



# aws INNOVATE

DATA EDITION

23 August, 2022

# **Harness the power of data and choose the right analytics for your use case**

Francis McGregor-Macdonald

Manager, Analytics Specialist Solutions Architect  
Amazon Web Services



# **Analytics: Why does it matter?**

# Analytics: Why does it matter?



Make better decisions, faster

# Analytics: Why does it matter?



Make better decisions, faster



Respond better to the unexpected

# Analytics: Why does it matter?



Make better decisions, faster



Respond better to the unexpected



Uncover new opportunities

# Analytics: Why does it matter?



Make better decisions, faster



Respond better to the unexpected



Uncover new opportunities



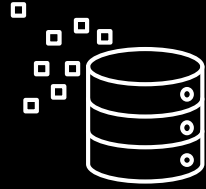
Improve efficiencies

# Challenges of building a modern data strategy



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Growing  
Exponentially



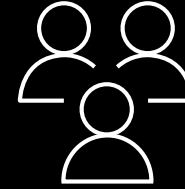
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From new  
sources



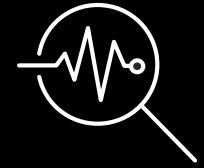
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Increasingly  
diverse



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Used by  
many people



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Analyzed by many  
applications



# Support your organization with future-proof modern data architecture

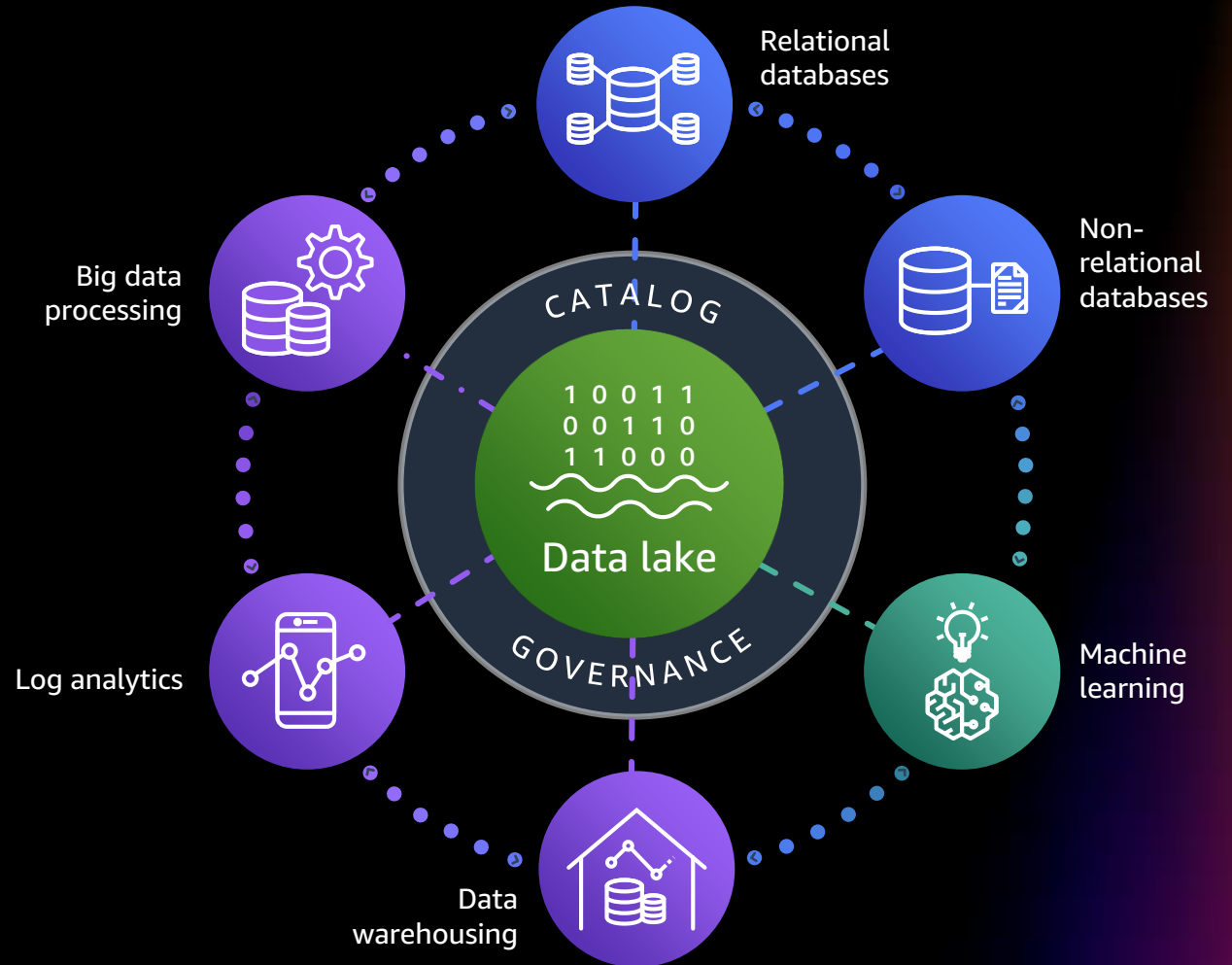
Data at any scale

Unified governance

Purpose built for price and performance

Serverless and easy to use

AI and ML to solve business challenges



# Support your organization with future-proof modern data architecture

Data at any scale

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# Support your organization with future-proof modern data architecture

Data at any scale

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Unified governance

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# Support your organization with future-proof modern data architecture

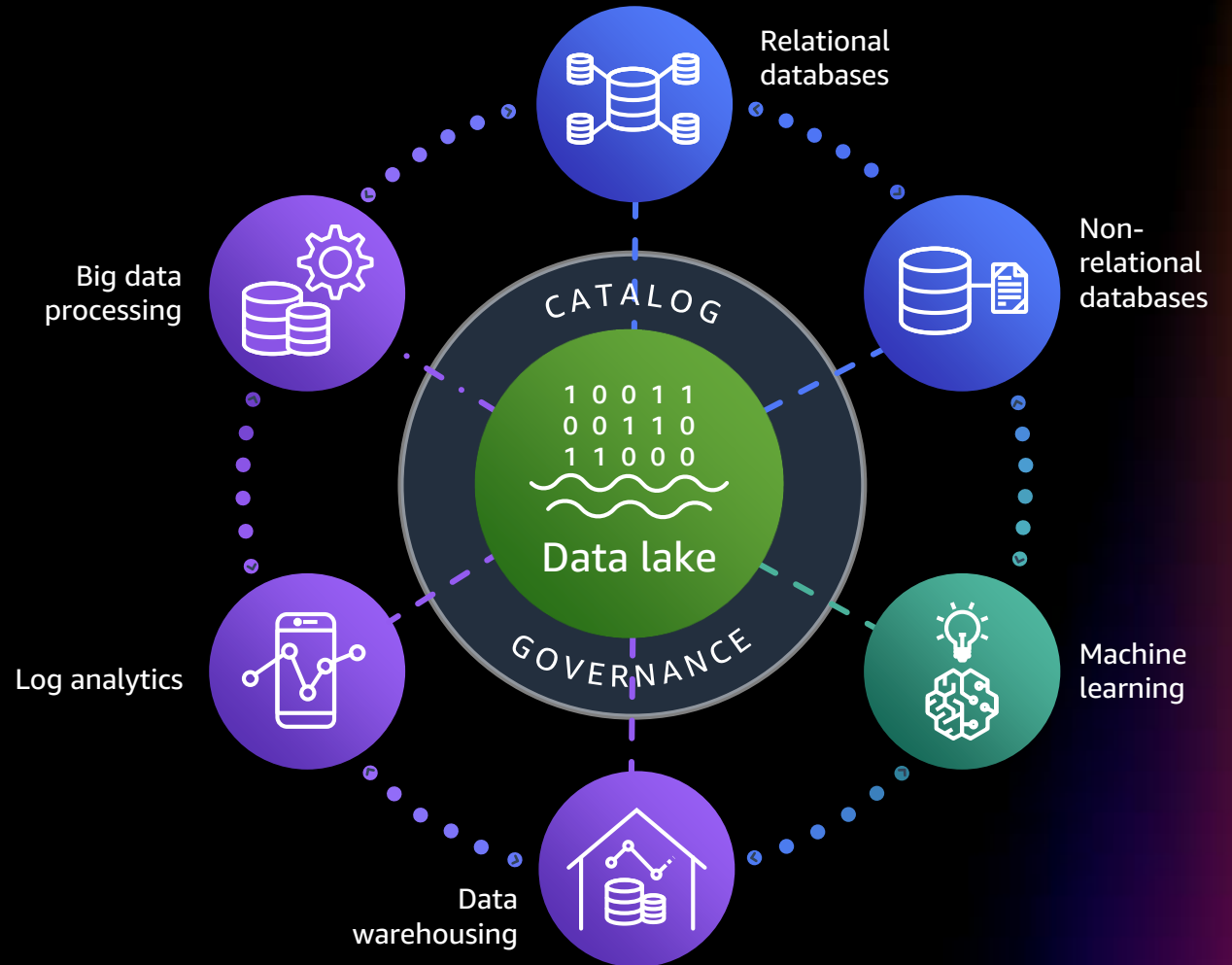
Data at any scale

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# Scalable data lakes

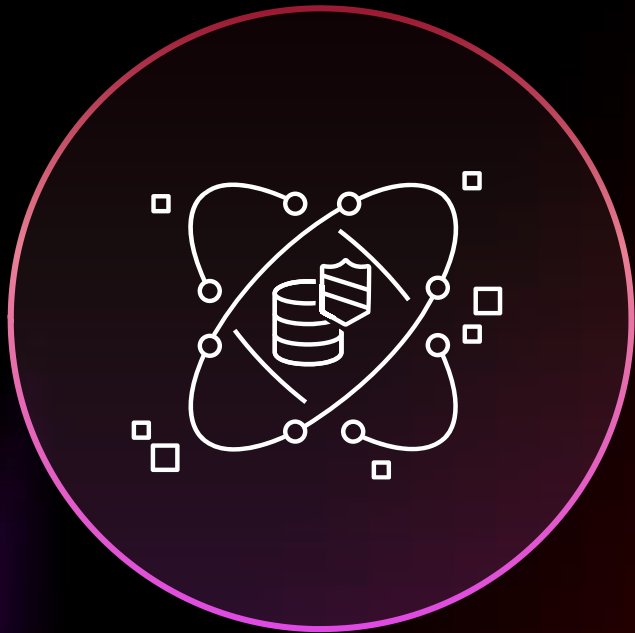
Broadest portfolio  
of analytics tools



**Amazon  
S3**

Unmatched durability,  
availability, and scalability

Built to store and retrieve  
any amount of data



# **Unified data access, security, and governance**

# AWS Lake Formation

Row-level security

Data sharing made simple

Tag based access control



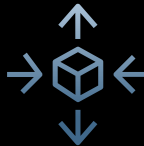


# AWS Glue

SIMPLE, SCALABLE,  
AND SERVERLESS



Integrate data faster



Automate at scale



No servers to manage



**Purpose-built for  
performance and  
cost**



AMAZON  
ATHENA

Interactive  
query



AMAZON  
EMR

Big data  
processing



AMAZON  
OPENSEARCH  
SERVICE

Log and  
search  
analytics



AMAZON  
KINESIS & MSK

Real-time  
analytics



AMAZON  
REDSHIFT

Data  
warehousing



AMAZON  
QUICKSIGHT

Insights  
discovery  
and  
visualization

# Amazon Athena

QUERY ALL YOUR  
DATA USING SQL



Serverless



Open and flexible



Fast and interactive



Cost-effective

# Amazon EMR

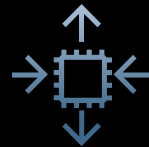
RUN BIG DATA APPLICATIONS  
IN THE CLOUD



Fully managed and customizable



Latest open-source releases



Automatically scale up and down



Best price-performance

# Amazon OpenSearch Service

SUCCESSOR TO  
AMAZON ELASTICSEARCH SERVICE



Fully managed



Log and search analytics



Cost-effective

# Amazon Kinesis

COLLECT, PROCESS, AND  
ANALYZE VIDEO AND DATA  
STREAMS IN REAL TIME



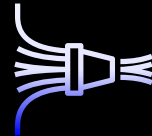
Amazon Kinesis Data Streams



Amazon Kinesis Data Analytics



Amazon Kinesis Video Streams



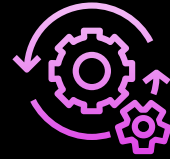
Amazon Kinesis Data Firehose

# Amazon MSK

FULLY MANAGED, HIGHLY  
AVAILABLE, AND SECURE

Kafka

Compatible



Fully managed



Highly available

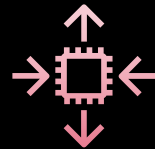


Secure



# Amazon Redshift

ANALYTICS AT SCALE



Performance at any scale



Analyze all your data



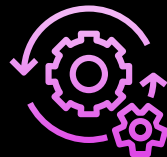
Easy analytics for everyone

# Amazon QuickSight

FULLY MANAGED, HIGHLY  
AVAILABLE, AND SECURE

Kafka

Compatible



Fully managed



Highly available



Secure



**Serverless**  
**and easy to use**

# AWS has the most serverless options for data analytics in the cloud

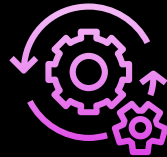




# **ML** integration

# Amazon SageMaker

COMPLETE END-TO-END ML  
SERVICE



Fully managed



Comprehensive



Secure

# AWS brings ML closer to data



Databases



Data warehouses  
+ data lakes



Business  
intelligence tools

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AMAZON  
AURORA ML



AMAZON  
NEPTUNE ML



AMAZON  
REDSHIFT ML



AMAZON  
ATHENA ML



AMAZON  
QUICKSIGHT ML

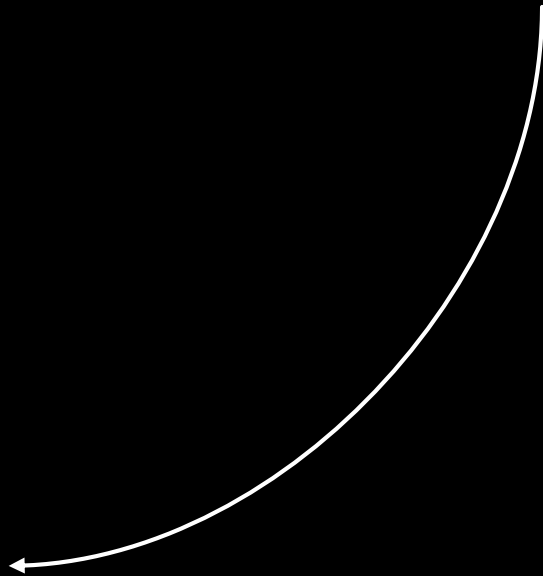


# Modern data strategy on AWS



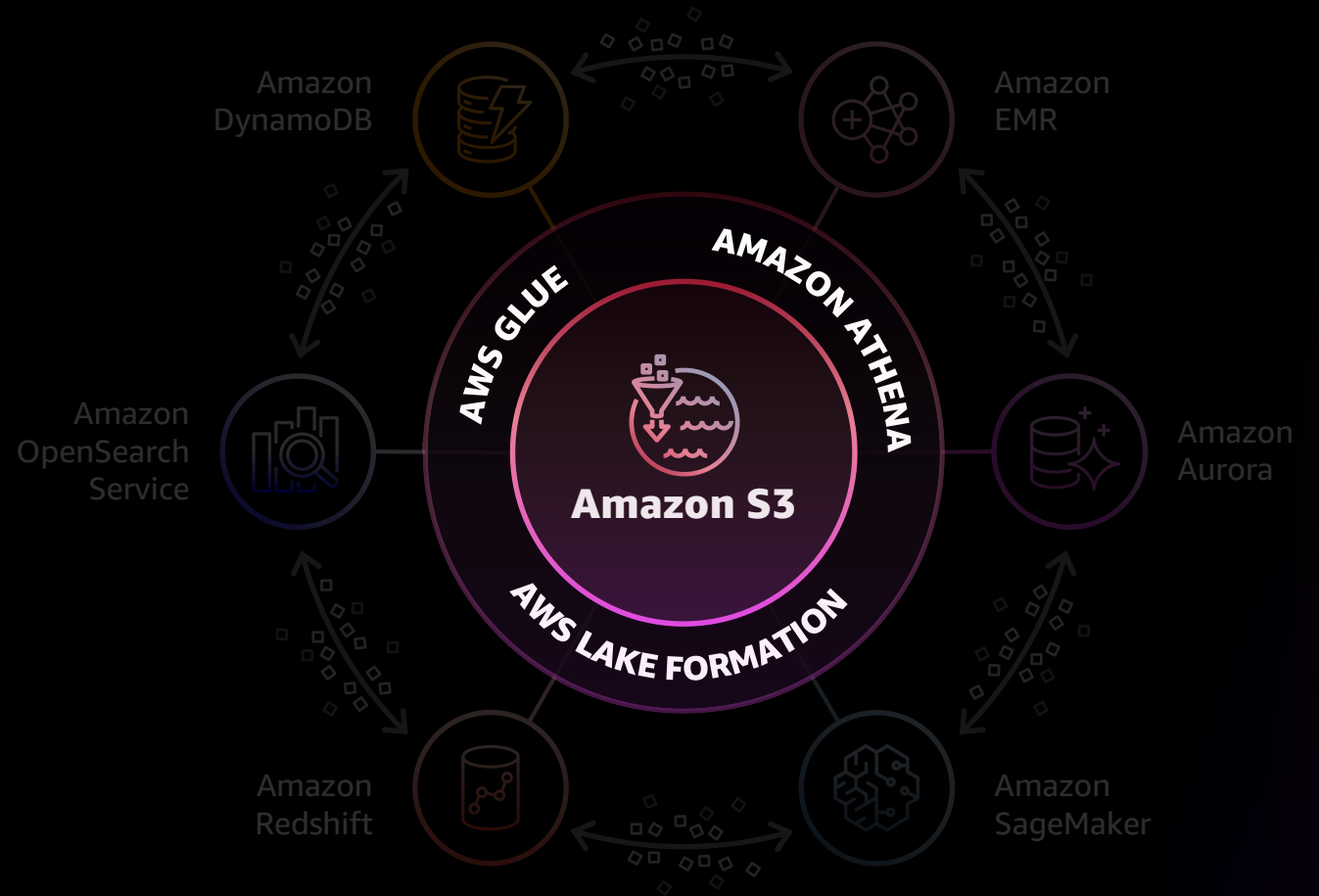
**ANY COMPANY**

Fictious Company





# Modern data strategy on AWS



# Modern data strategy on AWS



1

Answer business questions  
"Avg trip duration"  
"Most popular location"  
"Revenue by state"



Making better decisions, faster



# Modern data strategy on AWS



2

Predict how many bikes will be required at each station per day



Improve efficiency



# Modern data strategy on AWS

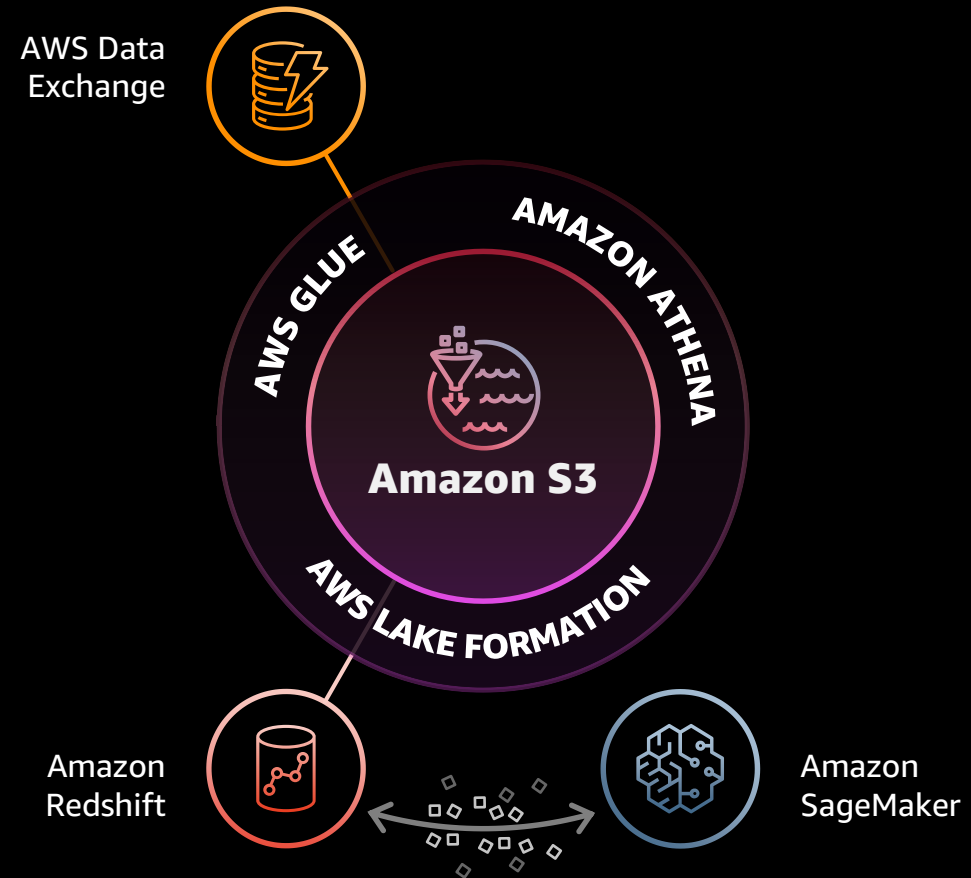


3

Provide riding statistics to external consumers / data monetization



Uncover new opportunities



# Modern data strategy on AWS

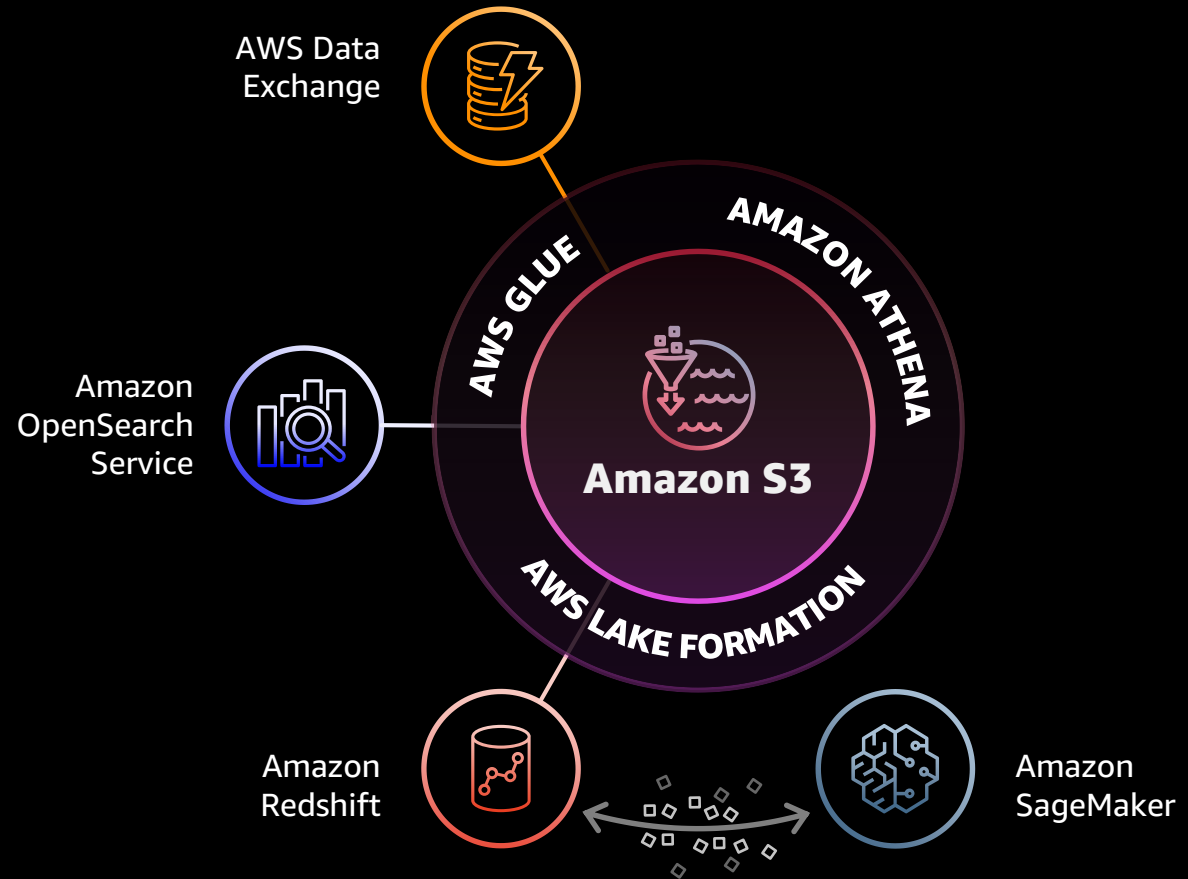


4

Real-time trip monitoring and anomaly detection



Respond to the unexpected



# Session recap

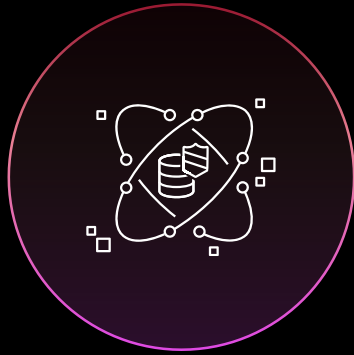


Scalable data  
lakes

# Session recap



Scalable data  
lakes

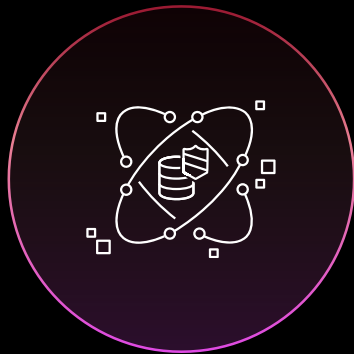


Unified data  
access, security,  
and governance

# Session recap



Scalable data  
lakes



Unified data  
access, security,  
and governance



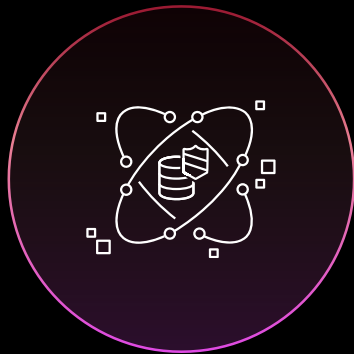
Purpose-built for  
performance and  
cost



# Session recap



Scalable data  
lakes



Unified data  
access, security,  
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Purpose-built for  
performance and  
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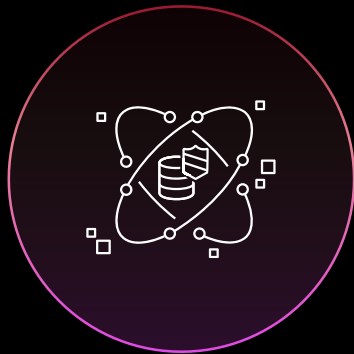


Serverless and  
easy to use

# Session recap



Scalable data  
lakes



Unified data  
access, security,  
and governance



Purpose-built for  
performance and  
cost



Serverless and  
easy to use



Built-in machine  
learning

# AWS analytics sessions

- Black belt tips: Operating at scale with your data in an Amazon S3 data lake
- Data governance at scale on AWS
- Simplify data integration with AWS Glue
- Deliver insights faster with AWS Glue interactive sessions and continuous delivery
- SQL-based stream processing at scale with Apache Kafka and Apache Flink
- Observability made easy with Amazon OpenSearch Service
- Migrate big data workloads to AWS with Amazon EMR
- Unleash your organization's data analytics potential with Amazon Redshift
- Unlocking analytics capability by migrating your legacy database to an Amazon Redshift data warehouse
- Accelerate your time-to-insight with Amazon Redshift streaming
- Build highly scalable and extensible SQL-based data pipeline using Managed Workflow for Apache Airflow and Amazon Redshift
- Go beyond insights to predictive analytics with Amazon Redshift ML and Amazon SageMaker
- Data virtualization and unifying disparate data sources with Amazon Athena
- Embedding insights within your applications with Amazon QuickSight

# Visit the AWS Data resource hub

A modern data strategy can help you manage, act on, and react to your data so you can make better decisions, respond faster, and uncover new opportunities. Dive deeper with these resources today.

- Harness data to reinvent your organization
- In unpredictable times, a data strategy is key
- Make data a strategic asset
- Rewiring your culture to be data-driven
- Put your data to work with a modern analytics approach
- ... and more!



<https://tinyurl.com/data-hub-aws>

[Visit resource hub](#)

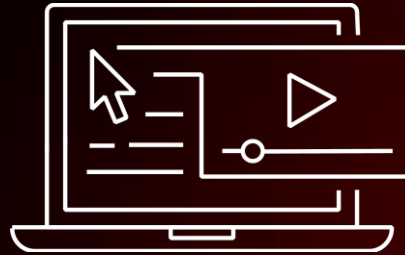
# AWS Training and Certification for Data and Analytics



## **AWS Data & Analytics FREE Training Resources**

Discover how to harness data, one of the world's most valuable resources, and innovate at scale.

<https://bit.ly/3Ntlhy7>



## **AWS Data Analytics Learning Plan**

This learning plan expose you to the fastest way to get answers from all your data to all your users. It can also help prepare you for the AWS Certified Data Analytics - Specialty certification exam.

<https://bit.ly/3wBVjD1>



## **AWS Certified Data Analytics - Specialty**

Earning AWS Certified Data Analytics – Specialty validates expertise in using AWS data lakes and analytics services.

<https://go.aws/3lwF0RR>

# Thank you for attending AWS Innovate – Data Edition

We hope you found it interesting! A kind reminder to **complete the survey**.  
Let us know what you thought of today's event and how we can improve the event experience for you in the future.



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# Thank you!