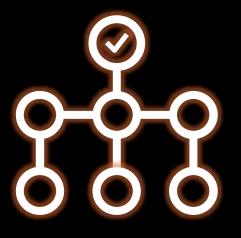


Reinventing Your Business With Data

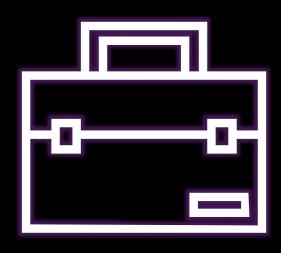
RAHUL PATHAK

Vice President, Analytics

The next wave of reinvention will be driven by data







DATA IS AN ORGANIZATIONAL ASSET

DATA IS ACCESSIBLE AND SECURE

DATA IS PUT TO WORK

Customer Challenges

More data than ever

Data sources are siloed

ML inertia and skill gap

Security, privacy, compliance

TO SURVIVE

Cut costs Save time

Perform at scale Make decisions

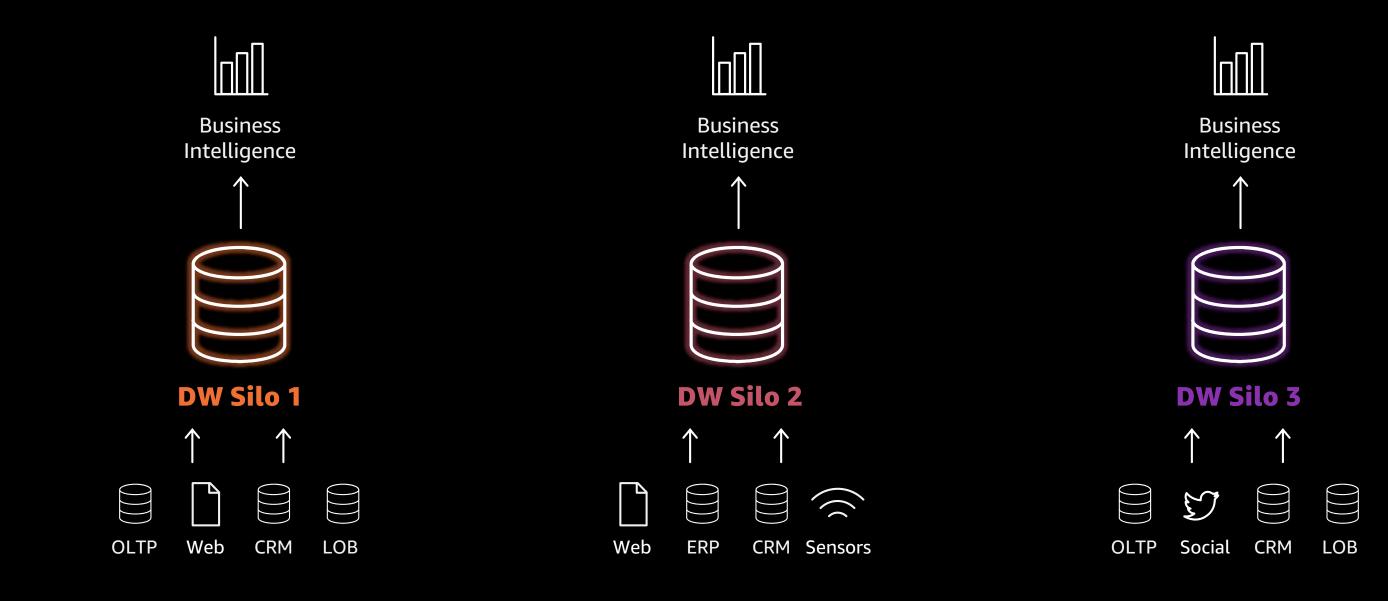
TO THRIVE

You need a modern data strategy

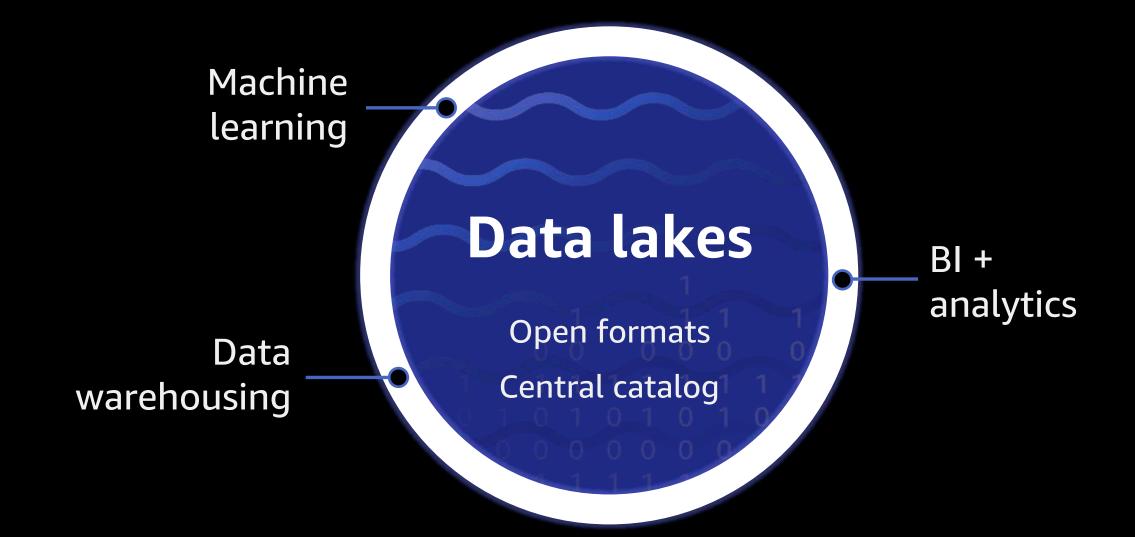
"AWS has been our preferred cloud provider for years, and its proven global infrastructure and expansive suite of services has contributed meaningfully to the incredible success of Disney+."

JOE INZERILLO

Executive Vice President & CTO, Direct-to-Consumer, The Walt Disney Company







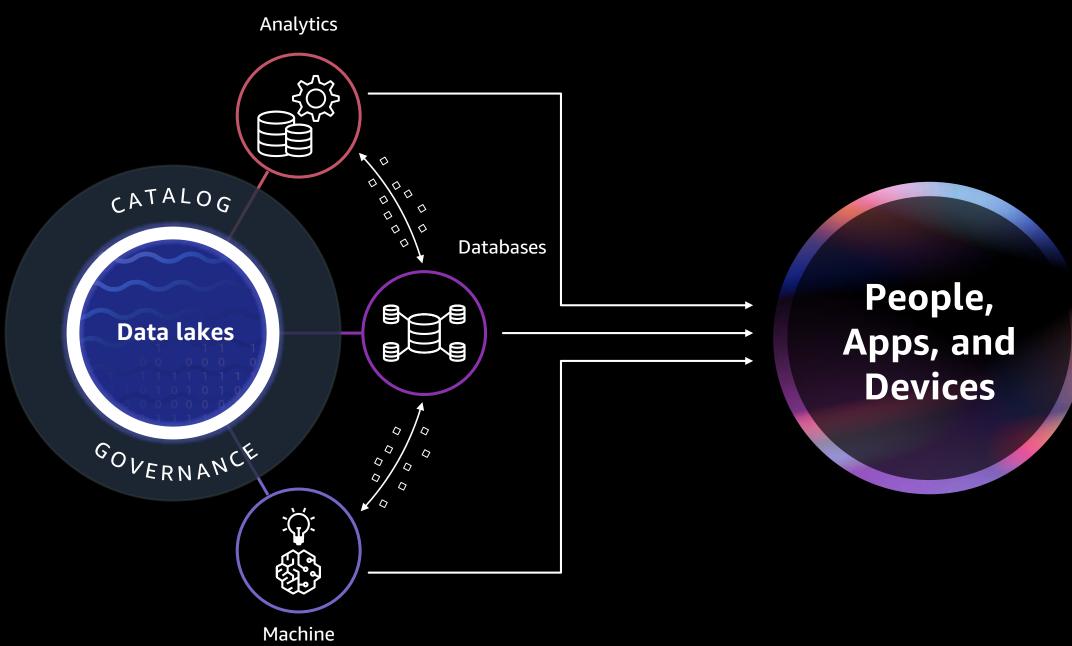


Shopping cart | Relational database

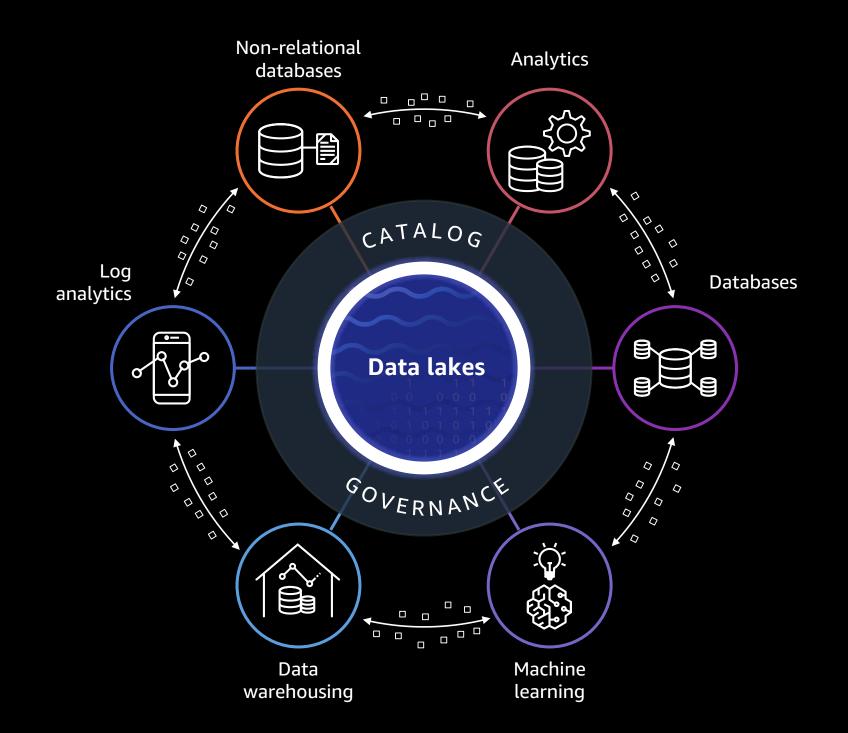
Customer reviews | Key-value database Recommendations | Graph database

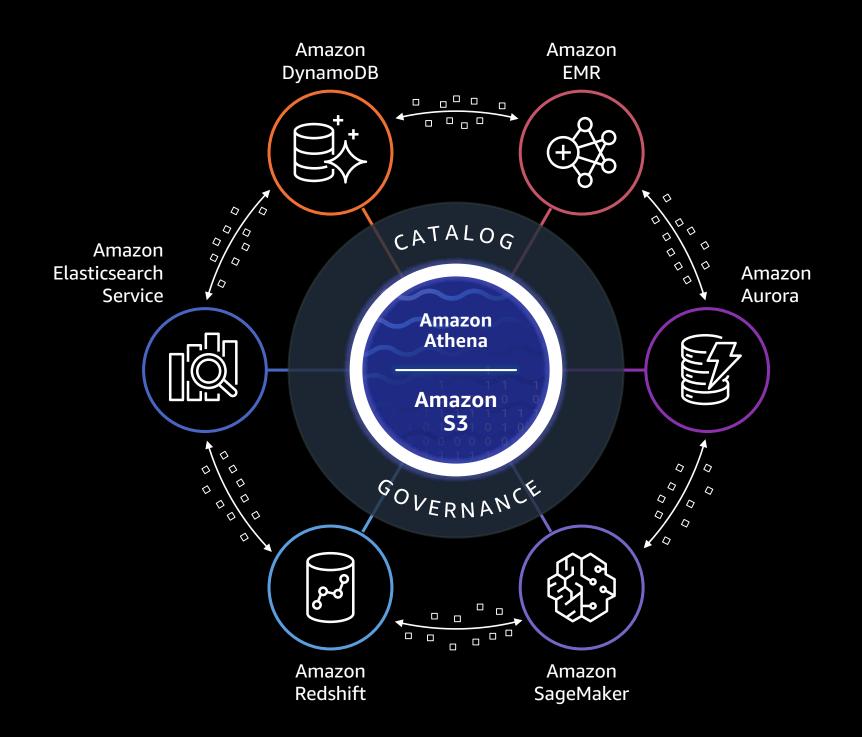






learning



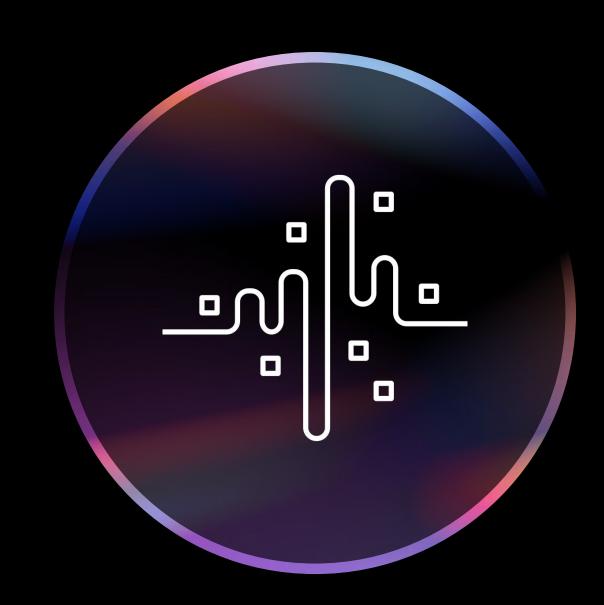




Data at any scale



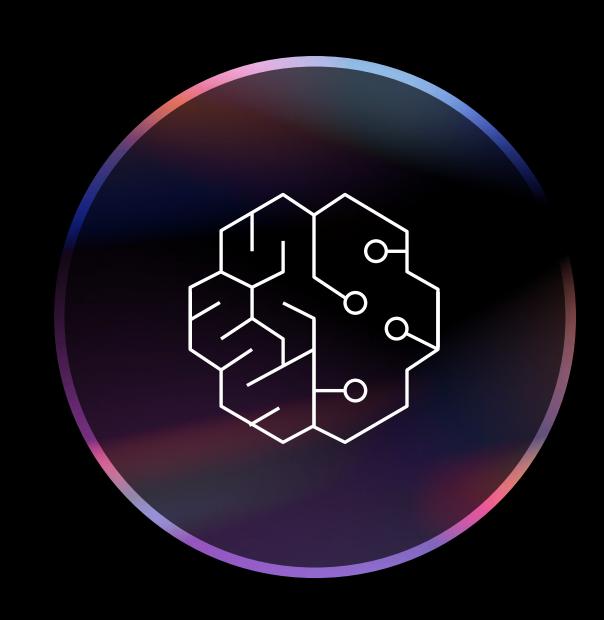
Best price-performance



Seamless data access

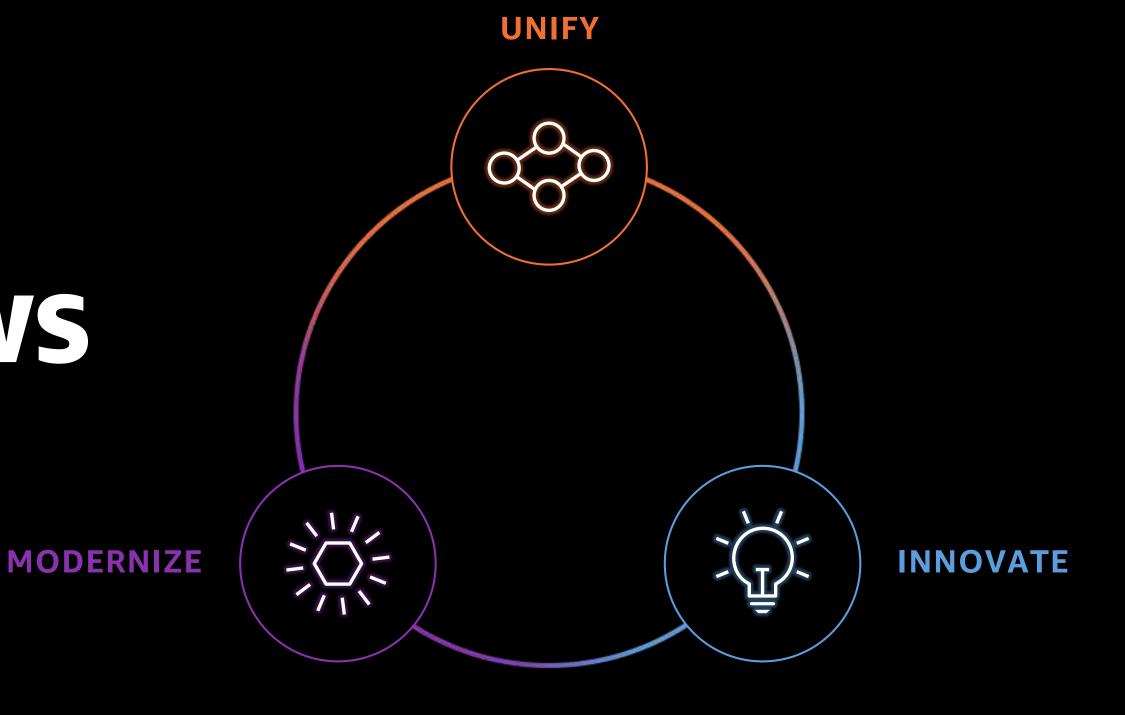


Unified governance

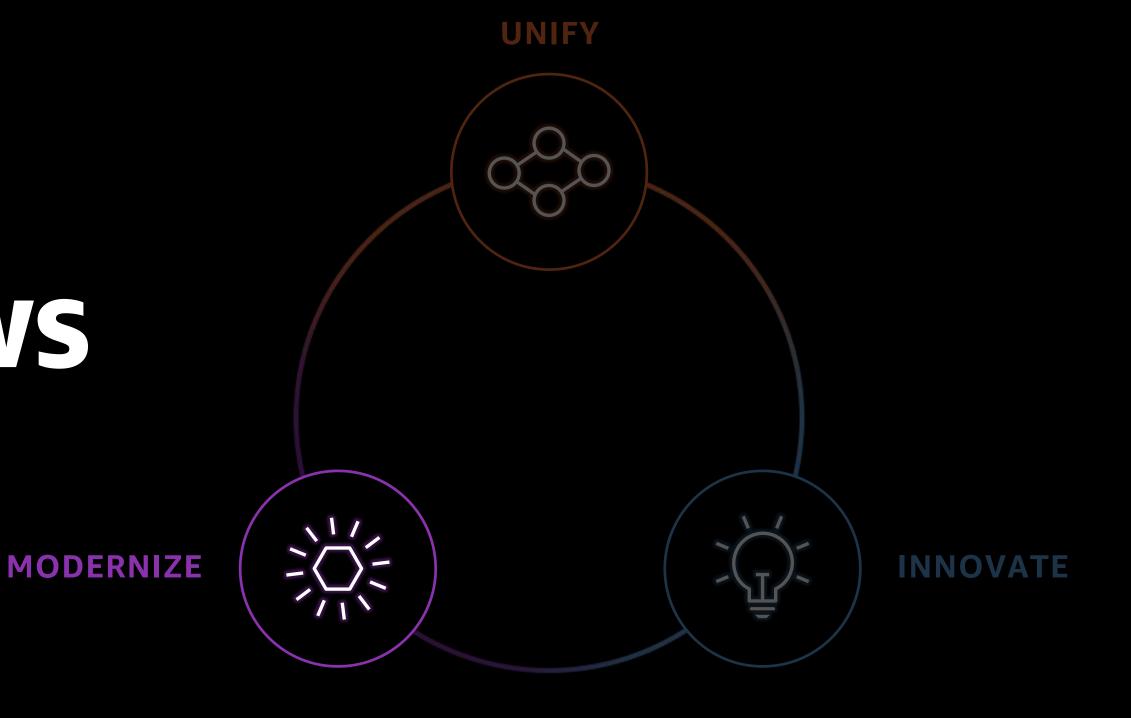


Al and ML to solve business challenges

Modern Data Strategy on AWS



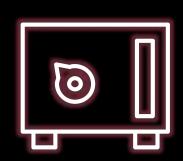
Modern Data Strategy on AWS



SAMSUNG

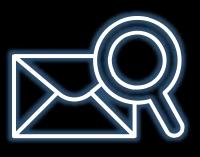
Migrated 1.1 billion users across three continents to Amazon Aurora, cutting monthly database costs by 44%.











VERY EXPENSIVE

PROPRIETARY

LOCK-IN

PUNITIVE LICENSING

YOU'VE GOT MAIL

Customers are moving to open databases









Commercial-grade performance and reliability

Amazon Aurora

MySQL and PostgreSQL compatible relational database built for the cloud

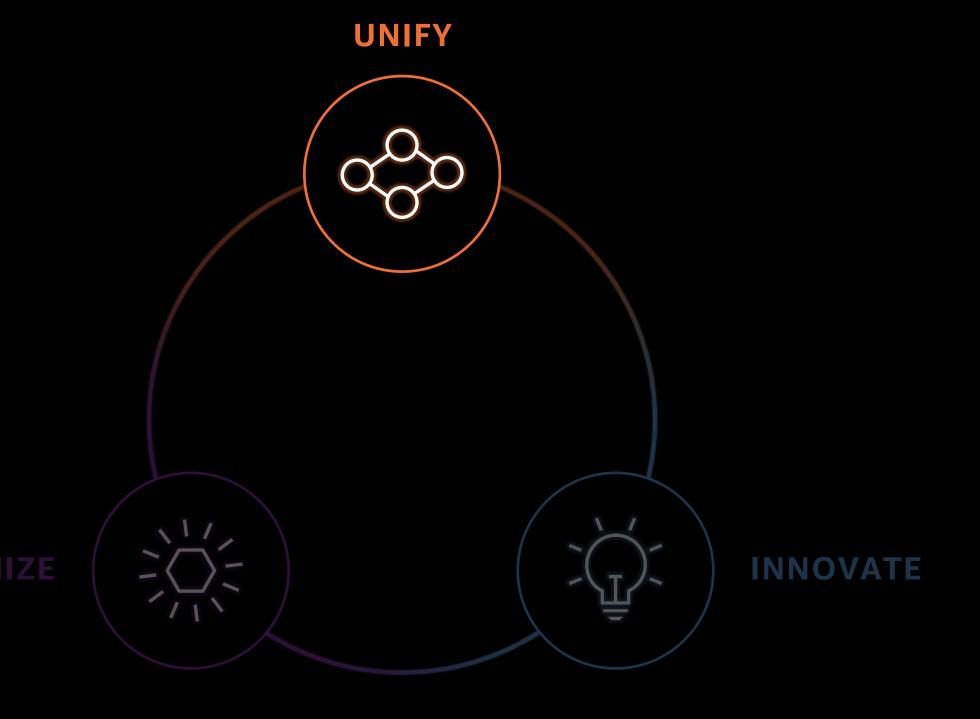
Performance of commercial-grade databases at 1/10th the cost

450,000+ databases have migrated to AWS



Amazon Elasticsearch RDS DynamoDB DocumentDB ElastiCache Redshift **EMR** MSK SageMaker Aurora Keyspaces Service **+** K (N () () () Spark, Relational Non-relational Data Operational Real-time Machine databases Presto, Hive databases warehouses analytics analytics Learning Oracle Mongo DB Oracle Elasticsearch Kafka Spark TensorFlow Microsoft SQL Server Microsoft Presto Cassandra PyTorch Logstash SQL Server Hadoop MySQL Redis Kibana mxnet Netezza Memcached PostgreSQL Greenplum MariaDB Database

Modern Data Strategy on AWS

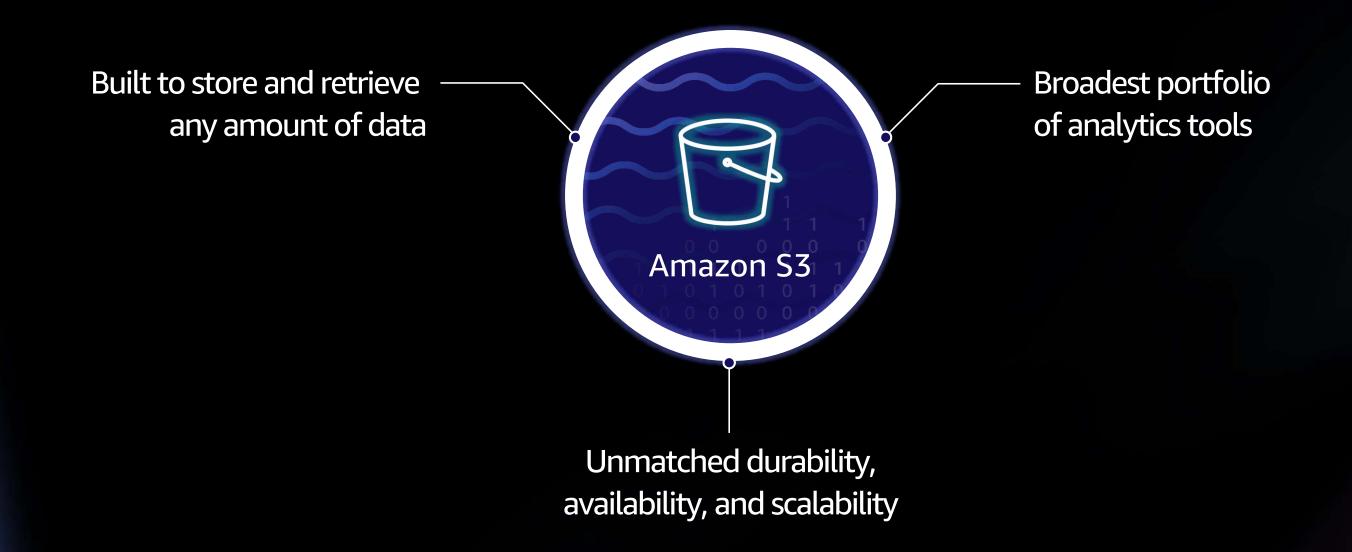


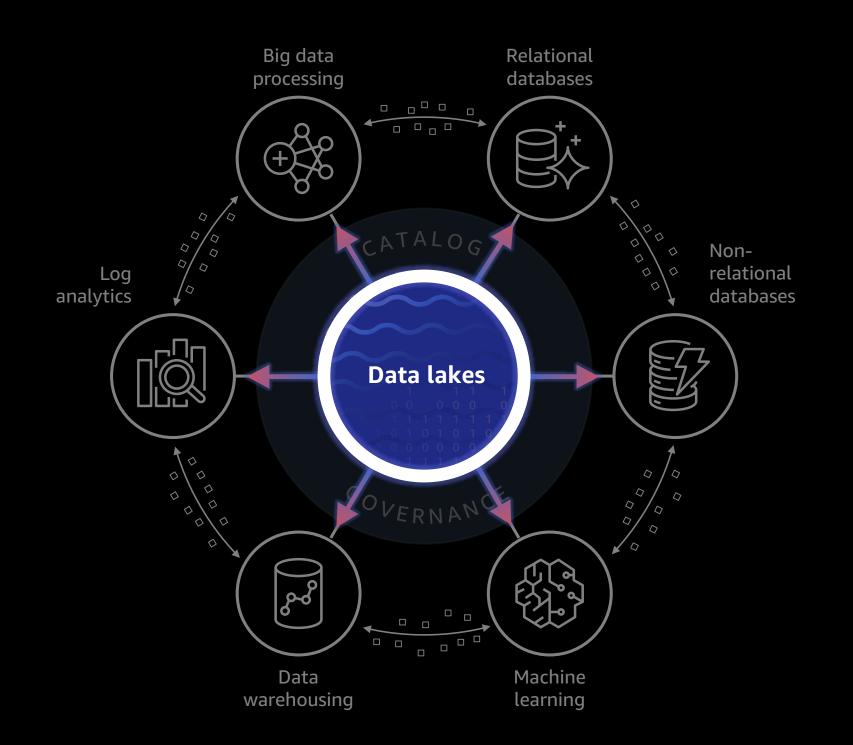


Collected 95 TB of data across 351 projects

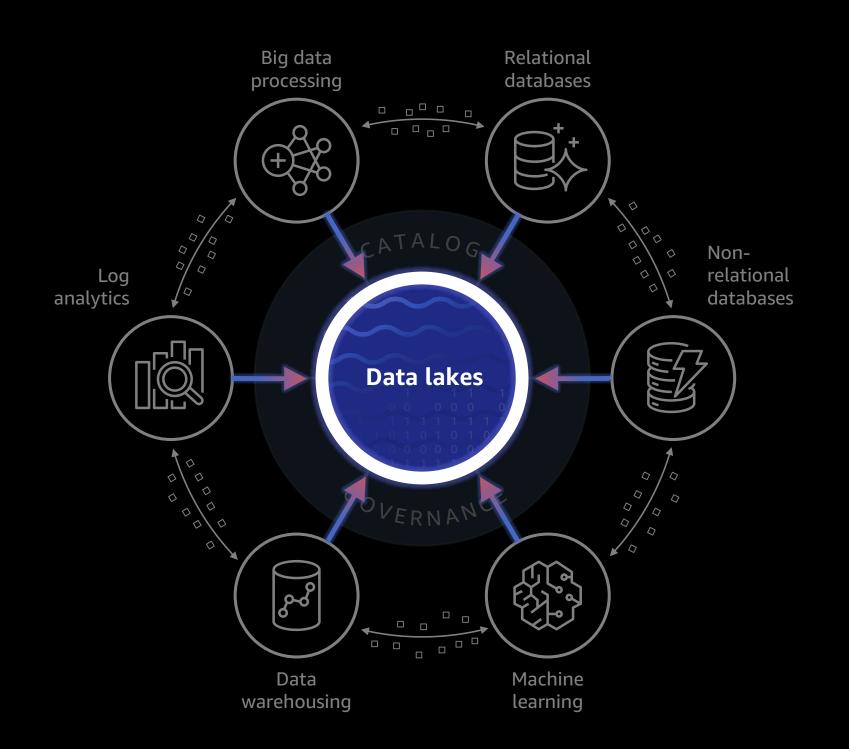
Automated energy predictions

Maximized wind farm energy production

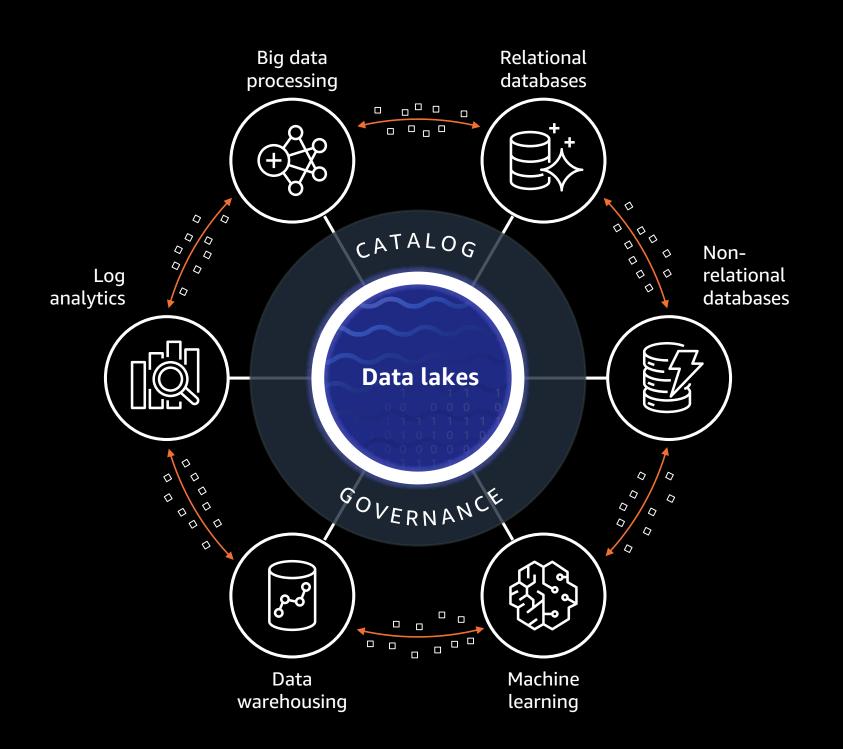




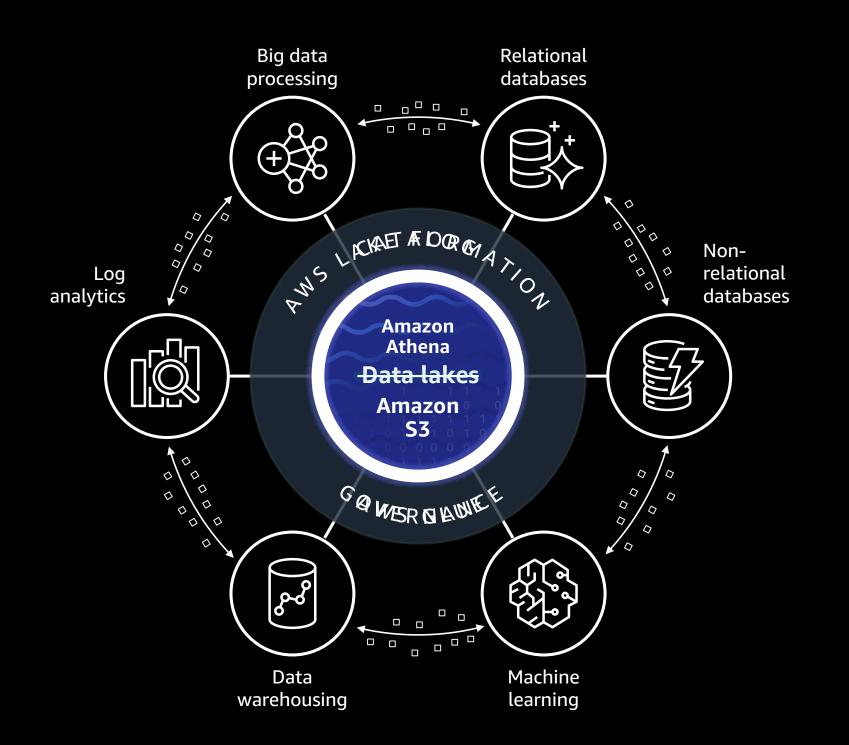
Inside out



Outside In



Around the perimeter



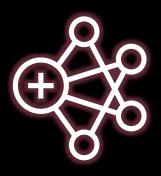
Lake house approach on AWS

AMAZON ATHENA AMAZON EMR AMAZON ELASTICSEARCH SERVICE AMAZON KINESIS AND AMAZON MSK

AMAZON REDSHIFT



Interactive query



Big data processing



Log and search analytics



Real-time analytics



Data warehousing

Amazon Redshift

BUILT FOR THE CLOUD



PERFORMANCE AT ANY SCALE

Up to 3x better price performance than other cloud DW



ANALYZE ALL YOUR DATA

Deepest integration with your data lake

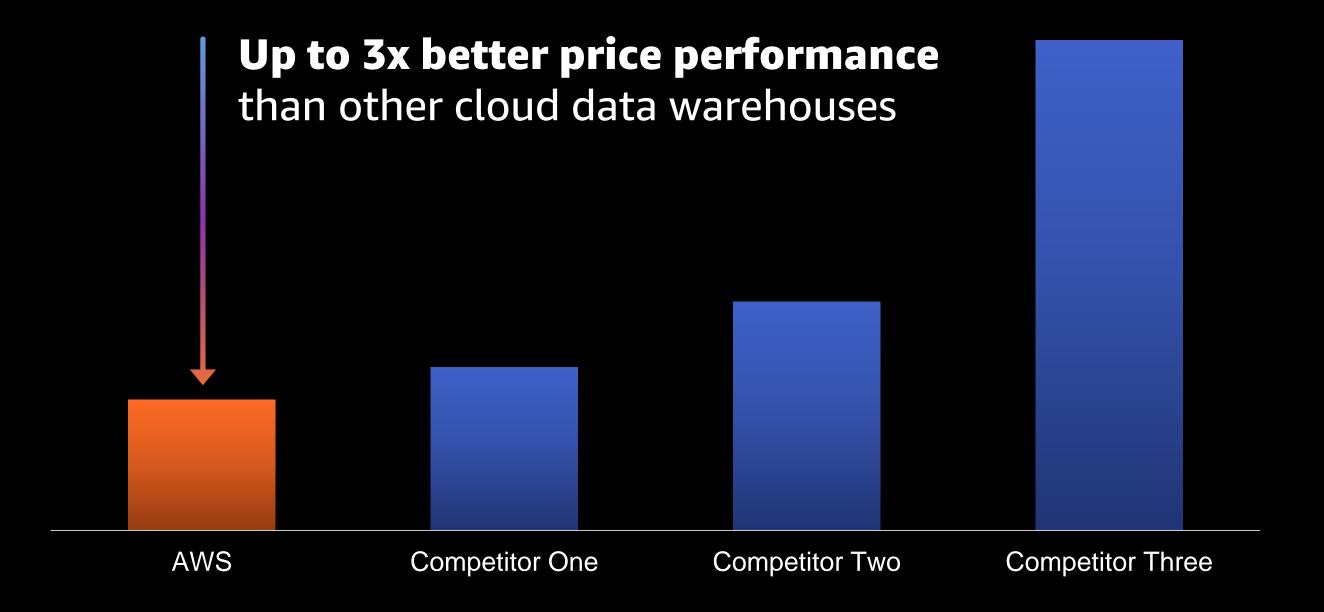


LOWER YOUR COSTS

At least 50% less expensive than other cloud DW

Amazon Redshift

BUILT FOR THE CLOUD



Amazon Redshift

BUILT FOR THE CLOUD

AWS designed-hardware

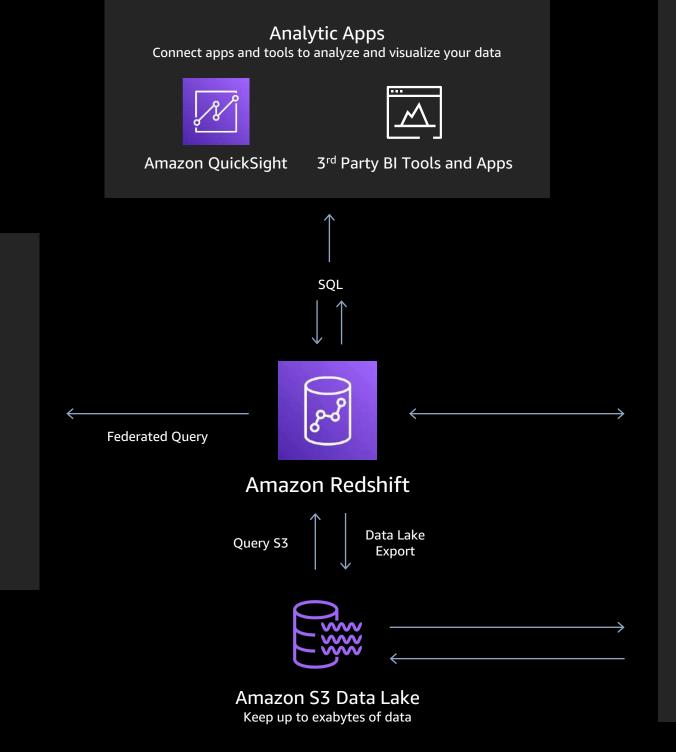
Highest networking bandwidth

Advanced ML that automatically organizes and stores data for performance

Intelligently moves data between data lake and data warehouse to lower costs

Amazon Redshift

ANALYZE YOUR DATA



Operational Databases

Query live data

Amazon Aurora

Amazon RDS

Analytic Services

Analyze open standards based data formats

Amazon SageMaker

Amazon EMR

Amazon Athena

3rd Party Analytics Services







































































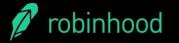






































Prasad Ramakrishnan

CIO/CISO





Powering the Customer Metrics that Matter

Prasad Ramakrishnan

CIO/CISO - Freshworks



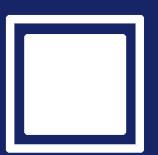
Delight made easy

Our mission is to make it **fast and easy** for businesses to **delight** their customers and employees.

Freshworks attributes

Modern

Meets the customers needs today



Fast and intuitive

Easy to onboard, configure, use, and scale



Unified

Integrated view of data

Enterprise grade

Scalable, secure

Affordable

Accessible to companies of all sizes







CRM



Freshdesk

Freshdesk Omnichannel

Freshdesk Core

Freshdesk Messaging

Freshdesk Contactcenter

Freshdesk Success



Freshsales

Freshsales **Growth Suite**



Freshmarketer

HRMS



Freshteam

ITSM/ESM/ITOM



Freshservice

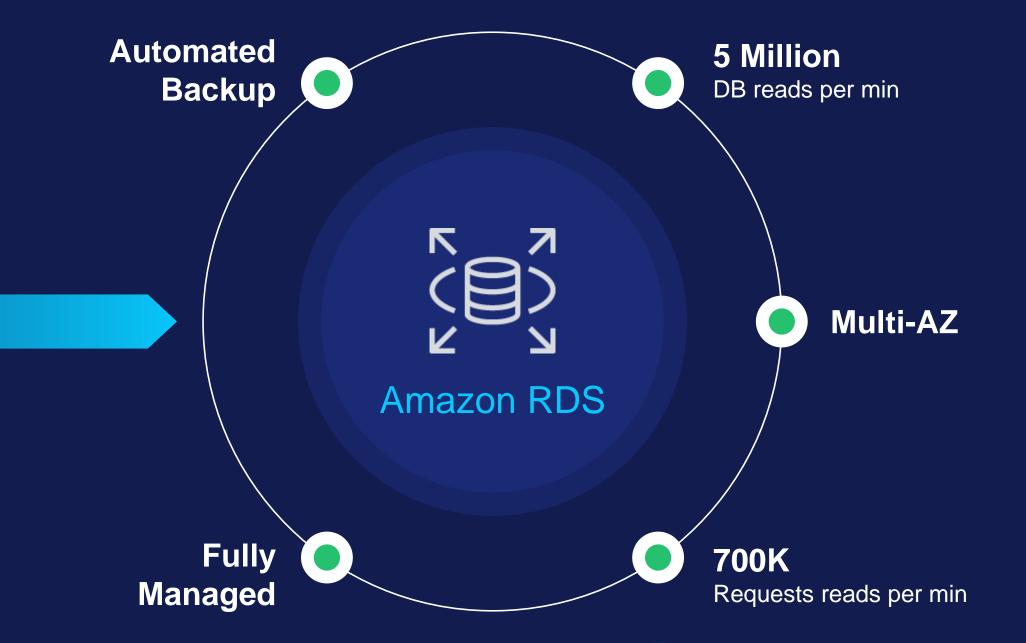
Platform



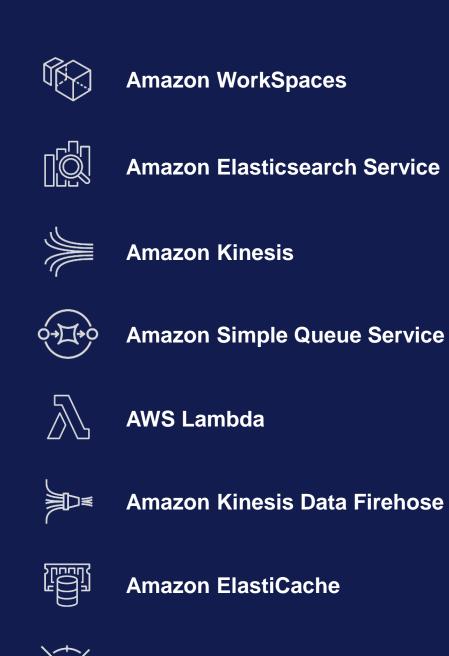
Freshworks Neo















AWS Database Migration Service



Amazon Managed Streaming for Kafka



Amazon Elastic Container Registry



Amazon SageMaker



Amazon CloudWatch



Amazon EC2

Amazon RDS



Elastic Load Balancing



Amazon Virtual Private Cloud





Amazon CloudFront



Amazon Route 53



AWS WAF



Amazon Elastic Container Service



AWS Config

AWS X-Ray

AWS CloudTrail



AWS Global Accelerator

Amazon GuardDuty



Amazon Redshift



Amazon DocumentDB



Amazon DynamoDB





AWS Secrets Manager



AWS Key Management Service

Amazon Elastic File System



Amazon Neptune









AWS Database Migration Service



Amazon Managed Streaming for Kafka























Amazon RDS







Amazon GuardDuty







Amazon Kinesis Data Firehose



Amazon DocumentDB









Amazon DynamoDB



AWS WAF



AWS Secrets Manager





Amazon Neptune







Service Spotlight



Amazon DynamoDB

Store unstructured Data for UCR platform



Service Spotlight



Amazon DocumentDB

Freshworks engineers have more time to build new delightful features for customers instead of managing databases



Service Spotlight



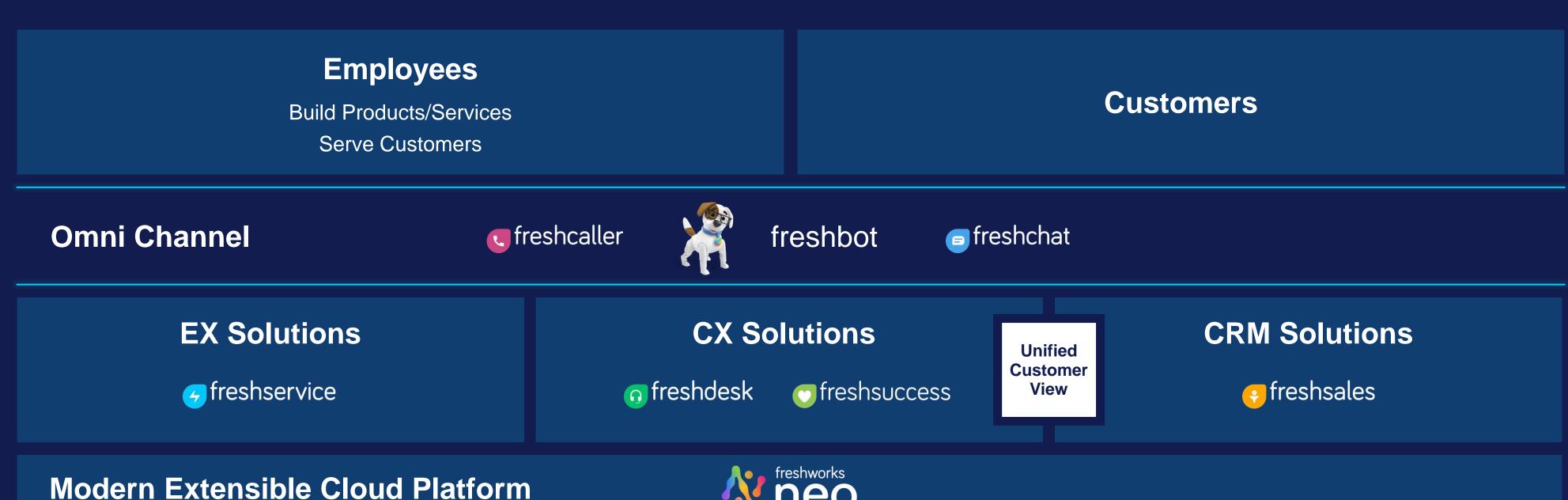
Amazon Neptune

Holds sales data of 10,000+ Freshsales accounts, amounting to ~100M vertices and graph edges



Growing Paid Customer Base

Technology to Unify Employee & Customer Engagement





Baikal Data Sources

Freshworks Products

freshdesk

freshteam

freshcaller

freshsales

freshservice

freshchat

Business Platform



northpass





Chargebee





Google Analytics

Operational Intelligence



Active users, simultaneously



Amazon SageMaker 30,000 Built Models

10,000 Customers benefit from SageMaker

30 Mins Down from 24 hours

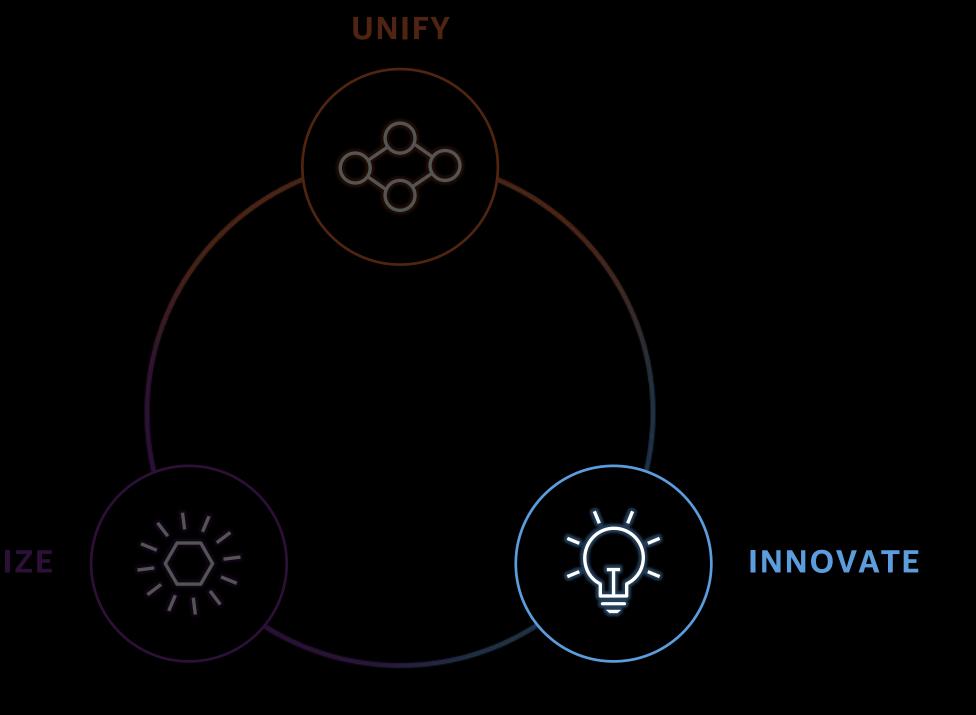
Real-time value to users





Delight made easy

Modern Data Strategy on AWS





Built and trained machine learning models on a data lake to predict order placement

Achieved goal of delivery in ten minutes or less

Increased Customer satisfaction scores

AI SERVICES

AMAZON SAGEMAKER

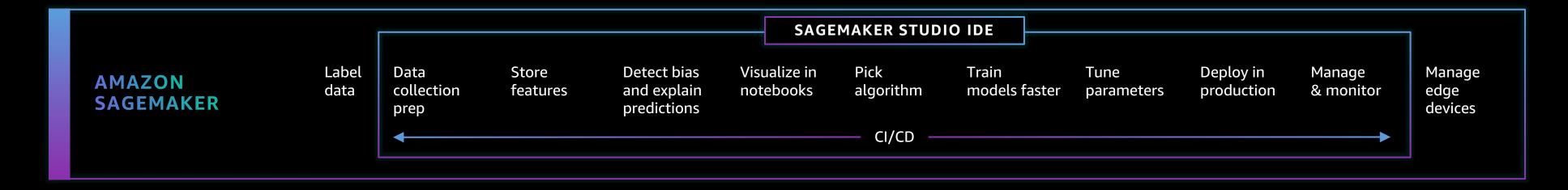
ML FRAMEWORKS & INFRASTRUCTURE

PyTorch Apache MXNet TensorFlow AMIs & containers

GPUs

AWS Inferentia and Trainium Elastic inference FPGA

AI SERVICES

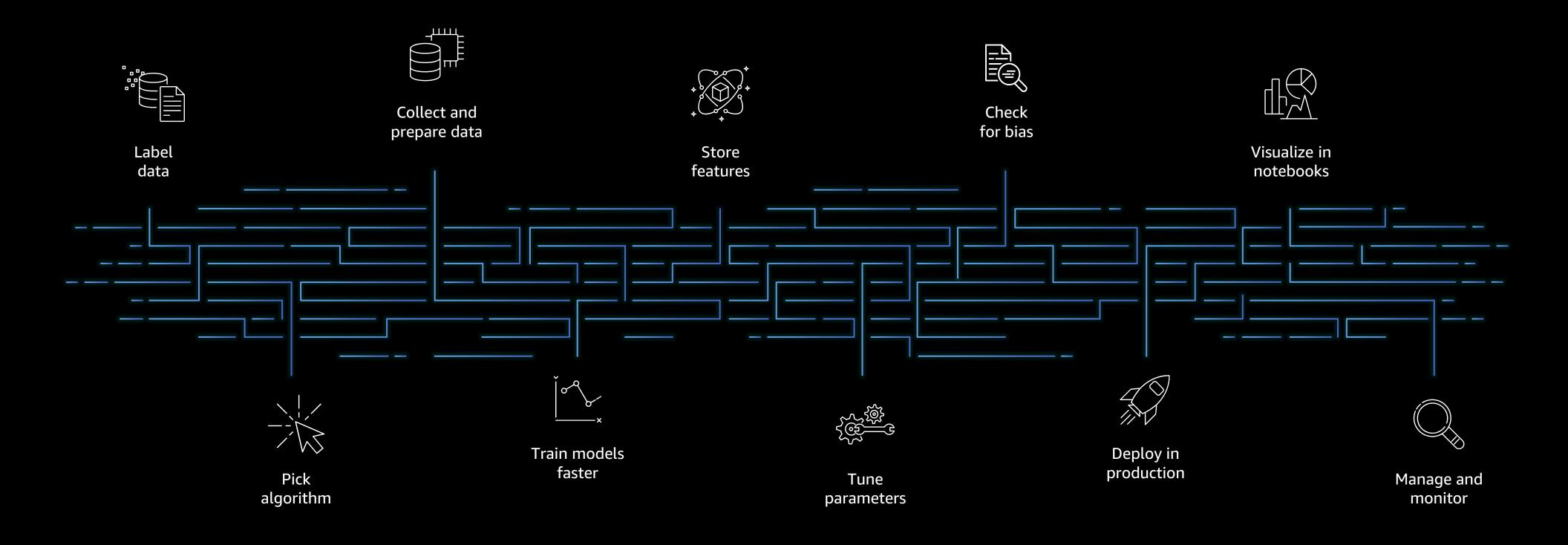


ML FRAMEWORKS & INFRASTRUCTURE

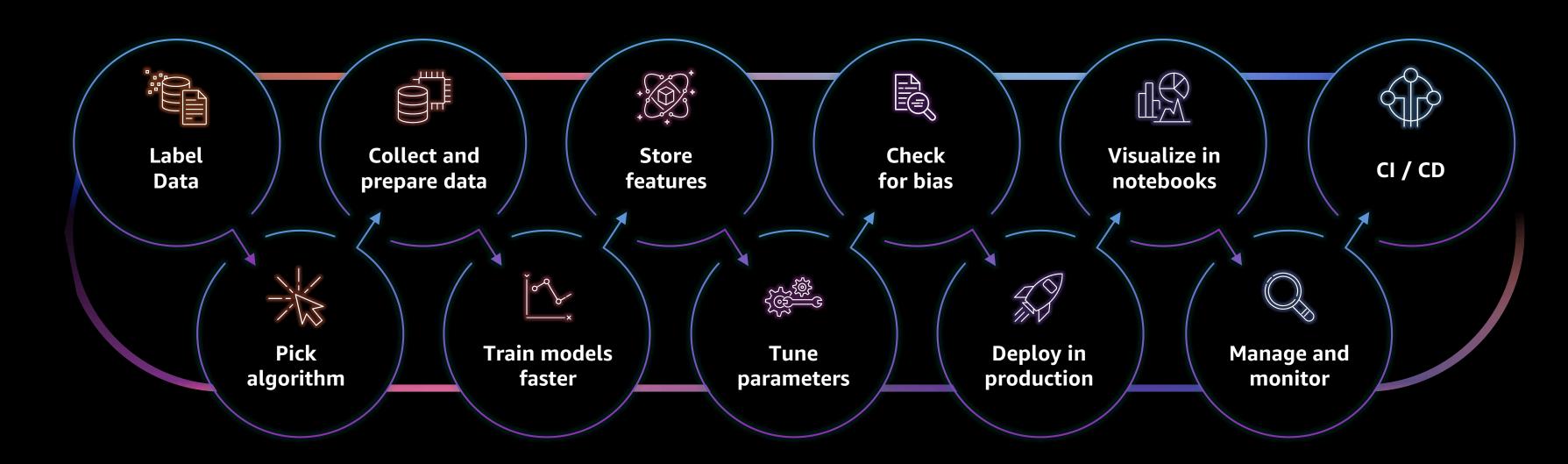
VISION CHATBOTS SEARCH SPEECH CODE + DEVOPS Polly Rekognition Kendra CodeGuru Lex DevOps Guru Transcribe **CONTACT CENTERS BUSINESS TOOLS TEXT HEALTHCARE INDUSTRIAL** AI HealthLake Panorama Appliance & SDK Contact Lens Personalize Comprehend **SERVICES** Comprehend Medical Connect Voice ID Translate Monitron **Forecast** Lookout for Equipment Fraud Detector Textract Transcribe Medical **Lookout for Vision Lookout for Metrics**

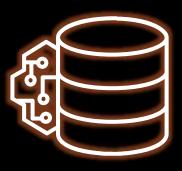
AMAZON SAGEMAKER

ML FRAMEWORKS & INFRASTRUCTURE



AMAZON SAGEMAKER

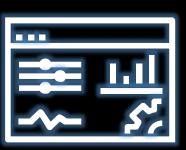












Databases

Data warehouses + data lakes

Business intelligence tools

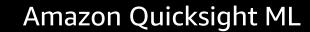
Amazon Aurora ML



Amazon Neptune ML















Jack Berkowitz

SENIOR VICE PRESIDENT

Product Development



Unmatched depth and breadth with global reach







Payroll	HR and benefits	Workforce management
2.3T Dollars Moved	90M Employee records	100K WFM Clients
38M Employees paid globally	11M 1095-C forms submitted	14M Employees served
67M W-2s Processed	2M+ Enrolled in retirement, \$100B AUM	750M+ Monthly time "punches"



Everything we do starts with data

ADP data is anonymized, aligned and available for applications

Data Identifiers

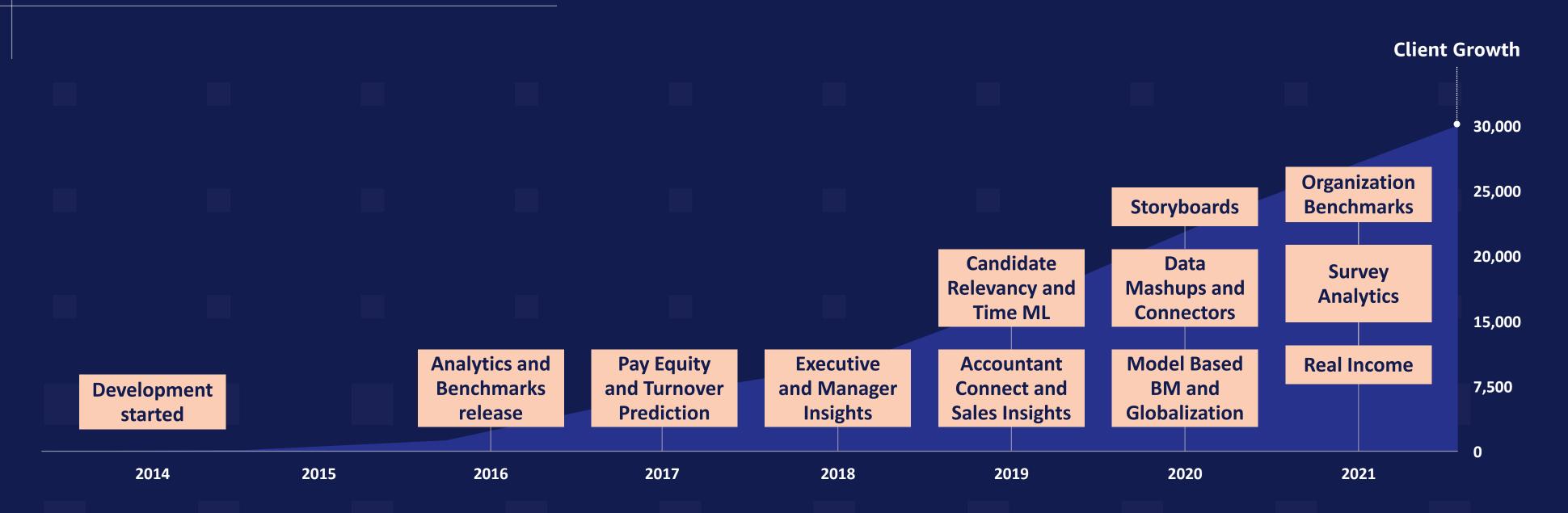
90N+ Employees →

700k+
Companies →





ADP DataCloud Evolution





120,000

Monthly Unique Active
Executives and Managers

82,000,000
HR & Payroll Reports
executed annually

5,000
Clients using
ML based Recruiting

37,000
Weekly HR Practitioners using People Analytics & Benchmarking

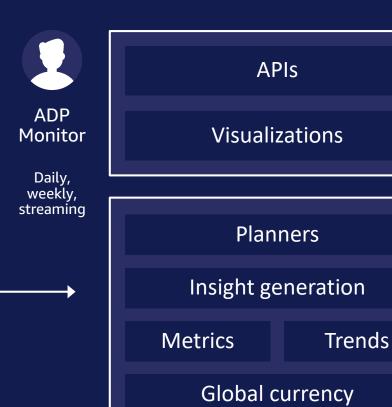


Our analytics architecture

securely processes petabytes of data supporting multiple applications and use cases

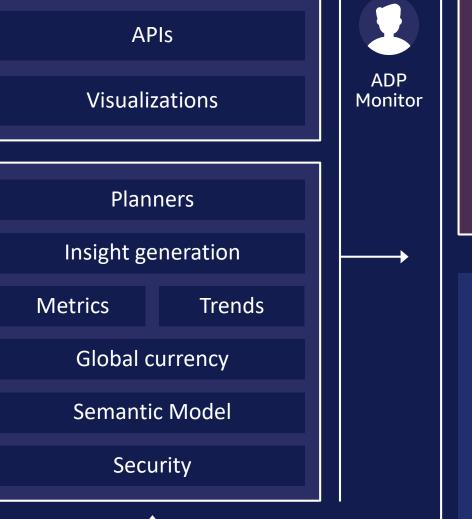
ADP Payroll ADP HR System **ADP Talent** ADP Time and Benefits **ADP Survey** (Return-to-work)

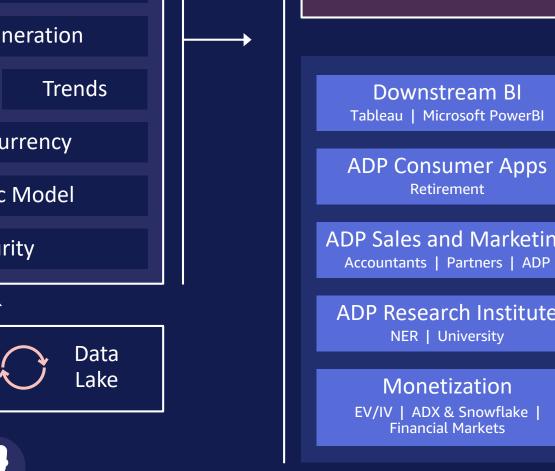
ADP Workforce Manager HR / Tax (Workday / Oracle) (Kronos) HR Ontologies and 70+ external reference sources Taxonomies (ONET, ESCO) Licensed business data Corp data (location, company info) (by use case) 400+ marketplace partners (future)



Relational

Warehouse







ADP DataCloud Insights | Analytics

> **ADP Mobile** My ADP

ADP Systems WFN | RM | Lifion

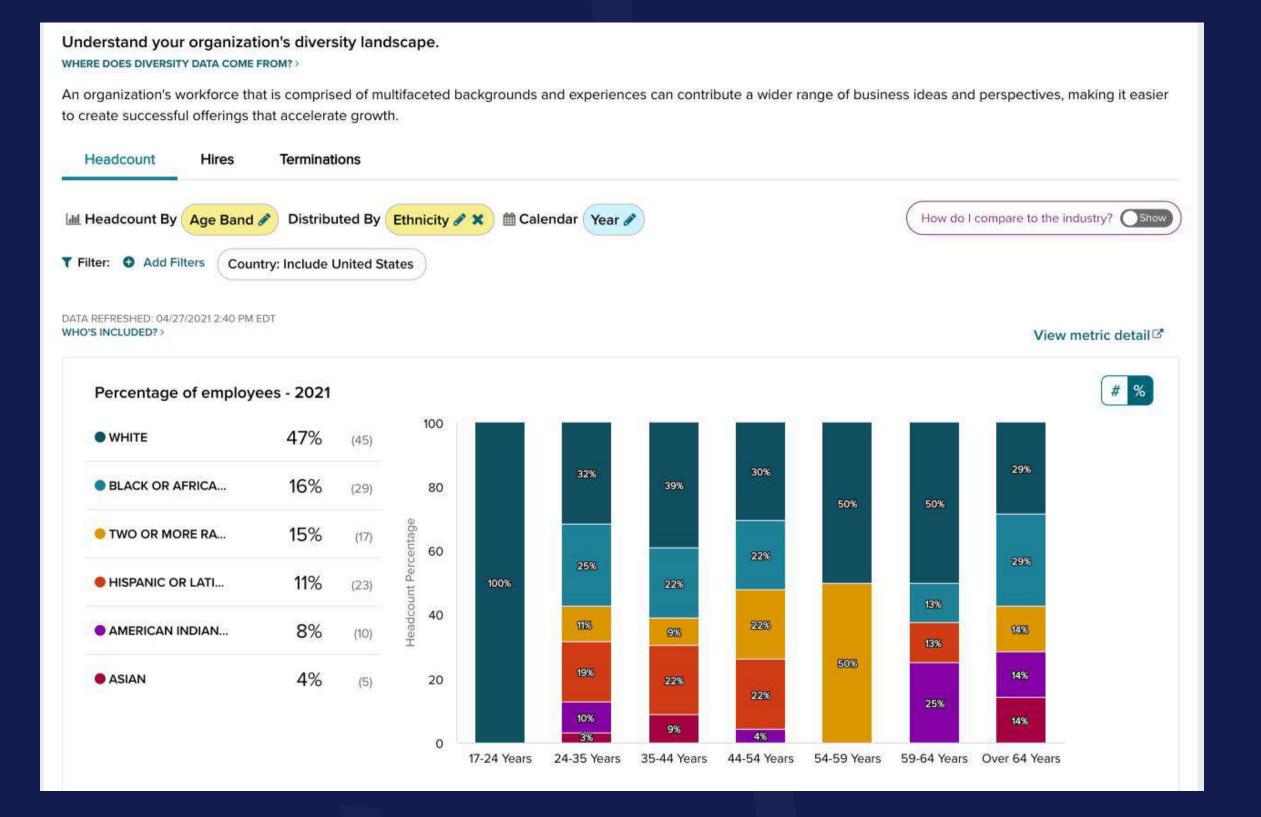
ADP Sales and Marketing

ADP Research Institute

Financial Markets

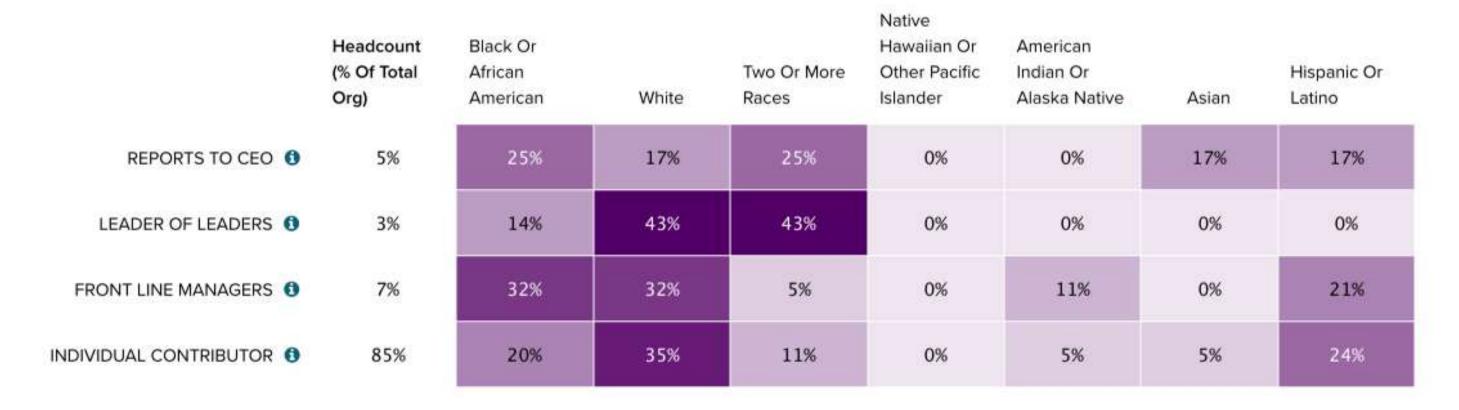








Org Level Headcount % - 2021



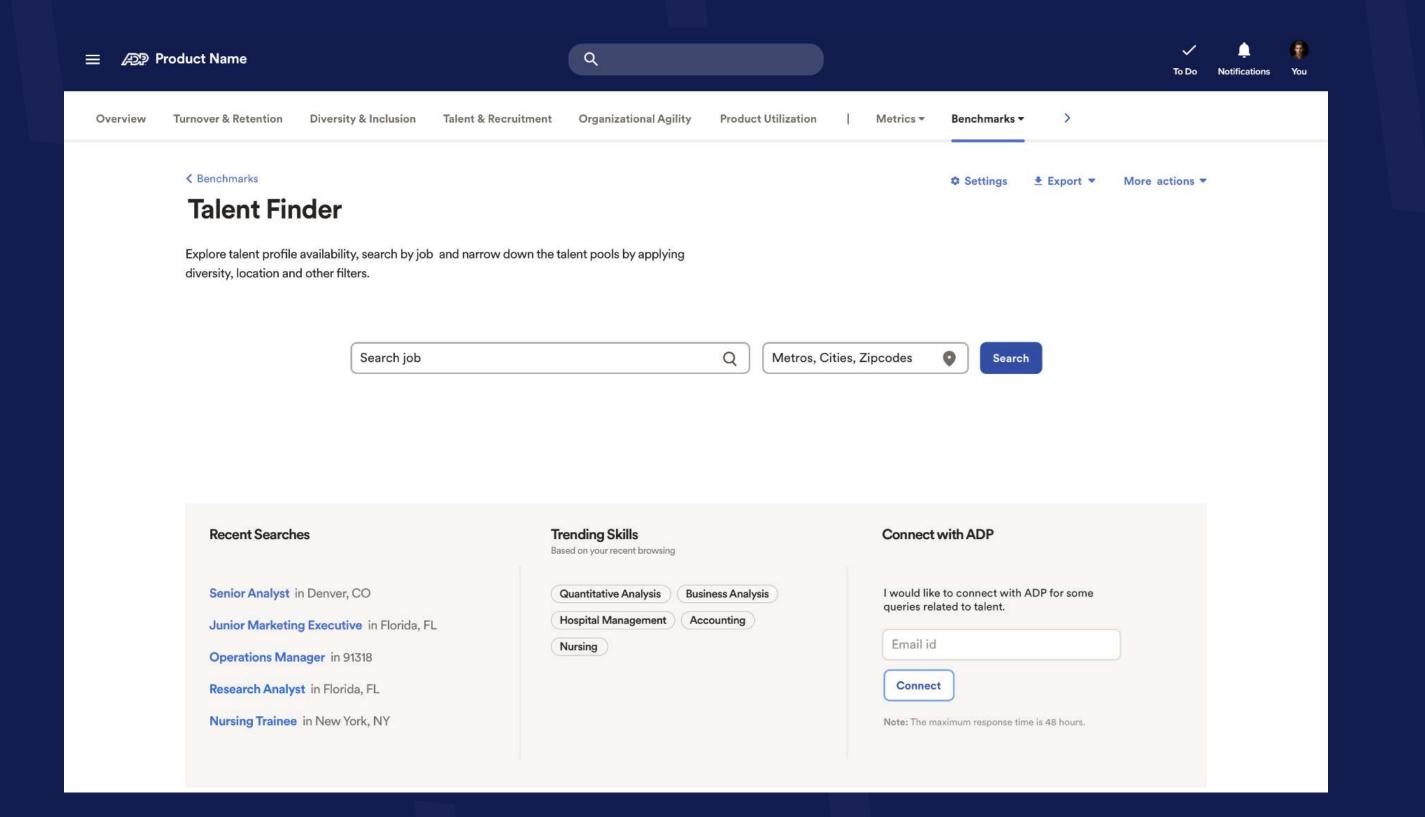
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



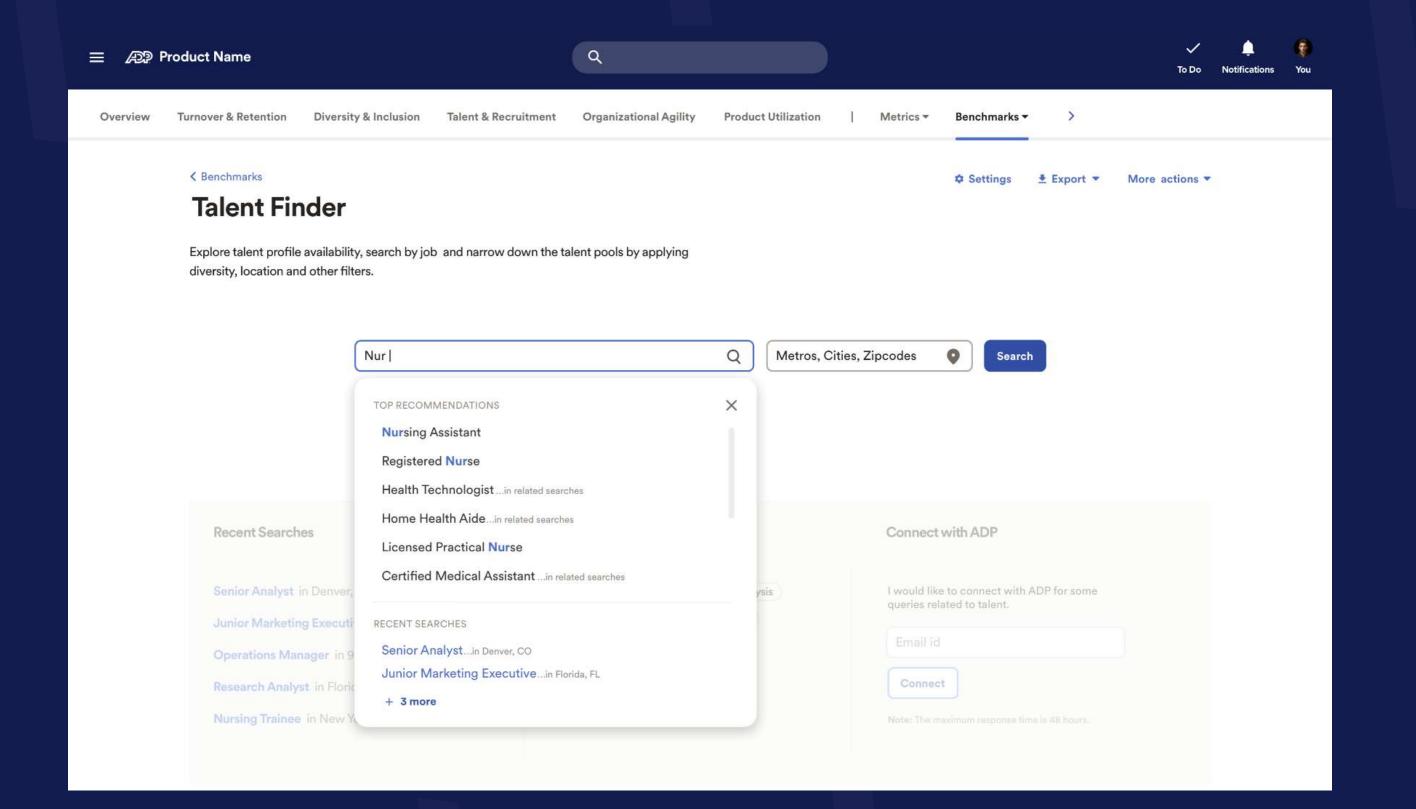
^{*}Org levels are based off your 'reports-to' structure. For more info, review your org tree and/or download this chart's org level grouping details.

Ethnicity as a % of Work Location Headcount - 2021 Work Location 001 - Parsippany NJ 001 - Parsippany NJ @ Edit YOU ADP BENCHMARK INDUSTRY COMPARISON FOOD MANUFACTURING YOUR ORGANIZATION in 001 - Parsippany NJ in Parsippany, New Jersey Show details ~ Show details v **ETHNICITY** Data as of: 1/15/2021 Data as of: 1/1/2021 26% Hispanic or Latino 30% White 20% Black or African American 25% 16% Two or More Races 8% 9% 8% Asian 1% American Indian or Alaskan Native

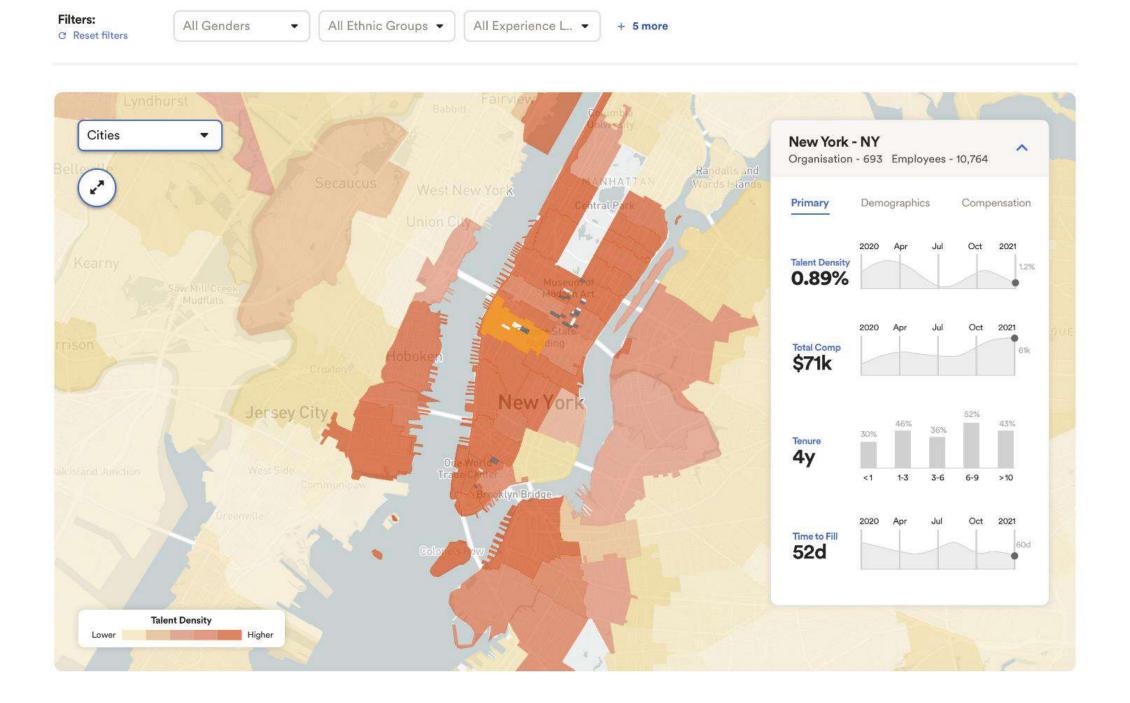




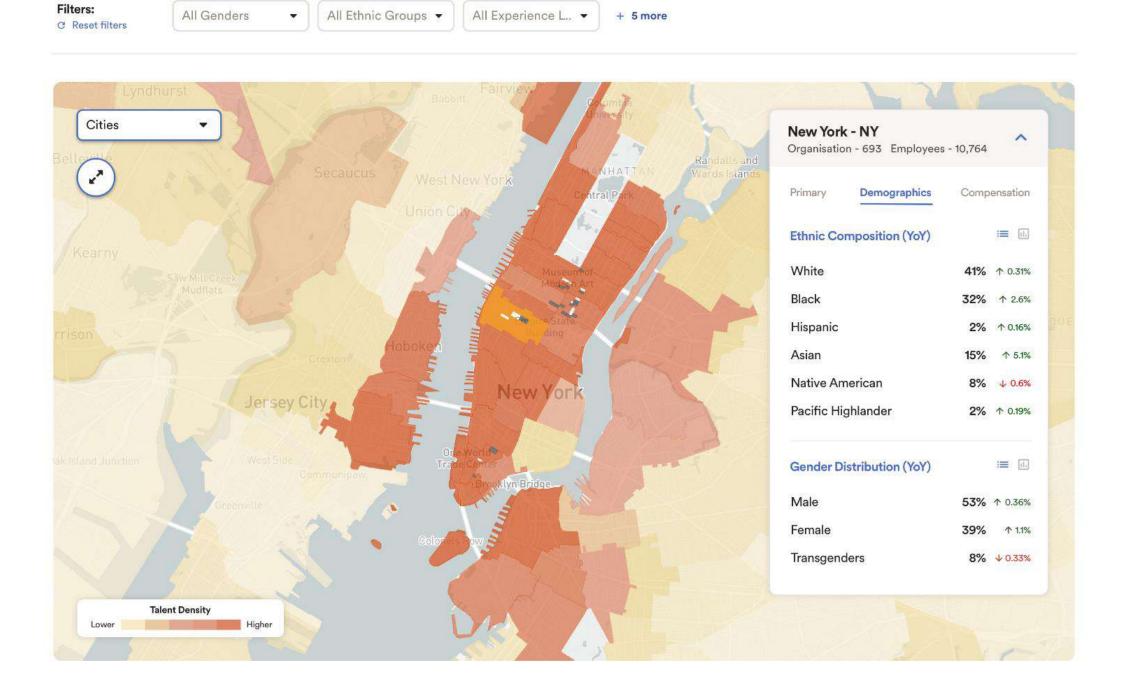




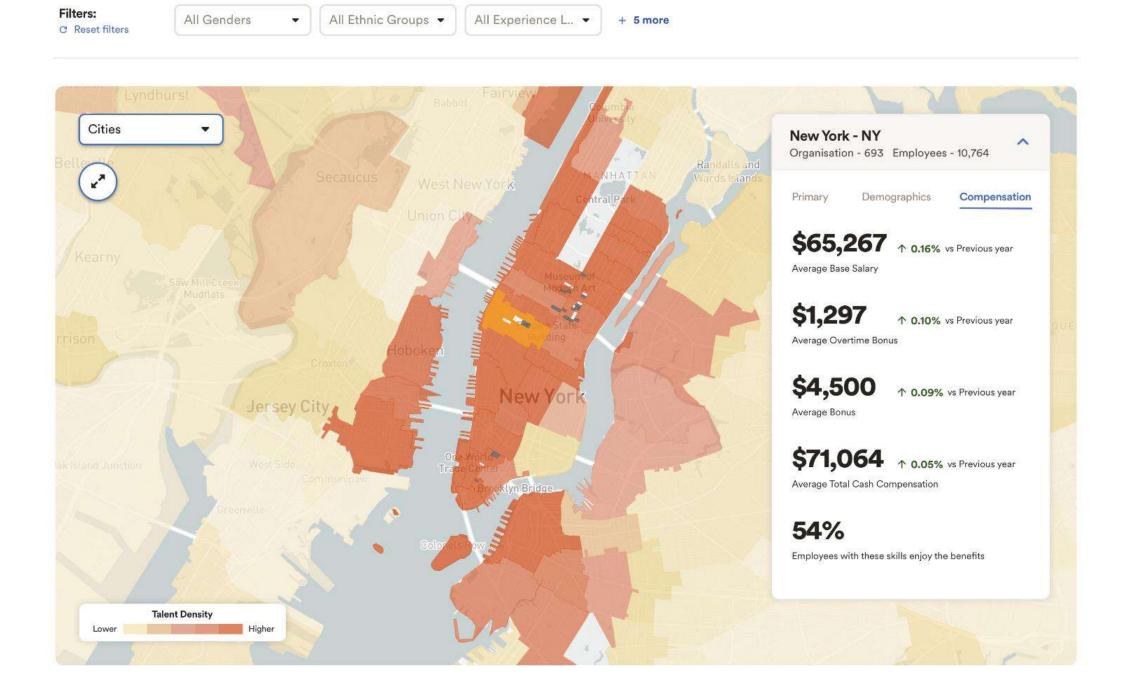






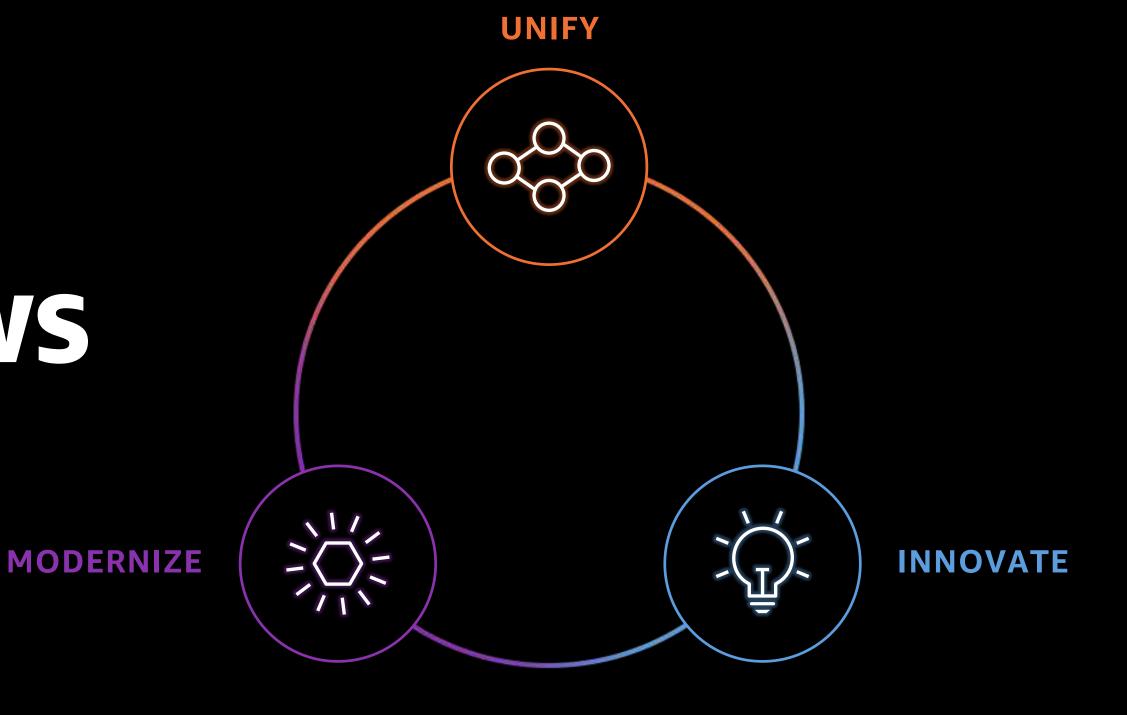








Modern Data Strategy on AWS



Thank You