

Startup customers



Enterprise customers



Public sector customers

APN Premier consulting partners



ISVs and SaaS providers





260% annual reoccurring revenue growth with AWS Marketplace

40%+ conversion from trial to customer

Primary sales channel is AWS Marketplace

Used by more than 300 customers across 30 countries

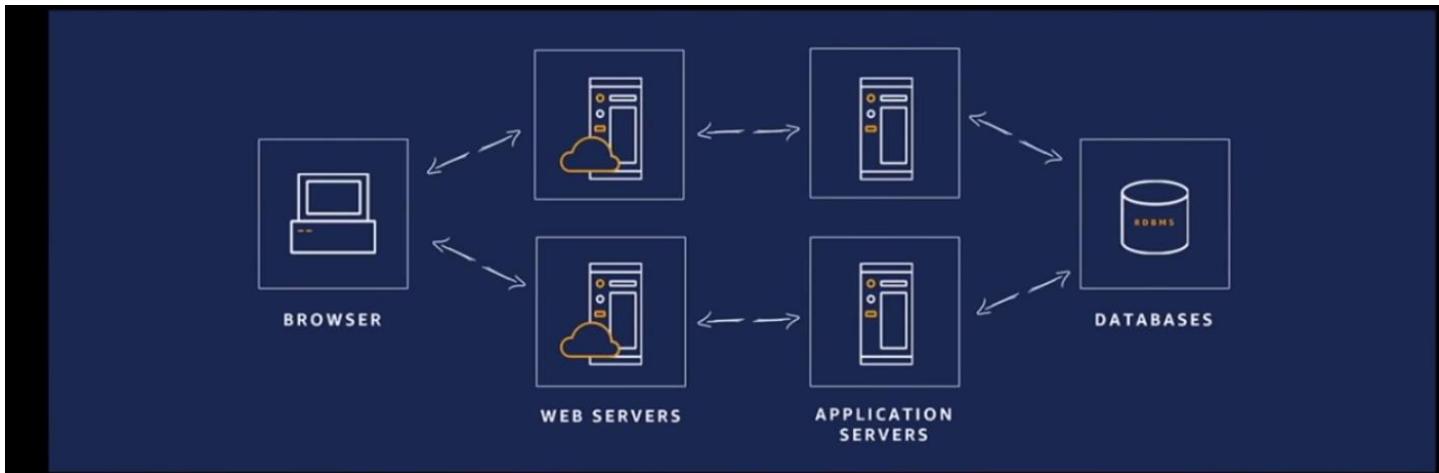
ANNUAL REVENUE

2015

2016

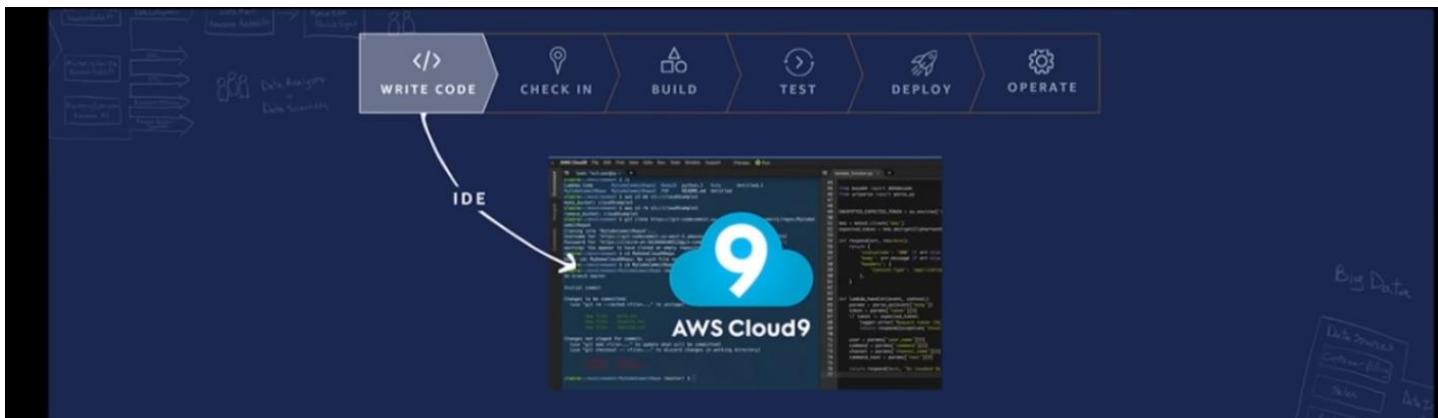
2017





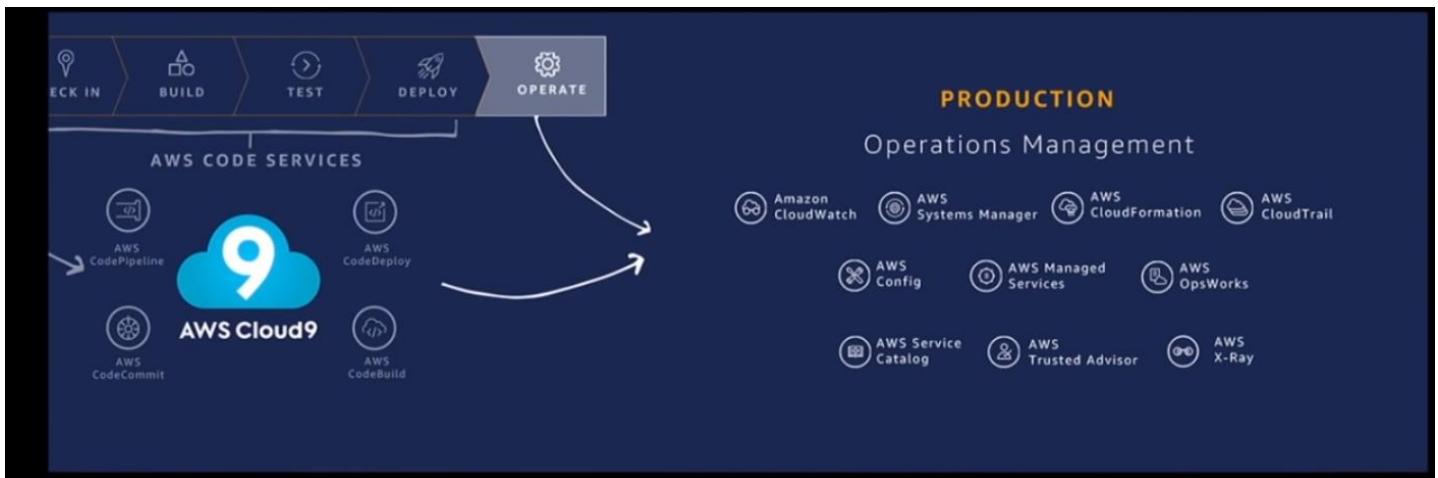
This new way of development is now all lambda functions combined with managed and unmanaged AWS services, there is no need for scale up, multi AZ, redundancy, etc. because all this are available to you free



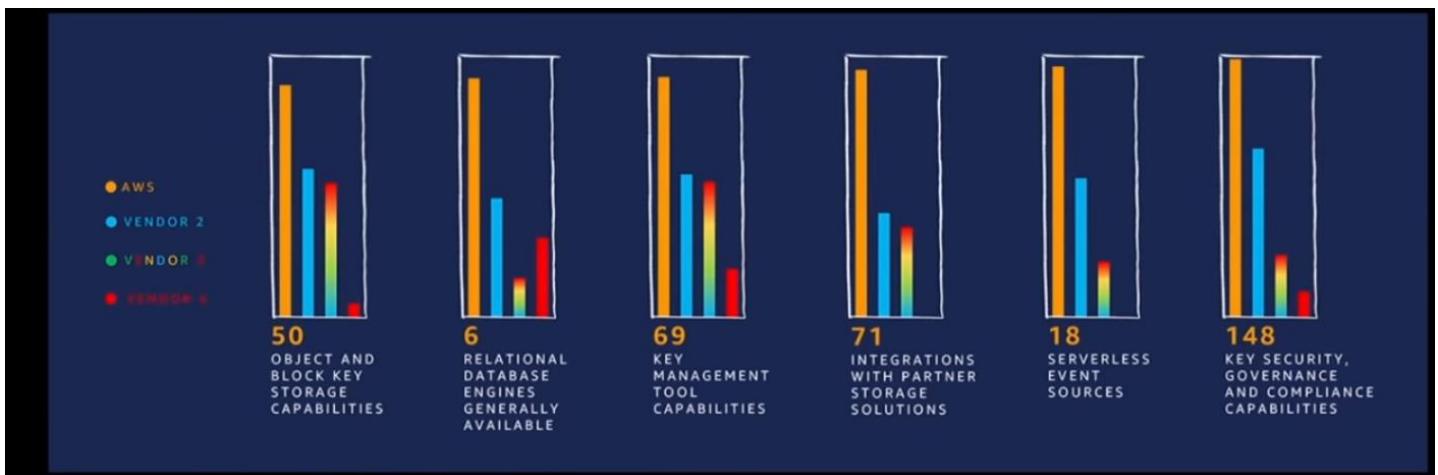


You can run lambda functions in here and debug them live





There are now over 125 different AWS services to pick from





Holistic healthcare helps all parts of society



Payers/Employers



Health Systems



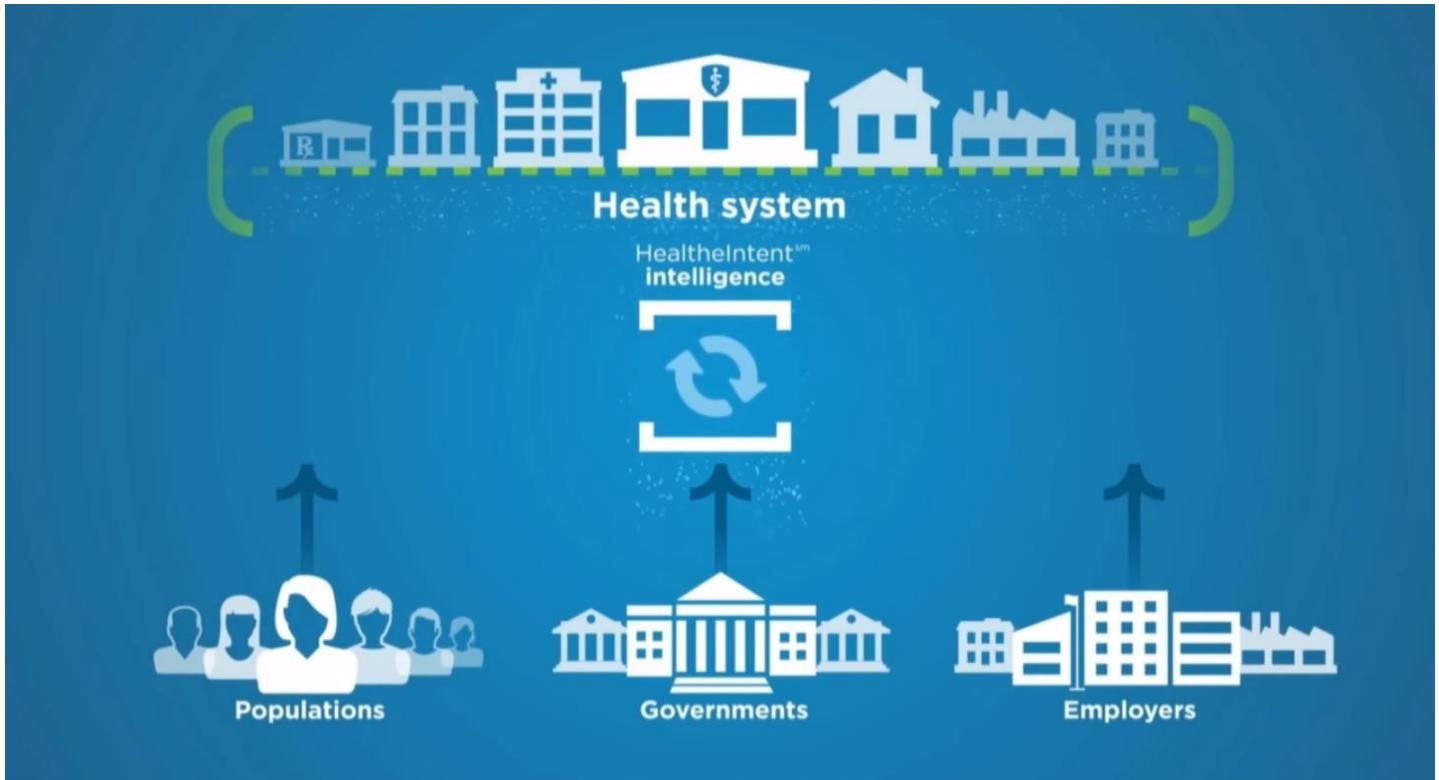
Government/Medicaid



Consumers



Cerner's vision for sustainable healthcare

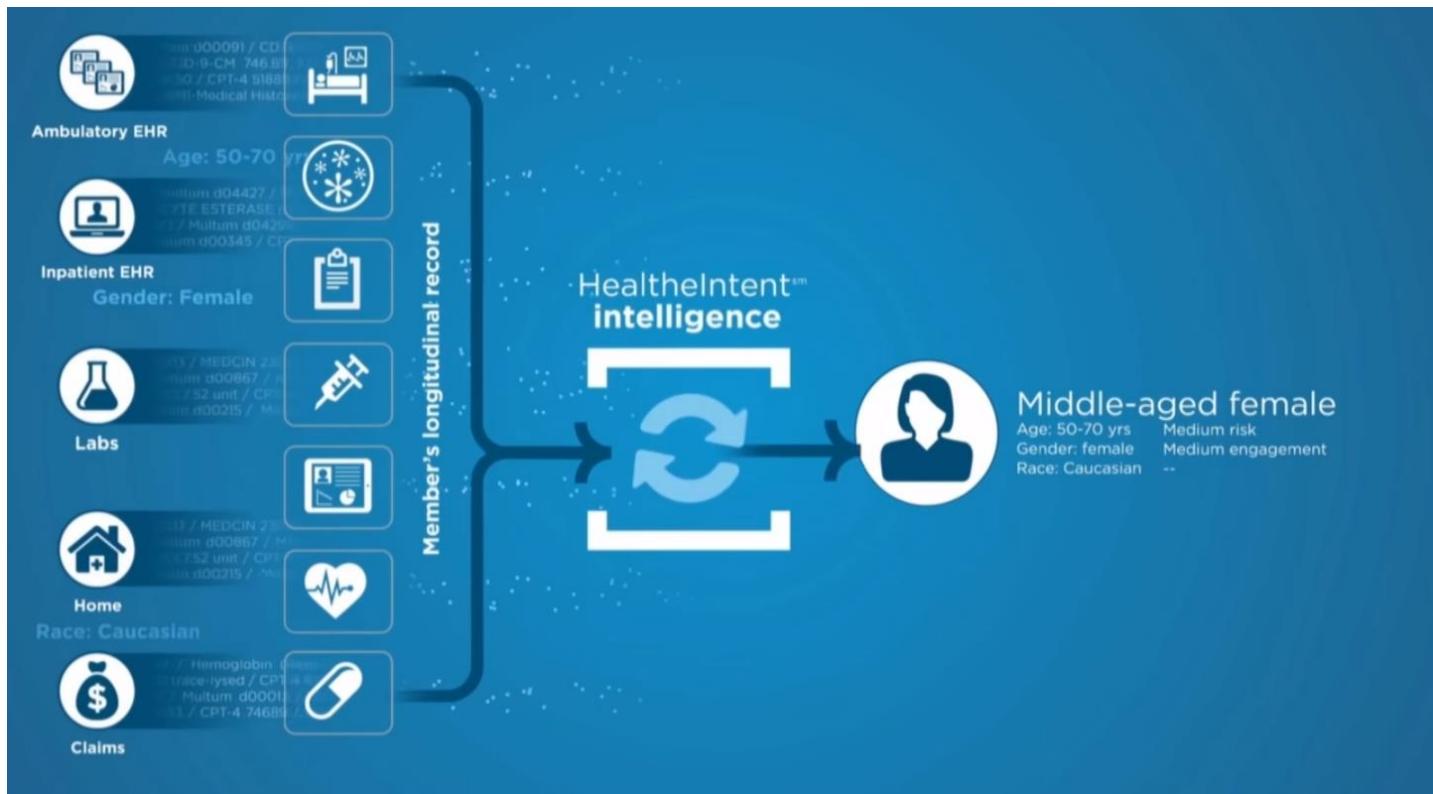


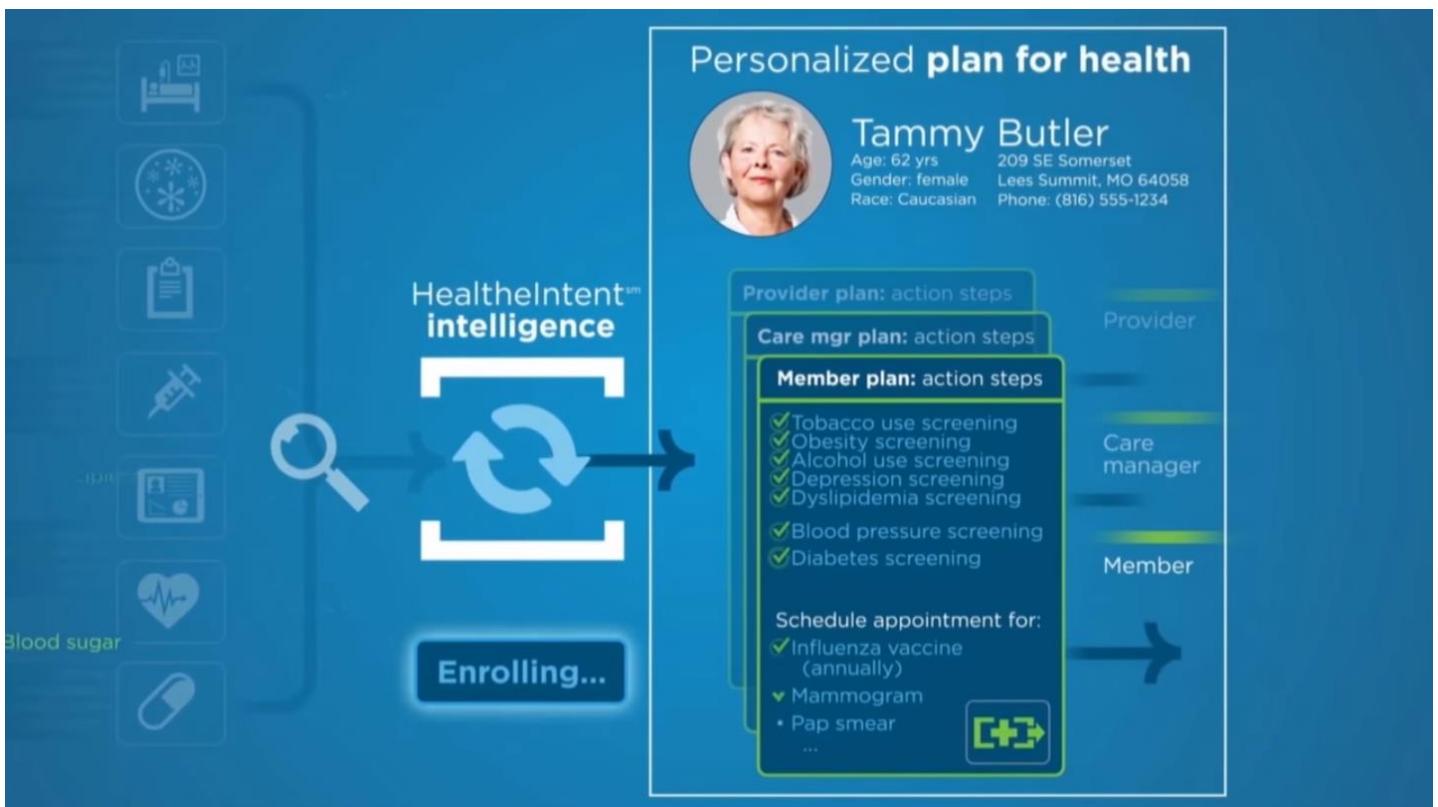
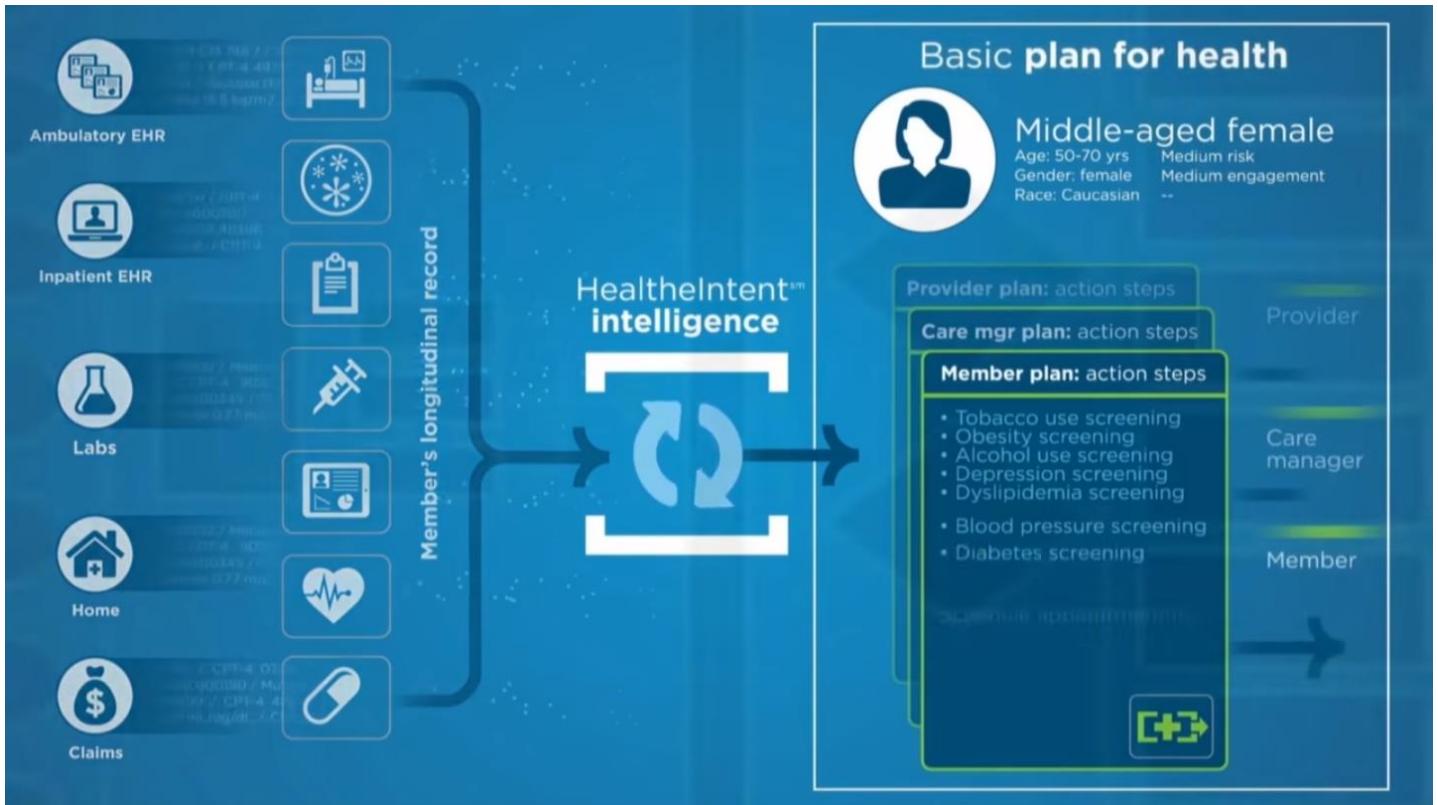
PROCEDURES	CONDITIONS	RESULTS	IMMUNIZATIONS	Vitals
 Ambulatory EHR	ICD-9-CM ICD-9-CM 992.9 CM / 16180W / CPT-4 90716 / Medi-Span98975 / Multum d00468 / MEDCIN 90185 / LYKOCYTE ESTERASE n / 9921 ST / Multum d00070 / Multum d0021 / CPT-4 1120 / Hemoglobin 18.6 gm/dL / D-9-CM 372.3 / Multum d00429 / Multum d00007 / CPT-4 45394 / pH-Arterial (POC) 7.44 unit / D-9-CM 351.79 / Multum d00695 / Multum d00345 / CPT-4 7651 / BUN 48 mg/dL / CPT-4 90471 / Medi-Span17546 / Multum d00252 / MEDCIN 275459 / APPEARANCE yellow / CPT-4 8010 / NDC 9310905 / Multum d00299 / MEDCIN 91335 / ETONES trace / CPT-4 99214 / CPT-4 38100 / Platelet 438 / THOUSAND/mcl / ICD-9-CM 9.61 / Multum d00373 / Multum d00170 / CPT-4 49392 / O2 Sat Arterial(POC) 90 % / ICD-9-CM 9.42 / Multum d00282 / Multum d00070 / CPT-4 78606 / WBC 9.7 THOUSAND/mcl / CPT-4 0669 / edi-Span2966 / Multum d00440 / MEDCIN 37518 / THER n / CPT-4 93321 / Multum d00022 / M-8850-4 0748 / BMI-Medical Histor 39.5 NULL / CPT-4 99254 / Multum d00190 / Multum d0005 / CPT-4 46619 / INR (Lab) 1.5 / JLL / ICD-9-CM 35.94 / Multum d0233 / Multum d00121 / CPT-4 545 / 15.7 / Hemoglobin (Resp) 15.7 gm/dL / CPT-4 0700 / Multum d000070 / Medi-Span48860 / OCCULT BLOOD trace-lysed / PT-4 93325 / Multum d00190 / INR (Lab) 1.5	CPT-4 36416 COLLECTON CAPILLARY ICD-9-CM ICD-9-CM 303.03 / 16180W / CPT-4 90716 / ICD-9-CM 992.9 CM / ENDOVASCULAR / ICD-9-CM 88.42 AORTOGRAPHY / CPT-4 93037 HGL GLYCATED - DEVICE / CPT-4 99215 EST PATIENT HIGH / CPT-4 982.98 HEMORR DZ DA HGM / CPT-4 99232 MINOR COMPLIC 25 MIN / CPT-4 93202 TRNTHORACIC / CPT-4 93308 ECHO TRNSTHORAC	ICD-9-CM ICD-9-CM 3910 ECG-ROUTINE W/12 LEADS; CPT-4 93321 DOPPLER ECHO CONT WAVE / ICD-9-CM 317.9 ENDOMICSU / ICD-9-CM 99225 INITIAL HOSPITAL CARE / CPT-4 99225 INITIAL CARE / ICD-9-CM ANGIOCARDIOPGRAPHY / CPT-4 35476 COLLECTON CAPILLARY / ICD-9-CM RIGHT HEART STRUCTURES / CPT-4 93304 TRANSTHORAC / CPT-4 93308 ECHO TRNSTHORAC / CPT-4 85035 HEMOGLOBIN	ICD-9-CM ICD-9-CM 372.33 HEART CATHETERIZATION / CPT-4 93321 DOPPLER ECHO CONT WAVE / ICD-9-CM 317.9 ENDOMICSU / ICD-9-CM 99225 INITIAL HOSPITAL CARE / CPT-4 99225 INITIAL CARE / ICD-9-CM ANGIOCARDIOPGRAPHY / CPT-4 35476 COLLECTON CAPILLARY / ICD-9-CM RIGHT HEART STRUCTURES / CPT-4 93304 TRANSTHORAC / CPT-4 93308 ECHO TRNSTHORAC / CPT-4 85035 HEMOGLOBIN
 Inpatient EHR	ICD-9-CM ICD-9-CM 495.90 ASTHMA, UNSPECIFIED / CPT-4 7862 COUGH / CPT-4 46619 / Multum d00007 / CPT-4 7650 PRECORDIAL PAIN / CPT-4 7881 / ICD-9-CM 745.5 05TIUM SECUNDUM TYPE / ICD-9-CM 992.91 UNSPECIFIED CHEST / CPT-4 78607 WHEEZING / CPT-4 78610 ASTHMA / CPT-4 78611 OXYGEN / CPT-4 78612 Oral Inhaler / CPT-4 78613 Vital Exam / CPT-4 78651 PRECORDIAL	ICD-9-CM ICD-9-CM 495.89 OTHER POSTSURGICAL MEDICAL / CPT-4 90185 Viral Infection / MEDCIN 91332 Normal Routine / ICD-9-CM 746.7 HYPOPLASTIC LEFT / ICD-9-CM 746.89 OTHER SPECIFIED / MEDCIN 91333 Normal Routine History / Multum d00345 / CPT-4 78601 ASTHMA / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 495.89 OTHER POSTSURGICAL MEDICAL / CPT-4 78609 RESPIRATORY / CPT-4 78610 ASTHMA / CPT-4 78611 OXYGEN / CPT-4 78612 Oral Inhaler / CPT-4 78613 Vital Exam / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 495.89 OTHER POSTSURGICAL MEDICAL / CPT-4 78609 RESPIRATORY / CPT-4 78610 ASTHMA / CPT-4 78611 OXYGEN / CPT-4 78612 Oral Inhaler / CPT-4 78613 Vital Exam / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough
 Labs	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough
 Home	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough	ICD-9-CM ICD-9-CM 250.01 DIABETES UNCOMPL. TYPE I / ICD-9-CM 250.02 MAJOR DEPRESS / CPT-4 78650 UNSPECIFIED CHEST PAIN / MEDCIN 275459 Adult Davis Medica / MEDCIN 250057 Constipation / MEDCIN 247 Cough
 Claims	ICD-9-CM ICD-9-CM 372.00 Verapami Hydrochloride / Multum d00345 / Acetaminophen / Multum d00162 TAKE / Multum chlorothiazide / Multum d00049 acetaminophen / Multum d00345 / Multum d00162	ICD-9-CM ICD-9-CM 372.00 Verapami Hydrochloride / Multum d00345 / Acetaminophen / Multum d00162	ICD-9-CM ICD-9-CM 372.00 Verapami Hydrochloride / Multum d00345 / Acetaminophen / Multum d00162	ICD-9-CM ICD-9-CM 372.00 Verapami Hydrochloride / Multum d00345 / Acetaminophen / Multum d00162
MEDICATIONS	Medi-Span Medi-Span17546 PrednisONE Medi-Span72120 Enalapril Maleate NDC-8821905 Lantus Solostar NDC-169633910 NovoLog FlexPen Medi-Span17546 PrednisONE Medi-Span2966 Baby Aspirin Multum d00345 spironolactone Multum d00222 warfarin	Medi-Span Medi-Span17546 PrednisONE Medi-Span72120 Enalapril Maleate NDC-8821905 Lantus Solostar NDC-169633910 NovoLog FlexPen Medi-Span17546 PrednisONE Medi-Span2966 Baby Aspirin Multum d00345 spironolactone Multum d00222 warfarin	Medi-Span Medi-Span17546 PrednisONE Medi-Span72120 Enalapril Maleate NDC-8821905 Lantus Solostar NDC-169633910 NovoLog FlexPen Medi-Span17546 PrednisONE Medi-Span2966 Baby Aspirin Multum d00345 spironolactone Multum d00222 warfarin	Medi-Span Medi-Span17546 PrednisONE Medi-Span72120 Enalapril Maleate NDC-8821905 Lantus Solostar NDC-169633910 NovoLog FlexPen Medi-Span17546 PrednisONE Medi-Span2966 Baby Aspirin Multum d00345 spironolactone Multum d00222 warfarin

The longitudinal record



A living health record for each person





The diagram illustrates the HealthIntent intelligence process. On the left, a vertical column of medical icons (bed, thermometer, clipboard, syringe, ECG, pill) is being processed by a central 'HealthIntent intelligence' unit, represented by a magnifying glass over a circular arrow icon. This unit generates a 'Personalized plan for health' for Tammy Butler, a 62-year-old female of Caucasian descent.

Personalized plan for health

Tammy Butler
Age: 62 yrs
Gender: female
Race: Caucasian
209 SE Somerset
Lees Summit, MO 64058
Phone: (816) 555-1234

Provider plan: action steps

Care mgr plan: action steps

Member plan: action steps

- ✓ Blood glucose 3x/Day
- ✓ Blood screening, counseling
- ✓ Prescribe: increased activity, diet counseling, exercise program

Schedule appointment for:

- ✓ Glucose monitoring, consultation
- ▼ Eye/foot exam

Provider

Care manager

Member

This diagram is similar to the one above, showing the HealthIntent intelligence process. The central 'HealthIntent intelligence' unit is shown with a magnifying glass over a circular arrow icon. A blue box at the bottom left indicates the process is 'Enrolling...'. The generated 'Personalized plan for health' for Tammy Butler includes additional items in the Member plan:

Personalized plan for health

Tammy Butler
Age: 62 yrs
Gender: female
Race: Caucasian
209 SE Somerset
Lees Summit, MO 64058
Phone: (816) 555-1234

Provider plan: action steps

Care mgr plan: action steps

Member plan: action steps

- ✓ Blood pressure (daily)
- ▼ Track weight (daily)
- Blood screening, counseling
- Prescribe: increased activity, diet counseling, exercise program

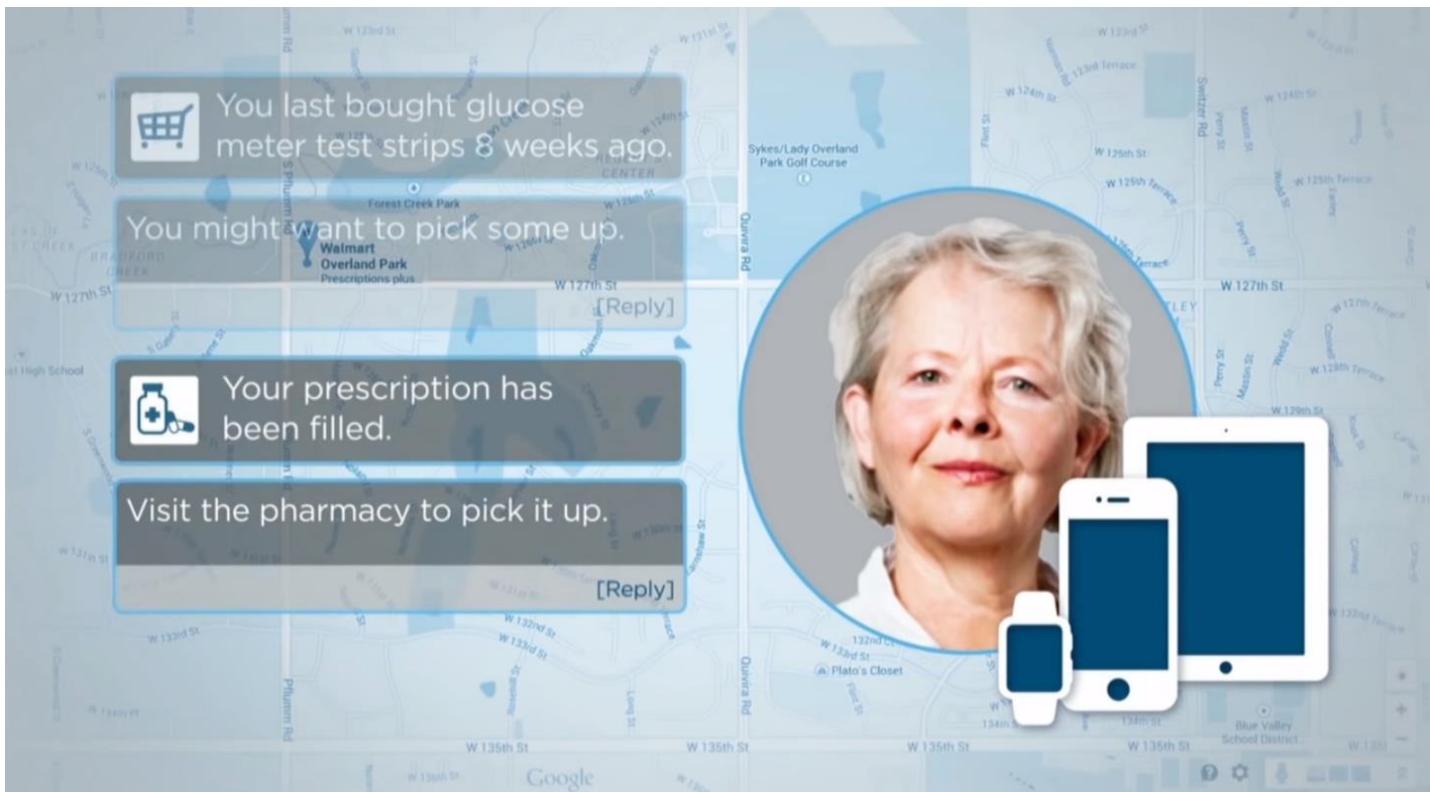
Schedule appointment for:

- ✓ Potassium & creatinine (check monthly)
- ✓ Medication step therapy:
1) ACEI/ARB
- ...

Provider

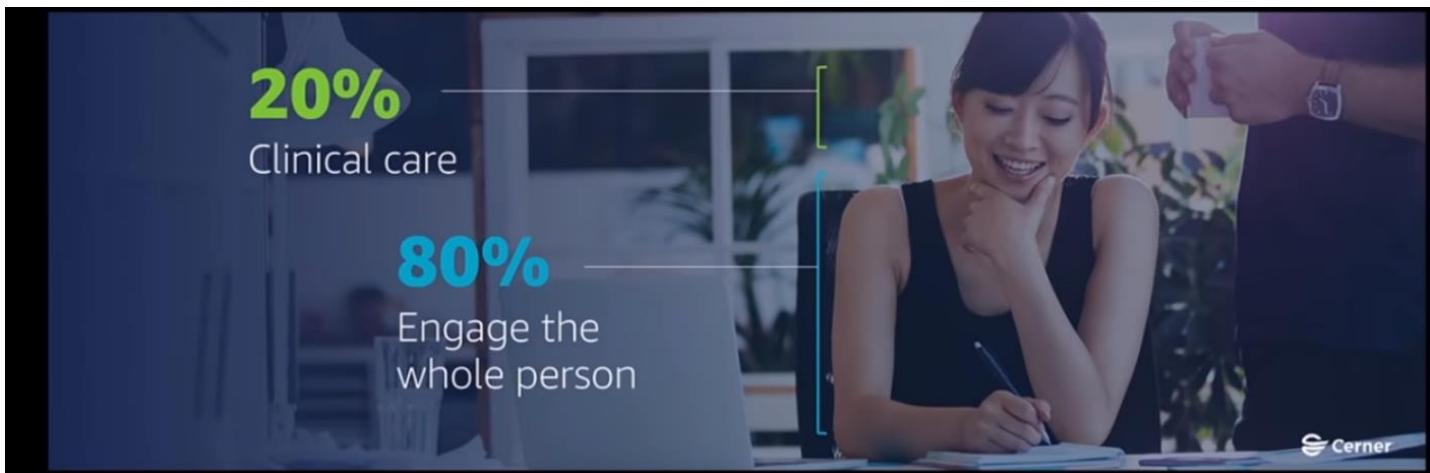
Care manager

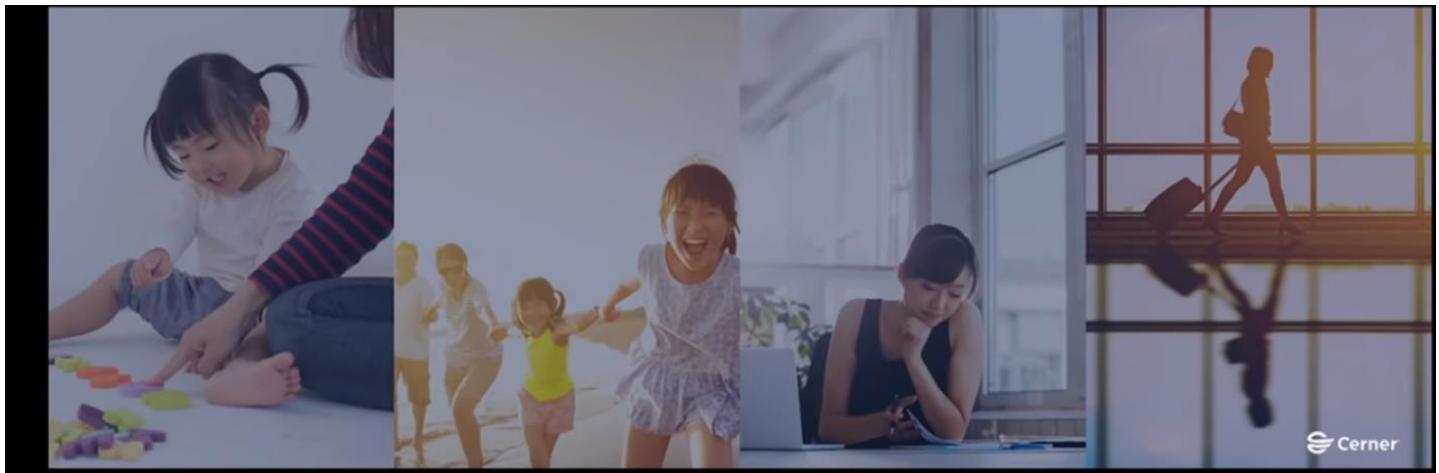
Member



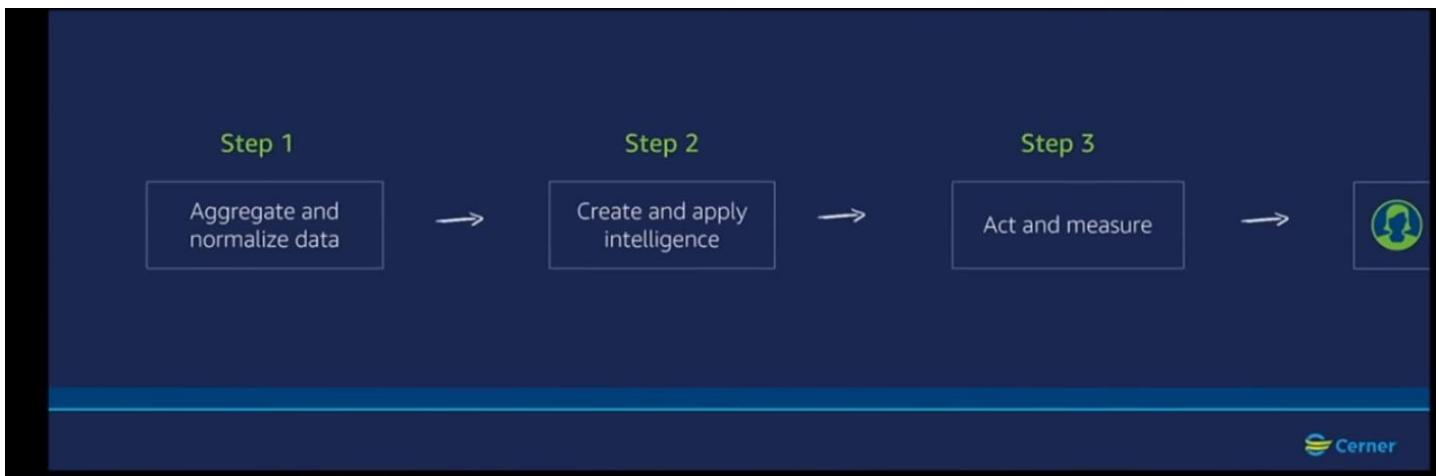
Cerner HealthIntentSM

Supporting the ability to take the right action at the right time





Cerner



Cerner



Cerner

Cerner chose AWS



Breadth and depth
of services



Scale



Global reach



Community of
innovators on AWS



AWS scales to support Cerner

149M
person profiles

10+PB
of data storage

1700+
processing nodes

110K
daily processed jobs

← ← ← secure & compliant → → →

Moving to AWS was transformative

Step 1

Aggregate and
normalize data

Step 2

Create and apply
intelligence

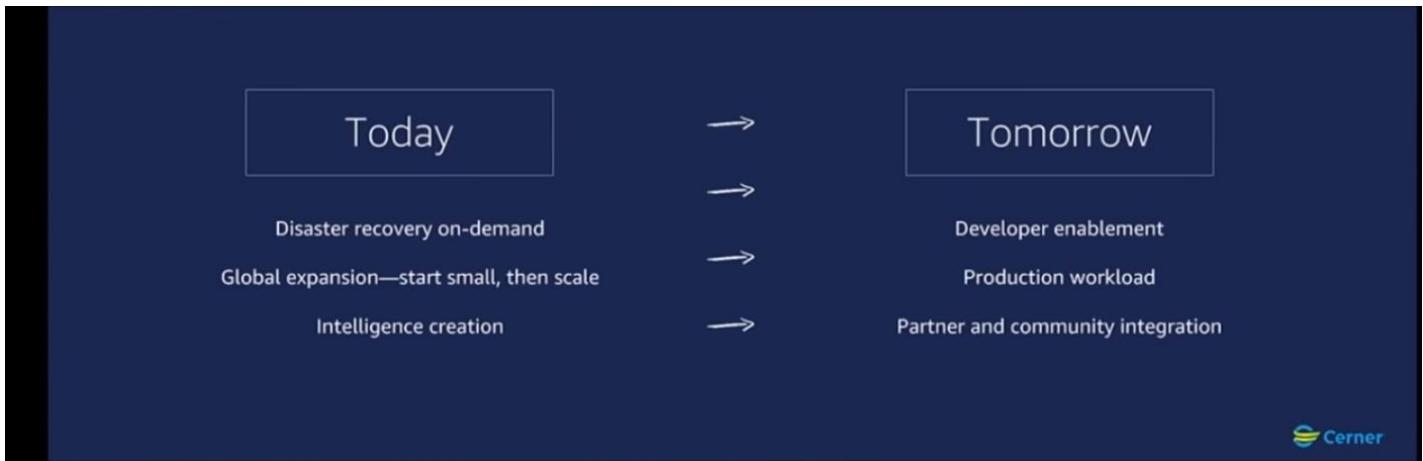
Step 3

Act and measure

Before AWS
6 months

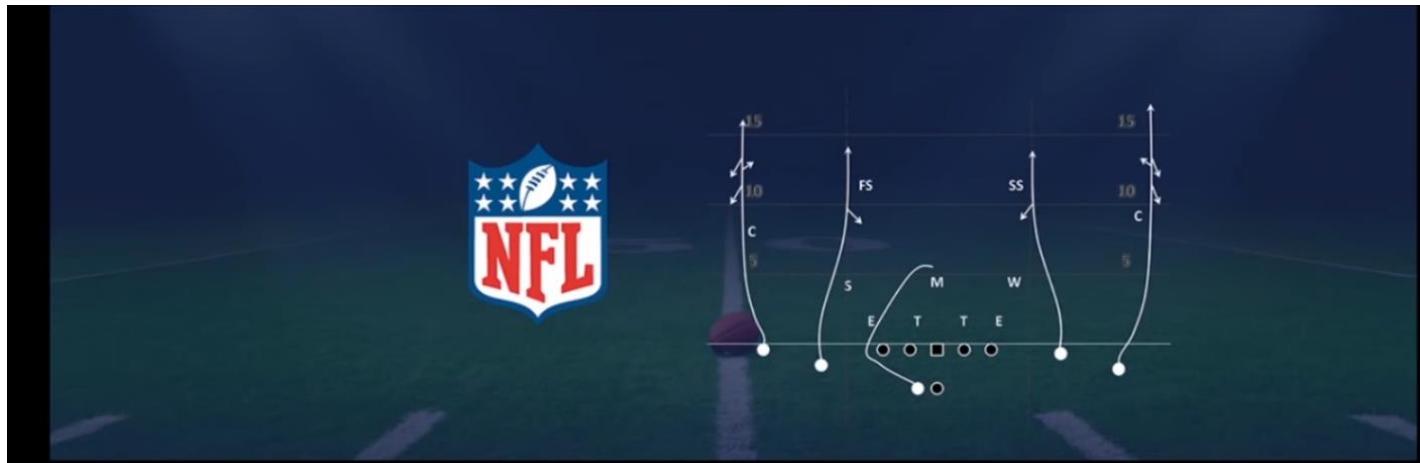
After AWS
< 4 weeks

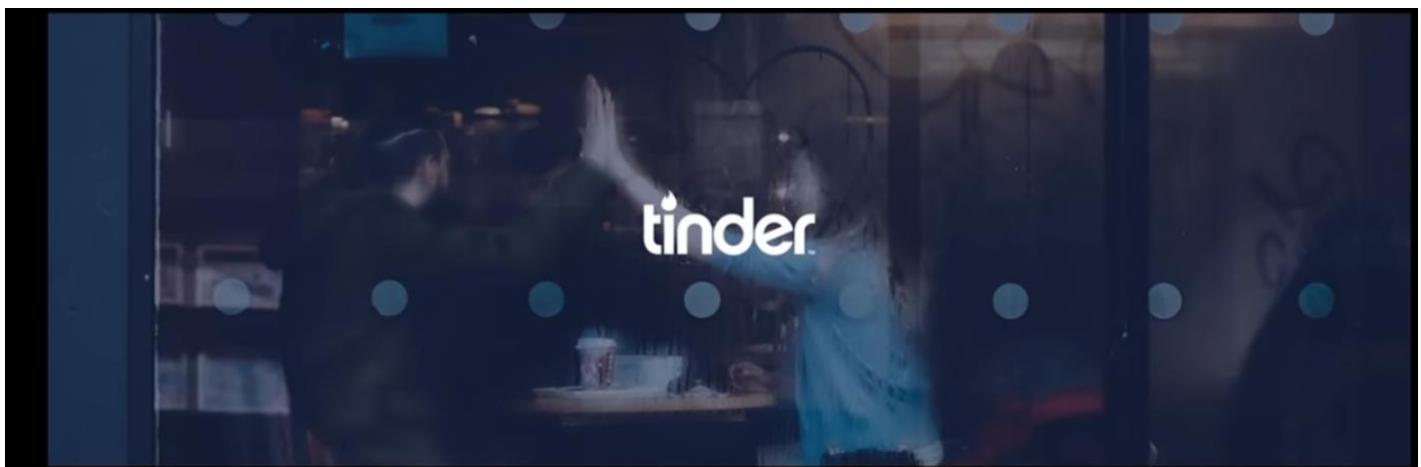






Machine Learning is experiencing
a renaissance in the cloud

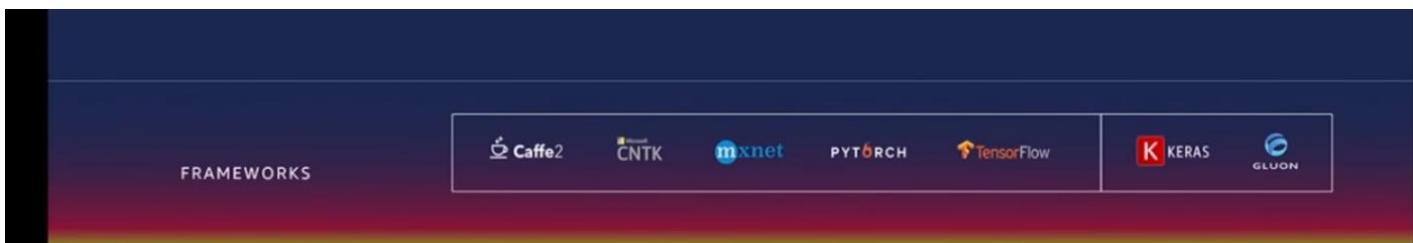




Using computer vision to do automated data extraction from financial documents



The NHS uses Amazon Lex to build a chatbot as the first point of contact in their care call center, the chatbot was able to handle 40% of the incoming calls and helping resolve them



Customers and developers are using the frameworks to build custom models using their own data.

Build, train, tune, and host custom models with Amazon SageMaker

Fully managed notebooks

One-click model training

Automated model selection



Fault tolerant, auto-scaling hosting

KMS integration

Running inside your VPC

Amazon Sagemaker allows customers to build, train, tune and host custom models in the cloud and deploy them for inference in the cloud and at the edge.

Announcing new customers using Amazon SageMaker

DOW JONES



GE Healthcare

realtor.com[®]



grammarly

tinder.

COX AUTOMOTIVE[®]

expedia group[®]

Regit

cookpad

APPLICATION SERVICES



PLATFORMS



AMAZON
SAGEMAKER

FRAMEWORKS



We also make available a couple of pre-trained models as application services that you can use instead.

Three trends we're seeing as customers adopt ML



Data matters
at any scale



Embrace ML of
every size and shape



Developers
love speed

It's never been easier or cheaper to collect data at any scale



New data created
in the cloud



Existing data
migrating as
quickly as possible



Encryption, auditing
& compliance



Analysis through
a data lake



Human annotation
through the crowd



Most algorithms weren't designed
to handle today's data volumes

Can we design better algorithms to take advantage of this data?



Algorithms for
“infinite scale”



Distributed by
default



Train on a
data stream



Single pass
training



Not memory
bound



Checkpoint
for re-training

Three trends we’re seeing as customers adopt ML



Data matters
at any scale



Embrace ML of
every size and shape



Developers
love speed

Machine learning
is like a primordial soup

Pre-trained models available at the end of an API



REKOGNITION



REKOGNITION
VIDEO



POLLY



TRANSCRIBE



TRANSLATE



COMPREHEND



LEX



Pre-trained models available at the end of an API



This includes the ability to add custom dictionary to your speech recognition system, this allows you to add things like your product names into your dictionary for transcribing calls



Pick the right method for the right custom model



SageMaker
algorithms



Bring your own
algorithm



TensorFlow &
Apache MXNet



TensorFlow 1.6 and MXNet 1.1

Open Source Amazon
TensorFlow and MXNet
Containers

You can put your custom algorithm inside a container, register it with Sagemaker for use.

Developers love speed (especially with ML)



Training speed



Inference speed



Remove
undifferentiated
heavy lifting of ML



Iterate, iterate,
iterate!

Drive better machine learning models with rapid iteration



Predicting patient outcomes



Coin toss



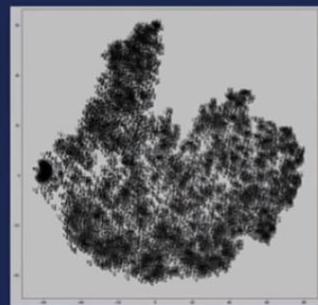
Logistic regression



Neural network



Feature selection



Drive better machine learning models with rapid iteration



Predicting patient outcomes



Coin toss



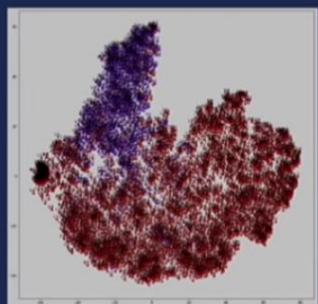
Logistic regression



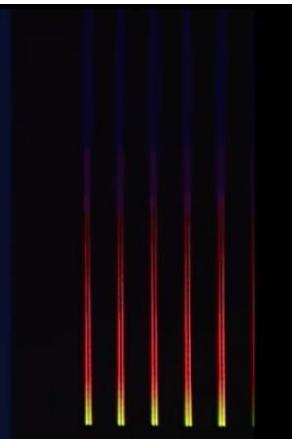
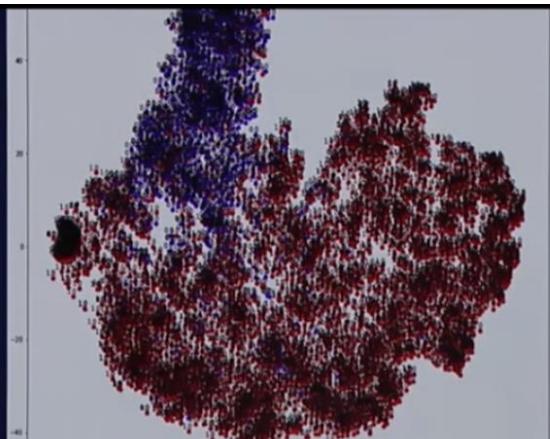
Neural network



Feature selection



Feature selection



Can we make it easier for developers to iterate on their models?

Even faster iterative machine learning with SageMaker local mode



Train with
local notebooks



Train on notebook
instances



PetaFLOP
training on p3.16xl



Go distributed
with one line of code

"Sounds great! How can I get started?"



AWS DeepLens

The world's first deep-learning
enabled video camera for developers

Amazon ML Solutions Lab

DAILYLOOK



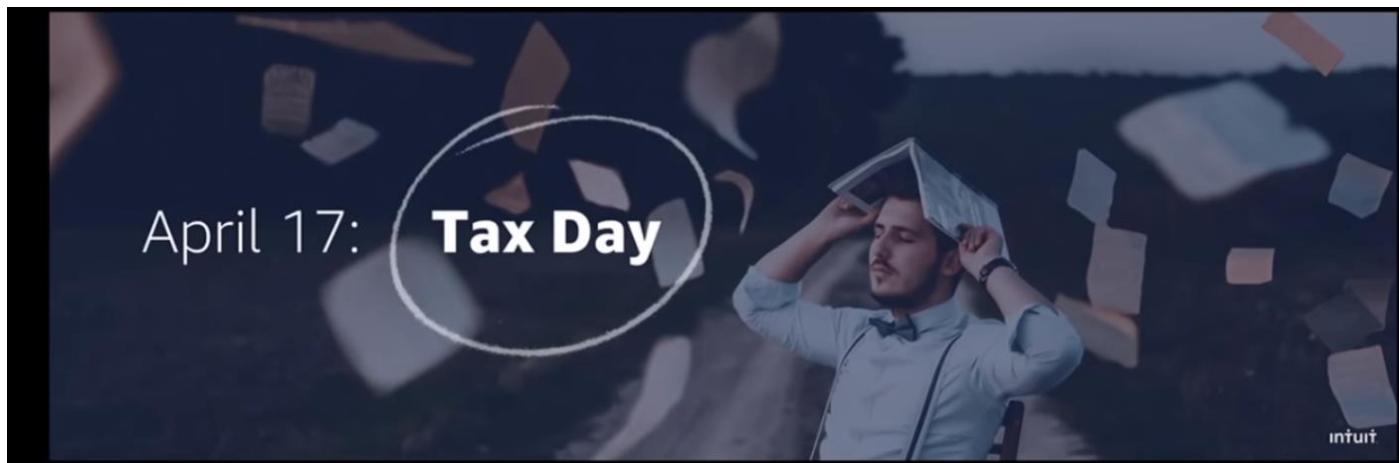
CONCAT
SYSTEMS

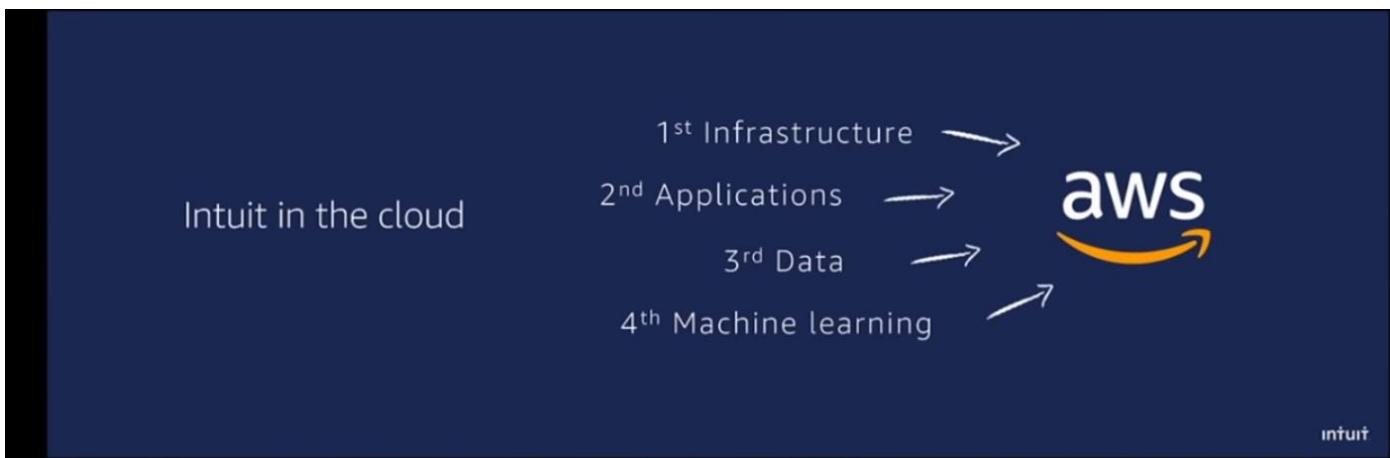
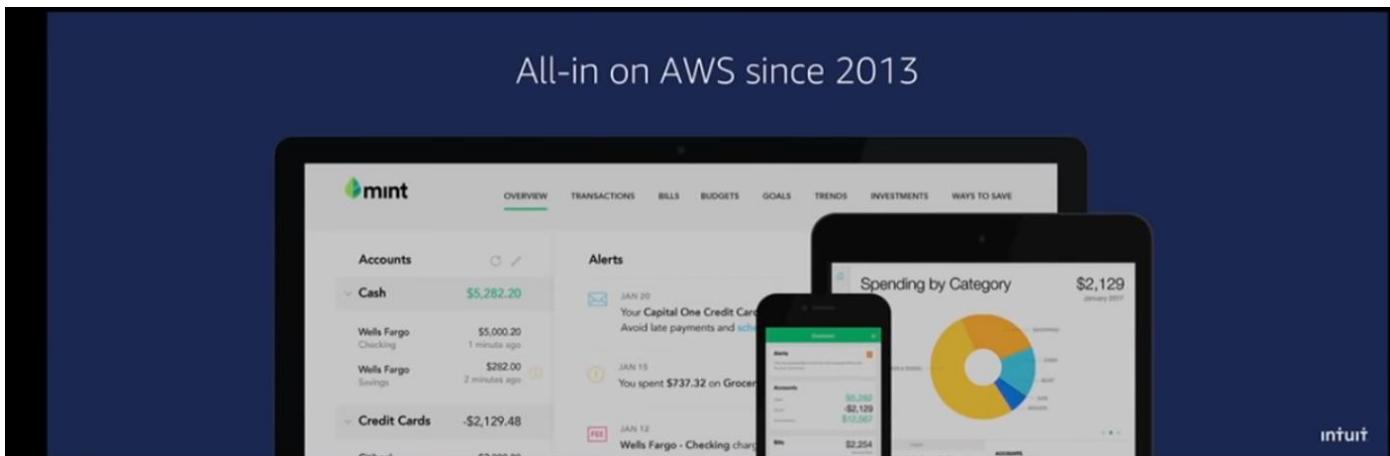


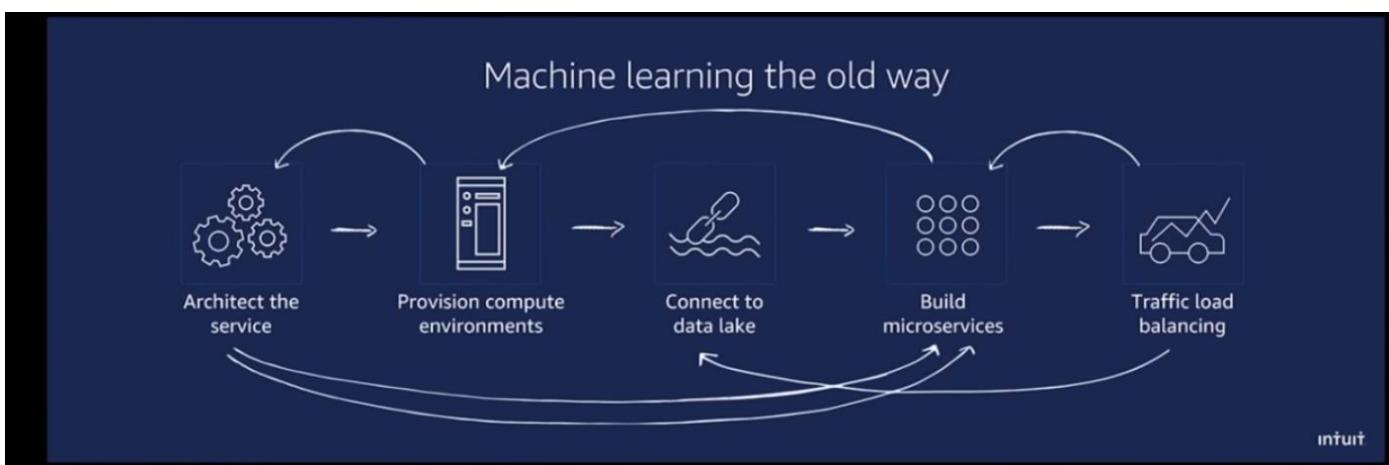
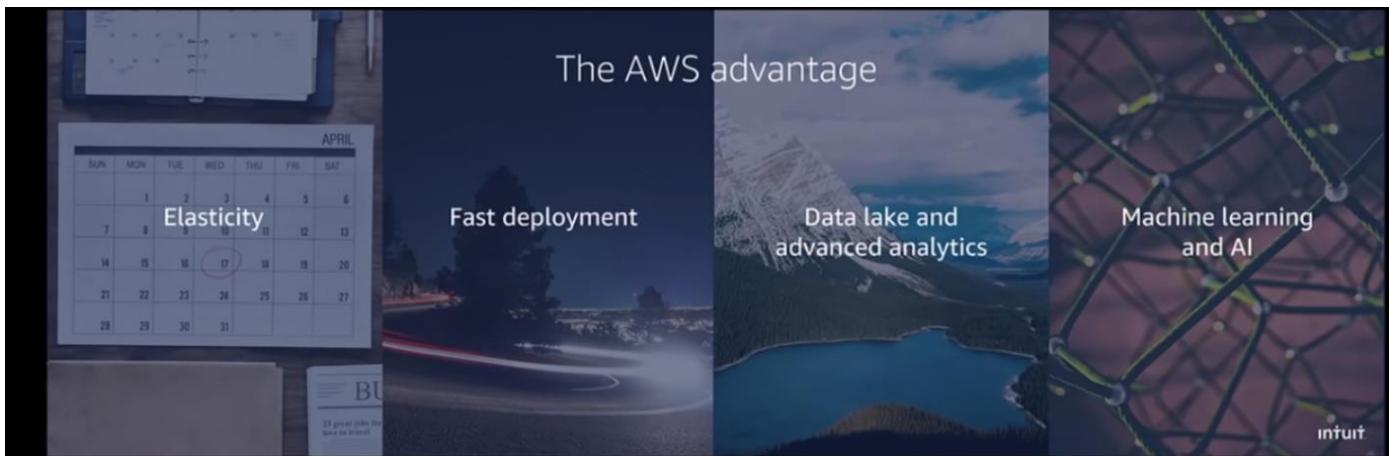
CATHAY PACIFIC

Moody's

Machine Learning in the hands of every developer





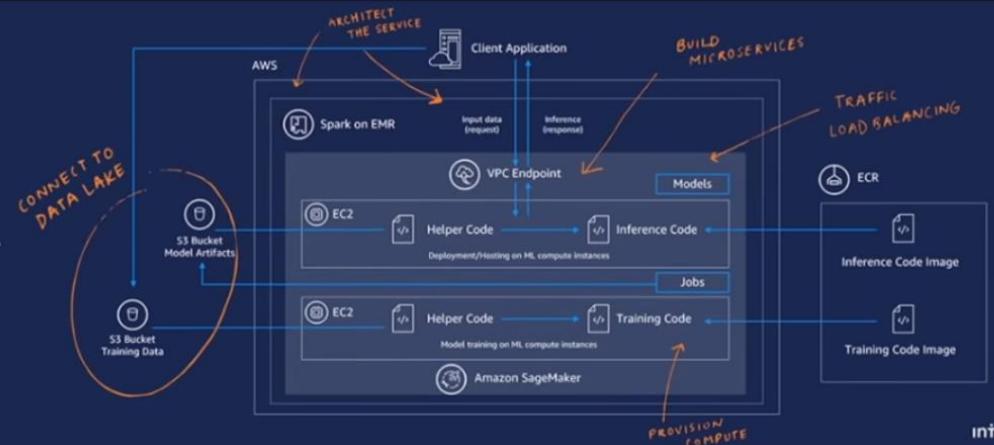




Data scientists can just be data scientists.

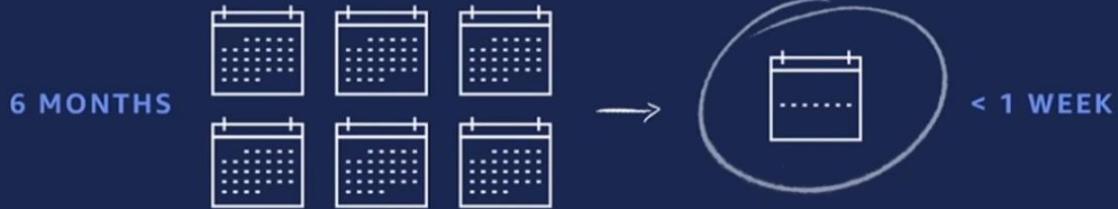
intuit

Intuit +
Amazon
SageMaker



intuit

Deployment time down by 90% with Amazon SageMaker



Down the road



Amazon SageMaker

Continuous
model training



Amazon EMR

Spark clusters for
data processing



AWS Transcribe

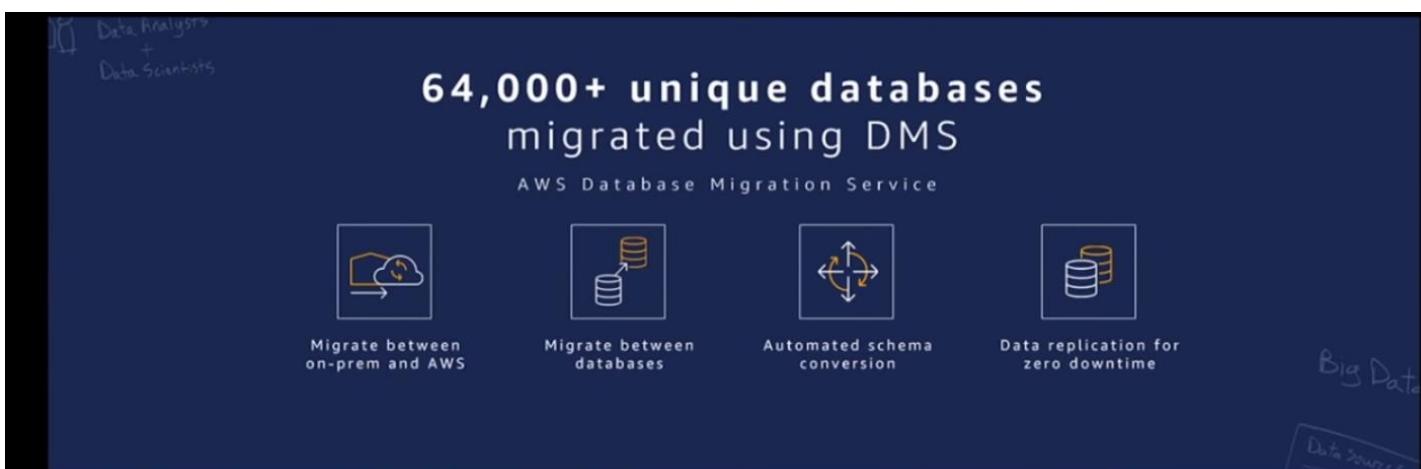
Translating
audio to text



AWS Comprehend

Sentiment
analysis

intuit



Amazon Aurora

The fastest-growing service in AWS history

MySQL and PostgreSQL compatible
Several times faster than standard MySQL and PostgreSQL
Highly available and durable
1/10th the cost of commercial grade database

Amazon Aurora: The fastest-growing service in AWS history



Amazon Aurora Multi-master

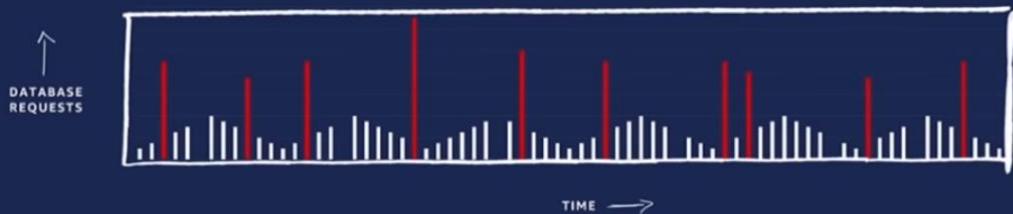
FIRST RELATIONAL DATABASE SERVICE WITH SCALE-OUT ACROSS MULTIPLE DATACENTERS

Zero application downtime from ANY node failure
Zero application downtime from ANY AZ failure
Faster write performance
Multi-region coming in 2018



Up to 15 read replicas across 3 Availability Zones
Auto-scale new read replicas
Seamless recovery from read replica failures

Unpredictable workloads are challenging



Amazon Aurora Serverless

ON-DEMAND, AUTO-SCALING DATABASE FOR APPLICATIONS WITH UNPREDICTABLE OR CYCLICAL WORKLOADS



No need to provision instances



Automatically scales capacity up and down



Starts up on demand and shuts down when not in use



Pay per second and only for the database capacity you use

Amazon DynamoDB Backup and Restore

NOW PROVIDING ON-DEMAND AND CONTINUOUS BACKUPS



Point-in-time recovery for short-term retention and protection against application errors



On-demand backups for long-term data archival and compliance



Back up hundreds of TBs instantaneously with NO performance impact



BUILDING INSIGHTS WITH Data Lakes/ Analytics

Big Data



Amazon S3 is the most popular choice for data lakes



Unmatched durability, availability, and scalability



Best security, compliance, and audit capabilities



Object-level controls



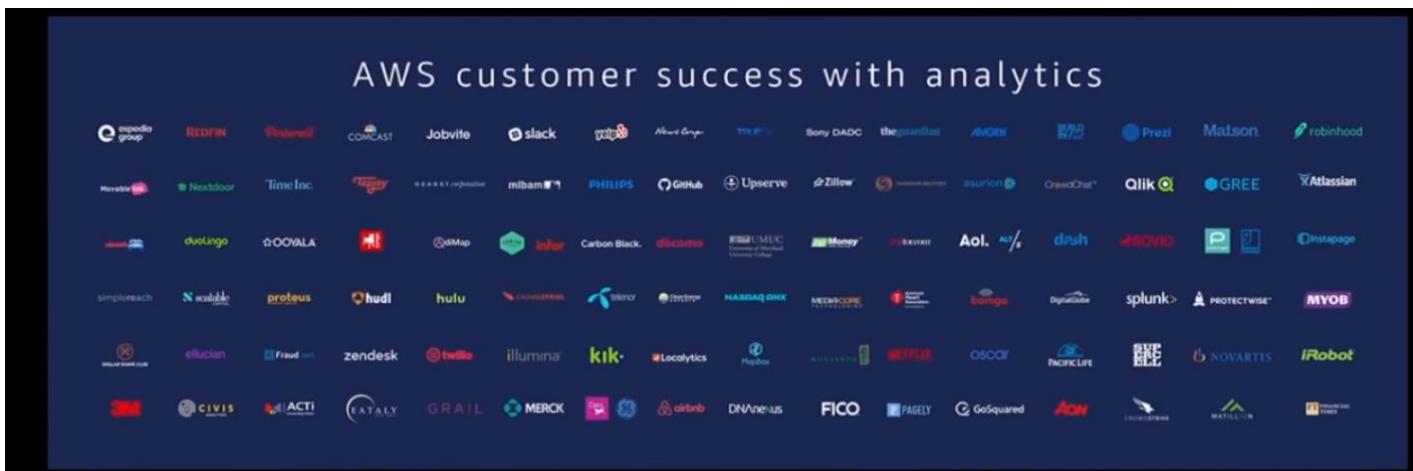
Business insights into your data



Most ways to bring data in



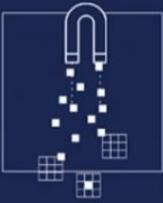
Twice as many partner integrations



S3 Select

Now GA

POWERFUL NEW S3 CAPABILITY TO PULL OUT ONLY THE OBJECT DATA YOU NEED USING STANDARD SQL EXPRESSIONS



New API to select and retrieve data within objects
Accelerate any application that processes a subset of object data in S3
Improve data access performance by up to 400%

Glacier Select

GA

RUN QUERIES DIRECTLY ON DATA STORED IN GLACIER



Run queries on data stored at rest in Amazon Glacier
Any application can query Glacier data
Retrieve only what you need
Makes Glacier part of your data lake

NEW!

Generally available today

One Zone-Infrequent Access

A NEW STORAGE CLASS FOR AMAZON S3



Stores data in
a single AZ



Costs 20% less
than S3-IA



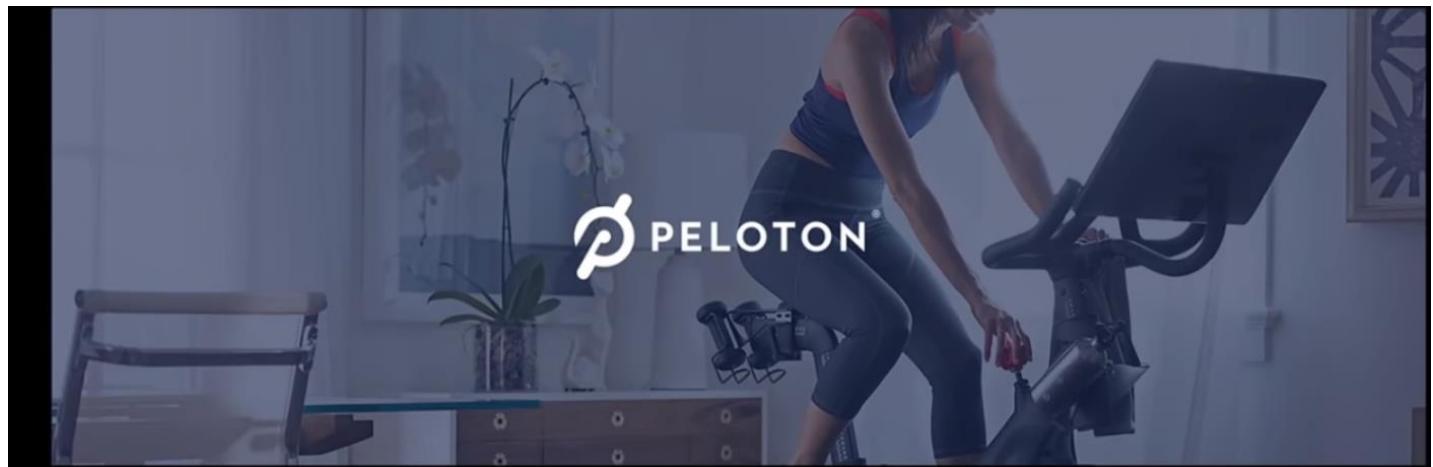
Full functionality
of S3

aws SUMMIT
SAN FRANCISCO

YONY FENG
CTO & CO-FOUNDER, PELOTON



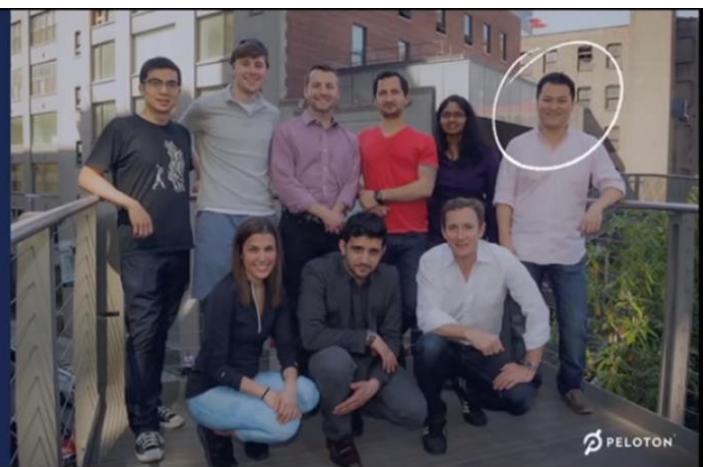
PELOTON®



Peloton offers a connected, in-home fitness experience using a community of riders who use the Peloton platform to ride virtually from the comfort of their homes

Where it all began

In 2013, 297 backers pledged
\$307,332 on **Kickstarter** to
help bring Peloton to life.



PELOTON

Fast forward 5 years



1M+

users

10

rides/month/user

8,000+

on-demand rides

1,000+

employees

31

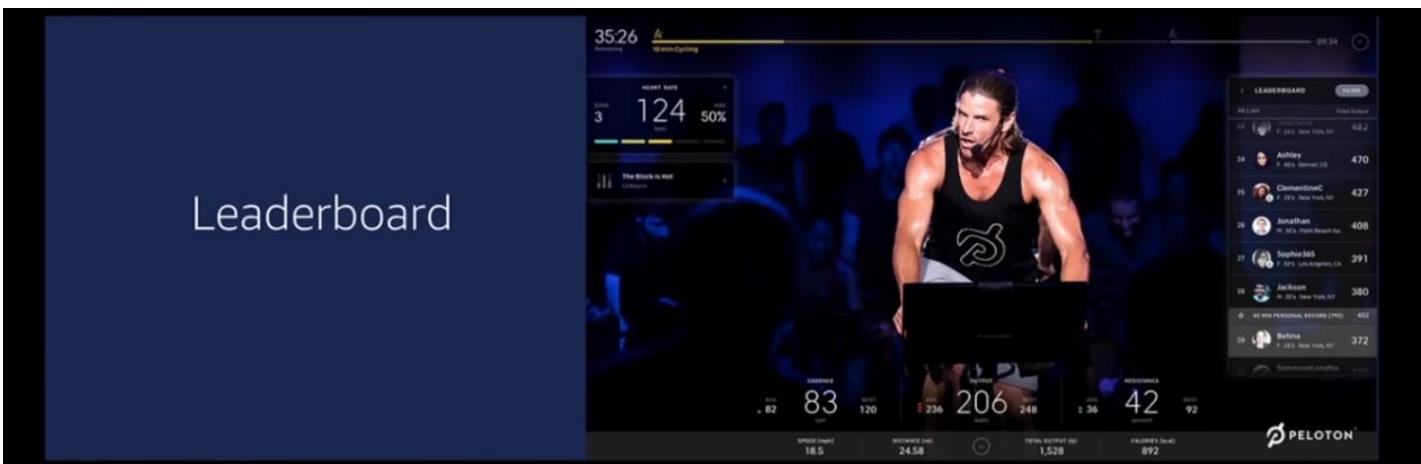
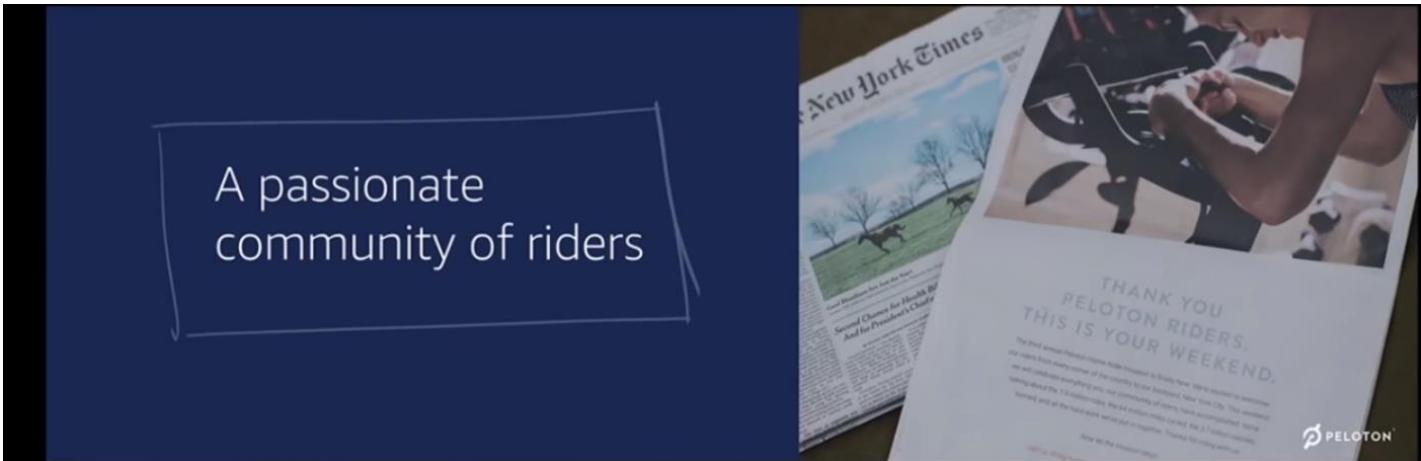
retail showrooms

7 billion calories burned

166 million miles ridden

A passionate
community of riders



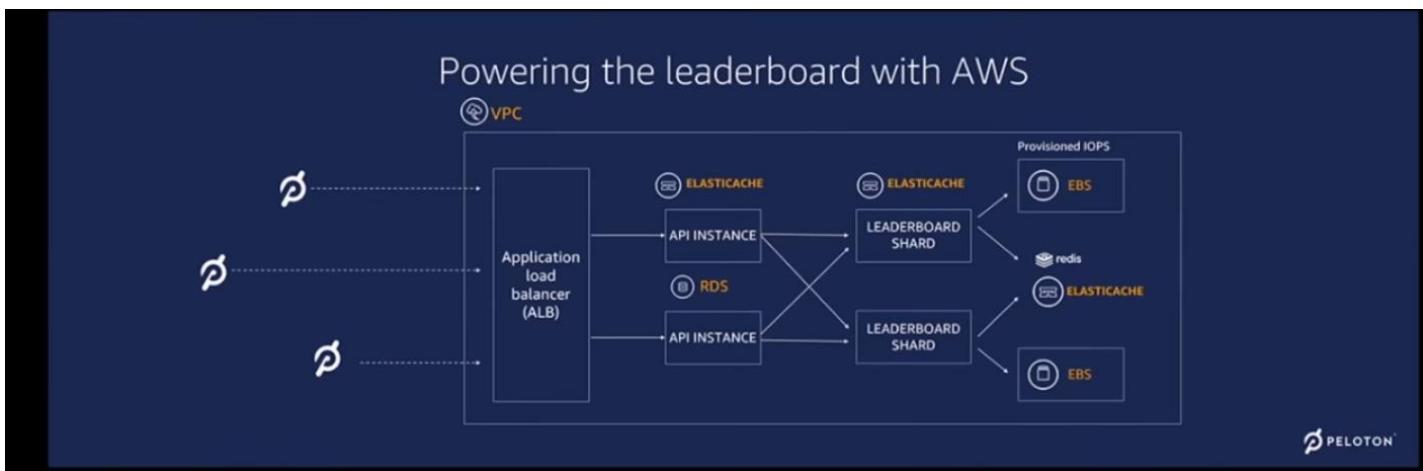


At the core of the Peloton experience is the Leaderboard. On the leaderboard, every rider can see each other's stats, their power output, their cadence, their resistance, their heartrate if they are wearing a monitor. But much more than that, I can filter my stats to show only the people that I follow like my age group, gender group...and all these have to be processed in real-time, low latency, and in the context of a live rider.

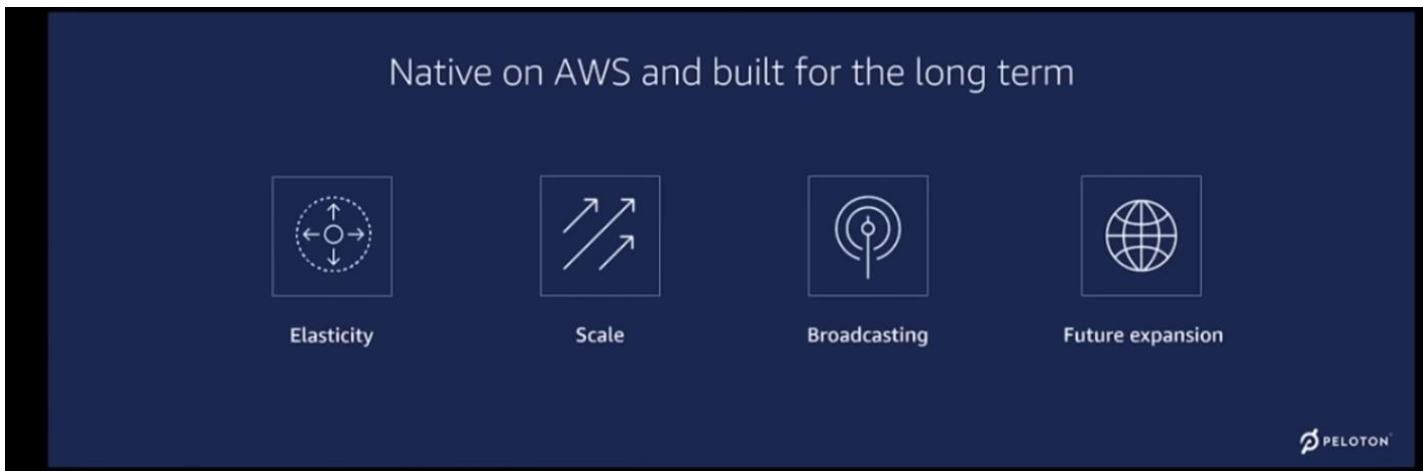




You are still able to compete with anyone who has ever taken the ride that you are taking and compare your stats with their stats



The first challenge is processing massive amounts of data in real time and filtering the data dynamically for specific users, their social graph, age group, and gender. The second challenge is that you are replaying massive amounts of data to each individual on-demand rider and filtering it for their personalized needs as well.



We also use Amazon Elemental Transcoding service to transcode all of our live on demand ride videos

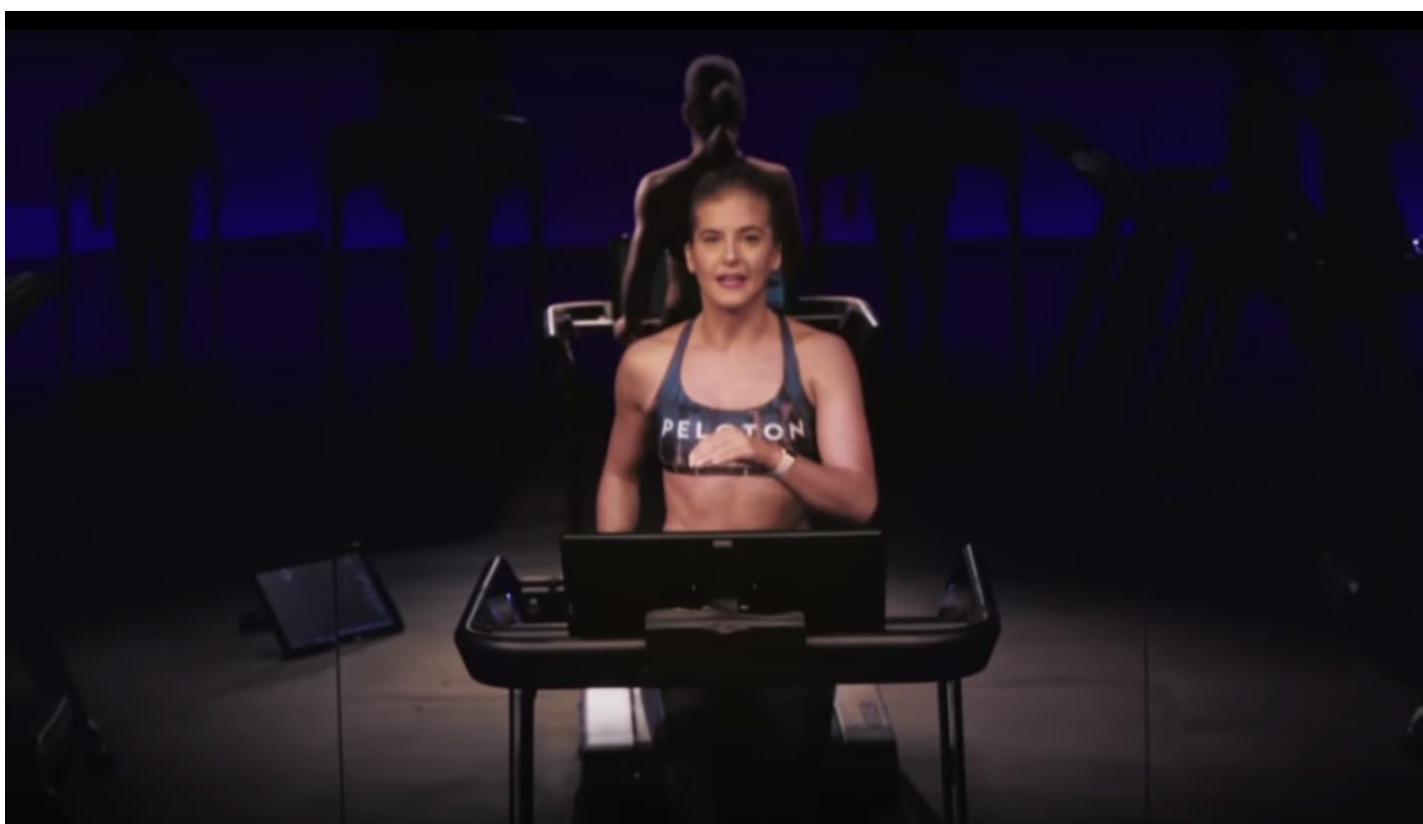
The future
PELOTON TREAD

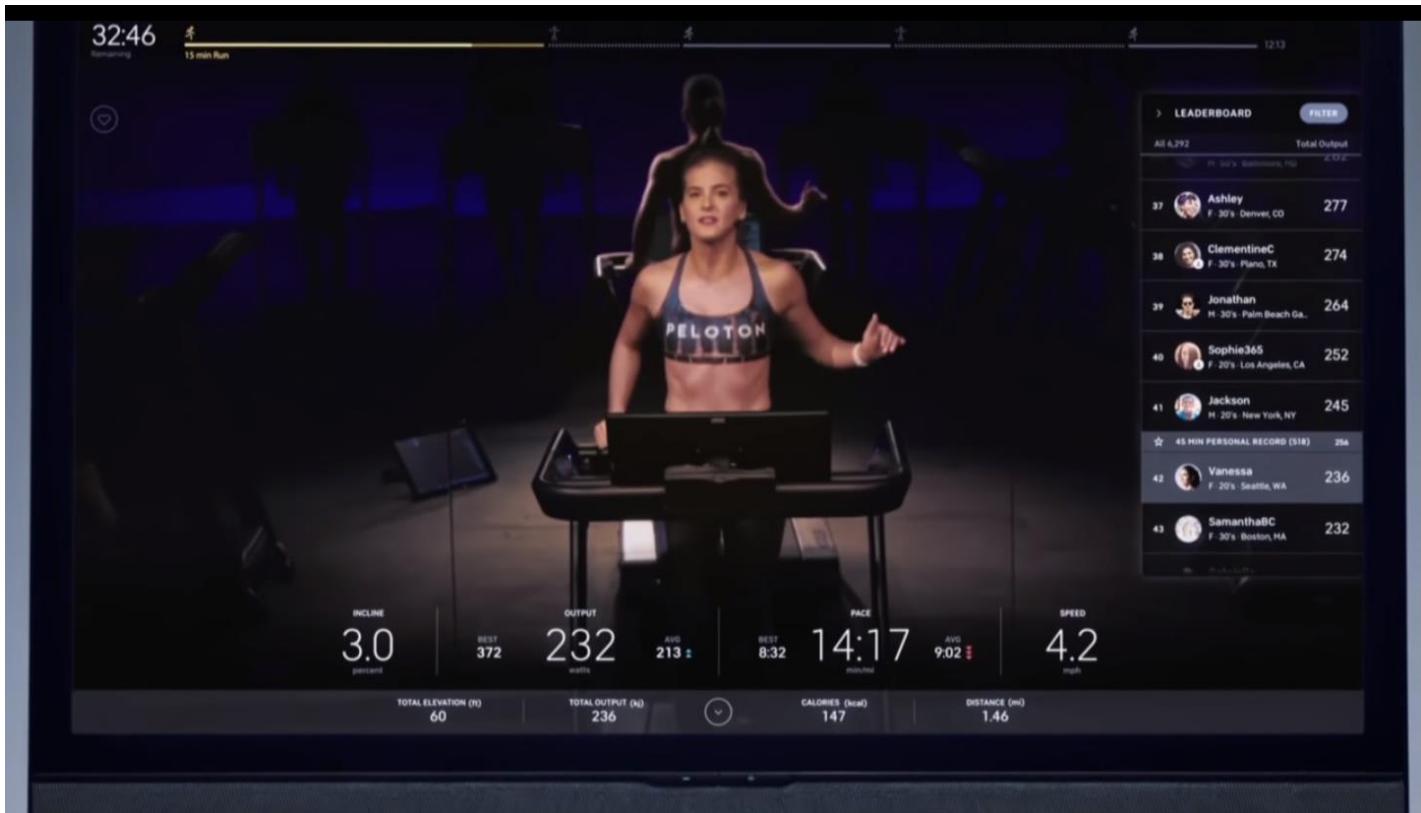


PELOTON

LIVE TOTAL BODY FITNESS HAS A NEW HOME.
YOURS.













THE PELOTON TREAD | FALL 2018



AWS Well-Architected Framework

OPERATIONAL EXCELLENCE

SECURITY & COMPLIANCE

RELIABILITY

PERFORMANCE
EFFICIENCY

COST
OPTIMIZATION





Security is
everyone's
job

Meet the new security team

Operations

Engineering

Application Security

Compliance

DEVELOPMENT



Pace of **innovation**... meets pace of **protection**... through **automation**

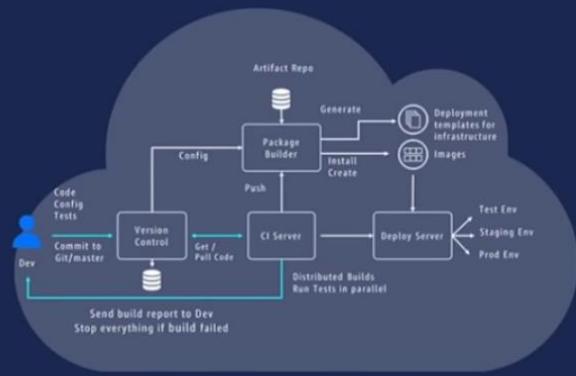
PROTECTION IN A CI/CD WORLD

1. SECURITY OF THE CI/CD PIPELINE

Access roles | Hardening build servers/nodes

2. SECURITY IN THE CI/CD PIPELINE

Artifact validation | Static code analysis



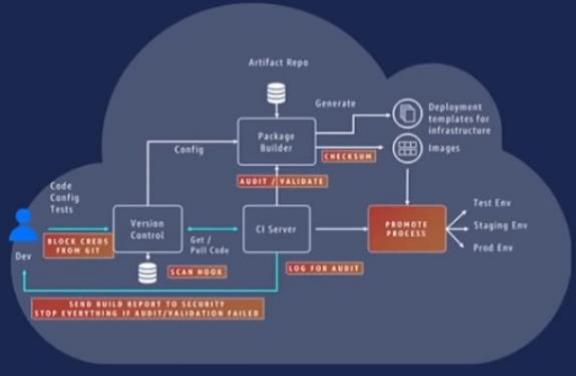
PROTECTION IN A CI/CD WORLD

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AWS Secrets Manager

Manage secrets for protected access to your IT resources

Generally available today



NEW!

Generally available today

AWS Secrets Manager

MANAGE AND PROTECT SECRETS USED TO ACCESS YOUR IT RESOURCES



Rotate, manage, and retrieve secrets through their lifecycle



Manage access with fine-grained policies



Secure and audit secrets centrally



Pay as you go

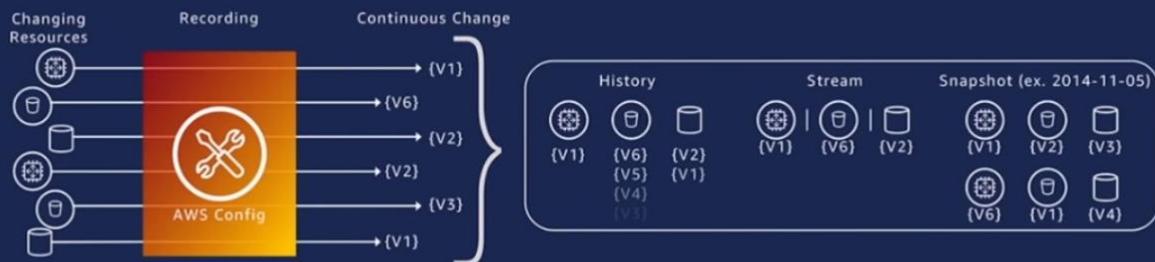
Automation help



AWS CloudTrail – usage logging



AWS Config Rules



NEW!

Generally available today

New for AWS Config

CENTRALIZED AUDITING AND GOVERNANCE CAPABILITIES



View compliance across multiple accounts



View compliance across multiple regions



AWS Firewall Manager

Centrally configure and manage web application firewall rules

Generally available today

Protecting your worldwide audience

AWS PROVIDES:

 TOOLS AND SERVICES	 PARTNER NETWORK
 COMPLIANCE FRAMEWORK	 DATA PROTECTION CONTRACT



WELL-ARCHITECTED  **SECURITY**

Ubiquitous Encryption

...AND AT REST

ENCRYPTED IN TRANSIT...

Load Balancer → S3
Amazon RDS → EBS
Amazon Redshift → EBS
Amazon Glacier → EBS

FULLY MANAGED KEYS IN KMS
Imported keys → Your KMS

RESTRICTED ACCESS
AWS CloudTrail → EBS

FULLY AUDITABLE



AWS Certificate Manager

Easily provision, manage, and deploy SSL/TLS certificates for use with AWS services

No charge for provisioning SSL/TLS certificates

Centrally manage certificates on the AWS Cloud

Managed certificate renewal

NEW!

Generally available today

AWS Certificate Manager – Private Certificate Authority



Deploy private certificates
on AWS, on-premises, and
IoT resources



Manage your
certificates centrally



Secure and managed
private certificate
authority

Security is
everyone's
job



Compute

Compute - From **server** to **serverless**



Virtual
Machines



Containers



Serverless

Compute - From **server** to **serverless**

VIRTUAL MACHINES
EMULATES PHYSICAL INFRASTRUCTURE
GREAT FOR RUNNING EXISTING SOFTWARE
LARGE EXISTING FOOTPRINT
Virtual Machines



Containers



Serverless

Broadest spectrum of compute instances



T2

M5

D2

H1

R4

X1

X1e

I3

I3m

C5

G3

P3

F1

Virtual Private Servers

Burstable

General Purpose

Dense Storage

Big Data Optimized

Memory Optimized

In-memory

Memory Intensive

High I/O

Bare Metal High I/O

Compute Intensive

Graphics Intensive

General Purpose GPU

FPGA



EC2 Elastic GPUs
Graphics acceleration for EC2 instances



EC2 Spot Instances
• Hibernation
• No Bid Pricing

From **server** to **serverless**



Virtual Machines

CONTAINERS
GREAT FOR MICROSERVICES
FROM HOURS TO MINUTES
DEVELOPER AGILITY



Serverless



ECS

Highly scalable, high performance container management system

A Managed Platform



Cluster Management



Container Orchestration



Deep AWS integration

Customers are doing amazing things in production with containers



"Run Kubernetes for me"

EKS
Platform for enterprises to run production-grade Kubernetes

Managed and consistent experience

Seamless, native integration with AWS services

Built with the OSS community

Upstream and Certified

EKS
Announcing New Amazon EKS Customers

CONDÉ NAST

Zocdoc

Pinterest

logicworks

DATADOG

verizon

lyft

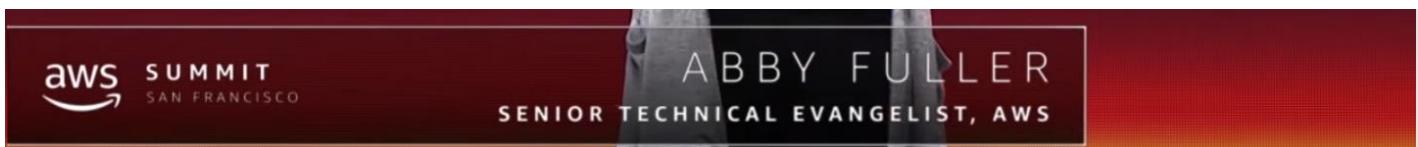
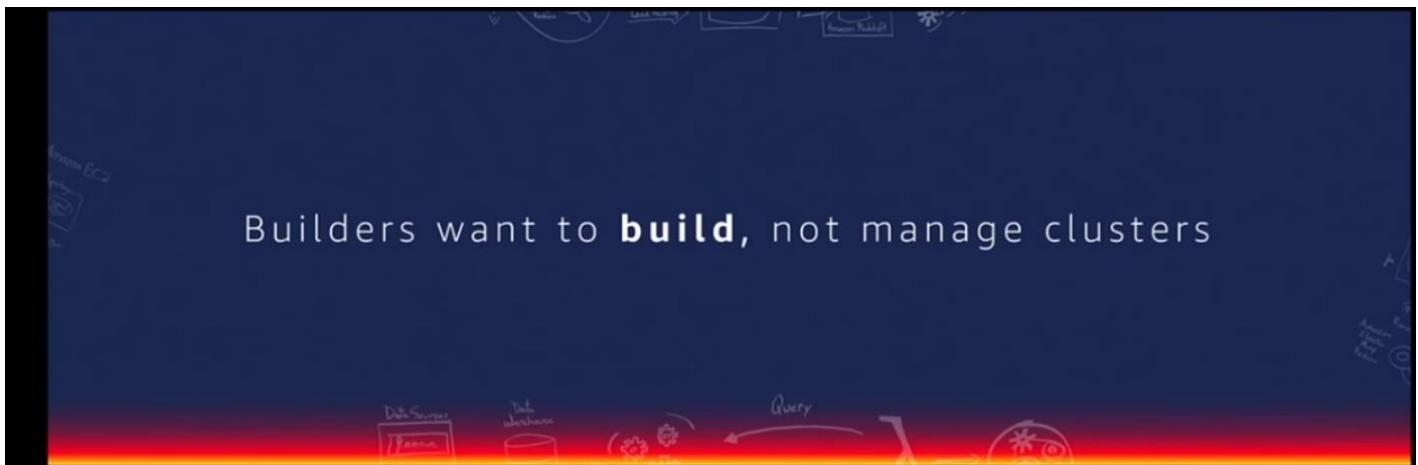
sumologic

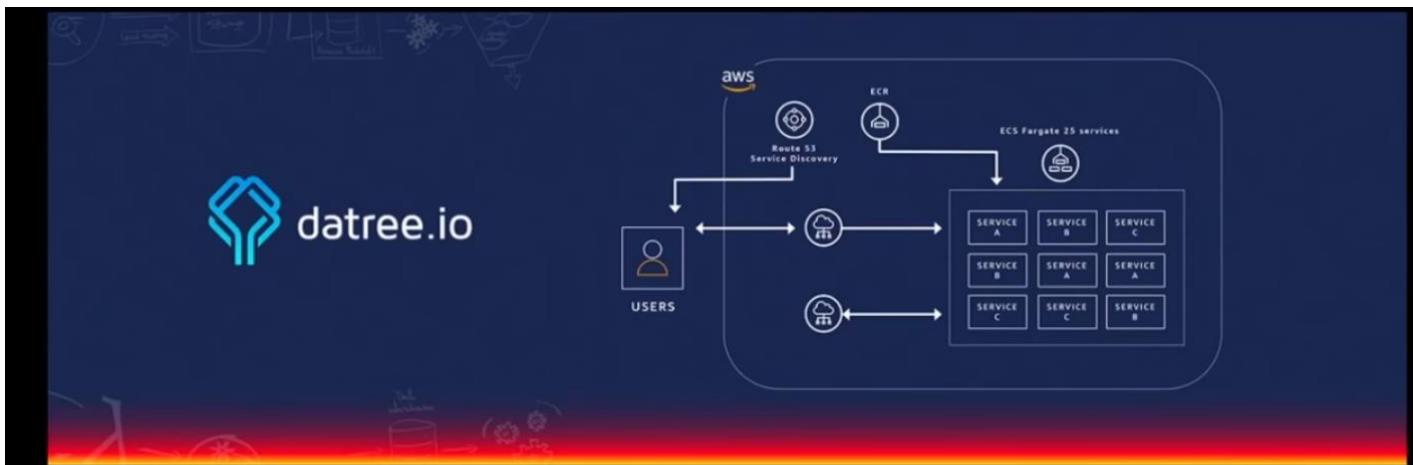
GoDaddy

zendesk

VIACOM

skyscanner



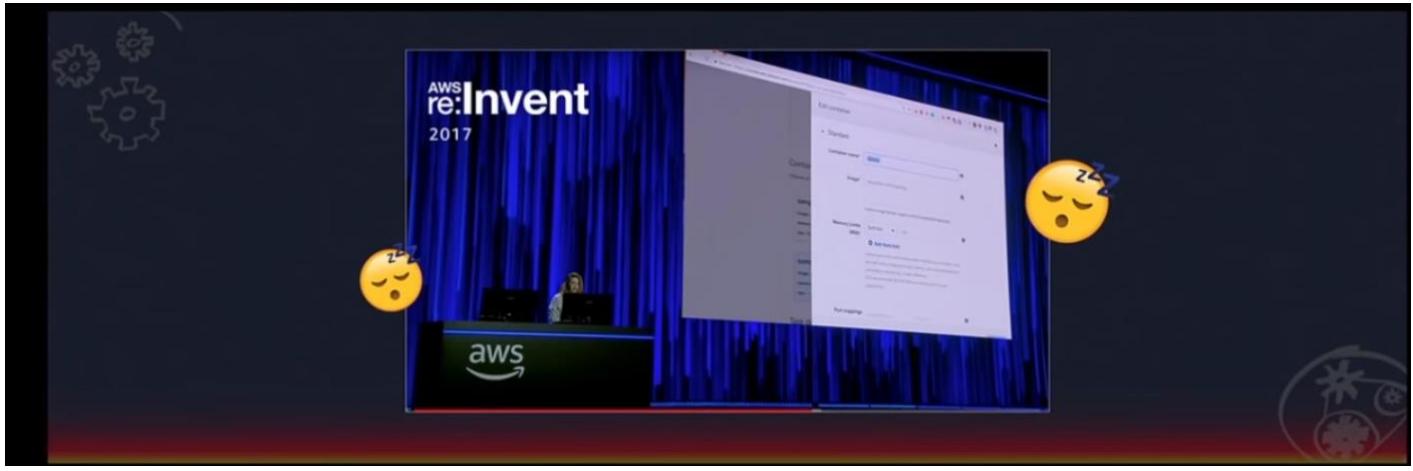


Customers are **driving innovation** with Fargate

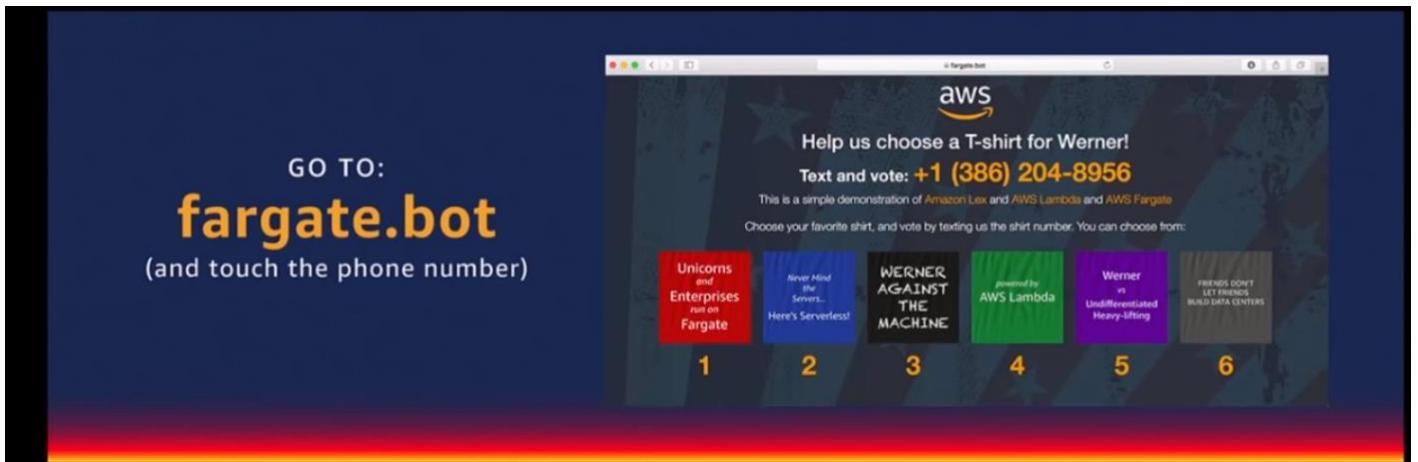


Native Service Discovery

Automatically register with a friendly DNS name in Route 53	Scale up or down in response to load or container health	Service lookup based on the state of each named service
---	--	---



AUDIENCE PARTICIPATION TIME



Amazon ECS Help us choose a tee sh https://console.aws.amazon.com/ecs/home?region=us-east-1#/clusters/sfo-environment-acceptance/tasks

Running tasks count 13 Fargate, 0 EC2
Active service count 1 Fargate, 0 EC2
Draining service count 0 Fargate, 0 EC2

Services Tasks ECS Instances Metrics Scheduled Tasks

Run new Task Stop Stop All Last updated on April 4, 2018 7:36:09 AM (more than 1 hour ago)

Desired task status: Running Stopped

Filter in this page Launch type ALL < 1-13 > Page size 50

	Task	Task defin...	Container...	Last statu...	Desired st...	Started B...	Group	Launch ty...	Platform v...
<input type="checkbox"/>	0056c9b3-...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	4abf661d-4...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	62c04640-...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	669ea1de-...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	6f4f39b9-2...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	7d00854b-...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	8197b6c7-...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	96d4a4da-...	sfo-service...	--	RUNNING	RUNNING	ecs-svc/92...	service:sfo...	FARGATE	1.1.0
<input type="checkbox"/>	LABEL	INACTIVE	--	PENDING	PENDING	FARGATE	1.1.0

Amazon ECS Help us choose a tee sh https://fargate.bot/

aws

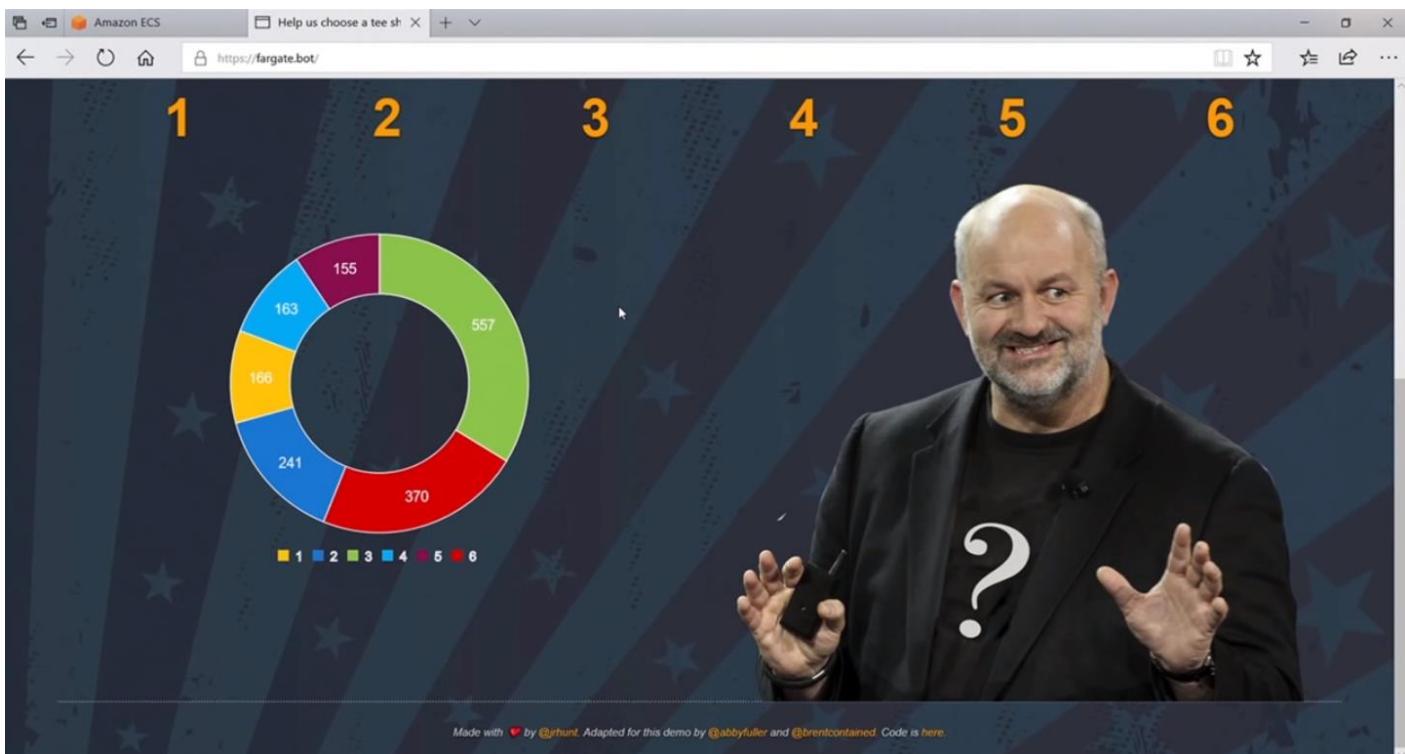
Help us choose a T-shirt for Werner!

Text and vote: +1 (386) 204-8956

This is a simple demonstration of Amazon Lex and AWS Lambda and AWS Fargate

Choose your favorite shirt, and vote by texting us the shirt number. You can choose from:

Unicorns and Enterprises run on Fargate	Never Mind the Servers... Here's Serverless!	WERNER AGAINST THE MACHINE	powered by AWS Lambda	Werner vs Undifferentiated Heavy-lifting	FRIENDS DON'T LET FRIENDS BUILD DATA CENTERS
1	2	3	4	5	6



From **server** to **serverless**



Virtual
Machines



Containers

SERVERLESS
EXTREME DEVELOPER PRODUCTIVITY
COMPLETE ELIMINATION OF INFRASTRUCTURE MANAGEMENT
FOCUS MORE ON BUSINESS LOGIC

Builders only want to build **business logic**

Serverless
application
architectures
on AWS



Benefits of
Serverless
Applications

No server management

Flexible scaling

High availability

No idle capacity

Some of the customers running serverless on AWS



VOGUE

the guardian

ZAPPROVED

FICO

iRobot

HomeAway

Nextdoor



SQUARE ENIX.

verizon revvel

NATIONAL GEOGRAPHIC

Y-CAM

Benchling

Localytics

Compute - From **server** to **serverless**



aws SUMMIT
SAN FRANCISCO

Thank you for watching.

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