



Airlines Flight Dashboard – Case Study Report



Executive Summary

This case study analyzes airline performance and passenger behavior using the Airlines Flight Dashboard (Power BI).

- Vistara and Air India dominate the market → jointly capture over 90% of revenue and passenger traffic.
- Economy Class drives volume (68.85%), but Business Class contributes higher profitability (31.15%).
- Passengers prefer Morning (71.15K), Early Morning (66.79K), and Evening (65.10K) flights.
- Late-night flights (1.31K) show negligible demand.
- Demand is concentrated in Tier-1 metros: Delhi, Bangalore, Mumbai, Hyderabad, Chennai, Kolkata.

👉 Airlines can use these insights to optimize scheduling, pricing, and route planning for improved profitability.



Business Problem

Airlines operate in a competitive, low-margin industry, facing challenges such as:

- Identifying profitable airlines and classes
- Understanding passenger preferences (timings, classes, airline choices)
- Determining geographic hubs with highest demand

Critical Questions:

1. Which airlines generate the most revenue and passenger traffic?
 2. Which class of service is most profitable?
 3. What are the preferred flight timings for passengers?
 4. Which cities/states contribute most to demand and revenue?
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Methodology

- **Data Source** → Passenger booking & revenue dataset (Excel/CSV)
 - **Tool Used** → Power BI
 - **Techniques Applied** → Data cleaning, DAX measures, interactive slicers, visual storytelling (bar charts, pie charts, donut charts, time-distribution plots)
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Key Findings

Revenue and Market Dominance

- Vistara → ~\$3.4B (61.98% market share)
 - Air India → ~\$1.6B (30.33% market share)
 - Together → >92% of total revenue
 - Others (Indigo, GO_FIRST, AirAsia, SpiceJet) contribute marginally
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Profitability by Class

- Economy Class → 206.67K passengers (68.85%)
 - Business Class → 93.49K passengers (31.15%) → higher per-passenger revenue
 - **Key Insight:** Business Class = high-yield segment
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Passenger Preferences

- **Preferred Airlines:**
 - Vistara → 128K
 - Air India → 81K
 - Indigo → 43K
 - **Preferred Timings:**
 - Morning → 71.15K
 - Early Morning → 66.79K
 - Evening → 65.10K
 - Late Night → 1.31K (least viable)
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Geographic Distribution

- Demand centered in metros: Delhi, Bangalore, Mumbai, Hyderabad, Chennai, Kolkata.
 - These hubs = core profit centers.
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Strategic Recommendations

1. **Capitalize on Market Leaders** → Strengthen alliances & loyalty programs with Vistara and Air India.
 2. **Maximize Business Class Profitability** → Premium perks, lounges, bundles, corporate partnerships.
 3. **Optimize Flight Scheduling** → More Morning & Evening flights; fewer Late-night flights.
 4. **Metro-Centric Expansion** → Reinforce routes among Delhi, Mumbai, Bangalore.
 5. **Low-Cost Carrier Strategy** → Compete with Afternoon/Night slot pricing for price-sensitive travelers.
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Business Impact

Implementing these strategies will:

- Increase load factor utilization
 - Improve profitability (via Business Class)
 - Strengthen market share in metro hubs
 - Reduce inefficiencies from low-demand flights
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