



# **Customer 360 View Implementation**

### **Background**

Understanding customer behavior and preferences is critical for businesses to offer personalized experiences. However, the data was fragmented across multiple systems, making it challenging to obtain a unified view of customers. This project aimed to consolidate customer data from various sources into a single, comprehensive Customer 360 View, enabling better decision-making and enhanced customer engagement.

## **Key Challenges**

Data was scattered across multiple platforms, leading to inconsistencies and duplication. Ensuring data quality and consistency across diverse data sources was a major challenge. Real-time data integration and processing were required to provide an up-to-date view. Business teams needed accessible dashboards for analytics and insights.

#### **Our Solution**

Designed and implemented a robust data integration framework using Apache Kafka and Apache Spark to ingest and process data in real time. Established ETL pipelines to extract, transform, and load data efficiently, ensuring high data quality. Integrated MongoDB and AWS Redshift for structured and unstructured data storage, allowing seamless access to customer insights. Worked closely with business stakeholders to define data requirements and ensure alignment with business objectives. Developed interactive Tableau dashboards to visualize customer data, providing actionable insights for sales, marketing, and customer service teams.

## **Technology Stack**

Data Streaming & Processing: Apache Kafka, Apache Spark

Databases: MongoDB, AWS Redshift

Visualization: Tableau

#### Value Delivered

Provided a unified, real-time view of customer data, improving customer engagement and decision-making.

Enabled faster and more accurate insights by eliminating data silos.

Improved data quality and consistency across various systems.

Allowed business teams to leverage self-service analytics through user-friendly Tableau dashboards.

This implementation transformed how customer data was utilized, allowing for a more personalized and data-driven approach to customer interactions.