



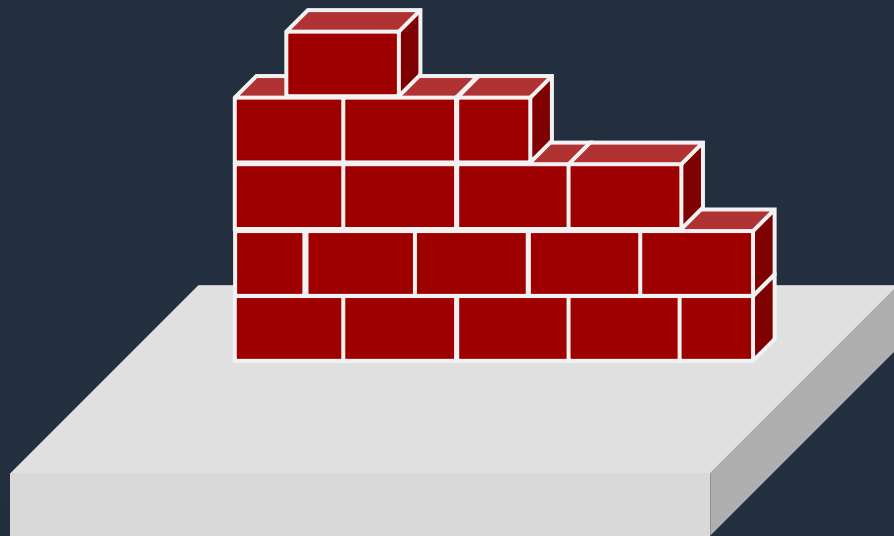
# AWS for education

*Accelerating the digital  
transformation of education*

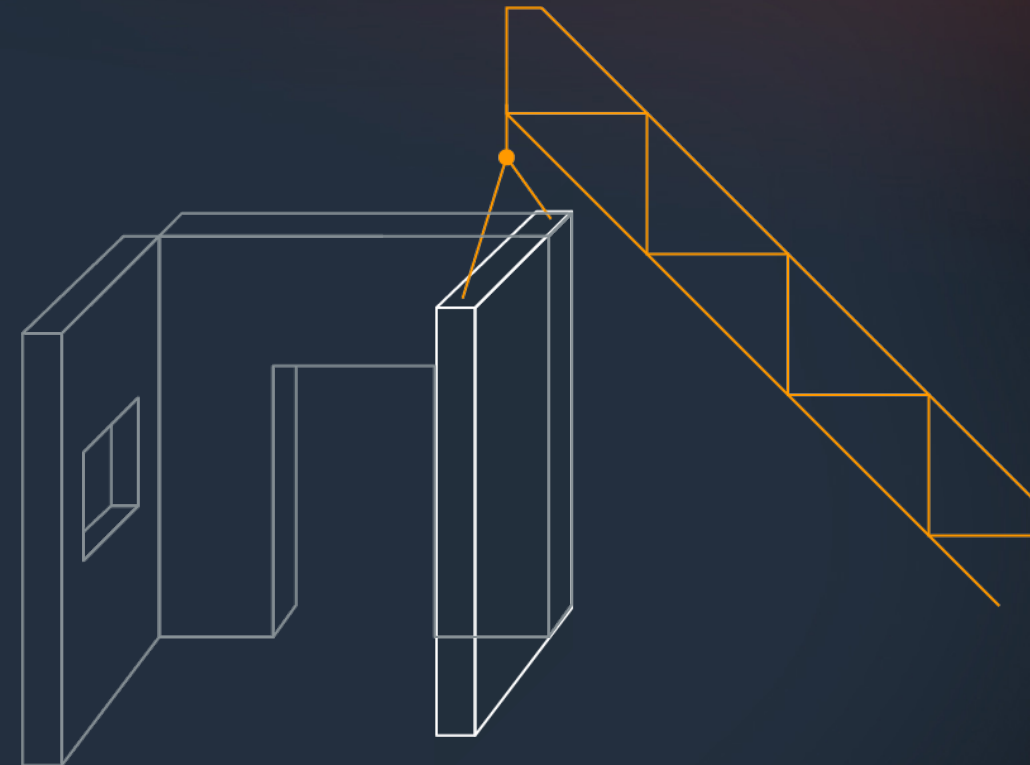
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# Agenda

- Introductions
- Why now for digital transformation
- How and why institutions are partnering with AWS
- Your transformation priorities
- Wrap-up and next steps



Traditional Model:  
Building on a foundation



New Model:  
Assembling pre-fabricated  
components

It's no longer about "Buy vs. build".  
It's "Build which parts?"  
and "Should I be running it?"

### ANALYTICS

<b>ANALYTICS</b>	<b>STREAMING</b>
DATA EXCHANGE	ETL
DATA LAKE	HADOOP/SPARK
DATA PIPELINES	INTERACTIVE SQL QUERIES
DATA WAREHOUSE	VISUALIZATIONS
ELASTICSEARCH	

### COMPUTE

<b>COMPUTE</b>	<b>CONTAINERS</b>
AUTO SCALING	CONTAINER SERVICE
BATCH JOBS	MANAGED KUBERNETES
EVENT-DRIVEN SERVERLESS COMPUTING	STORE & RETRIEVE DOCKER IMAGES
<b>INSTANCE TYPES</b>	
MANAGED VIRTUAL PRIVATE SERVERS	
MANAGED REPOSITORY FOR SERVERLESS APPS	
RUN & MANAGE WEB APPS	
SERVERLESS COMPUTE	
VIRTUAL SERVERS	

### END USER COMPUTING

APP STREAMING	MOBILE ACCESS
DESKTOP COMPUTING	STORAGE & COLLABORATION

### MACHINE LEARNING

<b>ML FRAMEWORKS</b>	<b>SAGEMAKER</b>
DEEP LEARNING AMIs & CONTAINERS	AUTOMATIC MODEL TUNING
HARDWARE ACCELERATION	DATA LABELING
ML AT THE EDGE	HOSTED NOTEBOOKS
TENSORFLOW, PYTORCH, MXNET	ML MARKETPLACE
	MODEL HOSTING
	MODEL OPTIMIZATION
	MODEL TRAINING
<b>AI SERVICES</b>	PRE-BUILT ALGORITHMS
CHATBOTS	TOPIC MODELING
ENTITY EXTRACTION	DEEP LEARNING MODELS
FACE ANALYTICS	REINFORCEMENT LEARNING
FACE SEARCH	SPOT INSTANCES
FORECASTING	BATCH PREDICTIONS
IMAGE LABELING	REAL-TIME PREDICTIONS
NATURAL LANGUAGE PROCESSING	
PERSONALIZATION & RECOMMENDATION	
SENTIMENT ANALYSIS	
SPEECH TRANSCRIPTION	
TEXT & DATA EXTRACTION	
TEXT TO SPEECH	
TRANSLATION	
VIDEO & IMAGE ANALYSIS	
CONTENT MODERATION	

### MEDIA SERVICES

LIVE VIDEO TRANSPORT	VIDEO PERSONALIZATION & MONETIZATION
MEDIA STORAGE	VIDEO PROCESSING & DELIVERY
TRANSCODING	VIDEO ORIENTATION & PACKAGING
VIDEO ORIENTATION & PACKAGING	VIDEO STREAMING ANALYSIS

### SATELLITE

SATELLITE OPERATIONS

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### SECURITY, IDENTITY, & COMPLIANCE

ACCESS CONTROL

ASSESSMENT & REPORTING

CONFIGURATION COMPLIANCE

DATA PROTECTION

DDOS PROTECTION

IDENTITY MANAGEMENT

KEY MANAGEMENT & STORAGE

MONITORING & LOGGING

RESOURCE MANAGEMENT

THREAT DETECTION

WEB APPLICATION FIREWALL

### AR + VR

AR/VR EXPERIENCES

### HYBRID ARCHITECTURE

AWS SERVICES ON PREMISES	INTEGRATED NETWORKING
DATA INTEGRATION	INTEGRATED RESOURCE & DEPLOYMENT MANAGEMENT
INTEGRATED DEVICES & EDGE SYSTEMS	VMWARE CLOUD ON AWS
INTEGRATED IDENTITY & ACCESS	

### MIGRATION & TRANSFER

APPLICATION MIGRATION

DATABASE MIGRATION

EXABYTE-SCALE MIGRATION

ONLINE DATA TRANSFER

SCHEMA CONVERSION

SERVER MIGRATION

TRANSFER FOR SFTP

### AWS COST MANAGEMENT

ANALYZE AWS COSTS

COST & USAGE BUDGETS

COST & USAGE REPORTS

RESERVED INSTANCES REPORTING

### GAME TECH

CROSS-PLATFORM 3D GAME ENGINE

GAME SERVER HOSTING

### MOBILE

API GATEWAY	MOBILE APP TESTING
DEVELOPMENT FRAMEWORK	SINGLE INTEGRATED CONSOLE
IDENTITY	SYNC
MOBILE ANALYTICS	TARGETED PUSH NOTIFICATIONS

### STORAGE

ARCHIVE STORAGE

BACKUP & RESTORE

BLOCK STORAGE

DATA TRANSFER

EDGE PROCESSING & COMPUTING

FILE STORAGE

HIGH-PERFORMANCE FILE SYSTEM

HYBRID CLOUD STORAGE

OBJECT STORAGE

WINDOWS FILE SYSTEM

### APPLICATION INTEGRATION

EMAIL	SEARCH
MESSAGE BROKER	TRANSCODING
QUEUEING & NOTIFICATIONS	WORKFLOW

### DATABASE

<b>REALTIONAL DATABASES</b>	<b>PURPOSE-BUILT DATABASES</b>
HIGH-PERFORMANCE RELATIONAL DATABASE BUILT FOR THE CLOUD	DOCUMENT DATABASE
MANAGED MARIADB	GRAPH DATABASE
MANAGED MYSQL	IN-MEMORY CACHING
MANAGED ORACLE	KEY-VALUE STORE DATABASE
MANAGED POSTGRESQL	LEDGER DATABASE
MANAGED SQL SERVER	TIME SERIES DATABASE

### INFRASTRUCTURE

AVAILABILITY ZONES

CUSTOM HARDWARE

DATA CENTER INFRASTRUCTURE

GLOBAL NETWORK BACKBONE

POINTS OF PRESENCE

POWER INFRASTRUCTURE

REGIONS

### MANAGEMENT & GOVERNANCE

ACTIVITY & API USAGE TRACKING	MONITORING
CHATBOT	PROVISIONING
CONFIGURATION TRACKING	RESOURCE TEMPLATES
GOVERNANCE	SECURITY RECOMMENDATIONS
INVENTORY TRACKING	SERVER MANAGEMENT
LICENSE MANAGER	SERVICE CATALOG
MANAGE POLICIES	SYSTEMS MANAGER
MANAGE RESOURCES	

### NETWORKING & CONTENT DELIVERY

APPLICATION DELIVERY

DEDICATED NETWORK CONNECTION

DOMAIN NAME SYSTEM

LOAD BALANCING

MONITOR APIS

MONITOR MICROSERVICES

NETWORK TOPOLOGY

NETWORKING HUB

PRIVATE CONNECTION TO APPS

SCALE VPC & ACCOUNT CONNECTIONS

SERVICE DISCOVERY

VIRTUAL PRIVATE CLOUD

### CUSTOMER ENABLEMENT

ACCOUNT MANAGEMENT

DASHBOARD PERSONALIZATION

ENTERPRISE SUPPORT

EXPERTS MARKETPLACE

OPTIMIZATION GUIDANCE

PARTNER ECOSYSTEMS

PROFESSIONAL SERVICES

SECURITY & BILLING REPORTS

SOLUTIONS MANAGEMENT

TRAINING & CERTIFICATION

### DEVELOPER TOOLS

ANALYZE & DEBUG

APPLICATION LIFECYCLE MANAGEMENT

AUTHORING

BUILD & TEST

CONTAINERS

DEVOPS RESOURCE MANAGEMENT

ONE-CLICK APP DEVELOPMENT

PATCHING

PIPELINE ORCHESTRATION

RESOURCE TEMPLATES

TRIGGERS

### INTERNET OF THINGS (IOT)

RULES ENGINE

DEVICE ANALYTICS

DEVICE GATEWAY

DEVICE SDK

DEVICE SHADOWS

EVENT DETECTION & RESPONSE

LOCAL COMPUTE

LOCAL DATA COLLECTION

MANAGEMENT & SECURITY

MICROCONTROLLER OPERATING SYSTEM

REGISTRY

VISUAL APPLICATIONS DEVELOPMENT

### MARKETPLACE

ANALYTICS	MACHINE LEARNING
DATA PRODUCTS	NETWORKING
DATABASES	OPERATING SYSTEMS
DEVOPS	SECURITY
IOT	STORAGE

### ROBOTICS

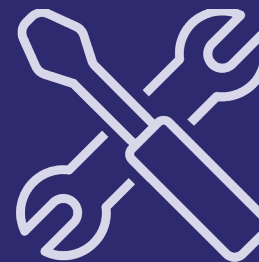
CLOUD ROBOTICS



“ Many presidents believe that their institutions will respond to the pandemic and economic recession by **transforming their institution** or resetting for growth. ”

*Inside Higher Ed, 2021 Survey of College and University Presidents*

# Institutions don't feel equipped...



# ...for change

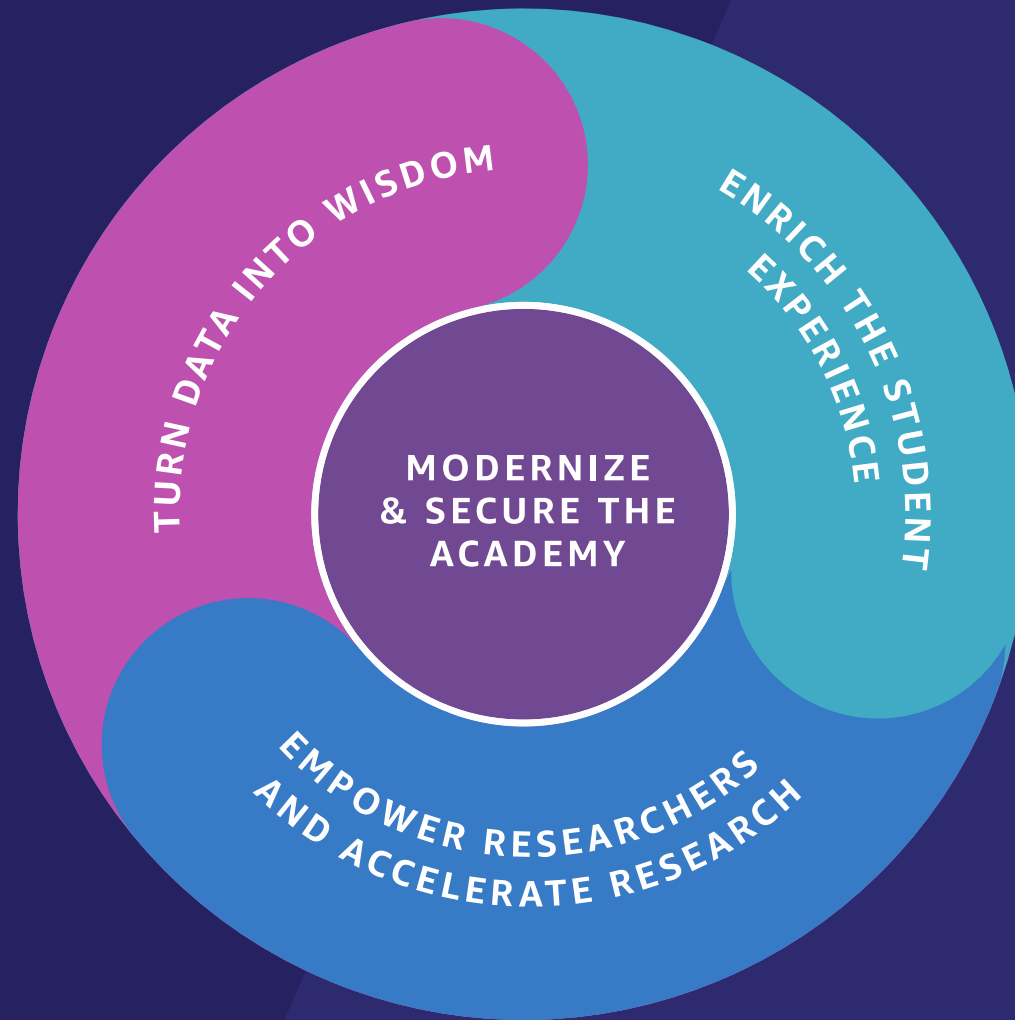
Our mission

Accelerate the digital transformation of education in partnership with the full education community.





# Four ways AWS helps





## Modernize and secure the academy

“ We’re going all -in on AWS. **Eighty percent** of what we do today on the operational floor will disappear. ”

William Britton, *Vice President of Information Technology and Chief Information Officer,*  
California Polytechnic State University

MODERNIZE  
& SECURE THE  
ACADEMY

## Turn data into wisdom

“ It’s been a **great accomplishment** to look back and see that something that was a large —and pretty overwhelming —idea has come together and is helping us make progress toward our larger goals. ”

Doug Glaze, **Chief Technology Officer,**  
Maryville University

TURN DATA  
INTO WISDOM





ENRICH THE  
STUDENT  
EXPERIENCE

## Enrich the student experience

“With the move to **virtual learning**, contact center call volumes more than quadrupled, but costs went down by nearly 30 percent.”

Antonino Cummings, **PMP**, Technical Project Manager,  
University of Texas at Austin (UT)

Empower researchers and accelerate research

“ Using bare-bones AWS architecture, the Open Virome team saves the scientific community **millions of dollars** and years of time in discovering new viruses. ”






















Blog post about the [Open Virome Project](#)



EMPOWER  
RESEARCHERS &  
ACCELERATE  
RESEARCH



# Education is built on AWS

Teaching and Learning	Administrative	IT and Security
      	      	      



# Thank you!

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