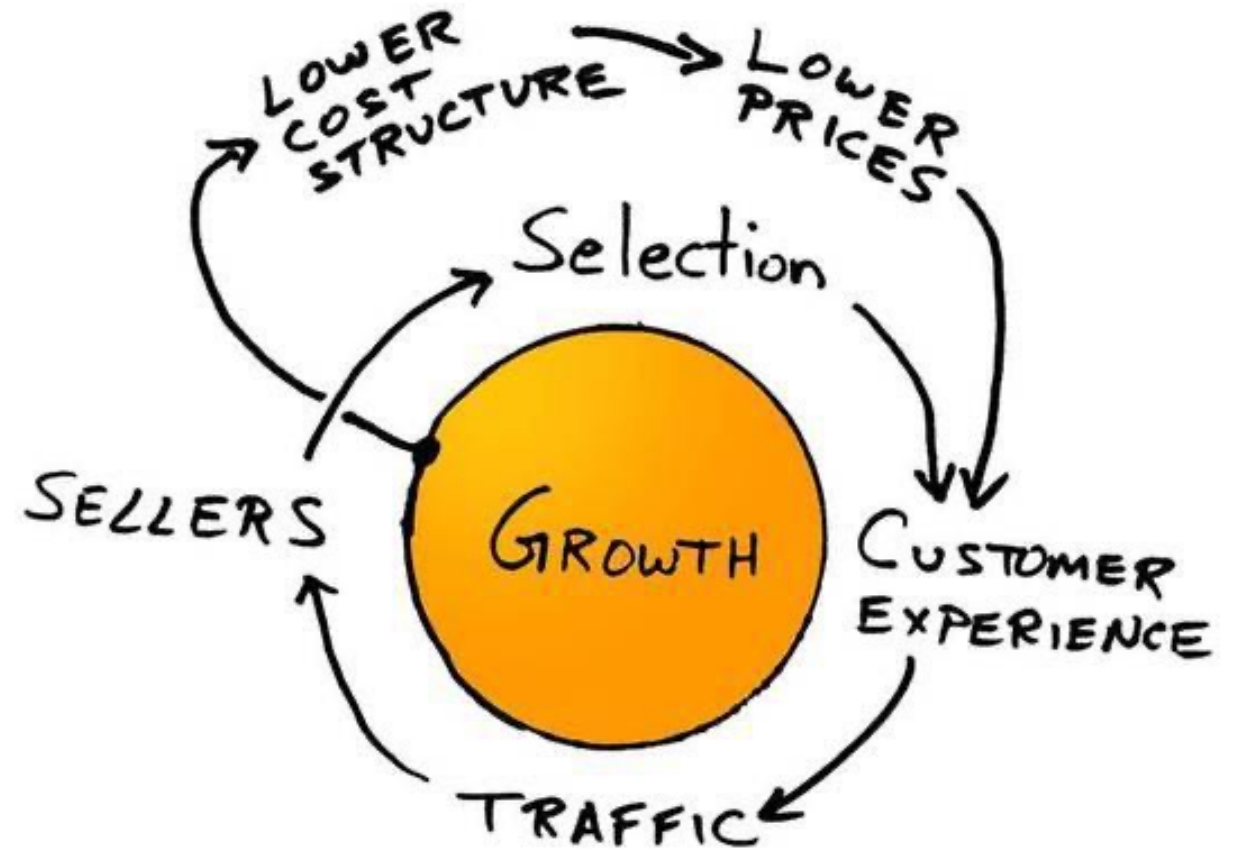
Price



Selection



Convenience



How do we organize for Innovation?

Culture

Customer obsession, hire builders, support them with a belief system



Architecture

Technical structure and tools that support rapid growth and change



Mechanisms

Encoded behaviors that facilitate innovative thinking



Organization

Small, empowered teams that own what they create



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Our Leadership Principles

... unless you know better ones.
Please be a leader.

Customer Obsession

Invent and Simplify

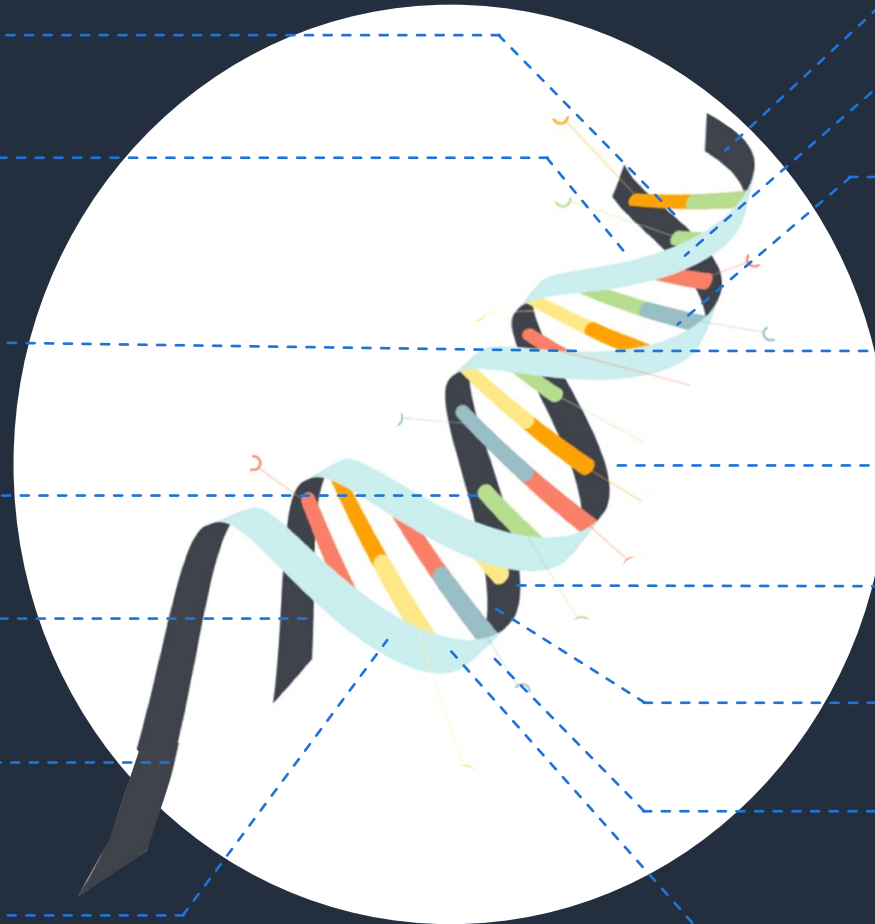
Learn and Be Curious

Insist on the Highest Standards

Bias for Action

Strive to be Earth's Best Employer

Success and Scale
Bring Broad Responsibility



Ownership

Are Right, A Lot

Hire and Develop the Best

Think Big

Frugality

Earn Trust

Dive Deep

Deliver Results

Have Backbone; Disagree and Commit



Invent and Simplify



Leaders expect and require innovation and invention from their teams and always find ways to simplify. They are externally aware, look for new ideas from everywhere, and are not limited by “not invented here.” As we do new things, **we accept that we may be misunderstood** for long periods of time.

Willingness to be **misunderstood** for a long time





134

Price Reductions (since '06)



200+

Fully featured services



Millions of

Active Customers Every Month



New significant
services and
features released



Bias for Action



Speed matters in business. **Many decisions and actions are reversible** and do not need extensive study. We value calculated risk taking.





Is it a **one-way** or
a two-way door?



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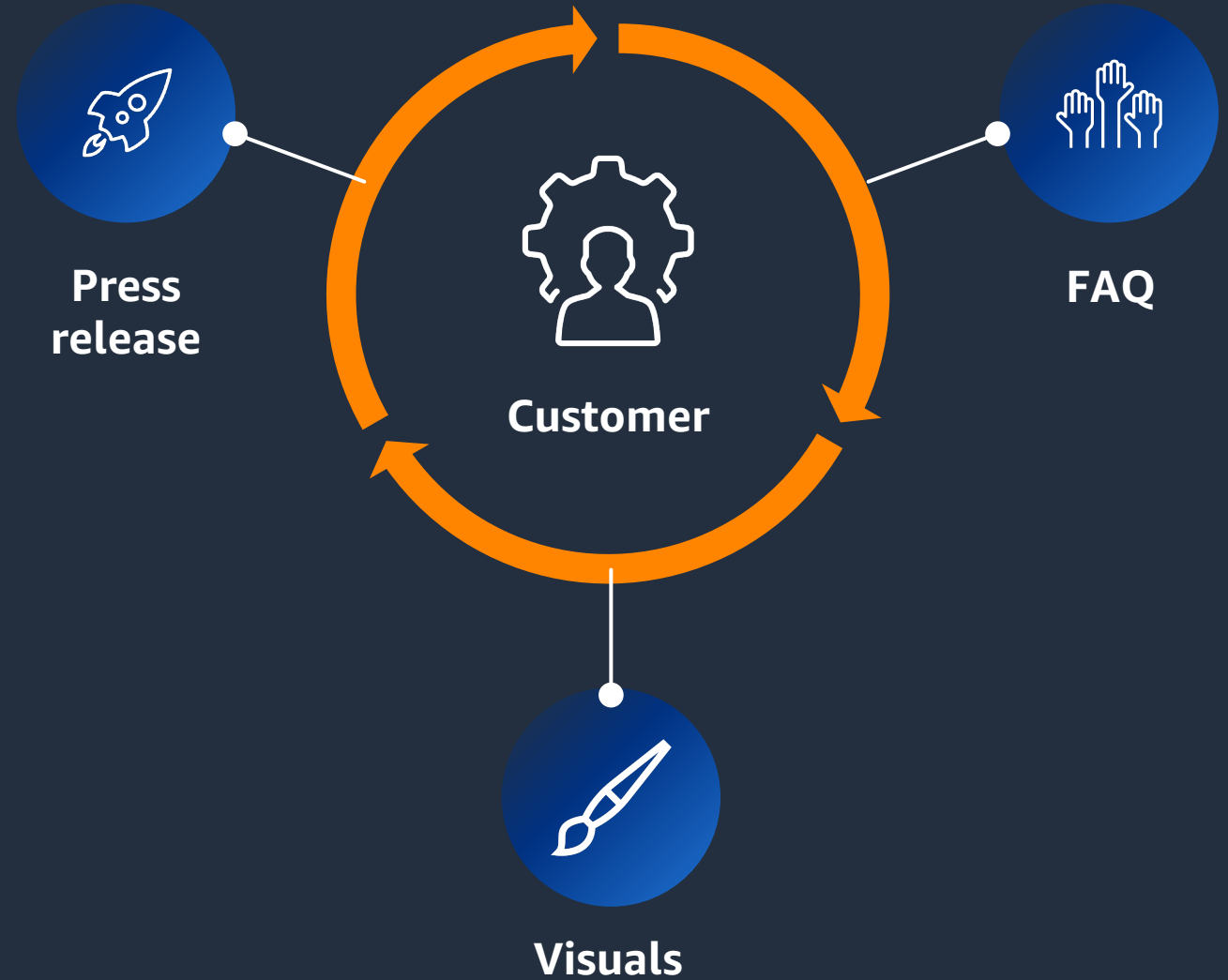


A **mechanism** is a complete process



Working backwards: A mechanism for innovation

Use it to get clarity, not to document
what you've already decided to do



Who is the customer?

Be specific about context
and needs





5 Customer Questions

Who is the customer, and what insights do we have about them?

What is the prevailing customer problem or opportunity?

What is the solution and the most important customer benefit?

How do we describe the solution and experience to customers?

How do we test the solution with customers and measure success?

Working Backwards artifacts



Press Release

AWS Announces General Availability of Amazon Location Service

New service makes it easier for customers to add location functionality to their applications without compromising on privacy or security at as low as 1/10th the cost of the most common location-based service (LBS) provider

SEATTLE--(BUSINESS WIRE)--Jun. 1, 2021-- Today, Amazon Web Services, Inc. (AWS), an [Amazon.com](#) company (NASDAQ: AMZN), announced the general availability of Amazon Location Service, a new service that makes it easier and more cost-effective for customers to add location functionality to their applications without compromising on user privacy or data security. With Amazon Location Service, customers can embed location functionality in their applications using data from location-based service (LBS) providers Esri and HERE Technologies to provide maps, points of interest, geocoding (converting location information to a point on a map), route planning, geofencing (creating virtual perimeters), or asset tracking. Amazon Location Service is as low as 1/10th the cost of the most common LBS providers, and customers pay only for the number of user requests, assets tracked, or devices managed. To get started, visit: <https://aws.amazon.com/location/>

Location data is vital for companies of all sizes and across every industry to support a range of use cases (e.g. asset tracking, route planning, and location-based marketing experiences) that rely on the explosion of connected devices in the world today. However, due to privacy and security compromises, cost-prohibitive pricing, and a difficult integration process, many companies face significant barriers when integrating location functionality into their applications. For example, some LBS providers impose licensing terms that give the LBS provider the rights to access, use, and commercialize a customer's location data (e.g. the position of users, facilities, or vehicles). Additionally, the pricing from LBS providers often makes it too expensive for customers to use location functionality in all of the ways a customer may want to use it. Even when the licensing terms and price are less prohibitive, onboarding an LBS provider requires customers to invest significant resources integrating data and building supporting tools before using the provider's location data in an application. For more advanced use cases like asset tracking or geofencing, a customer may need to build the solution from scratch, which can add months of development time. Furthermore, some customers may want to use an



FAQs

FAQ – Customer

1. What is Amazon Location Service?

Amazon Location Service is a fully managed service that makes it easy for developers to add location functionality, such as maps, points of interest, geocoding, routing, tracking, and geofencing to their applications, without sacrificing data security, user privacy, data quality, or cost.

2. Why should I use location data in my applications?

Location functionality is increasingly used in business and consumer applications. You can use location services to solve problems such as displaying data on top of a map to provide geographic context, determining travel time and distance, looking up points of interest, and constraining actions to specific locations. The use of location functionality enables capabilities such as map-based visualizations, asset tracking, location-based customer engagement, and delivery or ride-sharing applications. Visit the [Amazon Location Services Customers](#) page for real world examples.

3. What can I do with Amazon Location Service?

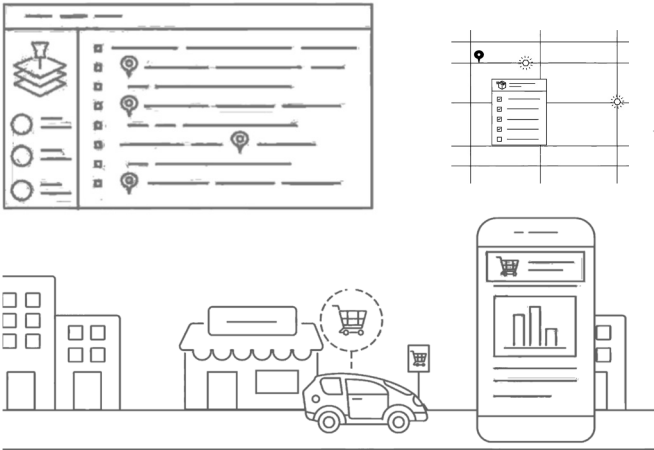
With Amazon Location Service, you have access to cost-effective location-based services (LBS) using high-quality data from global, trusted providers Esri and HERE, and you can easily integrate maps, points of interest, geocoding, routing, tracking, and geofencing in to your applications. Amazon Location Service enables you to bring sophisticated location-enabled applications to production quickly, without the high cost of custom development. Its affordable data, including tracking and geofencing capabilities, and built-in metrics for health monitoring reduce your costs and development time. Additionally, Amazon Location Service integrates with several AWS services to further speed application development. For more information on AWS integrations see Q: How does Amazon Location Service integrate with other AWS services? Also, visit the features page to learn more about each of the [Amazon Location Service Features](#).

4. Where is Amazon Location Service available?

Amazon Location Service is available today in US East (N. Virginia), US East (Ohio), US West (Oregon), Europe (Frankfurt), Europe (Ireland), Europe (Stockholm), Asia Pacific (Singapore), Asia Pacific (Sydney) Region, and Asia Pacific (Tokyo) regions. Amazon Location Service provides global location data from multiple data providers. Please visit our [data providers' page](#) to learn more.



Visuals





diaper sizing. By signing up for a single subscription, Amazon Family customers will have the peace of mind of knowing that Amazon will send them the right sized diaper at the right time.

Custom Benefit?

~~Babies need an average of about 3,800 disposable diapers across seven sizes in three years, and remain in a size anywhere between a few weeks to several months. A baby might need just one box of size 1 diapers but need as many as eight boxes of size 4 diapers. To complicate matters, weight – and not age – is the best predictor of a baby's diaper size.~~

With Amazon's Subscribe & Save program, customers previously created diaper subscriptions in a specific size which was replenished until the customer decided it was time to move up a size. This meant that parents needed to anticipate the change in diaper size and either cancel their existing subscription to create a new one, or go to the Manage Your Subscriptions page to update the existing diaper subscription with the new size. This caused endless frustration for parents, added to the stress of having a new baby, and the experience ran counter to the concept of a subscription that should run smoothly with minimal touch points.

Not a good name for this

With the introduction of the new auto-sizing feature, customers who subscribe to diapers will be asked to provide their child's weight, in addition to the existing child info. They will then be able to set up a single subscription that will take them through the various sizes at the right time. Customers will be notified before the next box of diapers is due to ship that it has automatically sized up – if it's too soon, there will be a simple one-click process to keep the current size.

Would a customer really say this?

"I love using Subscribe & Save. But for my older child, I have had to return boxes that were one size too small, which actually increased my work load," says Mara Steiner, who has used Subscribe & Save for her baby needs for several years. "As I expect my second child, I am very excited at the thought of having the right size diapers show up at my door each month. New parents have enough to do without having to keep calculating which size of diapers they should be buying for their baby."

~~"We want parents to always have the right sized diaper for their child at the right time," said Greg, director of Subscribe & Save. "This single subscription experience for diapers will ensure that customers can depend upon Subscribe & Save to do the work for them, and never have to worry about changing size as their children grow."~~

Amazon's Subscribe & Save ships thousands of items to their customers on a regular basis with additional discounts. With the diaper subscription service, the program has simplified the experience for new parents.

To learn more about Subscribe & Save's diaper subscriptions auto-sizing, go to www.amazon.com/subscribe

What about mobile?



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A shift to microservices



Decoupled
architecture of
single-purpose
services



Business logic
and data only
accessible
through
hardened APIs



Increased
speed, agility,
and innovation



Accelerate the pace of innovation

Our technical
architecture:



Allows for instant
experimentation



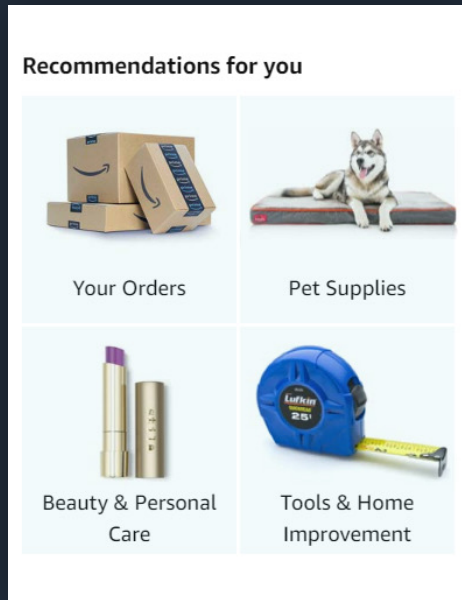
Lowers the cost
of failure



Enables rapid scale
and iteration



Shaping technology for innovation



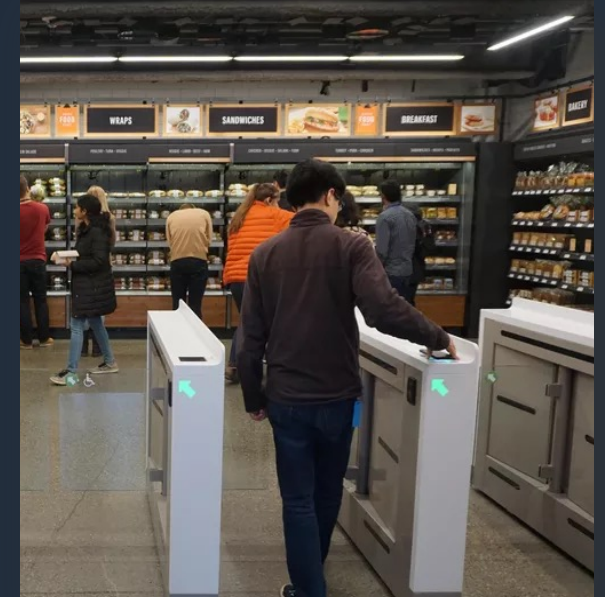
**4,000 products
per minute** sold
on Amazon.com



1.6M packages
every day



Billions of Alexa
interactions each week



**Skip the line at
checkout** with Amazon
Go and Just Walk Out
technology

Amazon Bedrock



ANTHROPIC



stability.ai



Jurassic

Contextual answers,
summarization,
paraphrasing

Claude

Summarization, complex
reasoning, writing, coding

Command + Embed

Text generation,
search, classification

Llama 2

Q&A and reading
comprehension

Stable Diffusion

High-quality images
and art

Amazon Titan

Text summarization,
generation, Q&A,
search



Amazon Titan Foundation Models



TITAN TEXT EMBEDDINGS

Translates text into numerical representations



TITAN TEXT LITE

Summarization, copywriting, fine-tuning

NEW



TITAN TEXT EXPRESS

Open-ended text generation, conversational chat, RAG support

NEW



TITAN MULTIMODAL EMBEDDINGS

Search, recommendation, personalization

NEW



TITAN IMAGE GENERATOR

Generate realistic, studio-quality images

IN PREVIEW

Why customers choose AWS to build AI and generative AI?



AWS and Amazon bring
20+ years of AI and ML
experience



Easiest place to build
with FMs and generative
AI providing model
choice, secure
customization, and AWS
integrations



Most price-performant
infrastructure for ML



Get started right away
with game-changing
generative applications
such as Amazon
CodeWhisperer



“We like to say that there is
no compression algorithm
for **experience.**”

- Andy Jassy, CEO, Amazon.com, Inc.



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Amazon hires **builders** and lets them build



Two-pizza teams are fast and agile, fostering **ownership** and **autonomy**

Small, decentralized, nimble teams

Own and run what you build



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To our shareowners (2015)

This year, Amazon became the fastest company ever to reach \$100 billion annual sales. Also this year, Amazon Web Services is reaching \$10 billion in annual sales.

One area where I think we are especially distinctive is failure. I believe we are the best place in the world to fail (we have plenty of practice!), and failure and invention are inseparable twins. To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment. Most large organizations embrace the idea of invention, but are not willing to suffer the string of failed experiments necessary to get there. Outsized returns often come from betting against conventional wisdom, and conventional wisdom is usually right. Given a ten percent chance of a 100 times payoff, you should take that bet every time. But you're still going to be wrong nine times out of ten. We all know that if you swing for the fences, you're going to strike out a lot, but you're also going to hit some home runs. The difference between baseball and business, however, is that baseball has a truncated outcome distribution. When you swing, no matter how well you connect with the ball, the most runs you can get is four. In business, every once in a while, when you step up to the plate, you can score 1,000 runs. This long-tailed distribution of returns is why it's important to be bold. Big winners pay for so many experiments.



"...failure and invention are inseparable twins.

To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment."

Jeff Bezos, Founder and CEO,
Amazon.com, Inc.

2015 letter to shareholders



Learn from failures



Auctions, zShops, Marketplace



Fire Phone

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There are many ways to innovate on AWS

Innovate

Working Backwards
Engagement

Learning from
Amazon

Innovation Pulse
Check

MLP Workshop
(Scope, Prototype, Launch)

Organize

ProServe
DevOps

Skills/
Center of Excellence

AWS Training &
Certification

Data-driven Everything
(D2E)

Transform

Innovation
Strategy

Product Operating
Model

Enterprise
Visioning

Connect

Enterprise
Strategy

EBC
Engagements

Summits, Executive
Roundtables, Events





Thank you!

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