Lufthansa Flight Data Analysis

A Data-Driven Insight Into Flight Delays, Pricing, And Complaints

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Project Objective

- This project aims to analyze Lufthansa flight performance using operational data.

- Key questions addressed:

- What routes experience the highest delays?

- How do ticket prices vary across classes and destinations?

- Where do most passenger complaints originate?

- How can Lufthansa optimize customer experience?

Data Overview

- Data Source:

- Collected From 30 Simulated Lufthansa Flights

- Cleaned And Analysed Using Python

- Visualized Using Power BI

- Key Features:

- Flight Number

- Origin & Destination

- Passenger Class

- Ticket Price (€)

- Delay Minutes

- Cabin Crew Rating

- Onboard Service Score

- Number Of Complaints

Lufthansa KPIs and OKRs

Key Performance Indicators

KPIs Extracted From Dataset:

Total Flights: 30

Average Delay: 9 Minutes

Average Passenger Satisfaction: 7.97

Total Complaints: 15

Insight: Flight Delays And Complaints Can Be Early Indicators Of Declining Service Quality. These metrics help Lufthansa identify problem areas proactively.

Delay Analysis By Destination

Madrid And Amsterdam has the highest average delay of 20 minutes

Barcelona and CDG are comparatively more punctual

Recommendation: Investigate operational bottlenecks on high-delay routes.

Ticket Pricing & Complaints

Insights:

Business Class Tickets Average €200 while Economy Is €100.

Most Complaints Come From Frankfurt To Madrid Routes.

Recommendation: Enhance the economy service experience and ensure transparent pricing to reduce dissatisfaction

Passenger Class Distribution

Insights:

70% of Passengers fly Economy and 30% of Passengers fly Business.

Higher Complaints Are Generated In The Largest Segment: Economy

Recommendation: Lufthansa should invest in enhancing comfort and crew attention in economy class.

Conclusion & Recommendation

Summary Of Key Findings:

Frankfurt to Madrid has High delays and High Complaints as well

Complaints Are Concentrated In Economy Class

Cabin Crew Rating and Onboard Service correlate with complaints.

Recommendations:

Review and optimize flight scheduling for high-delay routes.

Provide crew training focused on economic passenger needs.

Consider pricing adjustments to better match service levels.

Thank You!

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- Feel Free To Reach Out For Questions Or Further Insights