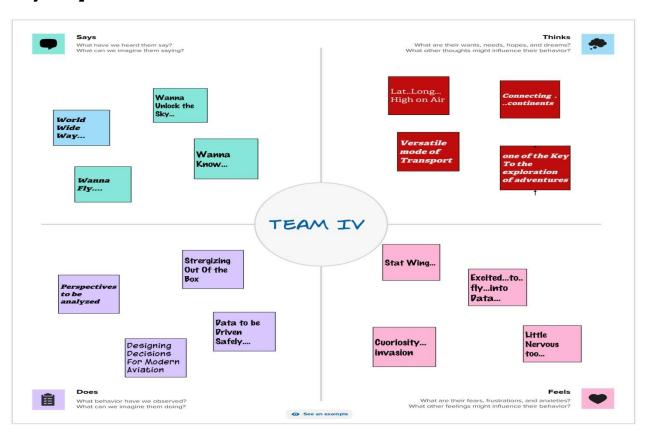
Global Air Transportation Network

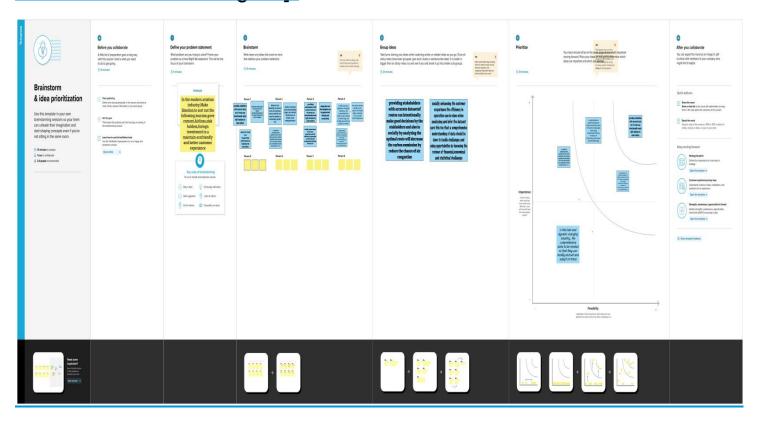
Introduction

This Global Air Transportation Network dataset is a comprehensive collection of information on airports, airlines and their routes. It contains information such as names, cities, countries, codes (IATA and ICAO) longitudes, latitudes and altitudes of airports across the world with detailed time zone and daylight saving time data. Additionally, this includes information about airlines including their IDs, name aliases, IATA and ICAO codes, callsigns country of origin and active/inactive status. Similarly, it also covers route details such as airline sources to destination airports along with essential details like codeshare stakeholder if any stops required during this journey along with the type of aircraft being used for that particular journey. This dataset has been compiled through meticulous labor by researchers all over the world to give you a comprehensive detail into air transportation networks from around the globe.

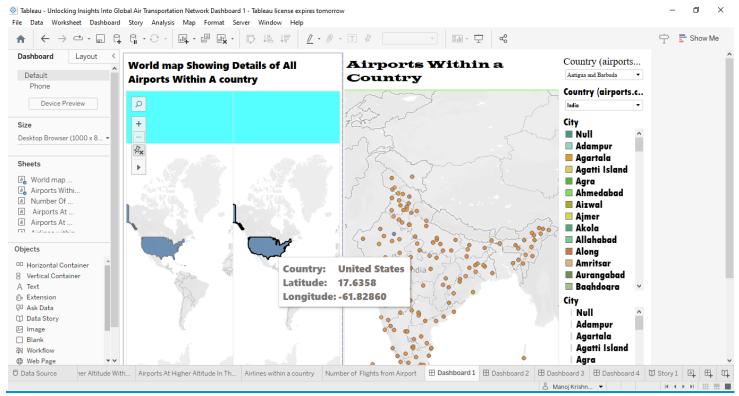
Empathy Map



Ideation & Brainstorming Map



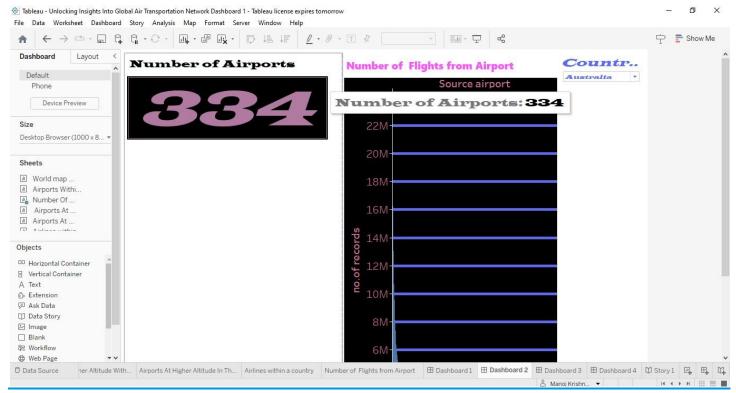
Result Dashboard1



Dashboard 1

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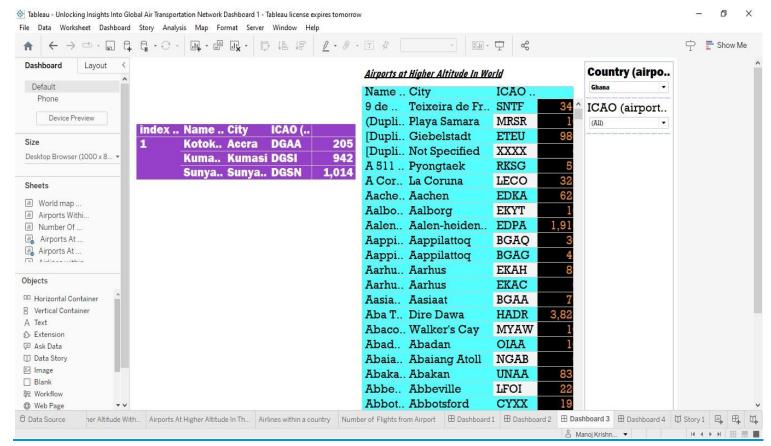
Dashboard 2



Dashboard 2

https://public.tableau.com/views/UnlockingInsightsIntoGlobalAirTransportationNetworkDashboard2/Dashboard2?:language=en-US&:display count=n&:origin=viz share link

Dashboard 3



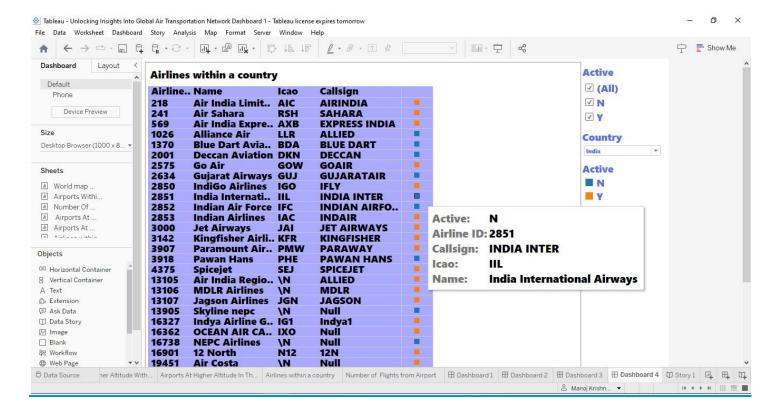
Dashboard 3

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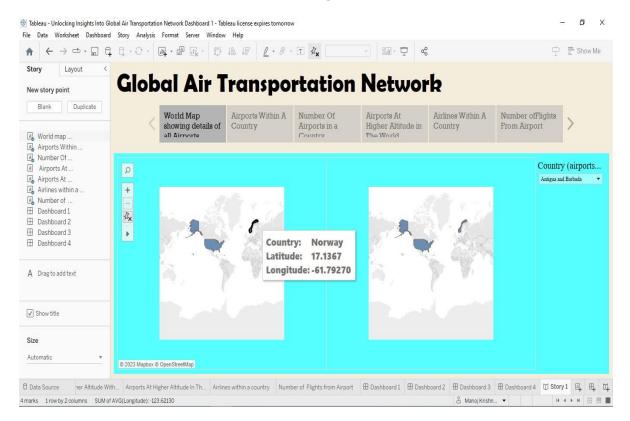
Dashboard 4

Dashboard 4

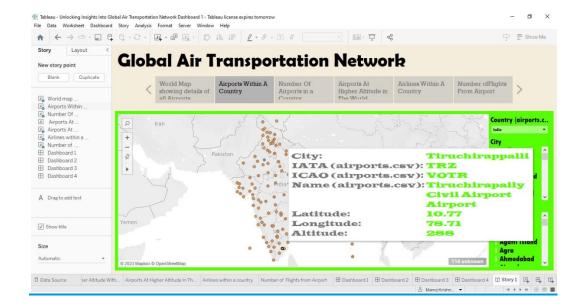
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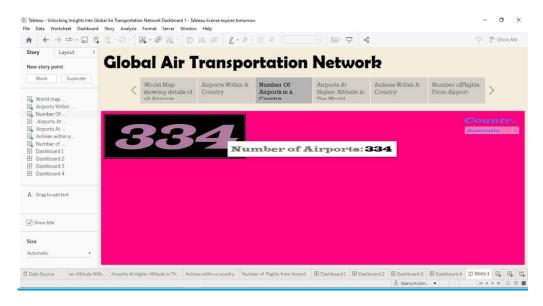
Story



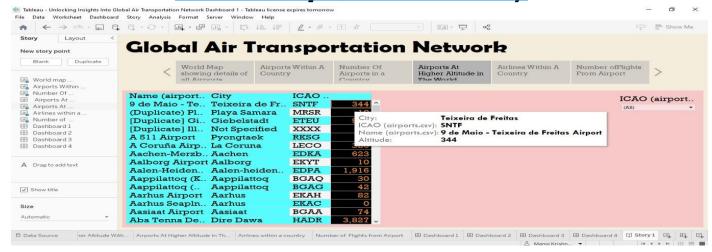
World Map Showing Details of All Airports



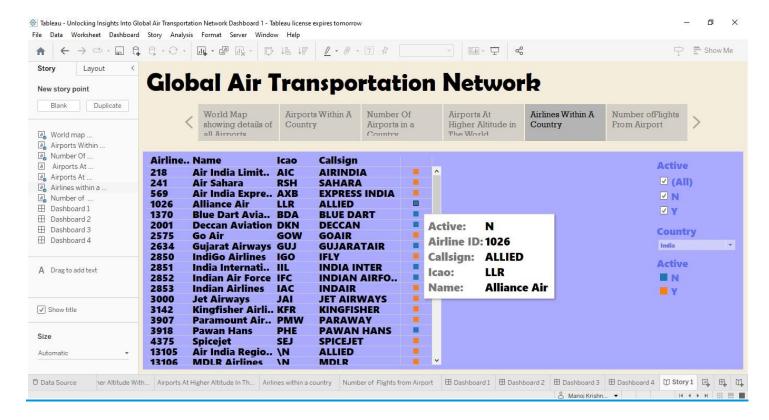
Airports Within A Country



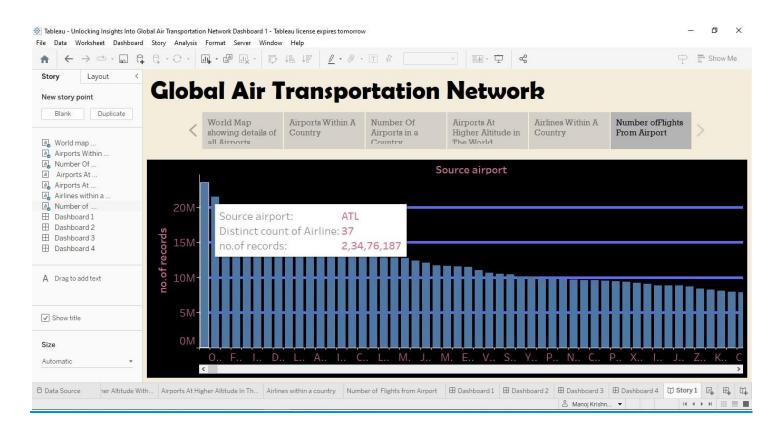
Number of Airports Within A Country A



Airports At Higher Altitude in The World



Airlines Within A Country



https://public.tableau.com/views/UnlockingInsightsIntoGlobalAirTransportationNetworkStory/Story1?:language=en-US&:display count=n&:origin=viz share link

Tableau can offer several advantages and disadvantages, as outlined below Unlocking insights into the global air transportation network using:

<u> Advantages:</u>

- 1. Data Visualization: Tableau is renowned for its powerful data visualization capabilities. It allows you to create interactive and informative dashboards that make complex data related to air transportation easy to understand. Visualizations can include route maps, passenger trends, and more.
- 2. Real-time Analysis: Tableau can connect to various data sources, enabling real-time or near-real-time analysis of air transportation data. This is valuable for tracking live flights, delays, or disruptions.
- 3. Customization: Tableau offers a high degree of customization, allowing you to tailor your visualizations to specific needs. You can create custom calculations, filters, and parameters to address unique questions about the air transportation network.

<u>Disadvantages:</u>

- Complexity: While Tableau is a powerful tool, it can be complex for beginners or those without a background in data analysis. Learning the tool may require training and expertise.
- 2. Data Quality: The quality of the insights you obtain is highly dependent on the quality of the underlying data. Garbage in, garbage out. If the data is incomplete or inaccurate, the insights generated may be unreliable.

APPLICATIONS

- Flight Route Analysis
- ❖ Passenger Trends
- Flight Delays and Disruptions
- Airport Performance

- Capacity Planning
- Demand Forecasting
- Environmental Impact Analysis
- Market Research and Competitive Analysis
- Regulatory Compliance
- Customer Experience
- Emergency Response and Contingency Planning
- ❖ Cost Management
- Market Expansion
- Economic Impact Assessment

CONCLUSION

In conclusion, the Global Air Transportation Network dataset offers a comprehensive and meticulously compiled resource for analyzing the worldwide aviation industry. It encompasses extensive data on airports, airlines, and routes, including location details, codes, time zones, and aircraft information. This dataset is a valuable tool for researchers, analysts, and professionals to gain insights into global aviation trends, connectivity, and operational histories of airlines. It can aid in making informed decisions related to air transportation, route planning, and understanding the impact of time zones and daylight saving time on travel. This dataset reflects the collaborative effort of researchers worldwide, making it an essential resource for those studying and working in the field of aviation and transportation

Future Scope.

- **❖** Real-Time Data Integration
- * Expanded Aircraft Details
- Environmental Impact Metrics
- Historical Route Data
- User-Friendly Interface
- * Mobile App Integration
- Crowdsourcing for Updates