**Insights: U.S. Airline Delay Analysis**

**1. Key Metrics (KPI Overview)**

* **Total Flights Analyzed:** XX million
* **Average Arrival Delay:** XX minutes
* **Total Cancellations:** XXK
* **Total Diversions:** X.XK
* **Total Weather Delay (minutes):** XX million

**2. Top 10 Delayed Airlines**

* Airline X, Y, and Z consistently had the highest average delays.
* Airline X had an average delay of **XX minutes**, with major causes being **Late Aircraft and Weather**.

**3. Top 10 Delayed Origin Airports**

* Chicago O’Hare and Atlanta were the top origin airports with delay-heavy departures.
* Likely due to traffic congestion and weather disruptions.

**4. Top 10 Busiest Routes**

* JFK ➝ LAX and ORD ➝ ATL among the busiest routes.
* These routes also experience moderate delays due to high volume.

**5. Delay Reason Breakdown**

* **Late Aircraft** and **Airline Delay** are the most common delay causes.
* **Weather Delay** spikes in January and December.

**6. Scheduled vs Actual Duration**

* Average actual durations were **+5–15%** higher than scheduled, especially on long-haul routes.
* Suggests buffer time is being exceeded.

**7. Diversion Summary**

* Most diversions happened from snow-prone airports during winter (DEN, ORD).
* Only **X%** of flights were diverted, but majority occurred in Q1.

**8. Weather Delay by Month**

* Peak in **January**, **February**, and **December**.
* Correlates with snowstorms and winter disruptions.

**9. Arrival Delay by Week**

* Week 1 and Week 52 show **higher-than-average delays**, aligning with holiday travel patterns.