



Modernizing Portfolio Analytics for Reduced Risk and Better Performance

Webinar

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Today's Agenda



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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

Digital Transformation 34%

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

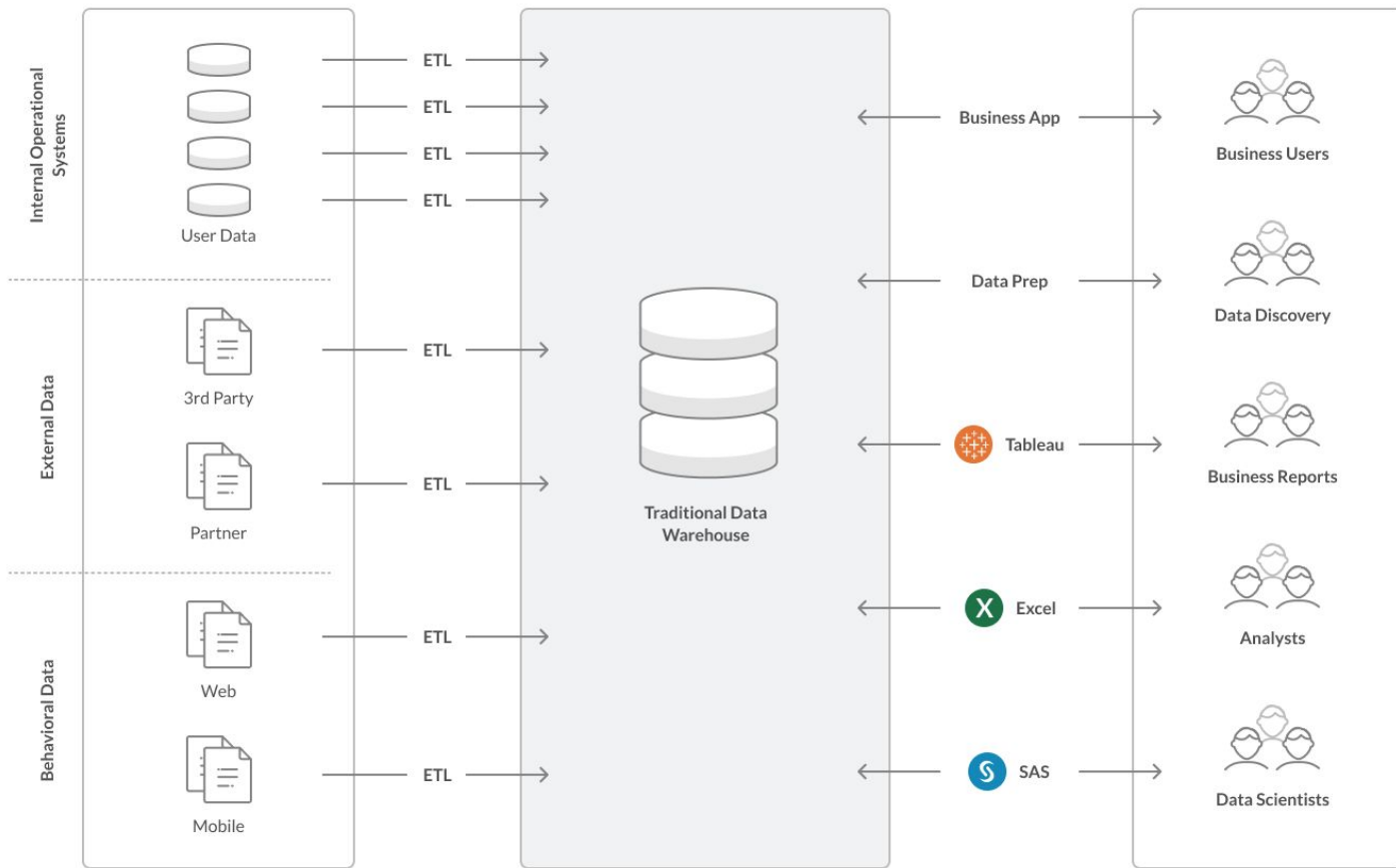
Business Outcomes

- 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



Case Study: Portfolio Analytics





Case Study: Portfolio Analytics

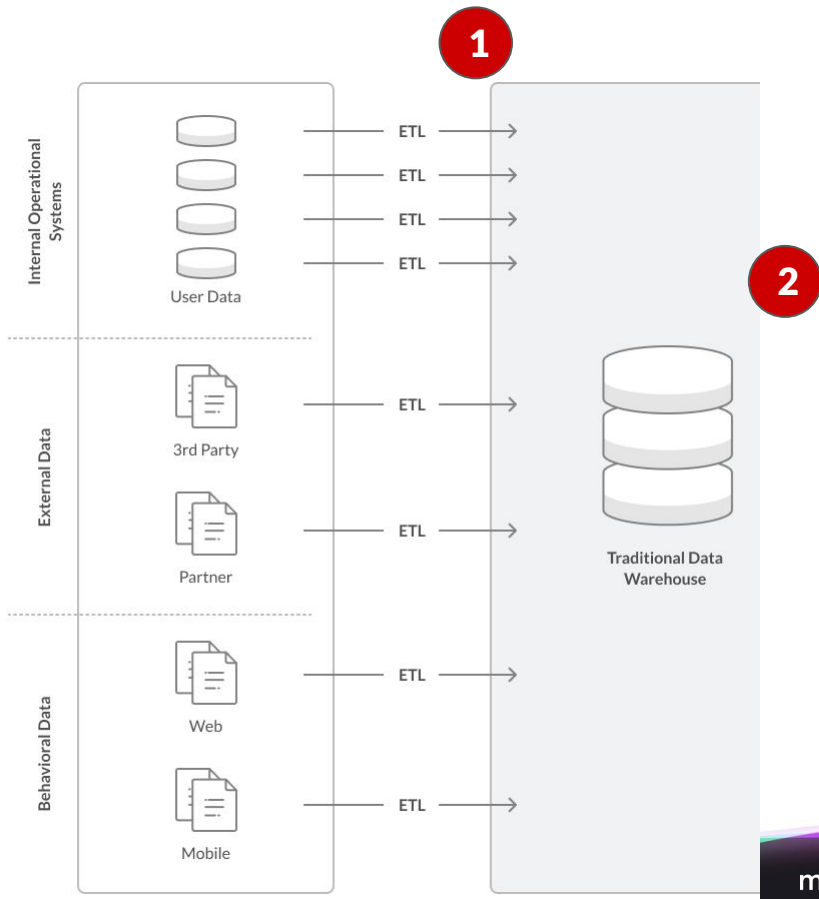
Before MemSQL

1 Batch ETL Loads

- Hourly & nightly refreshes
- Offline processing

2 Aging Models

- Limited what-if analysis
- No continuous model development



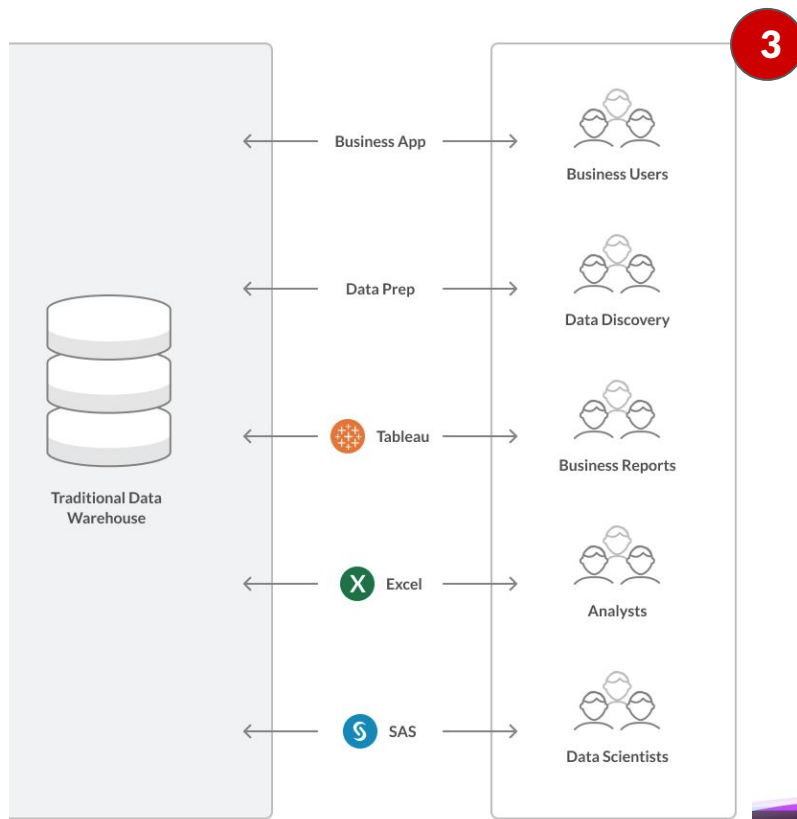


Case Study: Smart Risk & Portfolio Mgmt

Before MemSQL

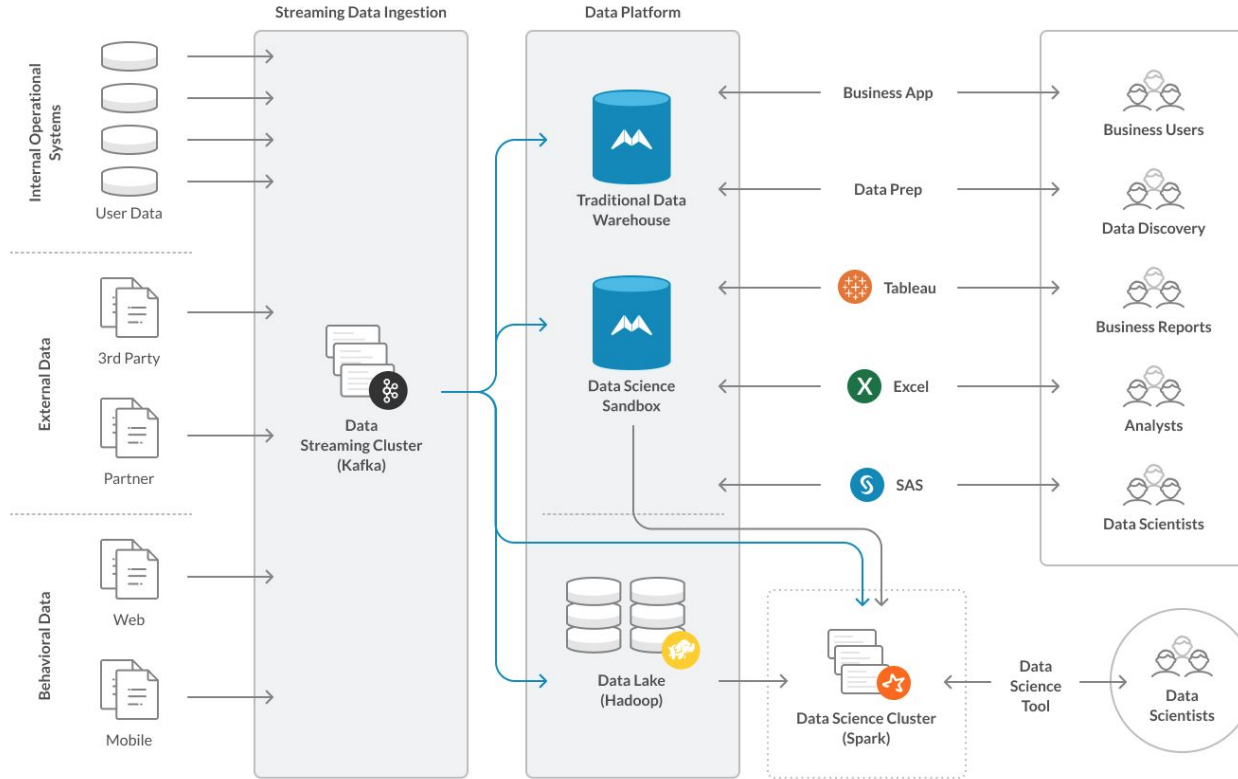
3 Slow Costly Performance

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





Case Study: Portfolio Analytics

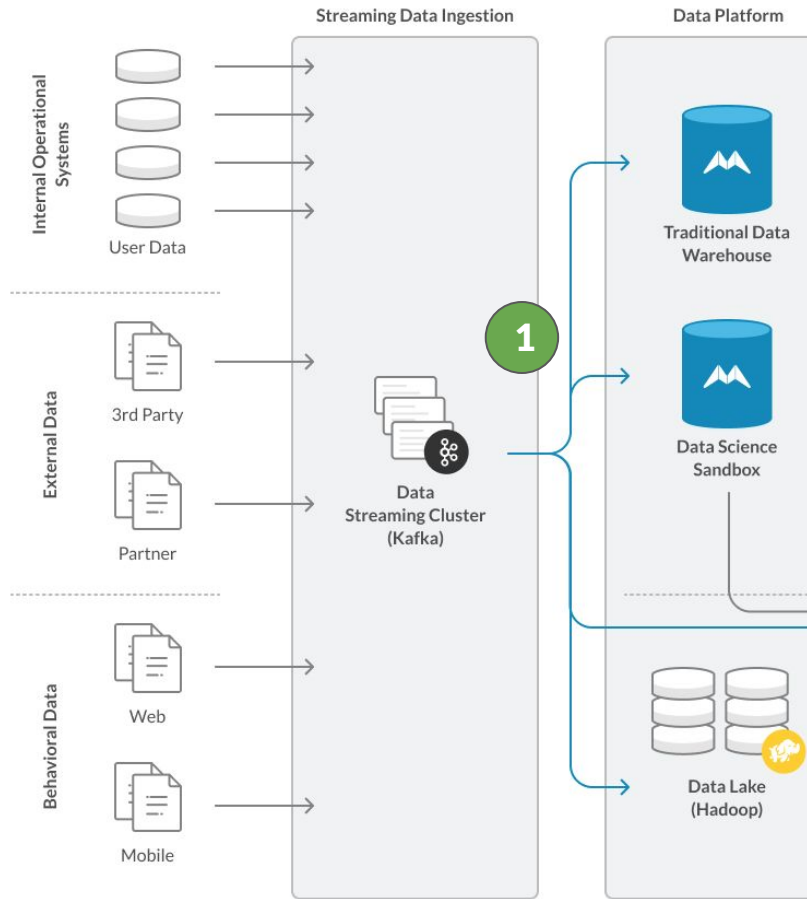




Case Study: Portfolio Analytics

With MemSQL

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

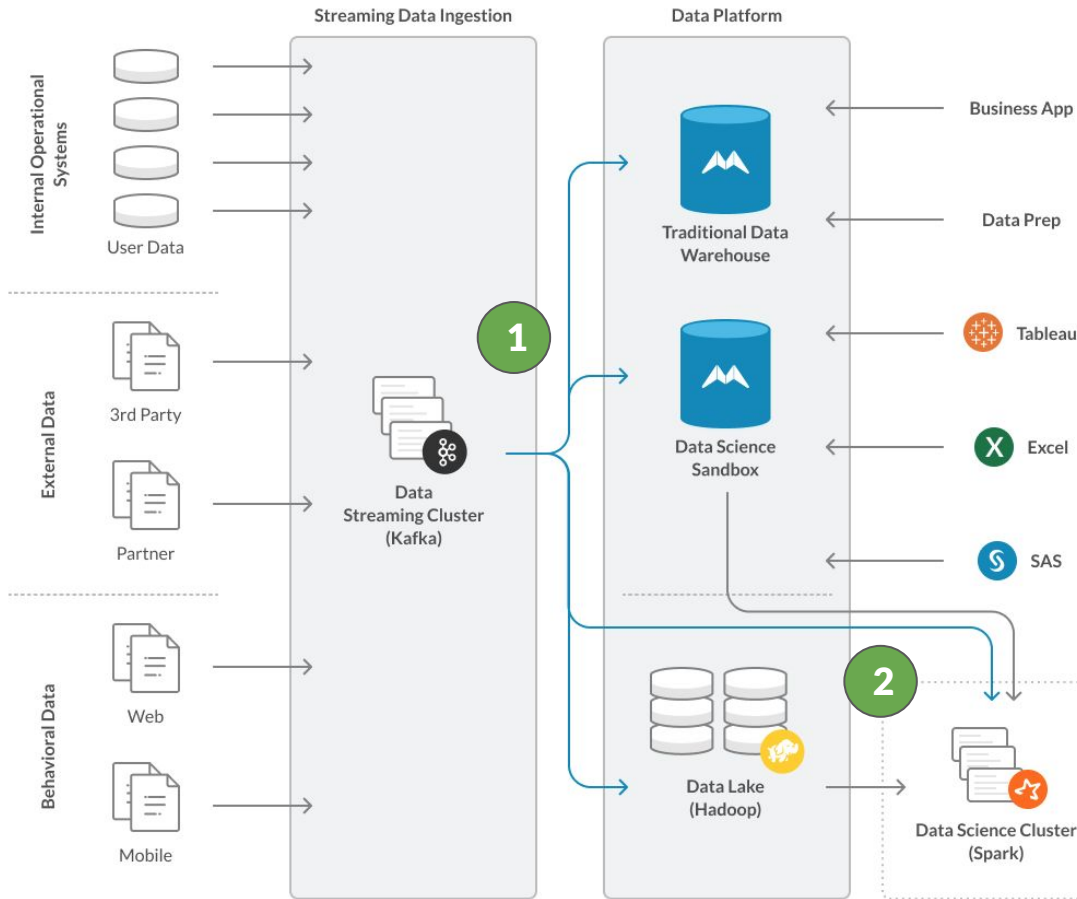




Case Study: Portfolio Analytics

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

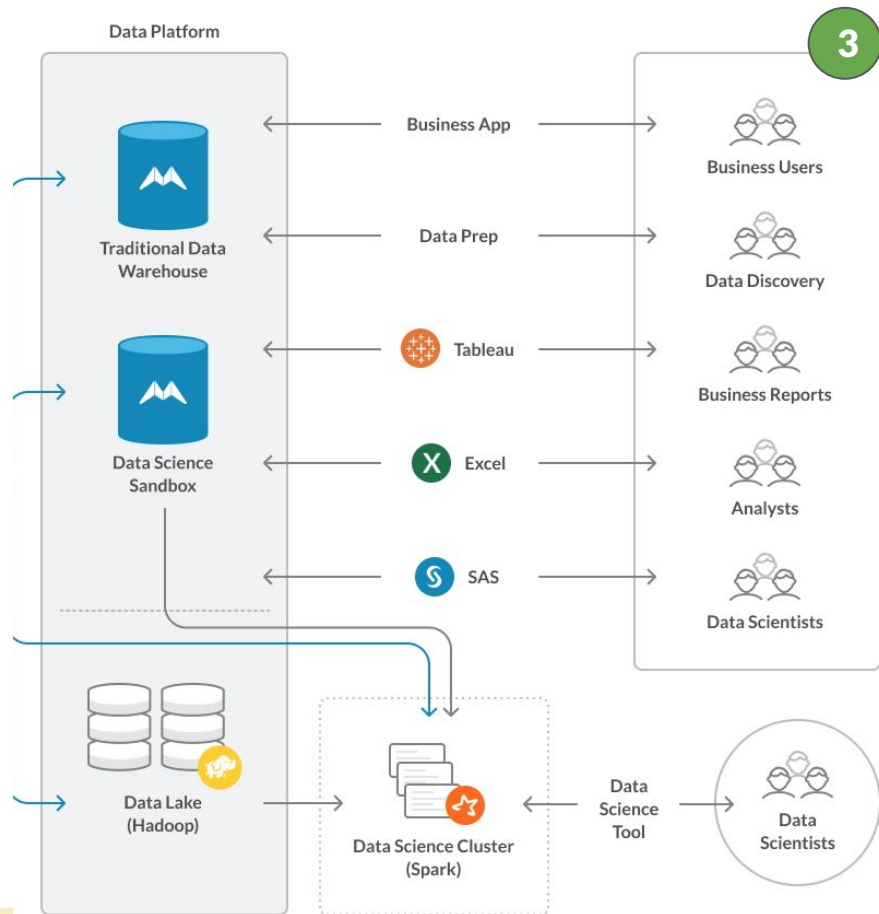
With MemSQL

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

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



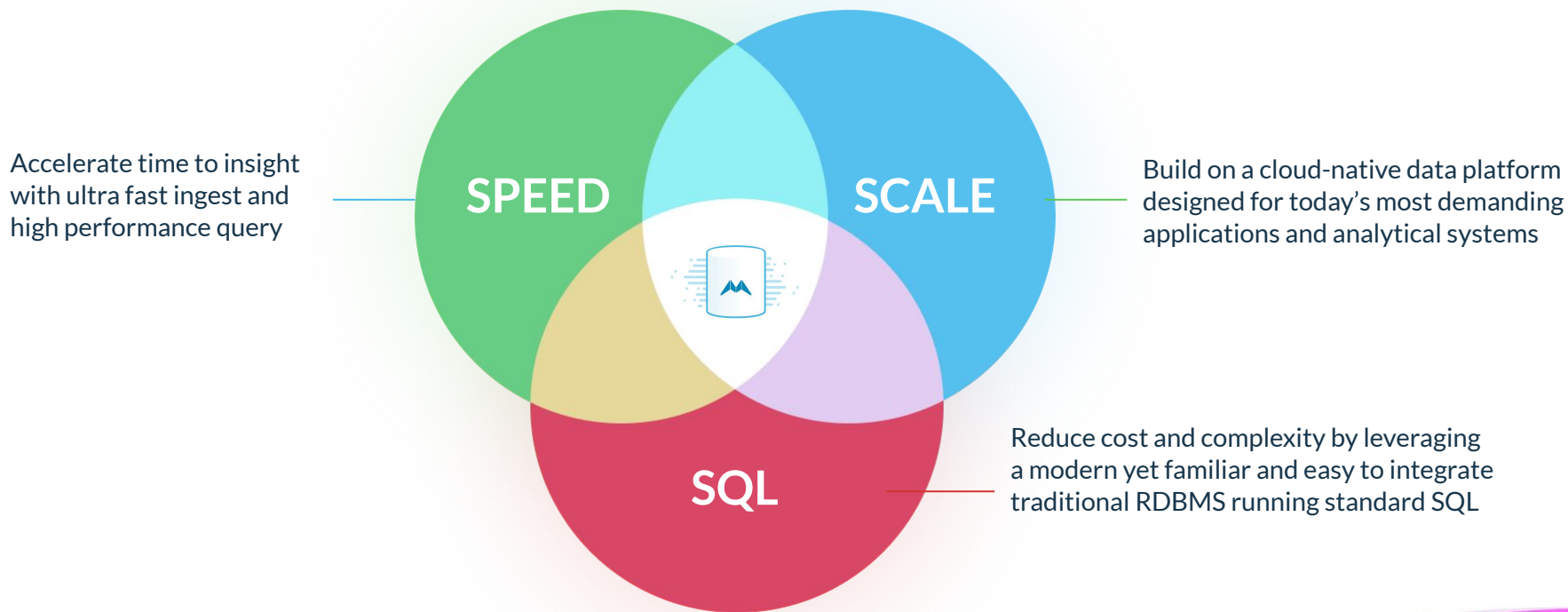
12 of the Fortune 50

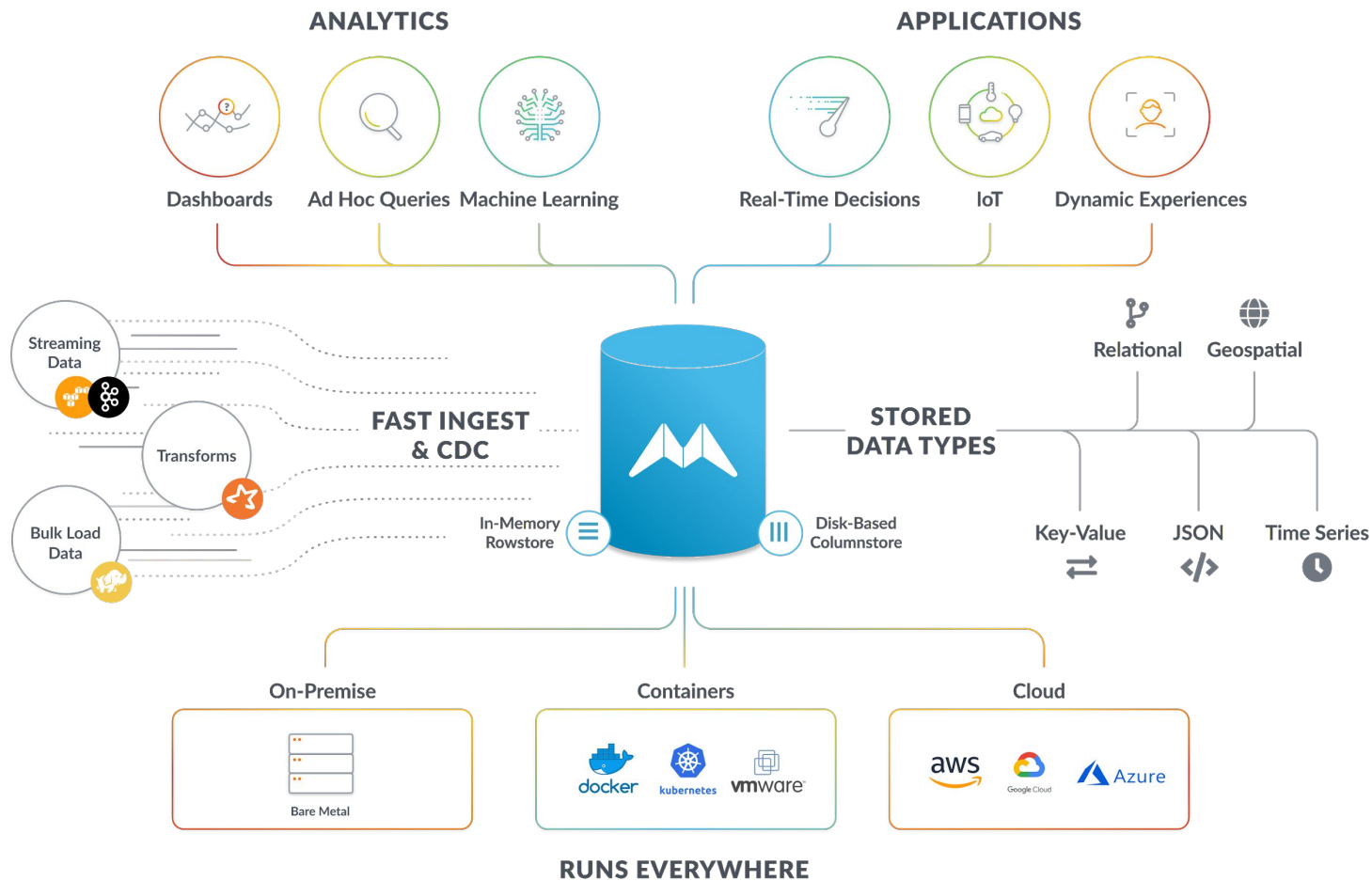


Tech Leaders from Akamai to Uber

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

- No time limit
- Deploy to production
- Full featured
- Up to 128GB of RAM, unlimited disk
- Get support at forum.memsql.com



Learn more at memsql.com/product

Questions? Email us at team@memsql.com