



Route Profitability Analysis

Decision Making Made Reliable & Easy

Industry

 **AVIATION**

Customers

 **20 Million**

Prominent airline makes reliable and profitable business decisions with Umbrella's Big Data solution that enhances their route profitability analysis



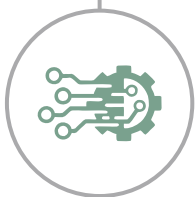
Setup
Data lake

Overview

The well-known airline specialises in bringing a personalised experience and works toward offering outstanding hospitality. The airline's management team was having a difficult time getting data on demand and it was a time consuming process to retrieve the data for different analyses each time. They needed Big data solutions to integrate, leverage and visualise data more effectively to make critical decisions that would drive Return on Investment (ROI). With Umbrella's Data Analytics solution based on AWS services, the business was able to achieve these goals and increase revenue through better route planning based on real time data.

About the Airline

The airline company aims at bringing a customised and seamless experience for Indian travellers that blends service excellence and exceptional hospitality. The relatively new airline has expanded operations in a short span of time, now serving 36 destinations with over 200 flights daily.



Fully automated
data pipeline

Business Challenge

The airline's team was following a highly manual process for integrating and manipulating data for route profitability planning. They did not have much flexibility with data manipulation and because of the complexity and volume, the management was using data that was at least 24 hours old for route planning. This delay and the lack of effective visualisation was affecting optimal route profitability analysis that would ensure better ROI.

Business Need for Efficient Route Profitability

As the airline was expanding, route planning was a critical aspect that significantly influences any airline's revenue. Route profitability systems help an airline determine the following from data analysis:

- If a specific course of journey is rewarding or not within a certain period of time
- Enables the management to alter, supplement or exclude routes from the airline's schedule

Some of the factors influencing route profitability planning include:

- Number of flights on a particular route per month
- Flight timings and duration
- Number of passengers per flight
- Number of bookings & cancellations
- Amount of cargo booked on each flight
- Cost of fuel and fuelling location
- Maintenance & service costs and airport parking space cost

In order to achieve profitability, an airline needs to integrate data on all these factors and more efficiently. The management needs to visualise the data effectively to plan routes in a manner that would help them save costs and improve revenue.

The Data Challenge

Route profitability planning for the airline business was complex because of the variety of data that is integrated from multiple sources. With a manually intensive process, they were finding it difficult to leverage the data for improving ROI.



Gained 5X
performance

These were the primary challenges in this process:

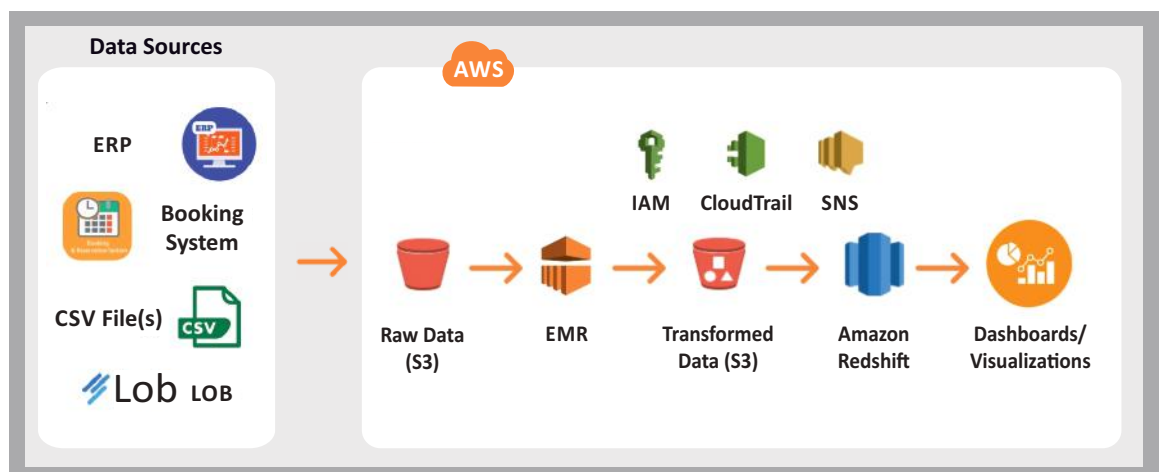
- Consolidation of data was time consuming and complex, no single view of data was available
- Manual errors due to human intervention and high turnaround time for reporting
- The template's predefined analyses parameters did not allow adhoc analysis on specific data

The Big Data Analytics Solution

Data aggregation being the airline company's main challenge, the first solution that Umbrella implemented was establishing a data lake. This helped create a centralized repository using which the management could execute route planning more effectively. Manual intervention was minimised, and the team could conduct analysis based on different parameters without restrictions. A number of dashboards with an interactive view makes data visualisation easier for various purposes.

Umbrella's Approach For The Airline's Challenge

- Data was first ingested into a single reservoir from various systems
- Data was then transformed and analysed using data analytics services
- Fully automated data pipeline from ingestion to visualization
- Notifications and alarms ensure data validation and quality
- Data visualization enables the management to optimize analytics for better planning





Increased
accuracy and
enhanced
visualization



Adhoc and
interactive
reporting

Business Benefits

The Big Data-Analytics solution has solved the client's business challenge of planning route profitability for better revenue. The airline has benefited in the following areas:

- Empowers senior management to quickly retrieve, appropriate and leverage precise route performance data
- Enhances forecasting capabilities to help identify revenue optimization and cost control opportunities to boost airline route profitability
- Enables 5X performance by bringing analysis time down from more than 15 hours to less than 3 hours
- Powers reporting and analysis on a single system that is leveraged for more purposes than route profitability
- Facilitates interactive analysis and reporting through visualization and dashboards



info@umbrellainfocare.com



www.umbrellainfocare.com



+91-9873892249