

# **AWS State, Local, and Education Learning Days**

Salt Lake City, UT



# Building the foundation: data strategy essentials for Generative AI in public sector

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# Key AI Trends

AI demand is exposing data challenges

A modern data foundation is "job zero"

AI is becoming institutionalized

Need for organizational infrastructure to support "What's Next"

Demand for measurable ROI and business value

Need disciplined approach to use cases that drive value



# Modern data foundation is “job zero”

“Gartner predicts that through 2026, organizations will abandon 60% of AI projects unsupported by AI-ready data.”

# The Data Challenge

“The opportunity is vast, and we need to move fast.  
We need to scale strategically, data matters.”

93%

realize a data strategy is  
crucial to getting  
business value from  
generative AI

37%

have the right data  
foundation to pivot to  
generative AI

46%

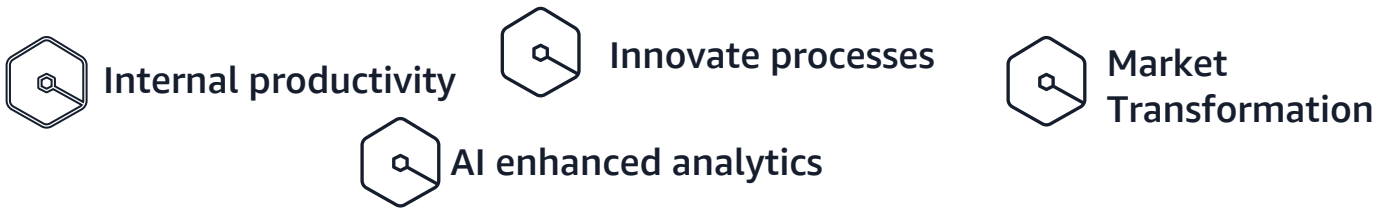
see data quality as the  
biggest blocker

Source: AWS, 2024 CDO Insights: Data & Generative AI



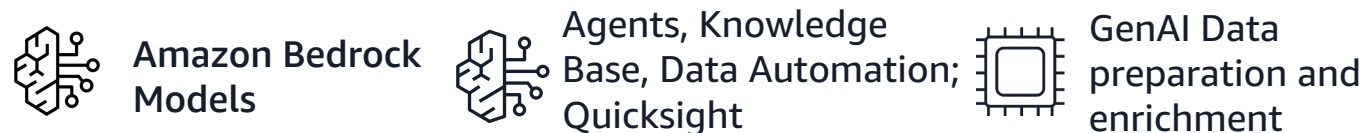
# Foundations of an AI Ready Organization

## DISCIPLINED USE CASES AND APPLICATIONS



## BRING IT ALL TOGETHER

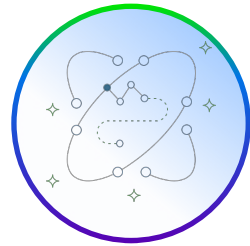
### SAGEMAKER UNIFIED STUDIO: BUILD GENERATIVE AI APPS



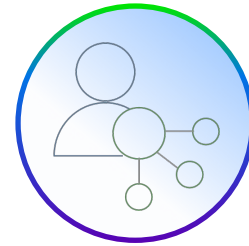
## JOB ZERO: FOUNDATIONAL DATA LAYER



# A modern data foundation for GenAI requires a modern data strategy



MINDSET



PEOPLE & PROCESS



TECHNOLOGY

Modern

Product  
centric

Customer  
focused

Cross  
functional

Autonomous

Federated  
and agile

Purpose built,  
flexible,  
scalable

Traditional

Platform  
centric

Solution  
first

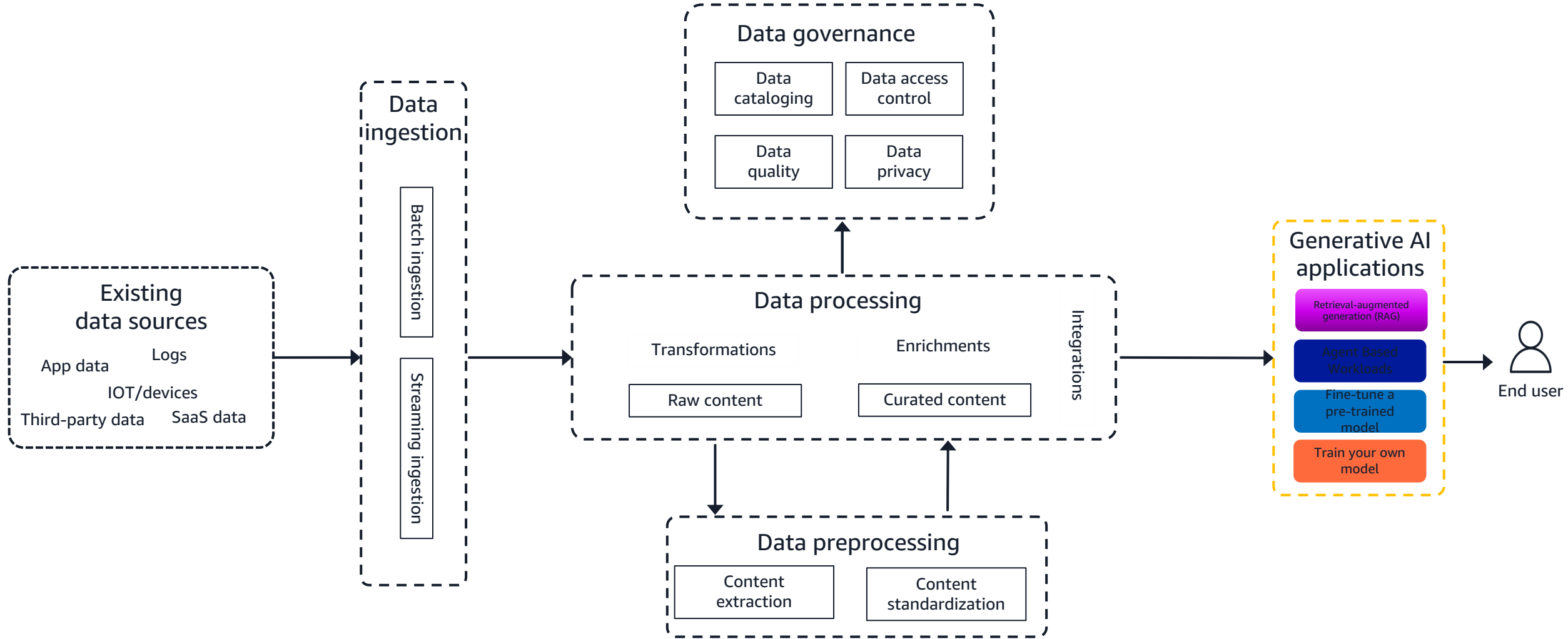
Technology  
only

Monolithic  
departments

Centralized  
control

Monolithic  
platforms

# Building Blocks for AI: Phase 1 Building a Data pipeline for Gen AI workloads



# Building Blocks for AI: Phase 2 Gen AI for Data Transformation

## Bedrock



**01** Generative AI powered database queries

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**02** Generative AI for data analytics

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**03** Generative AI powered data mapping

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**04** Generative AI for data relationship discovery

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**05** Generative AI for metadata extraction

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# Supporting the pace of innovation with flexible infrastructure



# Market info on pace of innovation

# Foundations of an AI Ready Organization

## DISCIPLINED USE CASES AND APPLICATIONS

- Internal productivity
- Innovate processes
- Market Transformation
- AI enhanced analytics

## FLEXIBLE INFRASTRUCTURE: BUILDING WITH GENERATIVE AI

- Amazon Bedrock Models
- Agents, Knowledge Base, Data Automation; Quicksight
- GenAI Data preparation and enrichment

## JOB ZERO: FOUNDATIONAL DATA LAYER

- Accessible and holistic Data
- AI Governance
- Storage

# Amazon Bedrock: Built for What's Next

47 capability announcements at Reinvent and dozens more planned for this year

Solutions focused on accuracy, ease of access; cost optimization, driving *business value*

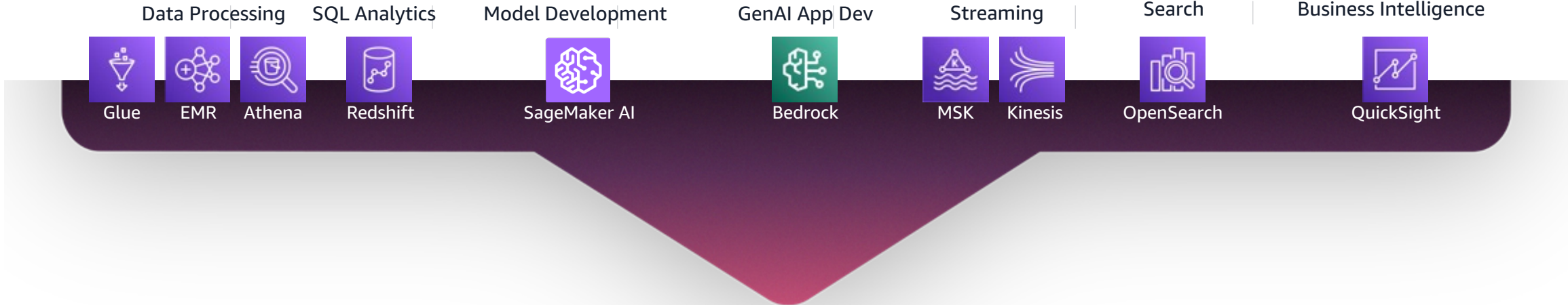
Helps customers avoid technical debt, process debt and lock in to point solutions

Access to models as released and custom model capabilities



# Amazon SageMaker Unified Studio

THE NEXT GENERATION OF AMAZON SAGEMAKER IS THE CENTER FOR ALL YOUR DATA, ANALYTICS, AND AI



## Amazon SageMaker Unified Studio

A single, unified development, data prep, model building, and analytics service interaction interface.





# Driving Value: Use Cases

# Need to Realize Value

PERSPECTIVE

## Why Generative AI Isn't Transforming Government (Yet) — and What We Can Do About It

Gartner

Who We Serve | Our Solutions | Latest Insight | Conferences

Newsroom | Topics | Media Contacts | Media Resources | Insights | Archive

### Demonstrating AI Value Is Top Barrier to Adoption

The primary obstacle to AI adoption, as reported by 49% of survey participants, is the difficulty in estimating and demonstrating the value of AI projects. This issue surpasses other barriers such as talent shortages, technical difficulties, data-related problems, lack of business alignment and [trust in AI](#) (see Figure 1).

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INNOVATION

## When Will Companies See ROI On AI?

By [George Davis](#), Former Forbes Councils Member.  
for [Forbes Technology Council](#), COUNCIL POST | Membership (fee-based)

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# TOP of MIND

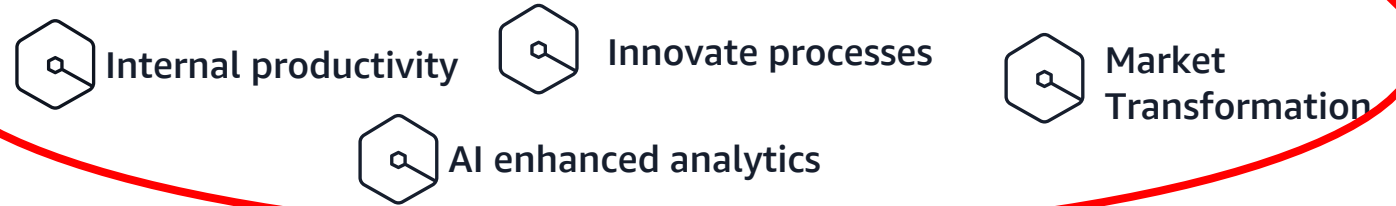
## GEN AI: TOO MUCH SPEND, TOO LITTLE BENEFIT?



Tech giants and beyond are set to spend over \$1tn on AI capex in coming years, with so far little to show for it. So, will this large spend ever pay off? MIT's Daron Acemoglu and GS' Jim Covello are skeptical, with Acemoglu seeing only limited US economic upside from AI over the next decade and Covello arguing that the technology isn't designed to solve the complex problems that would justify the costs, which may not decline as many expect. But GS' Joseph Briggs, Kash Rangan, and Eric Sheridan remain more optimistic about AI's economic potential and its ability to ultimately generate returns beyond the current "picks and shovels" phase, even if AI's "killer application" has yet to emerge. And even if it does, we explore whether the current chips shortage (with GS' Toshiya Hari) and looming power shortage (with Cloverleaf Infrastructure's Brian Janous) will constrain AI growth. But despite these concerns and constraints, we still see room for the AI theme to

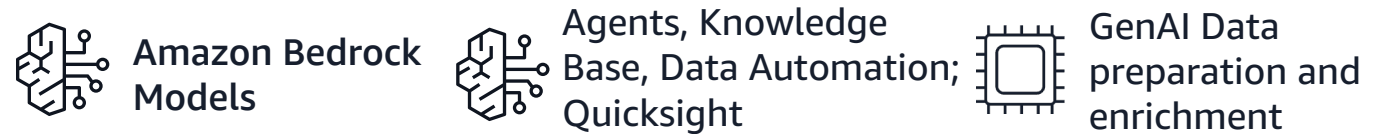
# Foundations of an AI Ready Organization

## DISCIPLINED USE CASES AND APPLICATIONS



## BRING IT ALL TOGETHER

### SAGEMAKER UNIFIED STUDIO: BUILD GENERATIVE AI APPS



## JOB ZERO: FOUNDATIONAL DATA LAYER



# Disciplined Approach to Use Cases and Applications



TIME TO VALUE

**INTERNAL EFFICIENCIES**

**PROCESS  
TRANSFORMATION**

**MARKET TRANSFORMATION  
AND DIFFERENTIATION**

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FINANCE/OPERATIONS

APPLICATIONS

TUTORS/COACHING

PROCUREMENT

FINANCIAL SERVICES

ASSESSMENT

COMPLIANCE AND LEGAL

MARKETING

CUSTOMER OPERATIONS

RESEARCH

FILINGS

INVESTIGATIONS

COMMUNICATIONS

PERMITTING

ENGAGEMENT

HUMAN RESOURCES

PLANNING

NEW CITIZEN SERVICES

# Driving value with AI

Align use cases to strategic business and mission priorities; assess time to value

Engage business stakeholders; not just IT

Set clear success metrics; if you can't measure it don't do it

Treat data like a product; because it is

Focus on use cases that target process *transformation with agents*: "don't build a faster horse"

Identify use case patterns that can be repurposed for scale





# Thank you!

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Please complete the survey  
for this session



## Executive track

Building the foundation:  
data strategy essentials for  
Generative AI in public  
sector

# Call to action

Ask your customers how they are thinking about being an AI ready organization

Leverage AI interest to drive data conversations

Engage specialists early and often

Establish SageMaker Unified Studio as data, analytics and AI governance tool

Set up sandbox account to support customer experimentation

[Use the Generative AI Solution Pricing and Value calculator](#)

[Access more than 1,600 GenAI use cases across industries](#)

[Check out the GenAI GTM Headquarters](#)

Amazon SageMaker Unified Studio Workshop

- Improve Student Engagement



# Summary: AI 2.0 The AI Ready Organization

## Lessons over 18 months: Gartner, McKinsey, PwC, AWS

Led with customer facing, high risk, complex use cases – delayed deals

Led with AI capabilities rather than establishing foundational data needs – lost customer and AWS time and money

AWS PS: Less than 30% of POCs/opps launch / less than 20% of launched opps are generating expected revenue

Customers not seeing ROI and value : Heading into “trough of disillusionment”

### Time to Value for AI:



1. Data Modernization: two phases traditional data modernization and data modernization for AI – building blocks of AI
2. Internal use cases drive faster ROI: HR, Finance, Call Centers, Content Creation, Legal, Compliance – org change and ROI
3. New Product/Features are necessary but will take longer to realize revenue and meet still nascent market demand – market differentiation

### Help your customers become AI Ready Organizations

Still early days for AI: AWS Infrastructure is how organizations become AI ready – flexible and designed for what's next (47 Bedrock announcements at ReInvent – 72 on roadmap for 2025 – AWS is building AI solutions for business value)

Treat data like a product – because it is

SageMaker Unified Studio (is free) and establishes single infrastructure for data modernization and AI application development. Use AI to accelerate Data Modernization processes

Highly disciplined approach to use case evaluation and opportunity qualification – use support from Data, Analytics and AI Specialist teams- early and often