

Database Management

Banks today carry responsibility for securing and storing enormous amounts of valuable information within their firewalls. This information is both about their customers and about the shifting financial landscape. In many cases, that information goes unused because it's not easily accessible or searchable, even though use of data could improve decision making across multiple banking activities.

With this data, banks could find information faster about who is at risk for defaulting on a loan. Banks can also decide what market portfolio valuation adjustments are needed. Banks could also have a clearer view of how their data is stored and managed to meet regulatory requirements. This way, the data can be leveraged, retained, archived, or deleted to comply.

Thousands of decisions, large and small, are required to meet everyday banking function requirements. As a result, data becomes increasingly important. Not only that, but banks are given strict regulatory requirements and financial crime obligations. They need the ability to audit the results of any data analysis process, all the way back to the initial information landing into a data repository. Traceability requires transparency from ingestion to producing actionable data.

To manage the many accounts or businesses that banks are serving, they need to make sense of all this data rapidly and cost-effectively. As banks mature digitally, the amount of data and the new opportunities to apply that data are exponentially growing. This growth enables banks to pursue new business models and areas of customer-centric opportunities.

Having the appropriate data storage strategy in place is key to operational efficiencies, good application performance, and regulatory compliance. The data storage strategy is also the initial lynchpin in getting data into formats where it can be used for business intelligence and actionable insights.

A common pattern to data management follows:



In this model, "Data Services" describes any transformation, joining of data, or any other data operations other than archiving. This is the key activity needed to take advantage of the data to help make more informed decisions.

All banks and financial institutions ingest, move and store data. This article focuses on bringing data to Azure. The solution helps move you away from traditional on-premises data storage, processing, archiving, and deletion. By moving data to Azure, banks and financial institutions can take advantage of fundamental benefits including:

- Cost control through effectively unlimited global scale, using compute resources and data capacity only when and where it's needed.
- Reduction of capital expenditure and management costs through retiring of physical servers on-premises.
- Integrated backup and disaster recovery, reducing the cost and complexity of data protection.
- Automated archiving of cold data to low cost storage, while still ensuring compliance needs are met.
- Access to advanced and integrated data services to process data for learning, forecasting, transformation, or other needs.

This article provides recommended techniques to ensure efficient data ingress to Azure and fundamental data management techniques to use once it's in the cloud.