

# EVOLVING DATA ARCHITECTURES



Enterprise DW



Data Lakes



Streaming  
Data



Cloud DW  
/Platforms



Data Lakehouse  
/DBaaS



Data Mesh

1980

2005

2010

2012

2020

Today

teradata.



CLUDERA



# EVOLVING DATA ARCHITECTURES



Enterprise  
DW



Data  
Lakes



Streaming  
Data



Cloud DW  
/Platforms



Data  
Lakehouse



Data  
Mesh

- Modeled data
- Structured
- Brittle ETL processes

# EVOLVING DATA ARCHITECTURES



Enterprise  
DW



**Data  
Lakes**



Streaming  
Data



Cloud DW  
/Platforms



Data  
Lakehouse



Data  
Mesh

- Schema on read
- Structured & Unstructured
- ELT
- Complements DW

# EVOLVING DATA ARCHITECTURES



Enterprise  
DW



Data  
Lakes



Streaming  
Data



Cloud DW  
/Platforms



Data  
Lakehouse



Data  
Mesh

- Publish and Sync
- Structured & Unstructured
- Stream Generation - CDC

# EVOLVING DATA ARCHITECTURES



Enterprise  
DW



Data  
Lakes



Streaming  
Data



Cloud DW  
/Platforms



Data  
Lakehouse



Data  
Mesh

- Modeled data
- ELT with Pushdown SQL
- Structured... & Unstructured
- Warehouse Automation

# EVOLVING DATA ARCHITECTURES



Enterprise  
DW



Data  
Lakes



Streaming  
Data



Cloud DW  
/Platforms



Data  
Lakehouse



Data  
Mesh

- Lake + DW
- ACID
- Batch and Streaming

# EVOLVING DATA ARCHITECTURES



Enterprise  
DW



Data  
Lakes



Streaming  
Data



Cloud DW  
/Platforms



Data  
Lakehouse



Data  
Mesh

- Decentralized
- Domain centric
- Consistency?
- Emerging

# Evolving Data Architectures



Enterprise  
DW



Data  
Lakes



Streaming  
Data



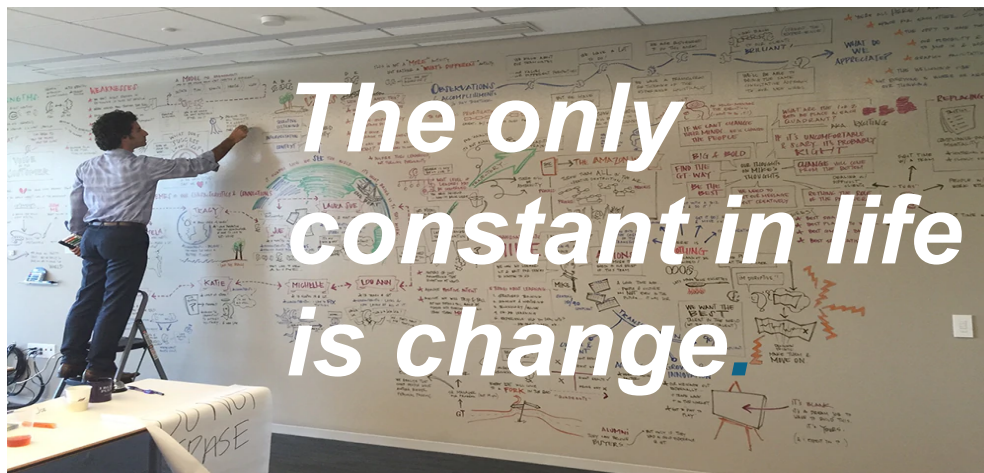
Cloud DW  
/Platforms




Data  
Lakehouse




Data  
Mesh







**Data fabrics have emerged as an increasingly popular design choice to simplify an organization's data integration infrastructure and create a scalable architecture that reduces the technical debt seen in most D&A teams due to the rising integration challenge.**



- Gartner

# KEY CAPABILITIES OF A DATA INTEGRATION FABRIC



Enterprise DW



Data Lakes



Streaming  
Data



Cloud DW  
/Platforms



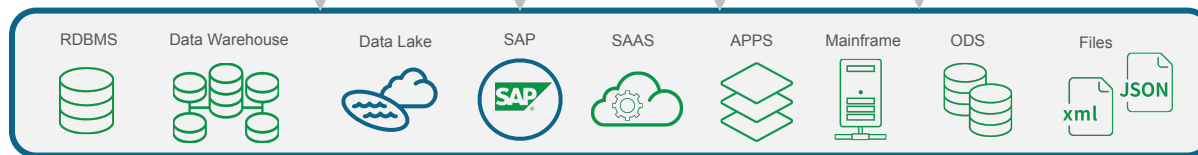
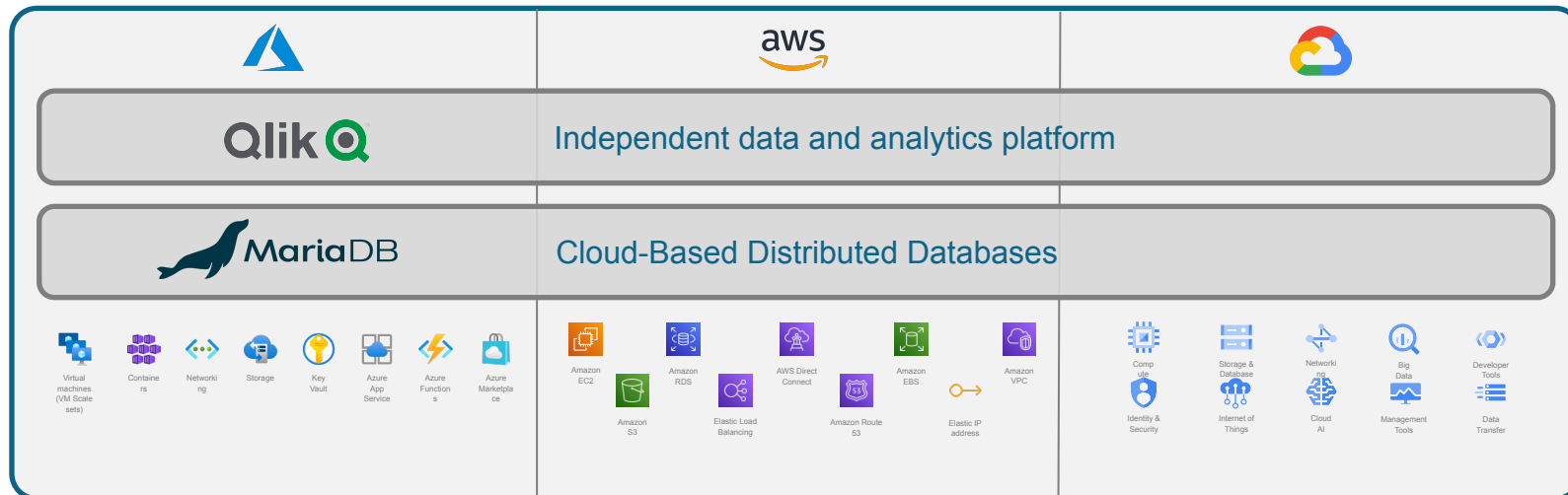
Data Lakehouse  
/DBaaS



Data Mesh

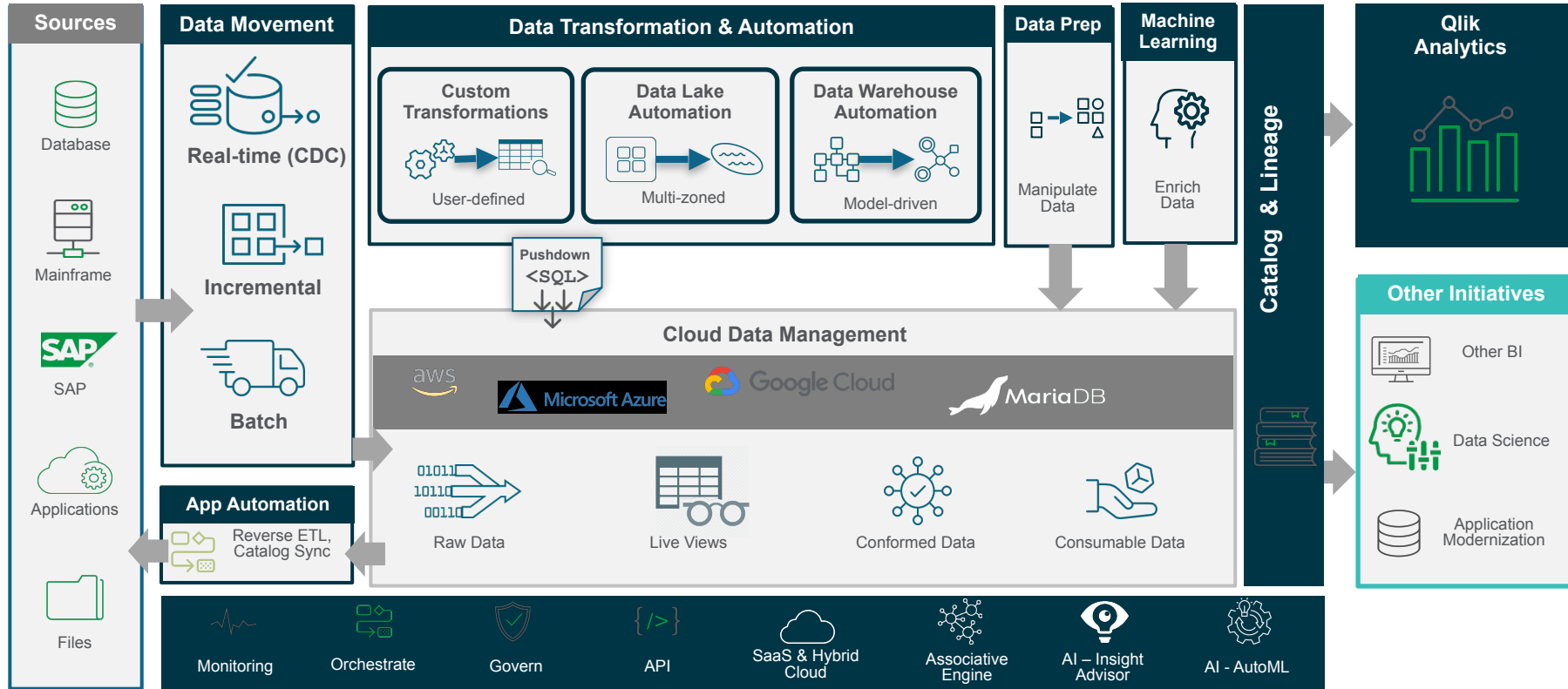
## Data Integration Fabric

# DRIVING DIGITAL TRANSFORMATION



# QLIK DATA INTEGRATION

## Real-time data integration fabric for any data architecture



# DEMO



# QLIK CLOUD DATA SERVICES

Improve data timeliness, reliability and quality for downstream analytics



A powerful **data integration fabric** to help you **deliver, transform, and unify** enterprise data in **real-time** via flexible, governed, and reusable **data pipelines**

**Qlik** <sup>®</sup>  
**TO BE CERTAIN.**

 **MariaDB**

# MARIADB XPAND - MODERN DISTRIBUTED SQL

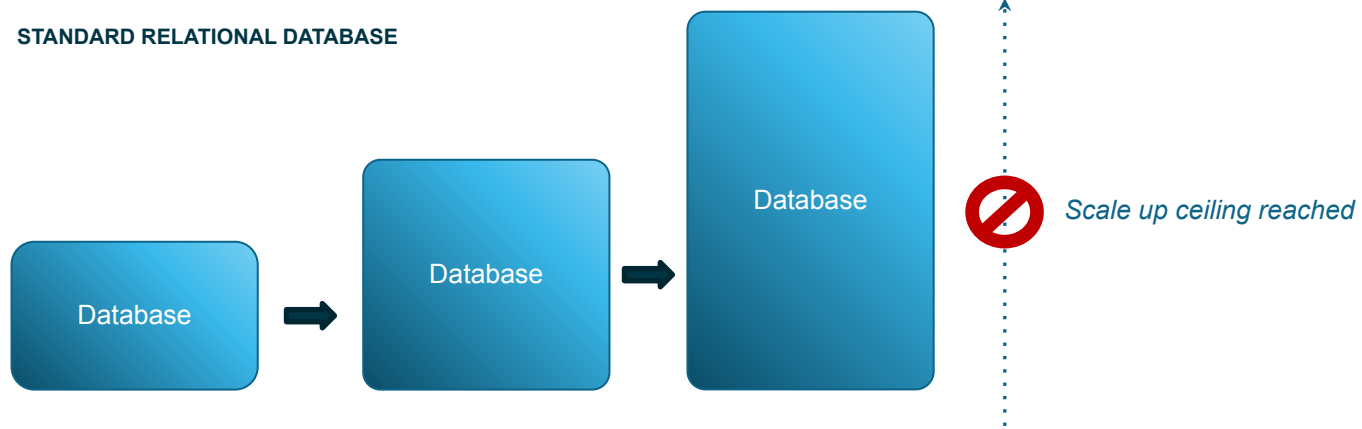
- Unlimited Scale
- Massive Throughput
- Indestructible Data
- Full ACID Compliance



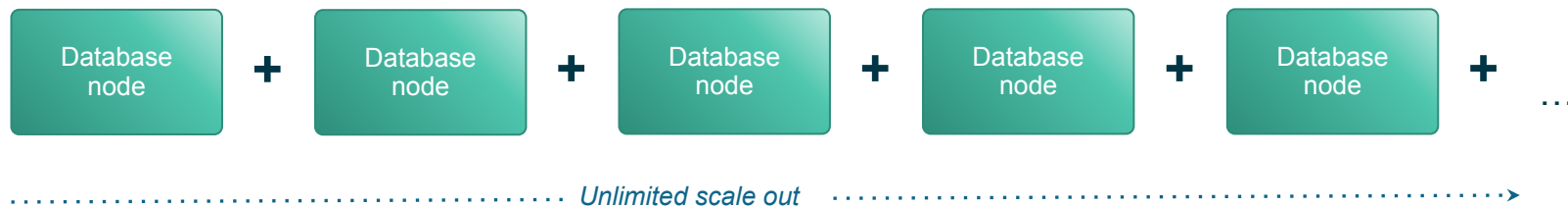


# UNLIMITED SCALE

## STANDARD RELATIONAL DATABASE



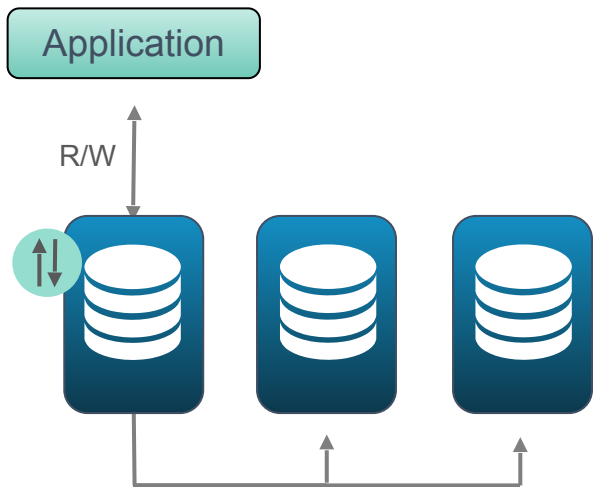
## DISTRIBUTED SQL DATABASE



# PARALLEL PROCESSING

## Traditional Cloud Database

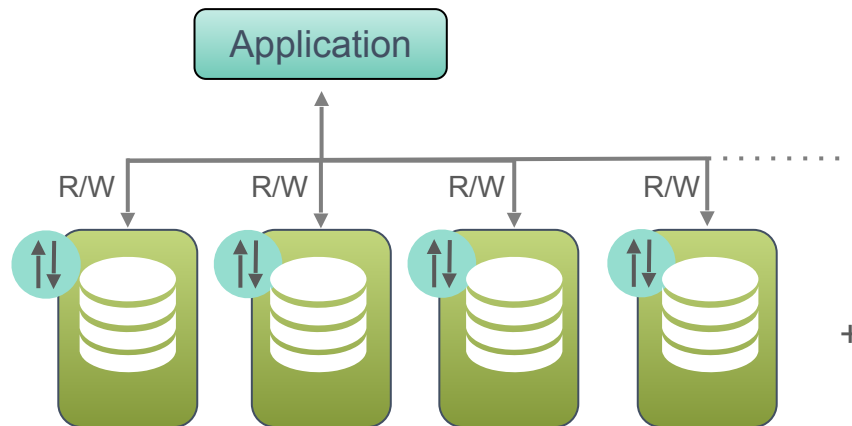
Single Primary Node



VS

## Xpand Distributed Database

R/W to All Nodes in Parallel



# SAMSUNG

Replaced an in-house sharding solution with Xpanc'

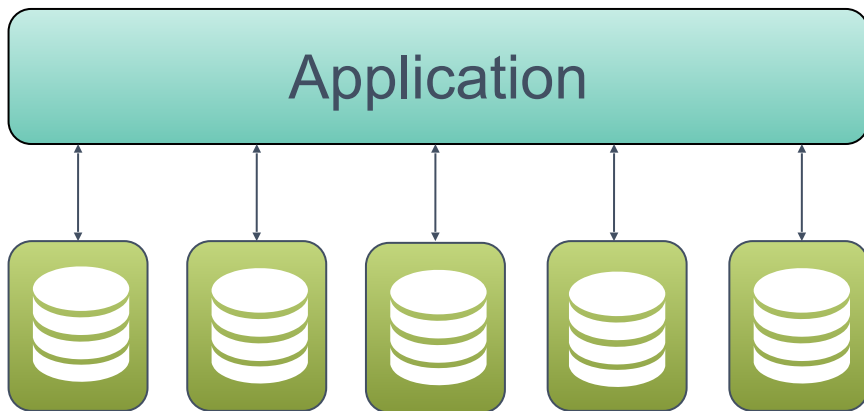
Used to manage hundreds of millions of customers' access to Samsung Cloud...

@500,000 transactions/second



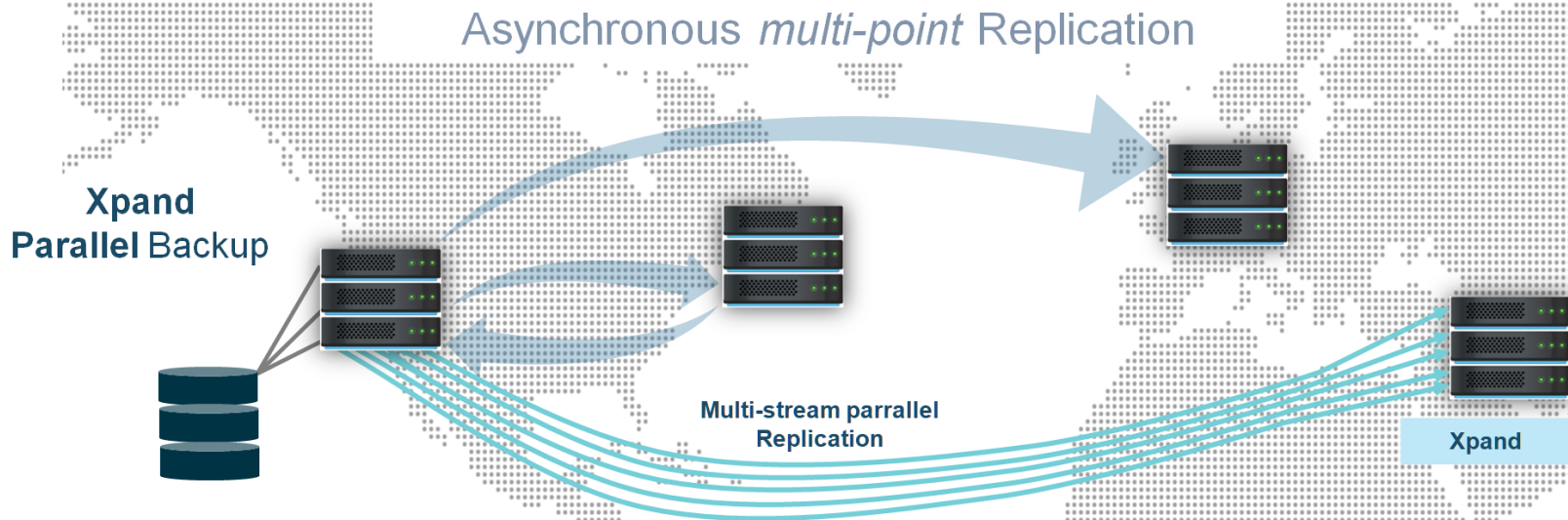
# CONTINUOUS AVAILABILITY

- Maintains HA
- Tolerates infrastructure failures
- Protect data within the cluster



# BACKUP, REPLICATION & DISASTER RECOVERY

Replicate to any cloud and datacenter, anywhere



# BUSINESS VALUE - SCALE, ANALYTICS, AND AGILITY

- Quickly and efficiently scale out OLTP
- Continuous Availability
- Real Time OLAP



SkySQL Xpand



Data Warehouse -  
SkySQL ColumnStore

“

Streaming our analytical data  
from SQL Server to MariaDB via Qlik  
was fast and easy.

...Qlik and MariaDB give us the ability  
to utilize our powerful new data lake  
for our data needs.

- Gina Hanks, Sr Director of IT

## TRY SKYSQL TODAY AND RECEIVE A \$500 CREDIT!

No credit card required to start MariaDB SkySQL. Discover how you could save up to 90% of your database cost today. It is the only cloud database that can take your business anywhere: Any cloud. Any workload. Any scale.

- ✓ Fully managed, pay-as-you-go database-as-a-service
- ✓ Transactions and multi-node data warehousing
- ✓ Scale-out distributed SQL for strong consistency and HA
- ✓ SkySQL is MySQL/MariaDB compatible for easy lift and shift
- ✓ Built on Kubernetes to support multicloud and hybrid

### NEW FEATURES

- ✓ Remote monitoring for your on-premises databases
- ✓ Prometheus API support for integration of external, real-time alerts and monitoring
- ✓ New data logging capabilities for MaxScale, Enterprise Audit, Xpand and slow queries

## SIGN UP OR SIGN IN TO SKYSQL



Sign up or Sign in with Google



Sign up or Sign in with GitHub



Sign up or Sign in with LinkedIn

Or use your email address

Next



# NEXT STEPS

Check out these sources to learn more about MariaDB

- **Take the free Qlik Test Drive**
  - Go to [www.qlik.com/us/trial/replicate](http://www.qlik.com/us/trial/replicate) to test drive Qlik today
- **Try out Xpand on SkySQL**
  - Go to [cloud.mariadb.com/skysql](http://cloud.mariadb.com/skysql) to start a trial
  - Take a tour of the SkySQL Portal
  - Chat with our experts on how Xpand can help you meet your SLAs
- **Subscribe to [youtube.com/@mariadb](https://youtube.com/@mariadb)**
  - Find more videos on Xpand, SkySQL, and MariaDB



**THANK YOU**



**OPENWORKS**

**BE UNSTOPPABLE**