

Algorithmic Revenue Management Solutions

A Leading Low-cost Carrier



In these challenging times, the airline industry is under pressure to grow revenues & reduce costs post-pandemic and revenue management is one of the key areas to focus.

↑ 1%
Load

↑ 1%
Revenue

Microsoft SQL Server | Microsoft SQL Server Integration Services | Power BI | R/Python

ITC Infotech is a leading global technology services and solutions provider, led by Business and Technology Consulting. We provide business-friendly solutions to help clients succeed and be future-ready, by seamlessly bringing together digital expertise, strong industry specific alliances and deep domain expertise. We offer technology solutions and services to enterprises across industries through a combination of traditional and newer business models, as a long-term sustainable partner.

CHALLENGE

The airline wanted to increase its passenger load without compromising on yield management to efficiently manage inventory utilization and improve network profitability. They intended to develop a Booking Forecasting Engine to predict future bookings for all the flight markets for the next rolling 3 months based on historical booking patterns.

SOLUTION

Implemented ML-driven solution with the following analytical models to enable data-driven revenue management strategies. Delivered insights as a service through CoE.

Descriptive Alert System

- Low booking traction alert system 72 hours before departure
- Weak alerts for flights departing in rolling 89 days

Predictive Models

- No-show propensity or last-minute cancellation propensity
- Booking forecasting engine
- Overbooking recommendations

Fare Simulation Intelligence

- Real-time dynamic pricing
- Price elasticity engine

RESULTS

- 7% improvement in yield compared to previous year
- 5% increase in monthly overbooking as compared to previous year
- 8% increase in last minute booking as compared to previous year

Intelligent Flight Operations Solution

A Leading Low-cost Carrier



In these challenging times, the airline industry is under pressure to grow revenues & reduce costs post-pandemic, and improving operational efficiency is a key challenge.

▼ **5%**
Wastage

▼ **4%**
Costs

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CHALLENGE

The airline wanted help to manage its flight operations efficiently to minimize operating costs through fuel analytics, crew analytics, catering analytics, etc.

Implemented Intelligent Flight Ops Solutions to provide efficient operational analytics through a predictive engine to minimize operational cost and improve process efficiency.

SOLUTION

Delay Prediction

- Factors driving block-hours delay
- Flight delay propensity
- Delay estimation

F&B Wastage Minimization

- Demand forecast for F&B across entire network
- Strike a trade-off between food wastage & opportunities of on-board sales

Fuel Analytics

- Destination hold fuel estimation
- Economical upload of fuel averted extra fuel burn

RESULTS

- 5% reduction in food wastage (by volume) through demand forecast
- Efficient planning of turn around time for aircrafts and assignment of optimal amount of Destination Hold Fuel for each flight



Cargo Analytics Solution – Agent Segmentation

A Leading European Airline

In these challenging times, airlines face multiple pressures, and technological advancement can help devise differentiated strategies to stay competitive.

Reduced Cost of Sales

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CHALLENGE

The airline operates non-freighter/ belly-cargo services and wanted to enhance B2B customer value by adopting a differentiated strategy basis the quality of business.

ML-driven segmentation strategy for Freight Forwarders using the following models.

Agent Segmentation

- Activity Segments
- Value Segments
- Behavioral Segments
- Need Segments

Agent Profiling

- Freight Forwarder persona basis -
 - Consignment Type
 - Claims Info
 - Shipment Types
 - Agent Demographics

Predictive Analytics

- Customer Churn Propensity
- Customer Win-back Propensity
- Customer Lifetime Value

SOLUTION

RESULTS

- Helped business to develop an integrated view of Freight Forwarders and pursue higher percentage opportunities through differential marketing strategy
- Personalized Marketing to induce Loyalty Program