

# Powering Banking solutions with real-time data

## SOLUTION BRIEF

# Increase Personalization, Leverage AI and Reduce Fraud with a real-time data platform.

As banking institutions face a rapidly evolving digital environment, they are being forced to modernize their data infrastructure across front-, middle- and back-office operations – utilizing data as a strategic asset to optimize their business. Aerospike sits at the heart of the retail, corporate and investment banking ecosystem, connecting and analyzing massive volumes of datasets in real time to understand customers on the deepest level, hyper-personalize the digital experience, and ensure the integrity and compliance of every financial transaction.

## Key Benefits

### Speed at Any Scale

Modern data architecture handles millions of transactions per second while scaling to meet petabyte-range data volume needs

### High Reliability

Unmatched availability with demonstrated uptime of five 9s and strong data consistency

### Exceptionally Low TCO

Fueled by our patented Hybrid Memory Architecture™, Aerospike provides unmatched performance at 40-60 percent reduction in TCO

### AI/ML-Powered Analysis

High-performance ML pipeline, cut Spark jobs execution time by 80%

### Offload Mainframe Workloads

Support ever-growing workloads during trading hours with a distributed, intraday real-time operational data layer

# Front Office

## Retail and Corporate Banking

Today's retail and corporate banking consumers expect an engaging, intelligent digital experience every time they transact with you online. Aerospike transforms your ability to provide a hyper-personalized cross-channel experience for every consumer and business across web, mobile and in-branch activity, helping you customize products and offers, drive deeper online services adoption, and improve customer trust and loyalty to your brand.

### AEROSPIKE HELPS YOU

- Enable AI-powered online recommendation engines, tailored pricing and rates, and upsell opportunities with faster and deeper knowledge of each customer
- Master fraud detection and reduce false positive exposure by enabling 10x the number of attributes to be analyzed without increasing customer friction
- Speed transaction, payment and response times to improve user experience and engagement
- Gain deeper insight into customer background and activity to lower risk, prevent fraud, improve opportunities for upselling and cross-selling
- Predict customer churn before it happens and take immediate, automated action

## Investment Banking

As investment banks go digital, they are discovering an immense opportunity to use data as a strategic asset to expand their customer bases and provide a more personalized range of services. Aerospike connects, analyzes and manages massive volumes of datasets to streamline the key processes that differentiate your front-office applications, including AI-powered portfolio optimization, algorithmic trading and dynamic customer experiences.

### AEROSPIKE HELPS YOU

- Speed development and presentation of portfolio research, risk models and complex investment strategies
- Empower front-office sales teams with 360-degree customer view, recommendation engines and upsell/cross-sell opportunities
- Enable low latency algorithmic trading for stocks, bonds and financial instruments across multiple exchanges in real-time

**Personalization can lead to annual revenue increases of 10 percent for banks.**

For every \$100 billion in assets that a bank has, it can achieve as much as \$300 million in revenue growth by personalizing its customer interactions.

**(Source: BCG)**

# Middle Office

Strengthening middle office operations with a powerful data infrastructure gives you a critical differentiator for your banking business, combining unmatched speed and deeper analysis to lower risk and improve decision making. Fast AI-driven data analysis enables strong decision support for real-time portfolio accounting, risk modeling, improving profitability of margin loans, conducting financial compliance, and driving more reliable performance metrics.

## AEROSPIKE HELPS YOU (CONTINUED)

- Link customer portfolio data with the system of record, make it available in real-time in a consumable format with full visibility into all client account activity
- Optimize the frequency of AI and ML model training, preparation, tuning, enrichment and validation to build a high-performance pipeline to feed AI and ML applications
- Leverage AI-powered analysis to accurately measure credit, market and operation risk
- Build a more profitable, data-driven margin lending business to differentiate your offerings and compete more effectively on lending rates

# Back Office

Aerospike's real-time data architecture strengthens every facet of back office banking activity, helping you reliably manage accounts, customers and entities; automatically execute settlement and reconciliation; conduct faster funds administration; manage operational risk and compliance; and minimize fraud exposure from cash management.

## AEROSPIKE HELPS YOU

- Scale and speed back-office processing for clearing, settlements, reconciliation, ACH and wires, commissions and charges, entitlements and securities, and real-time reporting
- Ensure adherence to data privacy (GDPR) and compliance mandates (CCPA, CCAR), & deliver risk reporting in real time
- Provide visibility and transparency to front-office entities to optimize costs for clients
- Leverage AI to generate analysis on trade rights, disputes, reconciliation, compliance reports and trade report

