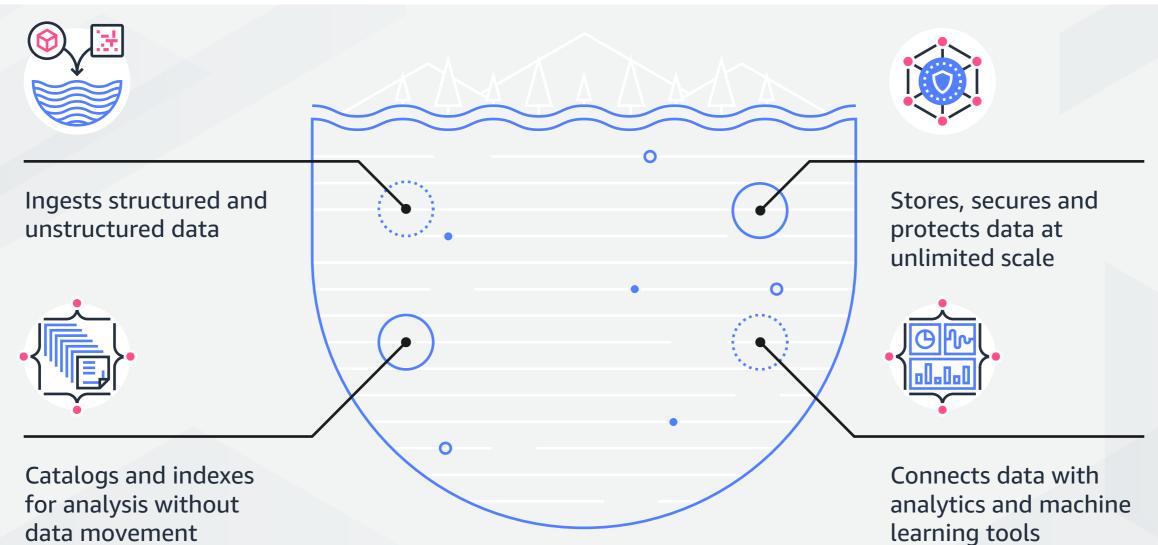
### Build your Data Lake on Amazon S3



### What is a data lake?

A data lake is a centralized repository that allows you to migrate and store all structured and unstructured data at unlimited scale, as well as gain insights through big data analytics and machine learning tools.

# Key components of a data lake



# Unprecedented data growth from new and diverse sources



generated in the last 5 years

of data worldwide



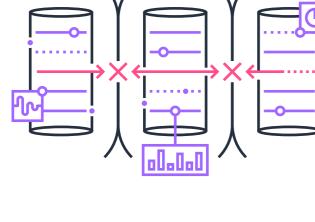
to 163 zettabytes (ZB) by 2025



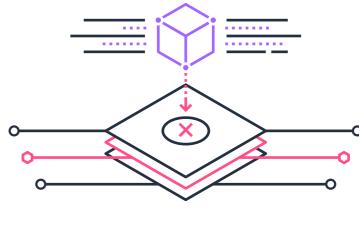
only analyze 12% of their data

# Why?

### Challenges to gaining the full value of your data **Growing on-premises costs** Disconnected data silos **Incompatible data formats**







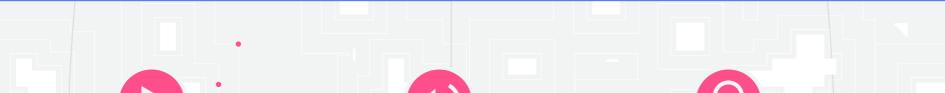
### Build your data lake on Amazon S3.

Break down data silos.

# Amazon S3 is the largest and most performant storage service for structured and unstructured data,

allowing you to cost-effectively build and scale a data lake of any size in a secure environment.

10,000+ data lakes on Amazon S3





# S3 data lake

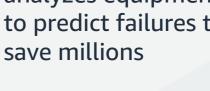
runs analytics on an

Why Amazon S3 is the best

place to build a data lake

connected devices

drive engagement



### **Unlimited scalability Cost-effective** Most durable, Amazon S3 is and high performance designed for storage that scales performant cloud



on demand

**Data management** features with object-level controls



Best security,

compliance and

audit capabilities

storage service



Most options to migrate data to the cloud

99.9999999999%

(11 9s) of durability



quickly process file system data

**Connect to Amazon** 

**FSx for Lustre to** 



**Automated data** 

**Lake Formation** 

lake setup with AWS

services

Works seamlessly

with analytics and

machine learning



- Amazon FSx for Lustre

- Amazon EMR

## Ingest and store data

Amazon S3 data lake lifecycle

A data lake built on Amazon S3 lets you store everything in one

place, dive into your data with flexible access, future-proof your

storage, and connect to powerful insights.

- Catalog and transform data

Migrate data from a variety of data sources

Unmatched scale, durability, security, and performance

Remove siloes with one data lake for structured and unstructured data

Real-time data movement

Analyze Run AWS analytics and machine learning services to gain insights

Know your data with better management and higher quality data

AWS Glue automates the effort in building, maintaining and running ETL jobs

- Amazon SageMaker

- Amazon Rekognition

AWS Glue crawls, catalogs, and indexes data for searchability



# Extract value from data

Maximize operational efficiencies

Improve customer interactions Guide R&D innovation choices

- Amazon Athena

- Amazon Redshift

Amazon S3 is the storage service of choice to build a data lake.

https://aws.amazon.com/products/storage/data-lake-storage/