

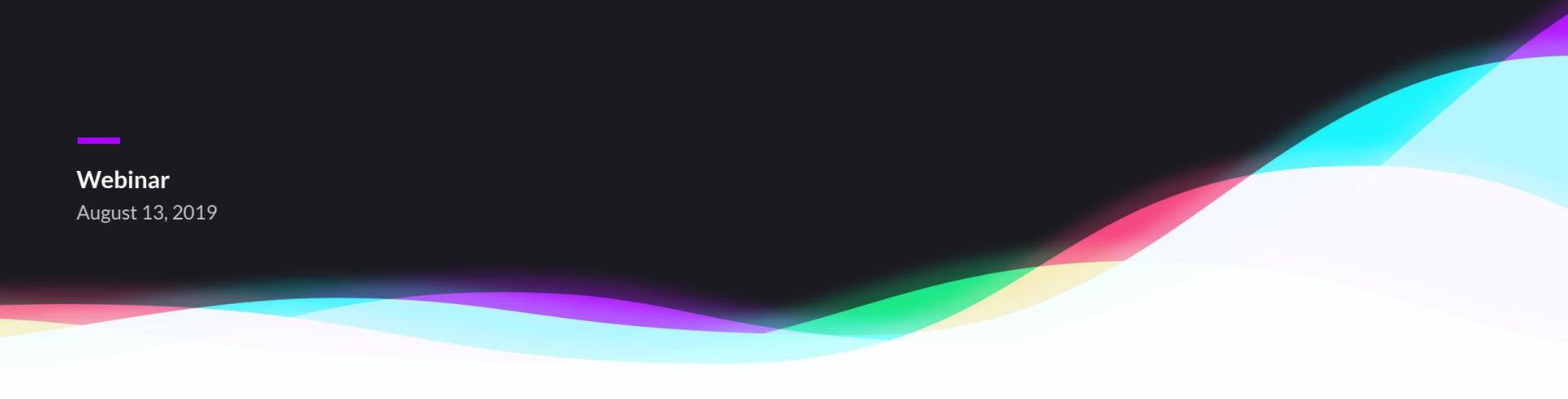
memSQL 

# Modernizing Portfolio Analytics for Reduced Risk and Better Performance

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Webinar

August 13, 2019



# Today's Agenda



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Management  
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- The New Data Initiatives for Banks
- Portfolio Analytics Challenges and Opportunities
- Portfolio Analytics Case Study
- MemSQL Overview
- Q&A

Submit questions in the Question Box

# Digital Remains a Priority for Banks

<b>Digital Transformation</b>	<b>34%</b>
Revenue/Business Growth	18%
Operational excellence	10%
Customer experience	10%
Cost optimization/reduction	9%
Data and analytics	8%

**Gartner**® 2019 CIO Agenda: Banking and Investment Services Industry Insights

# Digital Remains a Priority for Banks

*“... the digital transformation of banks creates new sources of **revenue**, supports new enterprise **operating models** and delivers **digital products and services**”*

**Gartner**® 2019 CIO Agenda: Banking and Investment Services Industry Insights

# New Data Innovations for Financial Applications

## Eliminate Event to Insight Latency

- Faster data driven actions
- Adaptable analytics
- Apply real-time and historical data

## SLA Driven Analytics

- Customer experience analytics
- SLAs ingest, query and all dimensions of usage
- Maintain the SLAs, even during the maximum usage

## Operational Standards

- Plugs in with existing tools
- Leverage existing skills, ie. SQL
- Cloud native for today and tomorrow

# Portfolio Analytics is a Growing Business

*The global risk analytics market size is expected to grow from USD 23.0 billion in 2019 to USD **45.9 billion by 2024**, at a CAGR of 14.8% [marketsandmarkets.com](https://www.marketsandmarkets.com)*

*Key growth factors ... include compliance ..., rising digitalization and business process automation [marketsandmarkets.com](https://www.marketsandmarkets.com)*

*...rising innovations in the fintech industry will create numerous opportunities for vendors of risk analytics solutions. [marketsandmarkets.com](https://www.marketsandmarkets.com)*

# Business Challenges and Outcomes

## Business Challenges

- Need analytics to combat passive investment vehicles
- Strong competition amongst large asset managers
- Demand for lower fee structures
- High performance expectations from clients

## Business Outcomes

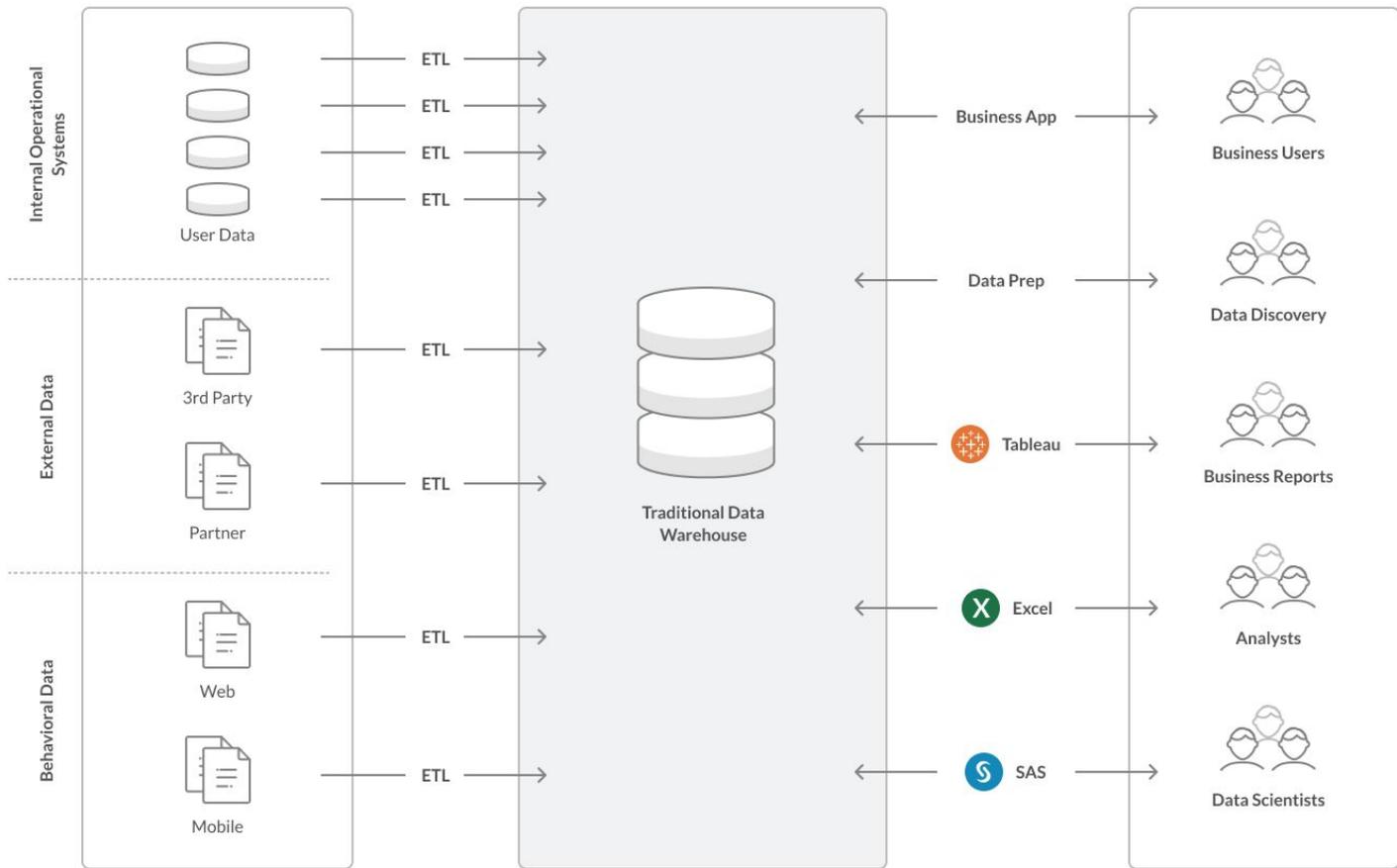
- Reduce churn and increase Assets Under Management by offering attractive self-service applications
- Drive down costs through faster analytics and automation
- Improved Agility responding to market conditions

# Case Study: Portfolio Analytics

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# Case Study: Portfolio Analytics

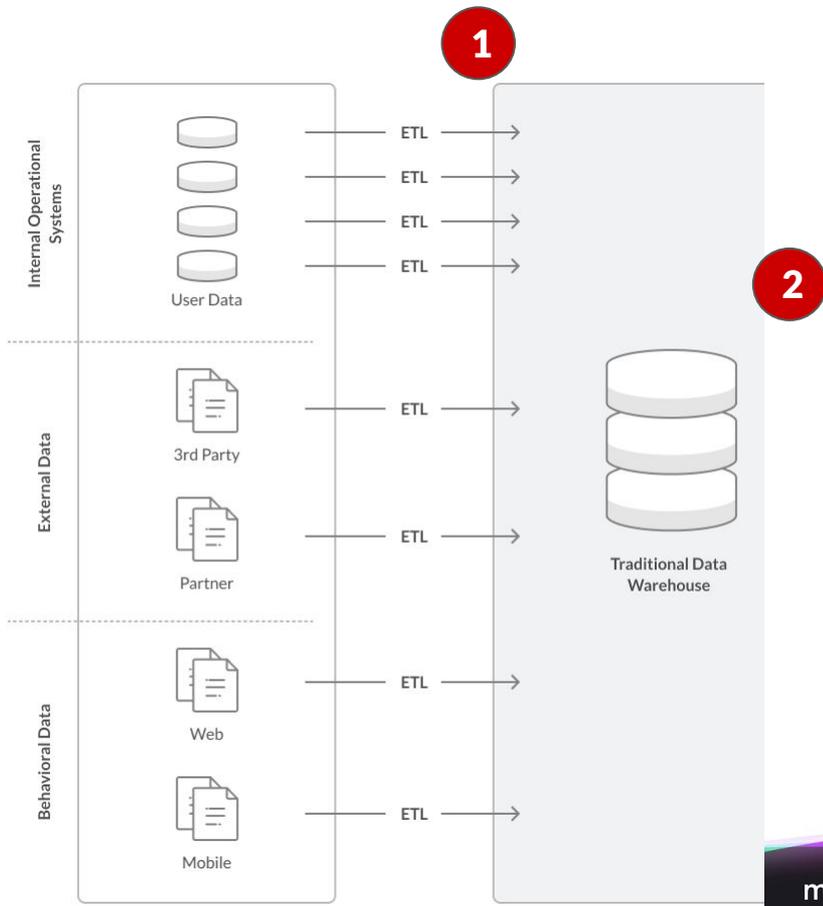




# Case Study: Portfolio Analytics

## Before MemSQL

- 1 Batch ETL Loads**
  - Hourly & nightly refreshes
  - Offline processing
- 2 Aging Models**
  - Limited what-if analysis
  - No continuous model development



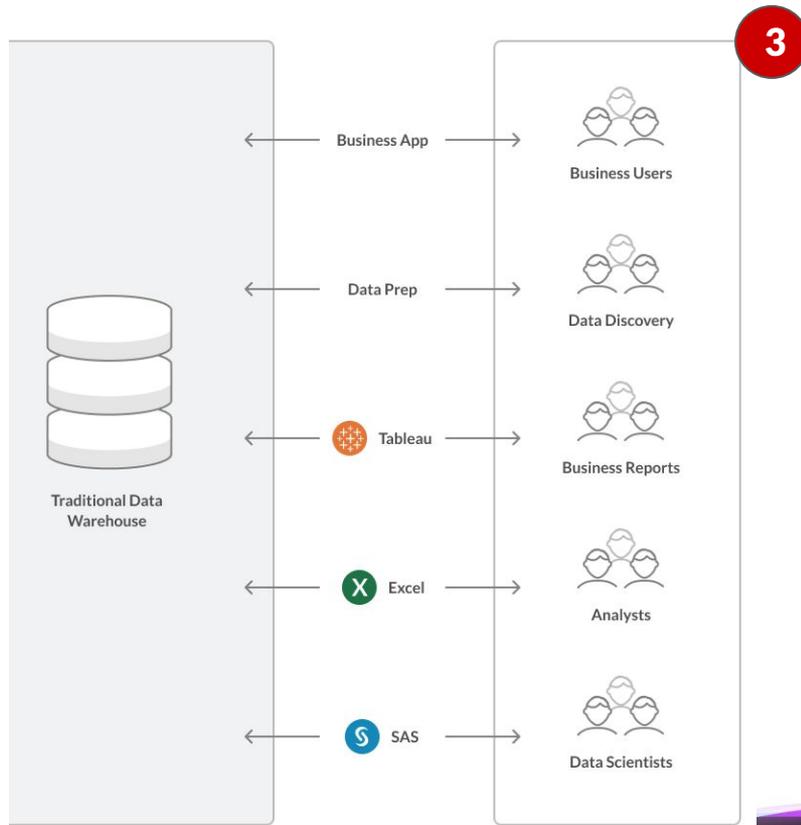


# Case Study: Smart Risk & Portfolio Mgmt

## Before MemSQL

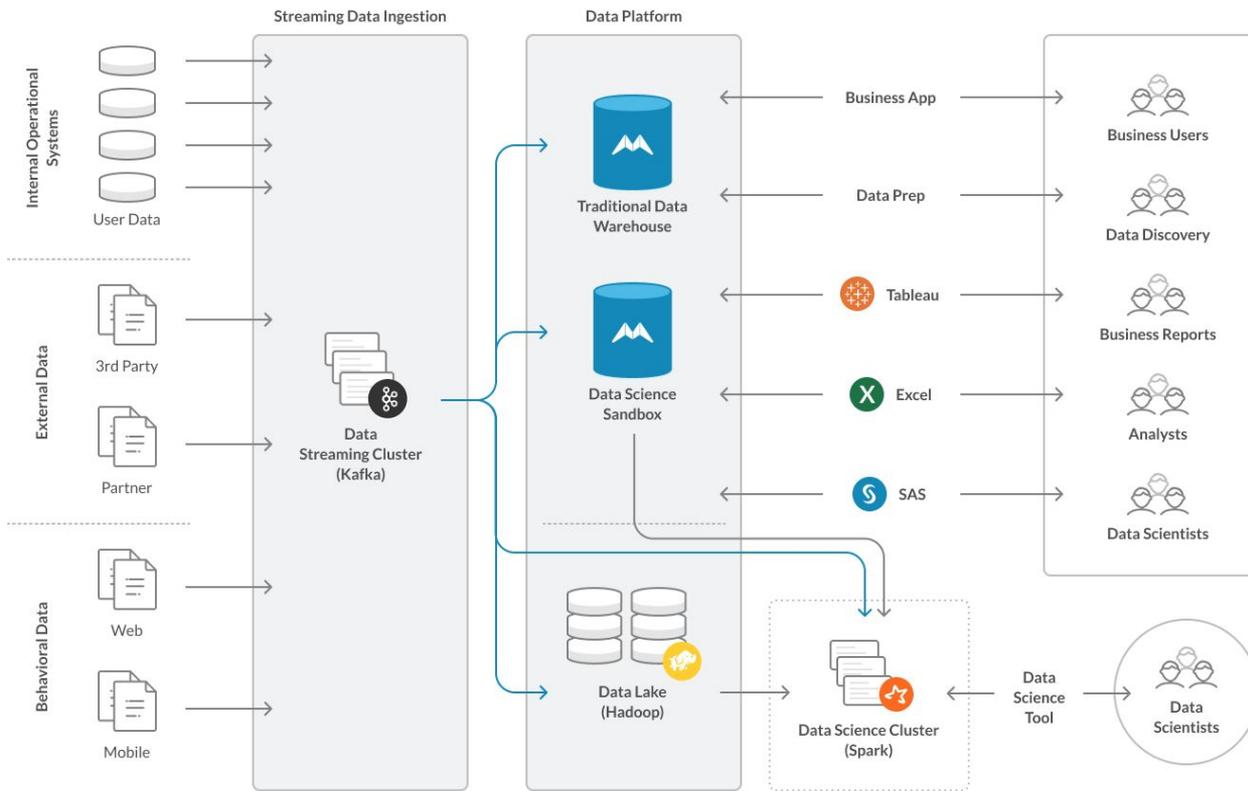
### 3 Slow Costly Performance

- Offline tuning demands
- Concurrency throttling
- Costly RAC & Exadata upgrades





# Case Study: Portfolio Analytics

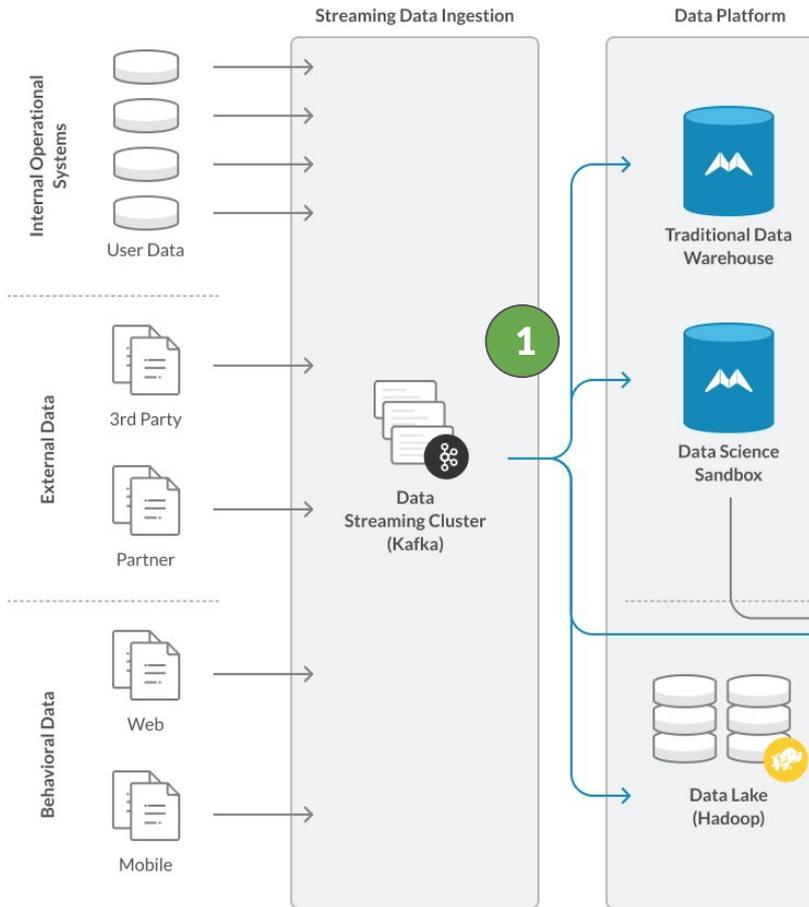




# Case Study: Portfolio Analytics

## With MemSQL

- 1 Streaming Ingest
  - Real-time data pipelines
  - Lambda architecture

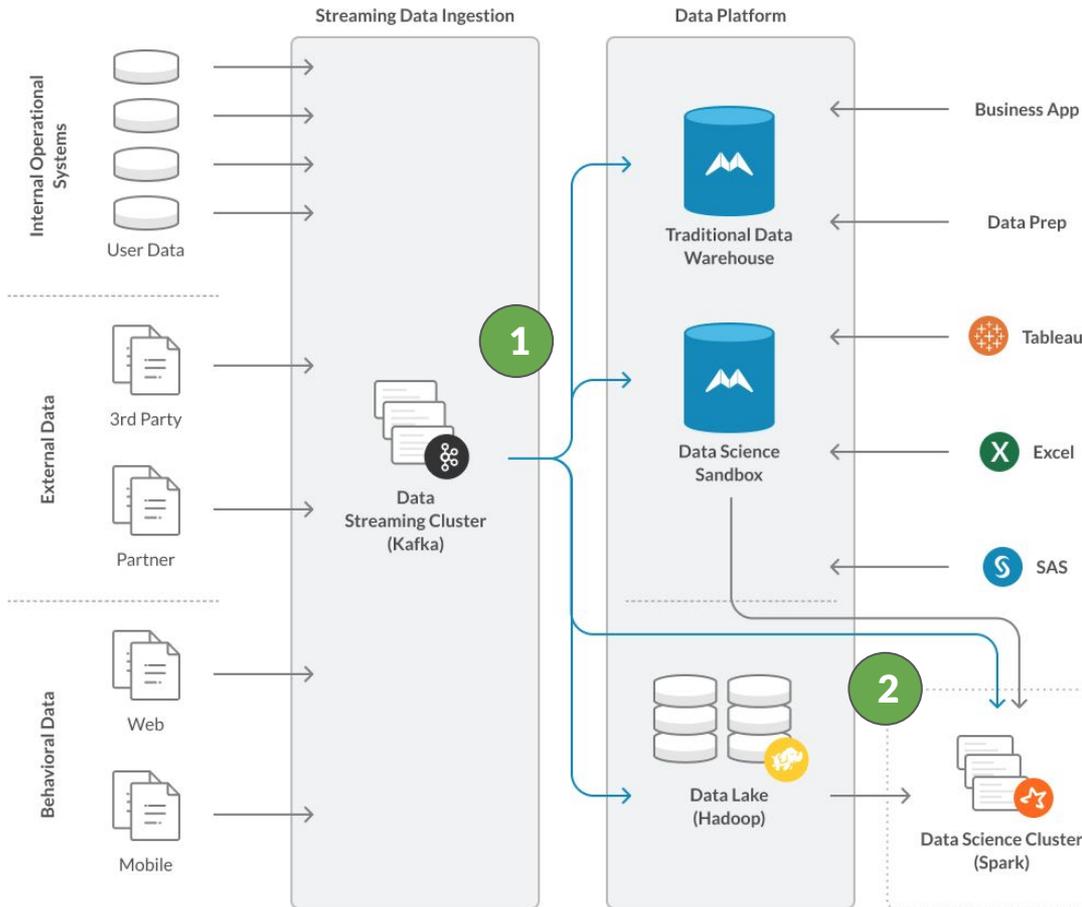




# Case Study: Portfolio Analytics

## With MemSQL

- 1 Streaming Ingest**
  - Real-time data pipelines
  - Lambda architecture
- 2 Continuous Model Dev**
  - SparkML interoperability
  - Train with new market data



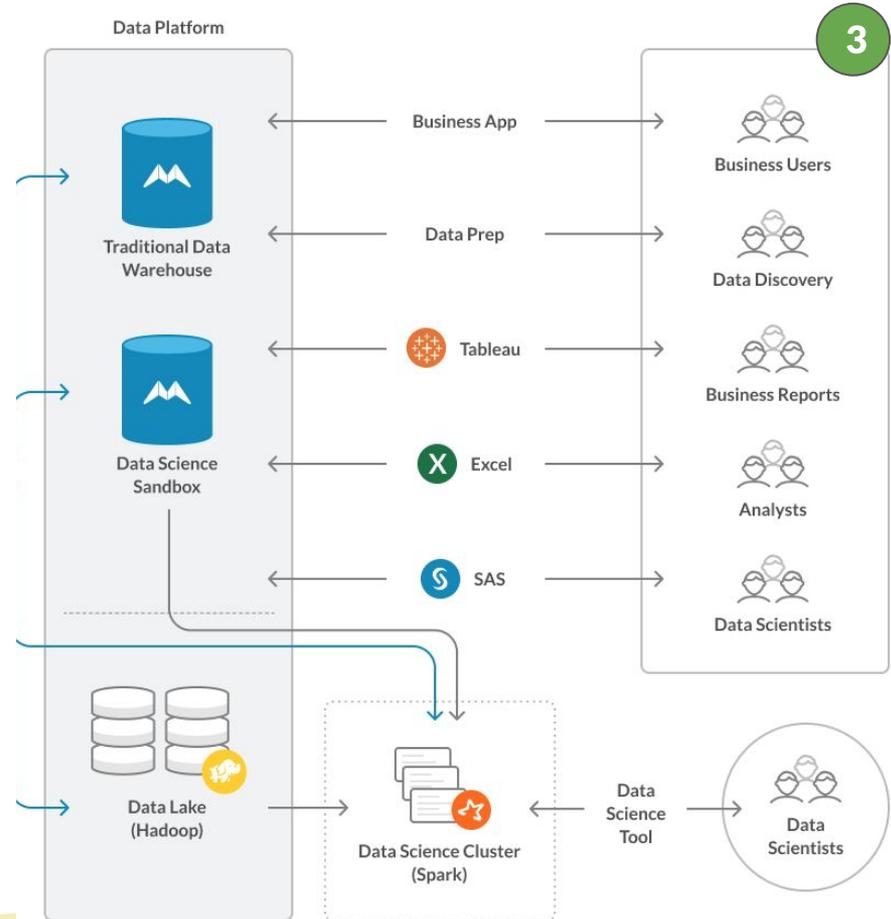


# Case Study: Portfolio Analytics

## With MemSQL

### 3 Faster Queries than Exadata

- More data analyzed
- 5 yrs of history vs 3 in ORCL
- 3x cheaper over Oracle





# Case Study: Portfolio Analytics

## Key Benefits and Takeaways:

- Enabled continuous pre-trade and risk analysis using live market data
- Reduced Oracle spend by 3x while improving performance
- New data platform for ML and operational analytic delivery

# Why MemSQL for Portfolio Analytics

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# MemSQL: The No-Limits Database

*The cloud-native operational database built for speed and scale*

## WHAT WE DO



### Operational Analytics

MemSQL is the ideal database when you *must* deliver “Analytics with an SLA”



### Predictive, ML & AI

MemSQL supports the creation and operation of models at scale across streaming & historical data



### Move to Cloud / Legacy Replace

MemSQL makes it easy to adopt a modern, cloud-native database with superior price/performance efficiency

## WHO WE DO IT FOR



Half of the Top 10 Banks



2 of the Top 3 Telcos



160M Streaming Media Users



FORTUNE

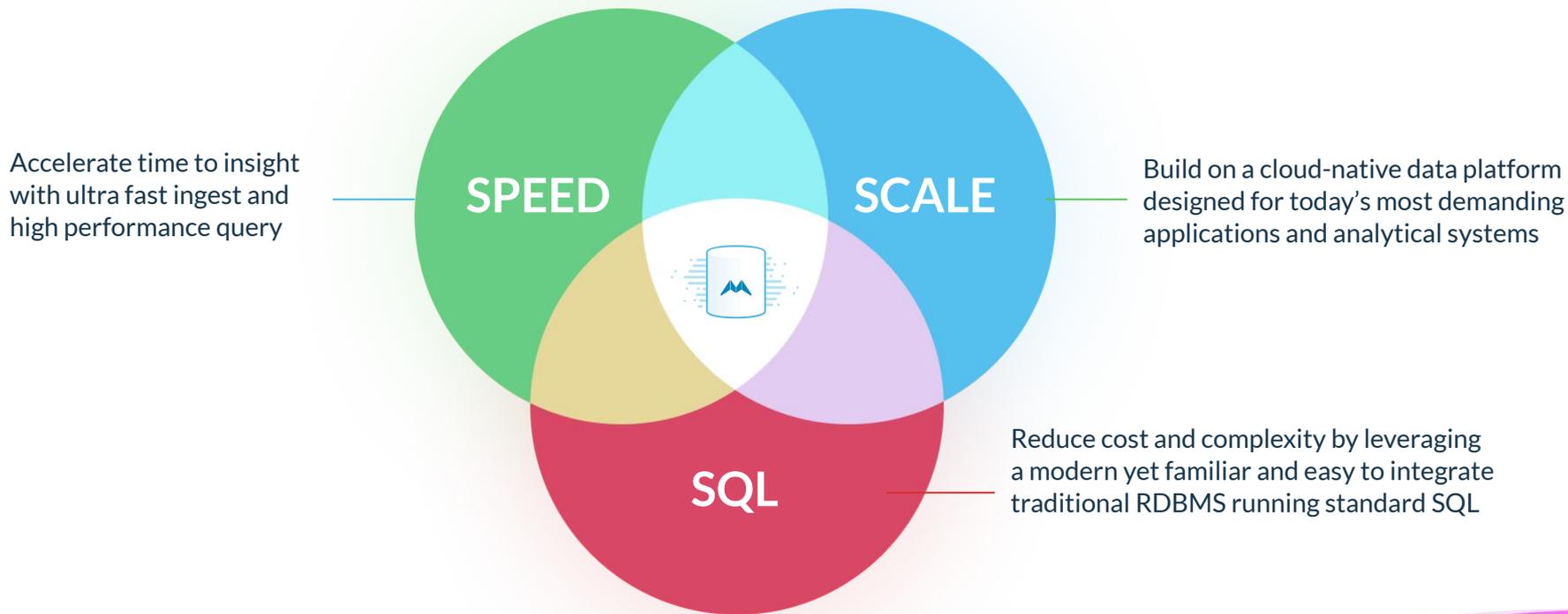
12 of the Fortune 50

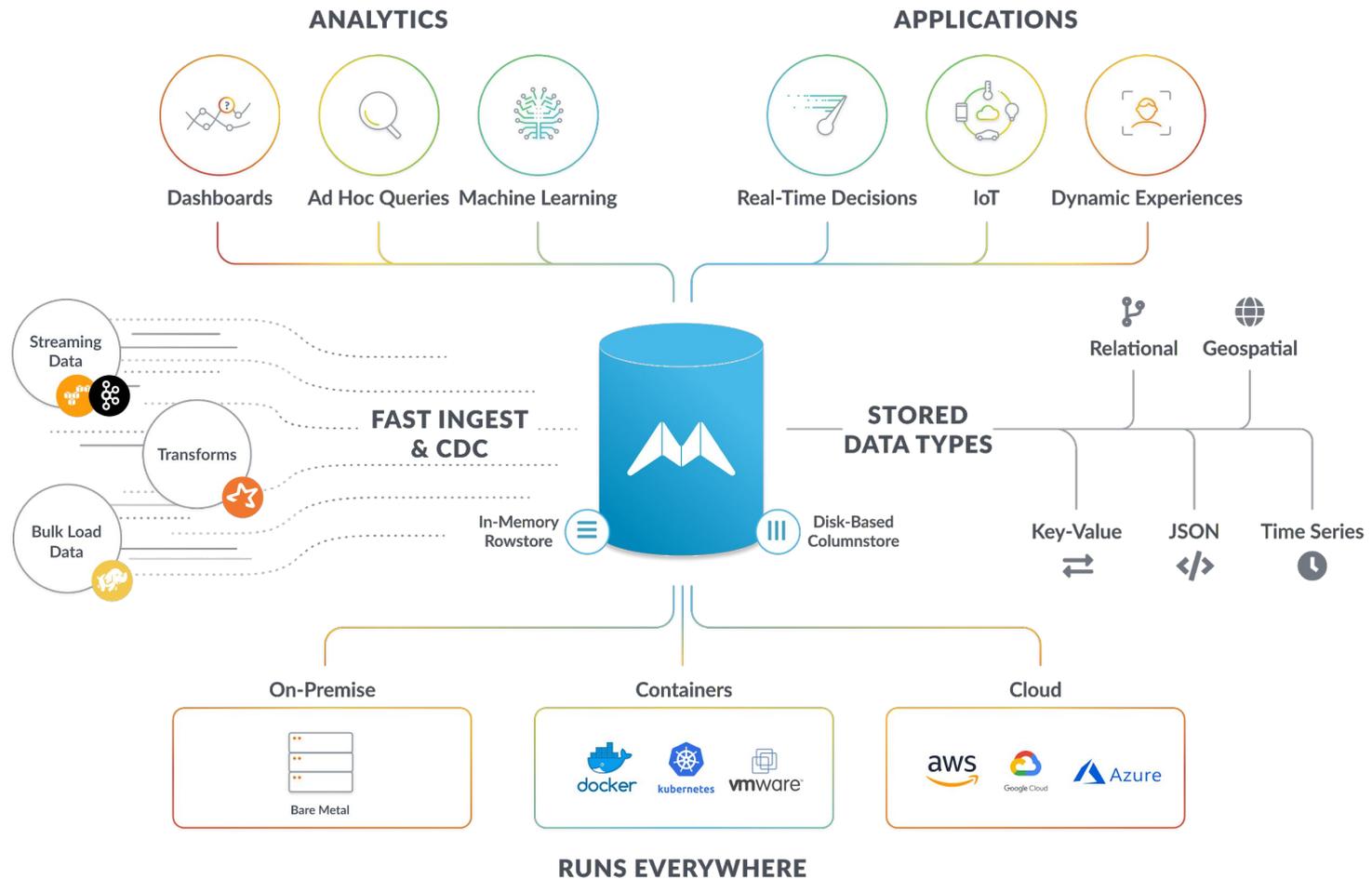


Tech Leaders from Akamai to Uber

# MemSQL: The No-Limits Database

*The cloud-native operational database built for speed and scale*





# MemSQL Architecture for Real-Time

## Scalable SQL



- Full ACID features
- ANSI SQL
- Document/JSON/Geospatial/Full Text Search

## Fast Ingest



- Standard bulk load APIs
- Native parallel stream ingest
- Load and Query simultaneously with Lock Free semantics

## Distributed



- Shared nothing, massively parallel
- High concurrency with commodity hardware
- Highly Available with transparent failover

## Cloud Native



- Deploy on-premises
- Cloud agnostic (AWS, GCP, Azure)
- Container/Kubernetes certified

# Thank You! Questions?

Try at [memsql.com/download](https://memsql.com/download)

- No time limit
- Deploy to production
- Full featured
- Up to 128GB of RAM, unlimited disk
- Get support at [forum.memsql.com](https://forum.memsql.com)



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Questions? Email us at [team@memsql.com](mailto:team@memsql.com)