

"With the large volumes of risk information, financial services companies are increasingly turning to Big Data repositories like Hadoop for their information management needs. Zaloni provides a great platform for Big Data Governance for BCBS 239 compliance in financial services."

- Sunil Soares, Principal, Information Asset

# DATA LAKE 360° FOR FINANCIAL SERVICES

Financial services firms rely on big data to more accurately predict financial trends, improve and personalize the customer experience, detect and prevent cybercrime and fraud, and meet regulatory reporting requirements. But leveraging big data can be a challenge as often the data is scattered across an organization in disjointed systems and databases. To manage the volume and complexity of financial and customer data more effectively, financial institutions are turning to data lakes to break down data silos and fragmented systems built up through a traditional database architecture.

## Financial Services Data Lake 360° Use Cases

While there are many valuable use cases for a well-managed data lake in the financial services industry, the following are some of the most common:

### Customer acquisition and retention

Financial services institutions are using a wide variety of data sources to get a 360-degree view of customers, create more personalized customer experiences, and support customer retention programs such as loyalty programs. A well managed data lake enables organizations to pull all data into a unified platform and give marketers controlled access to the data needed for customer targeting. An interactive visualization platform provides different views of the data and enables marketers to profile customers for analysis.



### **Regulatory compliance**

Banks are under pressure to meet Basel Committee Banking Supervision 239 (BCBS 239). Central to this are governance issues associated with data aggregation. BCBS 239 and other compliance requirements require financial institutions to implement policies around data governance, data aggregation, IT infrastructure, reporting and more to ensure a timely, accurate and complete view of data across multiple lines of business in order to better understand, anticipate, manage and mitigate risks. A well managed data lake enables financial institutions to capture and automate aggregation of data across the organization to better understand and improve data quality. Banks can aggregate risk data in near real-time and generate risk reports with frequency and on demand, including during crisis situations, to support changing internal needs and for auditing or supervisory queries.



## Fraud detection and prevention

Transaction fraud, identity fraud and money laundering are major concerns for financial services organizations. One reason is that many fraudsters are able to manipulate billing faster than investigators can audit. A well managed data lake can enable real-time data ingestion and automated fraud detection with algorithms that detect patterns of potential fraud hidden in huge volumes of data. Creating a centralized data catalog provides an intuitive user interface for search and ad-hoc analytics of all data and supports non-technical staff such as attorneys to quickly perform self-service data analytics through an intuitive user interface.



### A Holistic Approach to Financial Services Data Management

Data lineage

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Data quality

GOVERA

Metadata

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ENCAGE

Self-service data preparation

Managed ingestion

Data catalog

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Data Lake 360°

Management Platform

While data lakes offer enormous potential, building a data lake architecture is difficult, particularly when integrating multiple legacy data platforms and applications. The key to building and scaling an actionable data lake that meets the needs of the business is to balance the agility and flexibility that data lakes provide with the rigor that comes from sound data management and data governance best practices.

By taking a holistic approach to building and managing your data lake, you can ensure that your data is managed and governed properly to achieve the agility, shorter time-to-insight, and scalability that a data lake promises. At Zaloni, we call this holistic approach, Data Lake 360°.

Zaloni's Data Lake 360° solution helps financial services organizations navigate the complexity of creating a modern big data architecture and provides eight critical capabilities needed for an effective, scalable data lake:

## Zaloni Data Lake 360°

#### Enable the lake:

- Managed ingestion: Defines, tracks and logs all steps of what data ingested into the data lake
  - Metadata management: Applies technical, operational and business metadata to have a more complete view of your inventory

#### Govern the data:

- Data lineage: Tracks where data comes from and what happens to it over time
  - Data quality: Provides a clear understanding and level of each dataset's quality
- Data privacy and security: Leverages metadata to apply permissions, policy-based security, masking and tokenization
- Data lifecycle management: Automates management of data assets from use and reuse to eventual retirement and long-term storage/archiving

#### Engage the business:

- Data catalog: Provides an enterprise-wide view of data to discover and curate
- Self-service data preparation: Provides a sandbox for end users to interact and work with sample data and export results or create a workflow

Financial Services organizations have realized that their business and customer data has enormous strategic value to their business. But without the right solution in place to manage, govern and provide business user access to that data, its value will remain un-leveraged.

High-quality, well-governed data benefits any organization looking to improve operational efficiencies, reduce risk via fraud prevention or regulatory compliance, but it also can drive customer-focused use cases. This ability to improve customer responsiveness will provide significant competitive advantage in the fast-moving financial services industry.

Zaloni's Data Lake 360° solution helps navigate the complexity of creating a modern, integrated big data architecture to ensure that customers truly derive value from the data lake, helping to implement specific business use cases and making big data management and analytics more efficient and cost-effective.



## MICA Self Service Data Preparation

Mica provides the on-ramp for selfservice data discovery, curation, and governance of data in the data lake. Mica provides business users with an enterprise-wide data catalog through which to discover data sets, interact with them and derive real business insights.



## BEDRCCK Data Lake Management Platform

Bedrock is a fully integrated data lake management platform that provides visibility, governance, and reliability. By simplifying and automating common data management tasks, customers can focus time and resources on building the insights and analytics that drive their business.

## Zaloni Professional Services

## Your trusted partner for building production data lakes

Zaloni has more than 400+ staff years of big data experience working globally across the US, Latin America, Europe, Middle East and Asia. Zaloni Professional services offers expert big data consulting and training services, helping clients plan, prepare, implement and deploy data lake solutions.

### **Professional Services Include:**

- Big Data Use Case Discovery and Definition
- Data Lake Assessment Services
- Solution Architecture Services

- Data Lake Build Services
- Data Lake Analytics Application Development
- Data Science Services

## About Zaloni

## Delivering on the Business of Big Data

Zaloni is a provider of enterprise data lake management solutions. Our software platforms, Bedrock and Mica, enable customers to gain competitive advantage through organized, actionable big data lakes. Serving the Fortune 500, Zaloni has helped its customers build production implementations at many of the world's leading companies.

