



How Machine Learning and AI are Powering BI

From insights to predictions

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Amazon Web Services



Agenda

- What is driving change in data strategies?
- Developing a modern data strategy
 - Mindset
 - People / Process
 - AWS Digital Sovereignty Pledge
 - Technology
- How do I get started?

What is driving change in data strategies?

Trends Impacting Data Strategies



Data Partnering



Augmented Productivity



Culture of Autonomy



Embedded Intelligence



Simulation at Scale

97% of blue-chip companies are investing in data, **27%** have successfully created a data-driven organization.

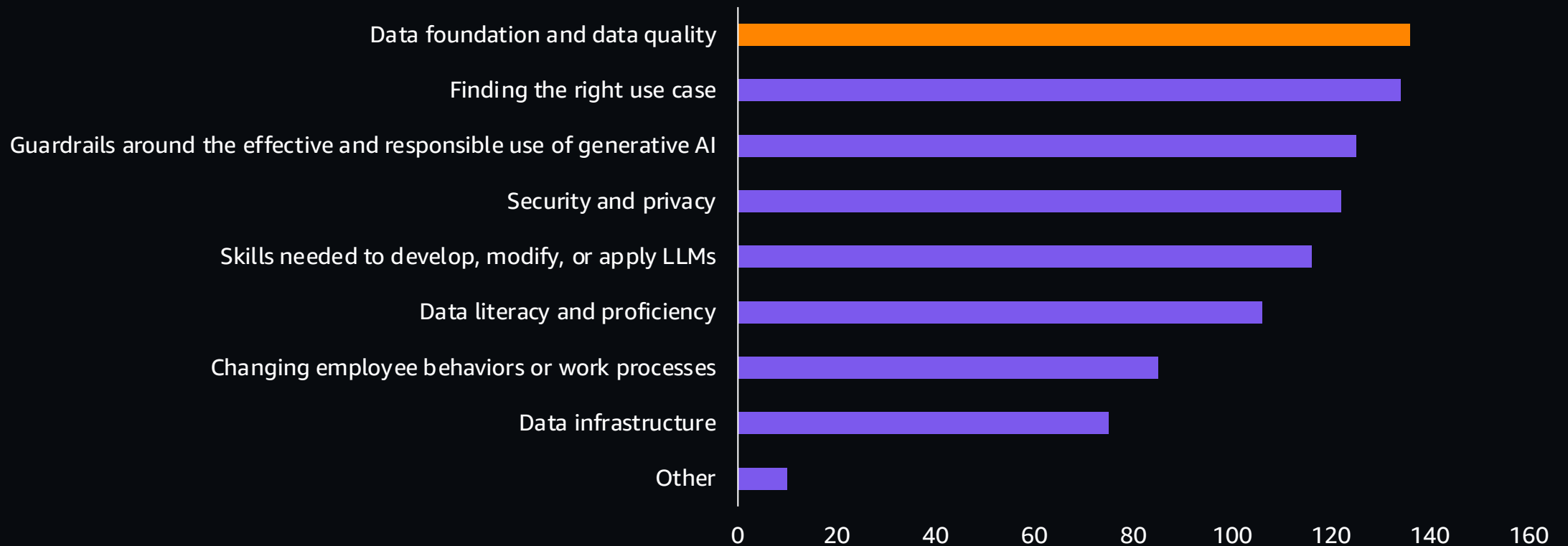
Culture is the biggest impediment

92% of companies cite culture – **people, process, organization**, and **change management** - as the biggest impediment.

New Vantage Partners. Data and AI Leadership Executive Survey 2022

Generative AI needs quality data

Question: In your opinion what is the biggest challenge for your organization in realizing the potential of generative AI? (Select all that apply)



The Data-Driven Organization Characteristics



Set **Think Big** goals, deliver iteratively



Focus on **delivering business priorities** fast



Shared leadership conviction and Business-IT **alignment** on data ownership



Having data-driven habits to **experiment and innovate** using data products



Culture of learning – data literacy and technical skills



Privacy, security, compliance and federated **governance** without impeding innovation

Modern Data Strategy – A Suggested Definition

An **agile** plan of **aligned** actions spanning mindset, people, process, and technology that **accelerates** creating value using data in **direct support** of strategic business objectives

(**Mindset + People + Process**)
x Technology

BUSINESS NEED

The need to stand up one of the largest contact centers in only a few weeks to address questions and concerns regarding a critical healthcare initiative

SOLUTION

CDC selected Maximus as their BPO. Maximus selected SuccessKPI as the end-to-end analytics solution to provide AI, Machine Learning, translation, sentiment analysis, across multiple channels

Used AWS Contact Center Intelligence services such as Amazon Transcribe, Amazon Comprehend, Amazon S3, Amazon SageMaker, Amazon EC2, AWS Lambda, and 20+ other Amazon Services

IMPACT

The CDC has handled hundreds of thousands of inquiries with a comprehensive end-to-end view of agent effectiveness, gained insights in root causes of vaccination hesitancy, and has a full 360 view of the contact center



MAXIMUS®



BUSINESS NEED

The European Parliament, one of two European Union legislative bodies, wants to allow the researchers and citizens to view historical documents. However, it is low quality and difficult to read, the electronic archive management system was also cumbersome as it was designed for research specialists.

SOLUTION

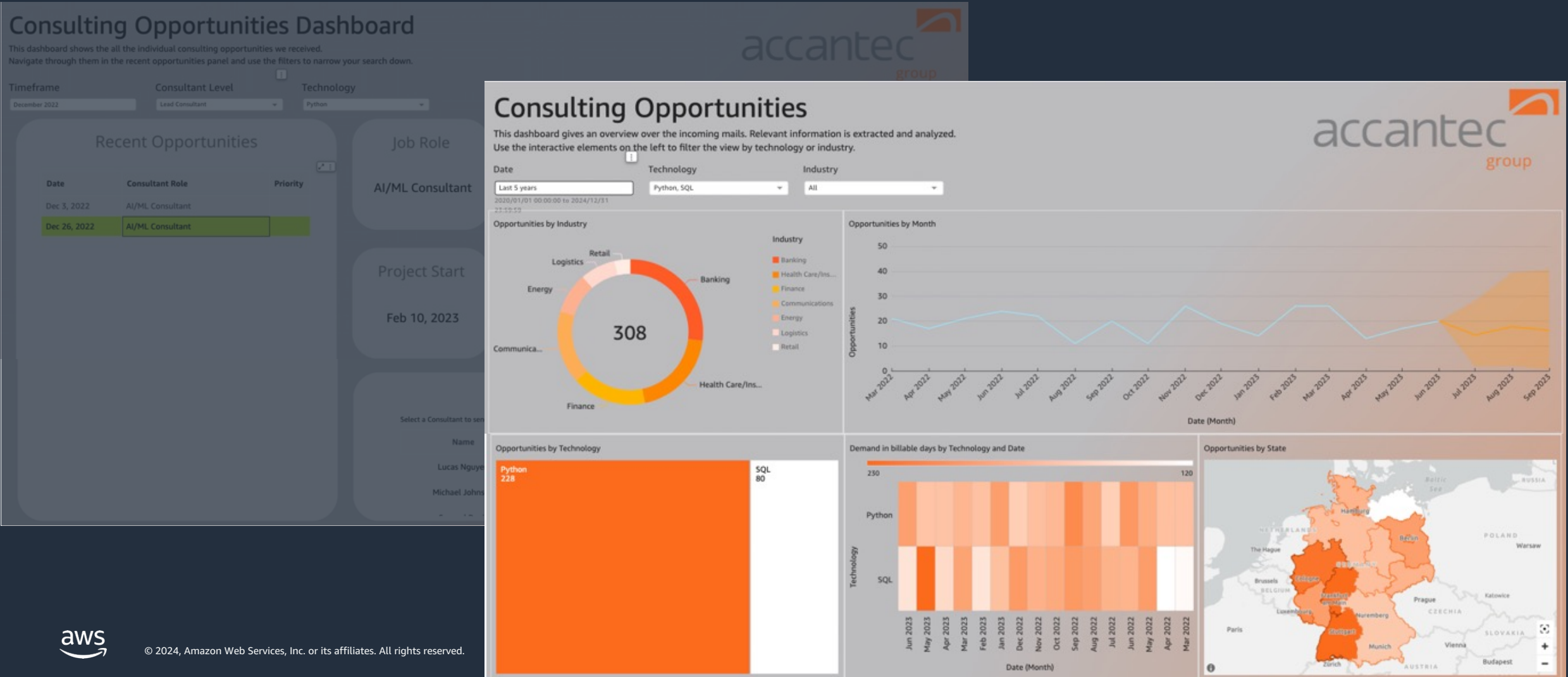
With the help of PwC, AWS partner, they have built the application, called ArchiBot, use AI algorithms and other AWS services (Amazon Textract, Amazon Comprehend, and Amazon OpenSearch Service) to extract important information, document summarization, and use Amazon QuickSight for data visualization. This dashboard allows users to visualize search results and quickly find archived documents.

IMPACT

- Give citizens digital access to 450,000 archived documents and more
- Reduce search time by 80%, which improve customer satisfaction rate from 3 to 4.75



AI-powered dashboard



Developing a modern data strategy





Mindset

Establish Key Tenets – Communicate from the Top

THESE REPRESENT THE GUIDING PRINCIPLES FOR YOUR DATA STRATEGY

Empower the business to solve their specific problems independently

Data is democratized, available, and discoverable for all

Use data to differentiate our services in the market from our competitors

Only move and duplicate data when it is absolutely essential for supporting a specific use case

Serve data widely, across the enterprise, with controls and traceability

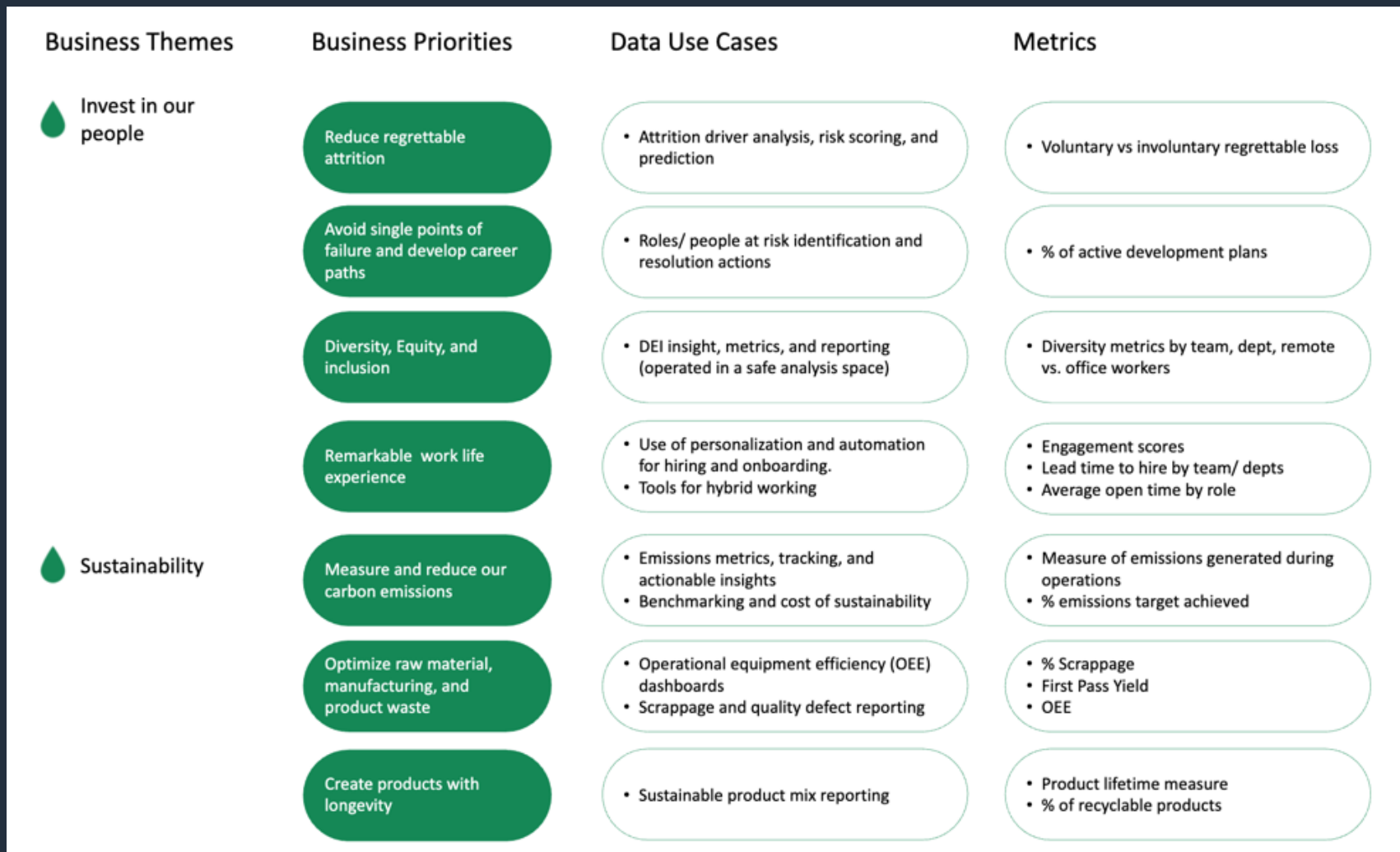
Decentralized governance to improve agility while still protecting the data

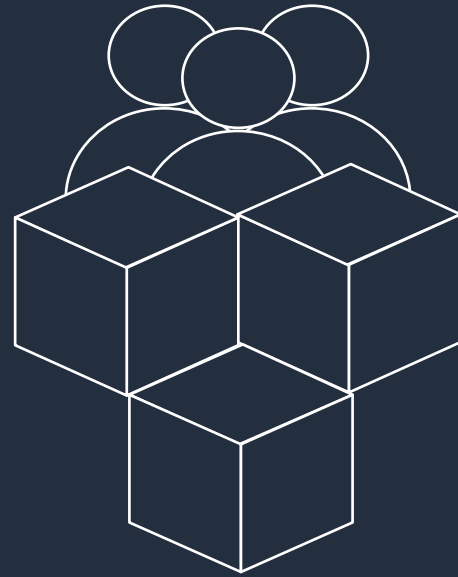
Abstract technical complexities so teams can move fast

Business value is secondary to customer value

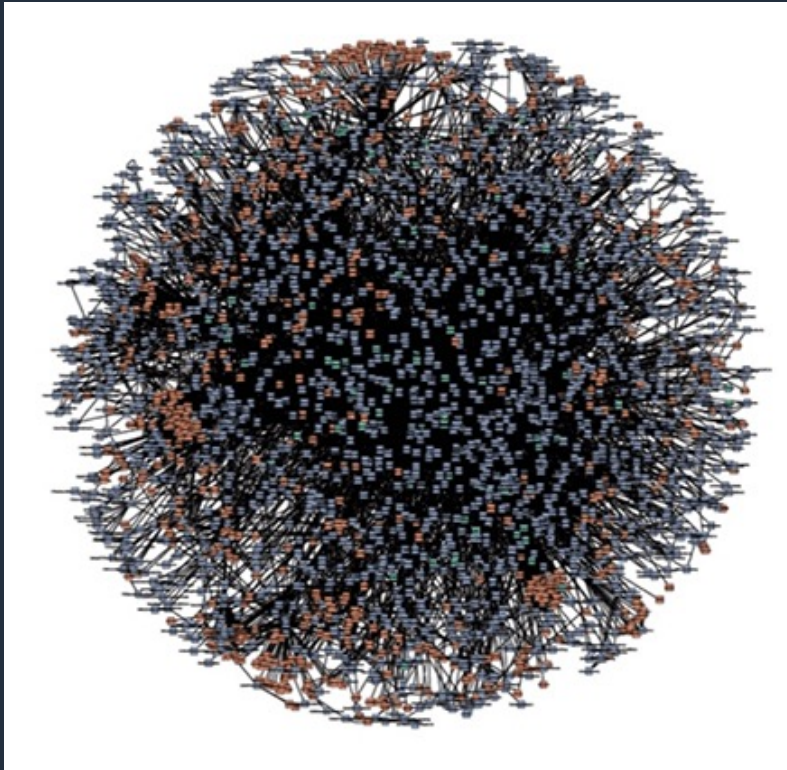
Land data once and reuse it in its natural location and most functional format

Align with Business Strategy Goals





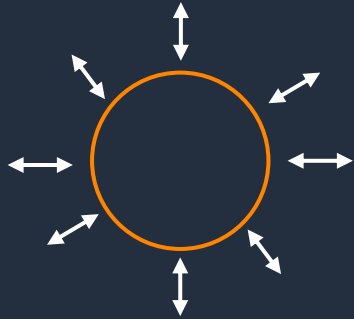
People / Process



“In the same way that organizations have uncovered benefits by decoupling and moving from monolith IT to micro-services, the modern data community is an organizational and cultural shift from monolith data organizations to decoupled responsibility.”

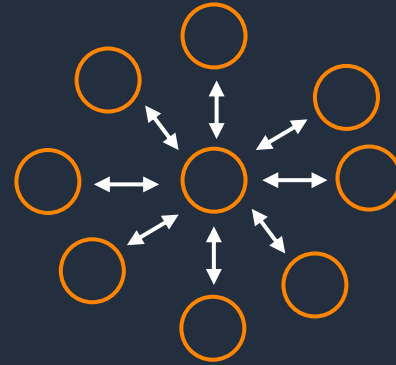
(AWS (2021), *“The Data-Driven Organization”*. Available [here](#).)

Aligning your Organizational Model



Centralized governance and control

- + Highly regulated domain
- + Over index on controls
- + Single point of accountability
- + Data ownership and control
- + Manage scarce resources
- Slow decision making and agility
- Can become a bottleneck
- Impacts time to value



Decentralized within the Lines of Business

- + Self sufficient teams
- + Shorter time to value
- + Tighter alignment of business/tech
- + Embrace change
- Compliance and security risk
- Limited control
- Duplication (by design)



Modern Data Community

- + Decentralized decision making
- + Leverage/govern core capabilities
- + Establish standards
- + Manage data ecosystems
- Perceived loss of control
- Incentivizing producers to participate

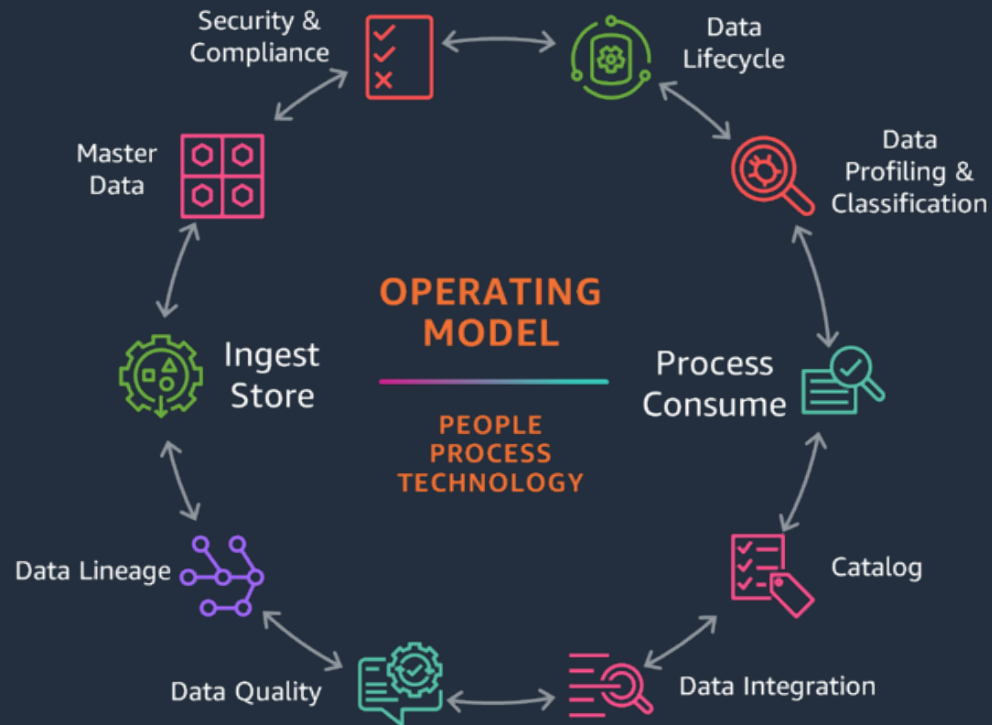
The Modern Data Community

DATA-DRIVEN ORGANIZATIONS ENABLE AGILITY BY PUSHING RESPONSIBILITY TO THE EDGES



AWS Approach to Data Governance

Data Governance is the combination of **people**, **processes**, and **technology** that organizations use to ensure the quality and security of their data throughout its lifecycle



THINK BIG, START SMALL, SCALE FAST

1. **Architect data governance** to support the wider data strategy
2. **Implement incrementally** based on business initiatives and use cases that drive the data strategy
3. Further **evolve** data governance capabilities over time

AWS Digital Sovereignty Pledge



Digital Sovereignty themes



Data residency



Operator access restriction



Resiliency, survivability, and independence



Data sovereignty



Operational sovereignty



Digital sovereignty

We pledge to give our customers:

1. Control over the location of your data

2. Verifiable control over data access

3. The ability to encrypt everything everywhere

4. Resilience of the Cloud



AWS Global Infrastructure Regions & AZs



N AMERICA

- Canada Central 3
- GovCloud US-East 3
- GovCloud US-West 3
- Northern California 3
- Northern Virginia 6
- Ohio 3
- Oregon 4
- Canada West



EUROPE

- Frankfurt 3
- Ireland 3
- London 3
- Milan 3
- Paris 3
- Spain 3
- Stockholm 3
- Zurich 3
- AWS European Sovereign Cloud



ASIA PACIFIC

- *Beijing 3
- *Ningxia 3
- Hong Kong 3
- Hyderabad 3
- Jakarta 3
- Mumbai 3
- Osaka 3
- Seoul 4
- Singapore 3
- Tokyo 4
- Malaysia
- Thailand



AFRICA

- Cape Town 3



MIDDLE EAST

- Bahrain 3
- Tel Aviv 3
- UAE 3



S AMERICA

- São Paulo 3



AUSTRALIA & NEW ZEALAND

- Melbourne 3
- Sydney 3
- Auckland

● Available Region ● Announced # Availability Zone



AWS Global Infrastructure Local Zones



N AMERICA

- Atlanta
- Boston
- Chicago
- Dallas
- Denver
- Houston
- Kansas City
- Las Vegas
- Los Angeles (2)
- Miami
- Minneapolis
- New York City
- Philadelphia
- Phoenix
- Portland
- Querétaro
- Seattle
- Toronto
- Vancouver



EUROPE

- Copenhagen
- Hamburg
- Helsinki
- Warsaw
- Amsterdam
- Athens
- Brussels
- Lisbon
- Munich
- Oslo
- Prague
- Vienna



ASIA PACIFIC

- Bangkok
- Delhi
- Kolkata
- Manila
- Taipei
- Bengaluru
- Chennai
- Hanoi



AFRICA

- Lagos
- Johannesburg
- Nairobi



MIDDLE EAST

- Muscat



S AMERICA

- Buenos Aires
- Lima
- Santiago
- Bogotá
- Rio de Janeiro



AUSTRALIA & NEW ZEALAND

- Auckland
- Perth
- Brisbane

● Available Local Zone

● Announced Local Zone



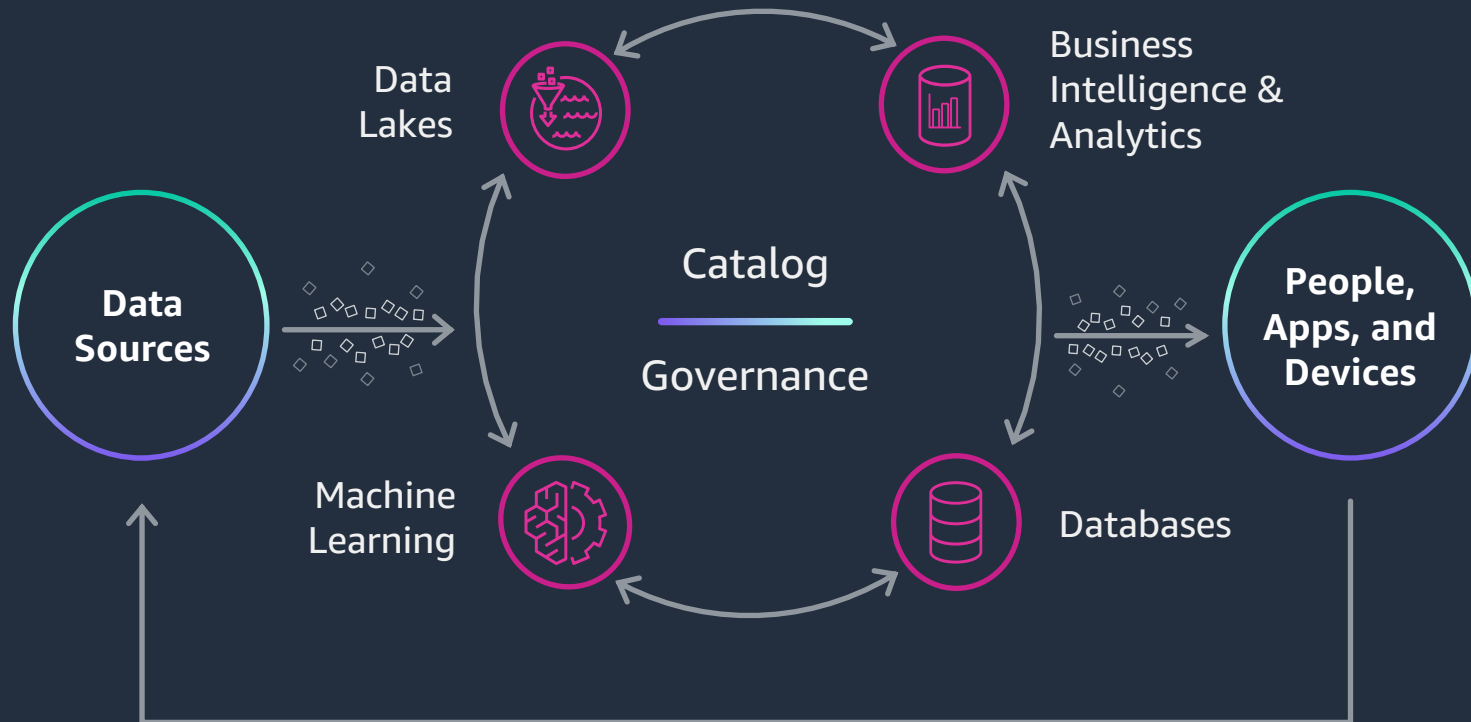
Inherit global security and compliance controls





Technology

Modern Data Strategy in Action



Scalable data lakes

Purpose-built data services

Seamless data movement

Unified governance

Performant and cost-effective

What does it take to build value at scale with AI and GAI

An iceberg floating in the ocean, with a small tip above the water and a much larger, jagged mass submerged below. The sky is blue with scattered white clouds. The water is a deep blue, and the submerged part of the iceberg is a lighter, translucent blue. The overall scene is a metaphor for the hidden complexities and foundations required to build value at scale with AI and GAI.

● AI / Generative AI: Business value

● Technology: Modern Data Foundations

● Mindset: Customer Obsessed, Experimental

● People: New Skills & Roles

● Process: Governance, Ethics, Alignment

How do I get started?



We Are Here To Help

Need peer-level guidance?



Data Strategist Conversations

- ✓ Discuss mental models and strategies based on experience and learnings working with AWS customers
- ✓ Get peer-level sounding board

Jumpstart the development of your modern data strategy

Need a strategy and help executing it?



Data-Driven Everything (D2E) Workshops

- ✓ Align business and technical leaders on data related use cases and initiatives to support business goals
- ✓ Align on priorities and where to start activating the modern data strategy
- ✓ Leave with an actionable delivery plan and architecture to activate an initial business driven use case in 90 days

Come with an idea, leave with a modern data strategy and a solution

Our global and local partners network





Thank you!

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