Airline Customer Satisfaction Report

This report presents an analysis of airline customer satisfaction using an interactive dashboard created in Power BI. The dataset consists of 103,904 customer records containing demographic, travel, and service-related information.

1. Demographics Overview

- The average age of passengers is 39.38 years.
- **Gender distribution** is nearly equal, with **50.75% female** and **49.25% male** passengers.
- **Visualization Used**: Donut charts were used to show proportional comparisons between gender categories in a simple and clear format.



2. Customer Type and Travel Purpose

- 81.73% of the passengers are loyal customers, while 18.27% are disloyal.
- A majority, **68.96**%, travel for **business purposes**, and the remaining **31.04**% for personal reasons.
- **Visualization Used**: Pie charts provide an effective way to present categorical data, helping to highlight the dominant travel purpose and loyalty status.

3. Satisfaction Level

- Only **43.33**% of passengers are classified as **satisfied**, whereas **56.67**% are either neutral or dissatisfied.
- **Visualization Used**: A donut chart was used to emphasize the satisfaction gap, offering a quick visual of overall customer sentiment.

4. Delay Metrics

- The average departure delay is 14.82 minutes, and the average arrival delay is 15.18 minutes.
- These figures indicate operational inefficiencies that may contribute to dissatisfaction.

5. Age Group Analysis

• The age group that travels the most falls within **41–50 years**, followed by the 21–30 and 31–40



age ranges.

• **Visualization Used**: A vertical bar chart was used for age-wise travel distribution, allowing straightforward comparison between categories.

6. Service Ratings

- Average ratings across services (check-in, food, entertainment, etc.) generally range between **2.7 and 3.6**, indicating moderate satisfaction.
- **Visualization Used**: Clustered bar charts helped compare different service aspects side by side, revealing which areas need the most improvement.

7. Relationship Insights

- A scatter plot was used to explore the relationship between age group and inflight service rating.
- This visualization helps identify if specific age groups perceive inflight service differently, though the correlation appears weak.



AIRLINE CUSTOMER SATISFACTION POWER BI DASHBOARD

Short Story Behind the Dashboard

This dashboard was made to understand how more than one lakh passengers feel about their flying experience. Instead of just guessing, the aim was to use data to get a clear picture of what passengers like, what they don't, and what needs to be improved.

As we explored the data, some interesting things stood out. Most passengers are loyal and travel for business. This shows that they fly often and have high expectations from the airline. But despite being regular customers, only about 43% of them are satisfied. That's lower than expected.

We looked deeper and found that service ratings—like check-in, food, cleanliness, and inflight entertainment—were mostly average. Not too bad, but not great either. These average experiences can easily turn into disappointments, especially for frequent flyers.

Delays also seem to play a role. On average, both departure and arrival delays were around **15 minutes**. While that may not seem like a lot, it can become frustrating when combined with other small issues.

So, what started as a simple data analysis turned into a clear story. The dashboard shows exactly who the passengers are, what they go through, and where the airline can do better. It highlights the areas that need attention and gives a solid direction for improvement.

Conclusion

The analysis reveals a need for strategic improvements in service quality and operational efficiency. Despite a strong base of loyal customers, more than half are not fully satisfied. Focused attention on reducing delays and improving customer-facing services can help convert neutral or dissatisfied passengers into advocates. The Power BI dashboard effectively presents these findings through well-structured visuals, making the insights actionable for decision-makers.