

Hawai'i Cloud Innovation Summit 2023

Customer-Obsessed Approach To Workforce Innovation

Angela A. Shippy, MD, MHA, FACP, FHM

Senior Physician Executive and Clinical Innovation Lead

AWS Non-Profit Healthcare



Contents

- Amazon's Culture of Innovation
- Healthcare's Approach to Workforce Resilience
- Enabling the Workforce of Tomorrow
- Emerging Technology to Accelerate Transformation



Industry Insights





We had three big ideas at Amazon that we have stuck with for 20+ years, and they are the reason we are successful: **put the customer first, invent on our customers behalf, and be patient.**

Jeffrey P. Bezos
Founder
Amazon.com, Inc.

Amazon's Culture of Innovation

Customer obsession

"Start every process with the customer and work backwards"

Long-term thinking

"Be stubborn on the vision but flexible on the details"

If you want to be inventive, you have to be willing to fail

"We are willing to go down a bunch of dark alleys and occasionally we find something that really works"

You have to be willing to be misunderstood for a long time

"We are very comfortable being misunderstood"

OUR MISSION

We want to be
Earth's most customer-
centric company

OUR COMMITMENT

We make our
customers' lives easier



amazon go

No Lines.
No Checkout.
(No, Seriously.)

<http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-corporatetimeline>

- 1994 ● Founded
- 1995 ● Amazon.com
- 1998 ● CDs & DVDs
- 2006 ● AWS
- 2007 ● Kindle
- 2011 ● Video
- 2012 ● Groceries
- 2014 ● Alexa/Echo
- 2015 ● Bookstores
- 2017 ● Go



The Need for Personalized Healthcare

For healthcare organizations, the challenge of providing patient-centered care amid ever-increasing costs has never been greater

- Inefficiencies are driving up operational expenses
- Lack of personalized care can lead to unnecessary or ineffective treatments
- Clinicians are experiencing burnout
- Patients are expecting a more personal healthcare consumer experience
- And, keeping health information secure and private adds yet another burden

But while the challenges are great, so are the opportunities



Who We Are

Our Mission

To enable **healthcare providers** with the **technology** they need to deliver patient-centric healthcare improving **cost, quality, outcomes, and access** to the communities they serve.

Breadth & Depth of AWS Healthcare Experience

16+

As the world's most comprehensive and broadly adopted cloud platform

8+

AWS dedicated healthcare and life sciences cloud technology practice

18+

AWS team leaders in the healthcare and life sciences industry

CHIEF DIGITAL OFFICERS, PHYSICIANS, NURSES, CHIEF STRATEGY OFFICER, CHIEF MEDICAL OFFICER, CLINICAL INFORMATICIST, NEUROSCIENTISTS, PHARMACOLOGIST, PROFESSORS, BIOCHEMISTS, CHIEF EXECUTIVE OFFICERS, BIOINFORMATICIST, RADIOLOGIST, RESEARCHERS, CHIEF STRATEGY OFFICER FOR POPULATION HEALTH, PRINCIPAL INVESTIGATORS, CHIEF ARCHITECT, SOLUTIONS ARCHITECT, FIRST HEALTH INFORMATION OFFICER FOR THE FDA

AWS Healthcare

Cloud enabled healthcare - provider mission alignment to innovate care delivery

Healthcare-Related Services



Amazon Comprehend Medical

- Amazon Comprehend Medical



Amazon HealthLake

- Amazon HealthLake



Amazon Transcribe

- Amazon Transcribe Medical

Healthcare-Enabling Services



Amazon Connect



Amazon Pinpoint

- Connect & Pinpoint



Amazon QuickSight

- QuickSight



Amazon SageMaker

- SageMaker

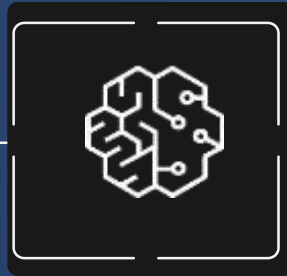
Unlocking Insights To Enable Data-driven Care



Migration and Disaster Recovery



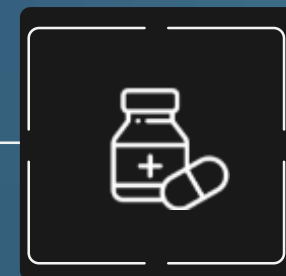
Store, Protect, Optimize Healthcare Data



Analytics & AI/ML



Digital Front Door



Digital Therapeutics



Precision Medicine

Hybrid Cloud

EMR on AWS

Data Lakes

Predictive Clinical and Ops Analytics
 High Performance Computing
 Voice/Ambient Listening

Consumer Engagement

Patient Activation

Personalized Care

IT Cloud Transformation

Predict Healthcare Relevant Events

Personalize the Health Journey

DATA PRIVACY, SECURITY, RELIABILITY, AND COMPLIANCE



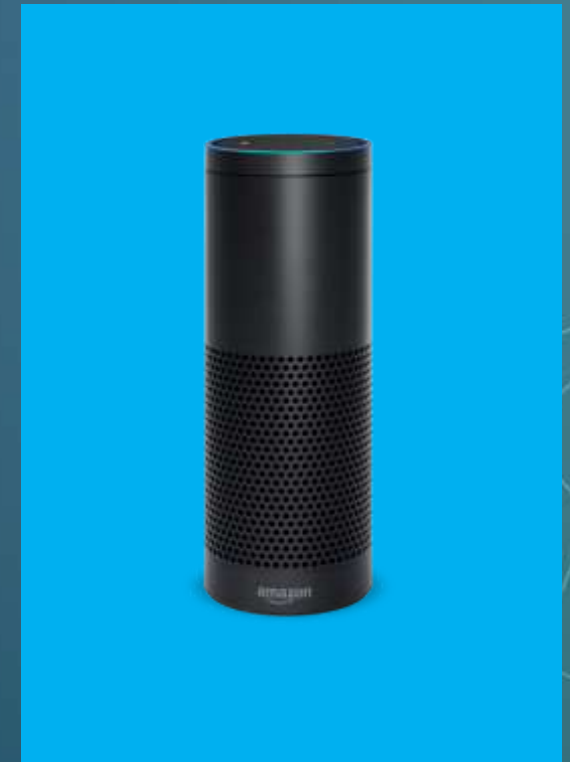
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Amazon Alexa at the bedside

“Hawaii Pacific Health improves its patients’ in-room experience by eliminating outdated nurse-call buttons and replacing them with natural conversations with Alexa. **Patients use their voice to direct and control their in-room amenities, entertainment choices and answers to many of their questions.**”

—Steve Robertson,
Executive Vice President and CIO



eHealth NSW Upskills Staff to Accelerate Cloud-First Strategy

Challenges

eHealth NSW introduced a cloud stream into their Digital Academy to develop cloud knowledge and expertise among its staff.

The purpose of the learning and development program is to support eHealth NSW's migration to Amazon Web Services (AWS), as well as the organization's cloud-first strategy.

Solutions

Working with eHealth NSW, the AWS Training and Certification team provided:

- A holistic, industry-relevant training program that includes AWS Cloud Practitioner Essentials and DevOps Engineering on AWS among others
- Over 500 free self-paced digital learning resources

Results

- Built in-house skills to migrate 10 clinical applications to AWS
- 81 percent of Digital Academy graduates feel that the program helped them work more efficiently
- Trained over 1,500 technical and non-technical staff

“ Investing in our staff’s development not only provides rewarding personal growth opportunities, it also contributes to improvements in the quality of patient care provided to the residents of NSW. ”

Farhoud Salimi

executive director, Service Delivery, eHealth NSW



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CUSTOMER PROFILE



INDUSTRY
Government

REGION
Australia

As the digital center of excellence for New South Wales (NSW) Ministry of Health, eHealth NSW plans, implements, and supports information and communication technology (ICT) and digital capabilities across the state's public health system. Its Digital Academy (DA) is a learning and development program that trains staff on critical tech-related skill sets.

Improving the Employee Experience

Challenges

Southern Illinois Healthcare (SIH) had been surveying its employees yearly to assess the corporate climate. SIH wanted to improve its company culture consistently with ongoing feedback instead of responding just once a year.

Solutions

SIH turned to AWS and in 12 weeks built an automated, text-based survey mechanism that provided company leaders with actionable data in real time, empowered employees, and created a culture that facilitated the recruitment and retention of top talent.

Results

- Built fully automated, text-based pulse survey in 12 weeks
- Collected real-time data on employee well-being
- Reduced employee burnout, a key factor in medical malpractice

CUSTOMER PROFILE



INDUSTRY
Healthcare

REGION
AMER

As the digital center of excellence for New South Wales (NSW) Ministry of Health, eHealth NSW plans, implements, and supports information and communication technology (ICT) and digital capabilities across the state's public health system. Its Digital Academy (DA) is a learning and development program that trains staff on critical tech-related skill sets.

“ The AWS team was highly engaged and collaborative. It was able to deliver on a plan and bring results very quickly. ”

Enabling Life-Saving Technologies

Migration

Geisinger is transitioning its entire digital portfolio of more than 400 applications and numerous workflows to the cloud.

Cost Savings

Migrating to the AWS Cloud will assist Geisinger in saving several million annually after implementation is complete.

Upskilling

Geisinger has also committed to comprehensive cloud skills training for the vast majority of its 24,000 employees.

“This is more than migrating applications to the cloud. We know that rapidly evolving technology, such as artificial intelligence and machine learning, can help save lives. Not to mention that this will make our staff more agile and responsive so they can spend more time at the bedside, where our patients need them most.”

Geisinger's Chief Information Officer



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CUSTOMER PROFILE

Geisinger

INDUSTRY
Healthcare

REGION
AMER

Geisinger is committed to making better health easier for the more than 1 million people it serves. Founded more than 100 years ago by Abigail Geisinger, the system now includes 10 hospital campuses, a health plan with more than half a million members, a research institute and the Geisinger College of Health Sciences, which includes schools of medicine, nursing and graduate education. With more than 25,000 employees and 1,700+ employed physicians, Geisinger boosts its hometown economies in Pennsylvania by billions of dollars annually.



“Your ability to adapt to an even more digital future depends on developing the next generation of cloud skills, **closing the gap** between talent supply and demand.”

Source: “[Digital Transformation Is About Talent, Not Technology](#)”, HBR



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70%

of employees report they **don't have mastery of the skills needed to do their jobs**

Customers tell us the top two challenges they face in their cloud journey are:

- 1) More unstructured **time** to play with new skills
- 2) Immediate **application** of skills so they are not lost





Amazon will help
29 million
people around the world
build cloud skills with
free training
by 2025

Core Offerings



Digital Training

Over 600 free, on-demand courses and learning plans that help your team learn cloud skills and services when and where it's convenient

<https://skillbuilder.aws/>



Classroom Training

Live classes with instructors who teach your team in-demand cloud skills and best practices in a hands-on environment

<https://aws.amazon.com/training/>



AWS Certification

Identify skilled professionals to implement cloud initiatives using AWS

<https://aws.amazon.com/certification>



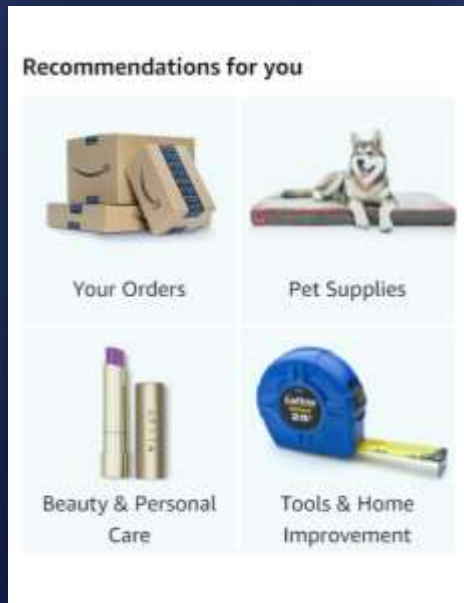
Education Programs

Connect with candidates prepared to pursue entry-level cloud roles

<https://aws.amazon.com/training/awsacademy/>
<https://aws.amazon.com/education/awseducate/>
<https://aws.amazon.com/training/restart/>
<https://aws.amazon.com/training/skills-centers/>



ML innovation is in the Amazon DNA



4,000 products per minute sold on Amazon.com



1.6M packages every day



Billions of Alexa interactions each week

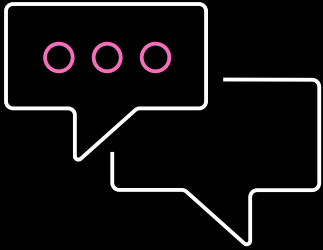


First Prime Air delivery on December 7, 2016

Question: What is generative AI?

- Creates new content and ideas, including conversations, stories, images, videos, and music
- Powered by large models that are pretrained on vast corpora of data and commonly referred to as foundation models (FMs)

Generative AI creates significant business value



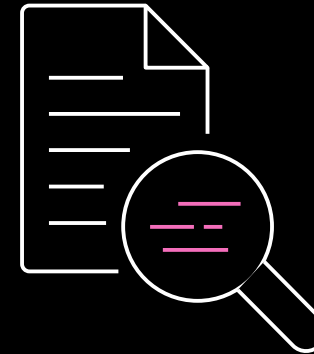
NEW EXPERIENCES

Create new innovative and engaging ways of interacting with your customers and employees



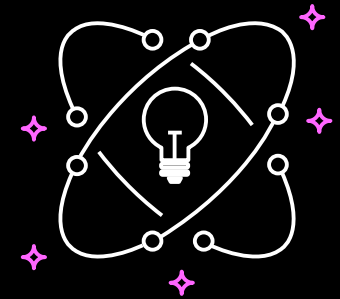
PRODUCTIVITY

Radically improve productivity across all lines of business, for example [Amazon CodeWhisperer](#) helped complete tasks 57% faster



INSIGHTS

Extract insights and clear answers from all your corporate information, enabling faster and better decisions



CREATIVITY

Create new content and ideas, including conversations, stories, images, videos, and music

Generative AI is transforming all industries



Financial Services



Healthcare and Life Sciences



Automotive



Manufacturing



Media & Entertainment

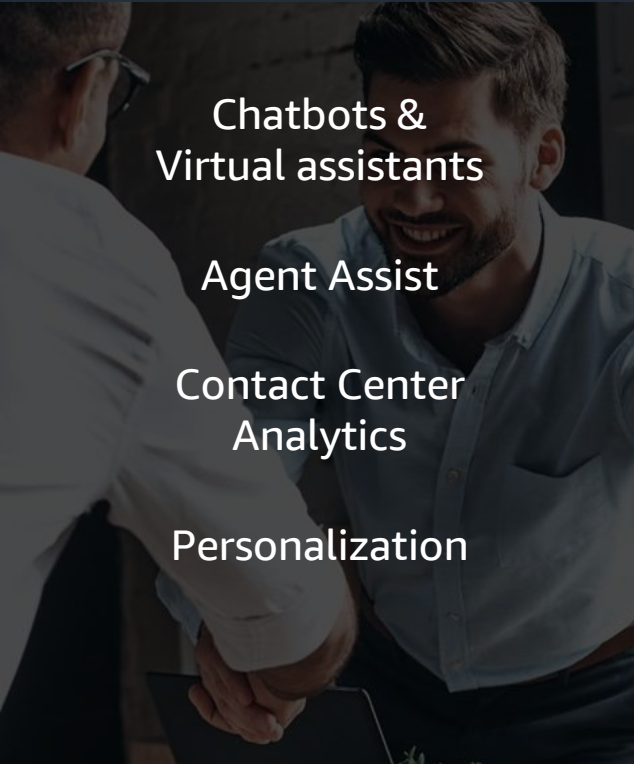


Telecom



Energy

Generative AI can be used for a wide range of use cases

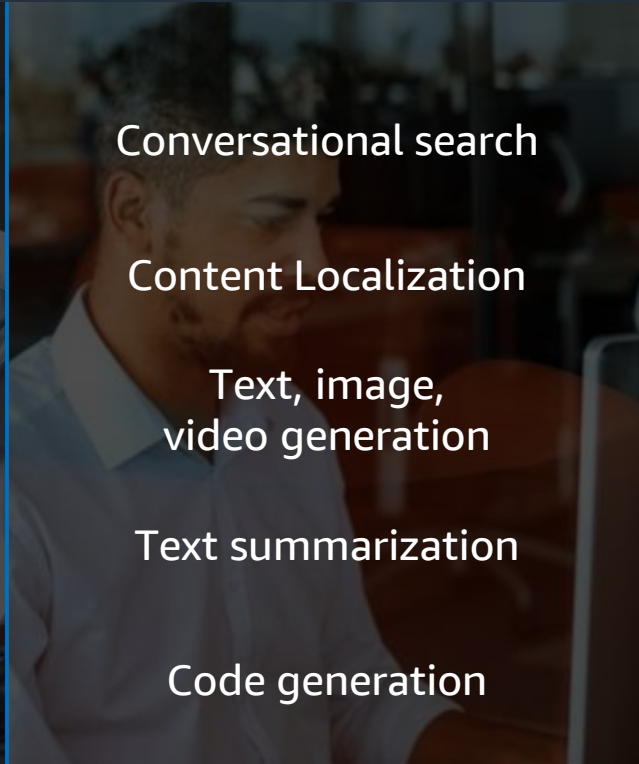


Chatbots &
Virtual assistants

Agent Assist

Contact Center
Analytics

Personalization



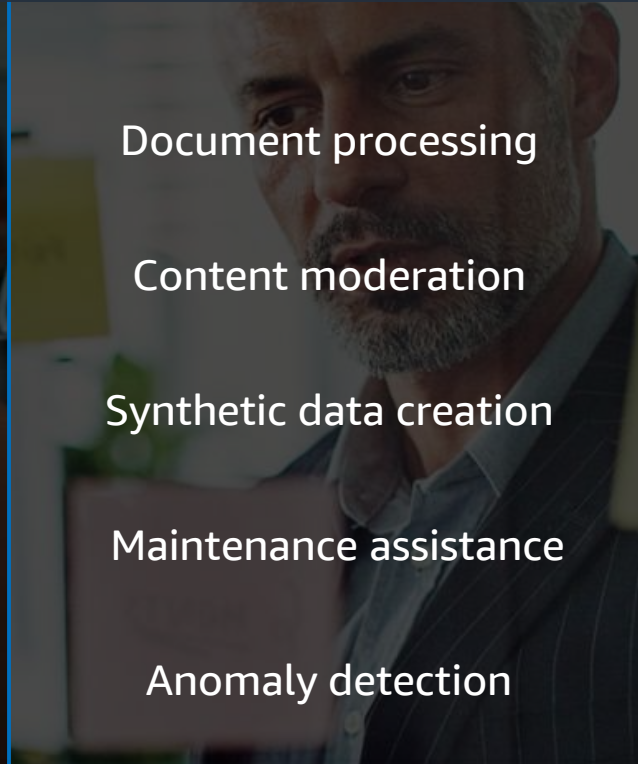
Conversational search

Content Localization

Text, image,
video generation

Text summarization

Code generation



Document processing

Content moderation

Synthetic data creation

Maintenance assistance

Anomaly detection

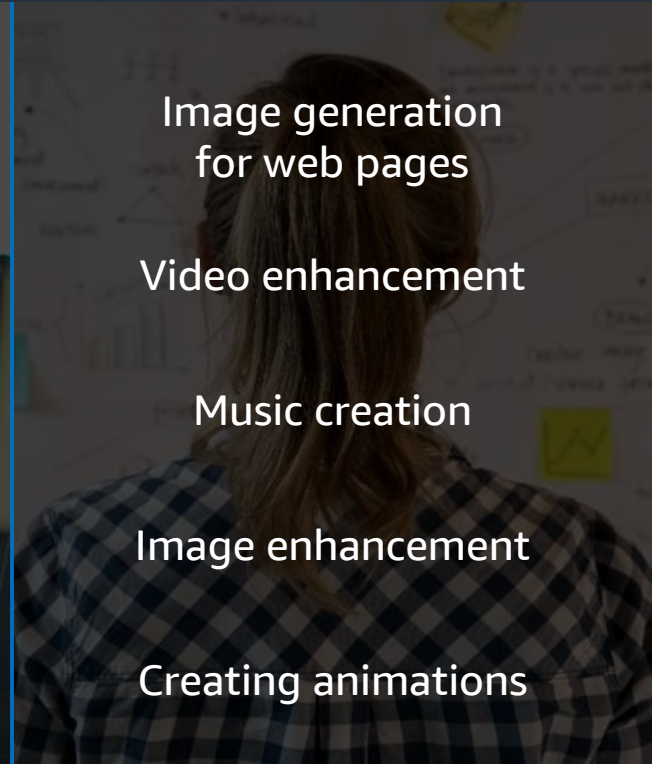


Image generation
for web pages

Video enhancement

Music creation

Image enhancement

Creating animations

**Enhance
customer
experience**

**Boost
employee
productivity**

**Improve
business
operations**

Creativity

AWS Education Programs: future-proof your organization with entry-level, cloud-skilled talent

The students hired from this program have been able to jump right in and join the team... Your sprint costs can be cut dramatically if you have people with the relevant skills, and they aren't trying to get up to speed at the same time.

Michael Fowler
VP of IT, Florida Light and Power

 academy

 educate

 re/start



Please submit your **feedback**. Thank you!



<https://www.pulse.aws/survey/X0QLZLND>

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Thank you!

