

Performance Report Dashboard - Plant Co.

Created by: Nilesh Sharma

Dashboard Link: View Report on Power BI

Executive Summary

This Power BI dashboard was designed to analyse and evaluate customer satisfaction levels in the airline industry. The main objective is to identify service improvement areas and highlight operational inefficiencies, such as delays in flight departure and arrival. Through insightful KPIs, customer segmentation, and rating visuals, the dashboard empowers business decision-makers to take data-driven actions for improved service quality and overall customer experience.

Business Problem

The airline industry faces continuous challenges in ensuring high customer satisfaction while maintaining operational efficiency.

Key issues identified:

- A significant number of customers are either neutral or unsatisfied with services.
- Average delays in arrival and departure are around 15 minutes.
- Lack of clarity on customer satisfaction by demographics (age, gender, travel type, etc.).

Goal:

To develop an interactive dashboard that allows stakeholders to:

- Track satisfaction metrics and identify weak service areas.
- Analyse customer preferences and behaviour by demographics.
- Monitor delay patterns to reduce operational bottlenecks.

Approach

1. Data Loading & Cleaning

- o Loaded CSV into Power BI
- o Used Power Query to check column distribution, quality, and nulls
- o Removed nulls from "Arrival Delay" (less than 1%) during calculations

2. Data Modeling & Transformation

- o Created a new calculated column Age Group using DAX
- o Built measures for total customers, % of business class travellers, and total distance travelled

3. Visualizations

- KPI Cards: Avg. Arrival Delay, Avg. Departure Delay, Total Distance, Customer Count
- o Bar Chart: Customer Satisfaction by Gender
- Star Rating Visuals: For 13 customer experience parameters
- o Slicers: Class, Customer Type, Gate Location, Type of Travel
- o Added branding elements (airline name, tagline, logo)

4. Publishing

o Published report to Power BI Service for broader access

Key KPIs

Metric	Value
Total Customers	129,880
Avg. Arrival Delay (min)	15.09
Avg. Departure Delay (min)	14.71
Business Class Travelers (%)	47.87%
Total Distance Traveled	Summed from dataset
Satisfied Customers (%)	~43%
Neutral/Unsatisfied Customers (%)	~57%

Insights

- **Satisfaction Gap:** Neutral/Unsatisfied customers make up the majority (~57%), showing a clear need for service improvement.
- **Delays:** Average delay of 15 minutes observed both in arrival and departure.
- Age Group Insights:
 - o Majority of passengers fall under the age group 25–50 years (52.44%)
- Travel Class Preferences:
 - o Nearly 48% travel in Business Class, showing a premium customer base.
- Customer Type:
 - o **81.69% are returning customers**, highlighting brand loyalty potential.

Dashboard Snapshot



Resources

- GitHub ReadMe (Gen-Z Style): Readme_Gen-Z Style.md
- Power BI Report File (.pbix):
 Performance Report (Plant Co.).pbix