The Bank needed to maintain a competitive advantage in the market by enhancing their customer experience, while also improving time to market, achieving regulatory compliance and reducing operational costs:

- Had massive amounts of siloed, disparate, and redundant data repositories throughout the organization
- Needed to transform how data was stored, accessed and used to achieve a regulatory compliance and cost savings
- Required less expensive centralized data storage and processing infrastructure which could act as a single source of truth for all customer data
- Needed the ability to analyze larger volumes of available data to unlock previously unknown client patterns to generate new revenue sources
- Desired to improve their digital customer experience through real-time offers
- Needed the right resources empowered to perform the correct activities through role-based access control and security policies

Leveraging our expertise in financial services, BIAS worked closely with the Bank to architect & implement the largest Data Lake in the U.S. on the Oracle platform as the Bank’s single source of truth:

- Provided an objective approach not just based around data collection, security, or analytics, but an overarching, cohesive data strategy for the Bank
- Architected a horizontally and vertically scalable private cloud Data Lake comprised of 216 Hadoop nodes on 35 Oracle Big Data Appliances to meet the growth demand
- Implemented a comprehensive solution that interconnected Oracle Engineered Systems (Exadata, Exalytics, ZFS) in a unified InfiniBand fabric, offering a high-speed Data Lake solution unmatched by other technologies in the Big Data industry
- Provided the ability to bring data closer to the compute engines and to push down queries near the storage layer preventing data processing latency
- Integrated Oracle Engineered Systems, Hadoop, and Oracle ZS4-4 Storage to provide maximum availability in their architecture in the form of backups, data replication, and automated recovery
- Created an open architecture that leveraged open source APIs for faster integration to a broader set of applications and data sources

Through the Data Lake implementation, the Bank achieved a single, secure digital platform that provided a 360-degree view of their customers, improved time to market and enhanced customer experience:

- Enhanced “speed to insight” of analytics, due to less time for data preparation and more time for insight generation
- Improved productivity of BI and reporting teams through faster data collection
- Reduced Enterprise Business Intelligence maintenance spend 35% year-over-year by retiring old data stores
- Gained over 9,000 new accounts per month as a result of customized real-time offers
- Increased customer experience net promoter score (NPS)
- Enabled the bank to retire their aging and cost prohibitive hardware with the new system saving over $40 million
- Provided cost avoidance tied to data growth through centralized data storage in the Data Lake
- Reduced regulatory risk by building a consolidated single source of truth that could be patched and upgraded with little to no downtime, including:
  - Improved compliance with regulatory requirements
  - Enhanced controls leading to improved data quality and risk reduction
- Delivered the ability to store Chatbot interactions in the Data Lake, predict customer behavior using text analytics and improve response time by anticipating customer needs via AI & ML