

CUSTOMER SUCCESS STORY

Data Platform Modernization for a Leading Middle East Airline

ABOUT THE CLIENT

The airline is a budgeted carrier in the Middle East, flying 70 million passengers to 95 destinations across Europe, Middle East and GCC, Africa, and Asia. The airline continues to expand its network with more regular flights, more direct routes and more comfortable inflight options.

Business Challenge

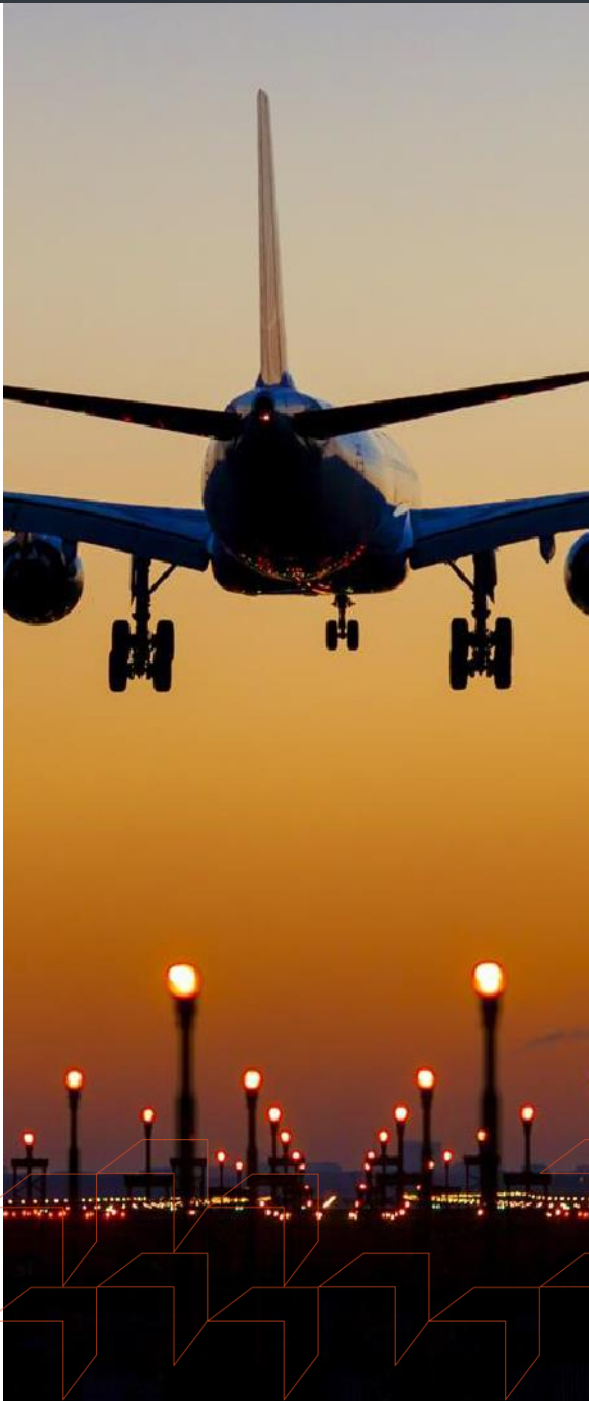
The client's existing data platform was an on-premise solution built using traditional tools and technologies. It had following challenges:

- Lacked Integration capabilities with other modules
- Legacy Data Architecture built with an intent of historical reporting
- Not scalable to cater the growing demands of platform's data
- Huge licensing and infrastructure cost

Business Need

The airline wanted to modernize its data platform to resolve the challenges posed by the existing system. The new system should:

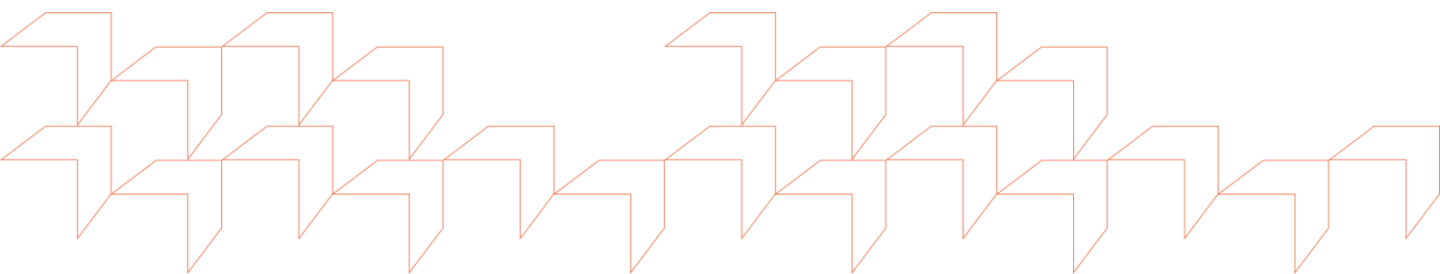
- refresh real-time / near-real time data for effective decision making.
- provide real-time intelligence by modernizing data architecture and infrastructure.
- provide unstructured data integration and analysis.
- support execution of complex resource intensive queries generally requested by business.
- support peak hour user work load by paying additional cost for peak workload window.



Solution

The client selected IGT Solutions for its requirement for data platform modernization & reporting. IGT leveraged its extensive domain knowledge and technical expertise to implement a solution best-fitted to address the challenges. The modern version consists of the following:

- **Cloud-based** infrastructure to provide scalability during peak hours, performance improvement and cost saving on Data center, Software licensing and Appliances/ Servers.
- **Cloudera Impala** for EDW to support complex queries, massively parallel processing and vertical scaling based on the user workload and complex business logic.
- **Kafka** for real-time PNR data integration, so business operations can know the actual inventory positions and make effective decisions.
- Utilization of modern **ETL** best practices to uplift the existing data architecture and enable parallel processing.
- Unstructured data integration in **Big Data**, so businesses can perform social analytics, sentiment analysis, surveys and customer 360 analysis. Social media connectors, web scrappers, Python are utilized for the same.
- Complex ETL processing and business logics are coded in **Map Reduce, Pig**, and **Hive** to improve performance and resource utilization.
- **Power BI** and **SSRS** are applied for supreme data visualization
- **Scoop** is utilized for CDC processing. Scoop merged with data architecture best practices to refresh data near real-time.



Benefits

60%

saving on
infrastructure cost

4x

improvement in
processing time

Zero

licensing fee for
software

Integration

of social media and survey
data in EDW

Real-time

integration support in data
architecture

Technology Stack in Scope



Power BI



Hive