

Executive Summary: Flight Status Dashboard

Objective

The Flight Status Dashboard provides a comprehensive overview of flight performance, delays, and cancellations across various cities, airlines, and time periods. The goal is to analyze key flight metrics to identify trends, improve operational efficiency, and enhance passenger experience.

Key Highlights

1. Total Flights Analysis

- **2M Total Flights** recorded, with a monthly trend analysis showing fluctuations in air traffic.
- Top cities with the highest flight volumes include **Atlanta, Chicago, and Dallas**.

2. Flight Delays

- **790K flights were delayed**, accounting for **41%** of total flights.
- The delay trend shows seasonal fluctuations, highlighting potential operational bottlenecks.
- Airlines with the highest delay percentages include **United Airlines, Southwest Airlines, and Spirit Airlines**.

3. Flight Cancellations

- **29K flights were canceled**, representing **1%** of total flights.
- Cancellations vary by **day of the week**, with certain days experiencing higher disruption rates.

4. Flight Punctuality & Performance

- **58% of flights were on time**, demonstrating a need for efficiency improvements.
- A breakdown by flight status shows a significant proportion of flights facing delays.

Insights & Recommendations

- **Operational Efficiency:** Address peak delay periods by optimizing flight schedules and improving turnaround times.
- **Airline Performance Monitoring:** Airlines with high delay percentages should focus on service enhancements and contingency planning.
- **Passenger Experience Enhancement:** Identifying trends in cancellations and delays can help airlines improve communication and passenger satisfaction strategies.

This dashboard serves as a valuable tool for stakeholders in the aviation industry to make data-driven decisions and improve overall flight reliability.