UNLOCKING INSIGHTS INTO THE GLOBAL AIR TRANSPORTATION NETWORK WITH TABLEAU

1. INTRODUCTION

1.1 OVERVIEW

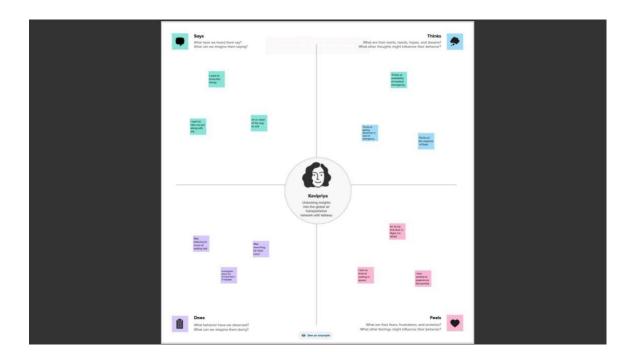
This Global Air Transportation Network dataset is a comprehensive collection of information on airports, airlines, and their routes. It contains information such as names, cities, countries, codes (IATA and ICAO) longitudes, latitudes, and altitudes of airports across the world with detailed time zone 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 stakeholders if any stops are required during this journey along with the type of aircraft being used for that particular journey. This dataset has been compiled through meticulous labour by researchers all over the world to give you comprehensive details into air transportation networks from around the globe.

1.2 PURPOSE

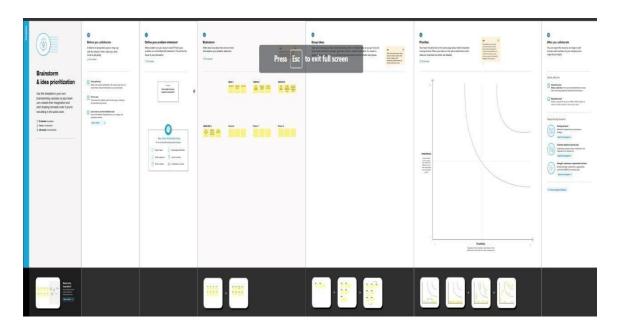
- Air transport is currently used in almost all industrial sectors and distribution chains. Most
 companies use air transport to market goods and products internationally or to deliver samples
 and documents related to foreign trade operations.
- It promotes an improved quality of life and helps to improve living standards. By facilitating
 tourism, air transport also helps generate economic growth and alleviate poverty providing
 employment opportunities, increasing revenues from taxes, and fostering the conservation of
 protected areas.
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2. PROBLEM DEFINITION AND DESIGN THINKING

2.1 EMPATHY MAP

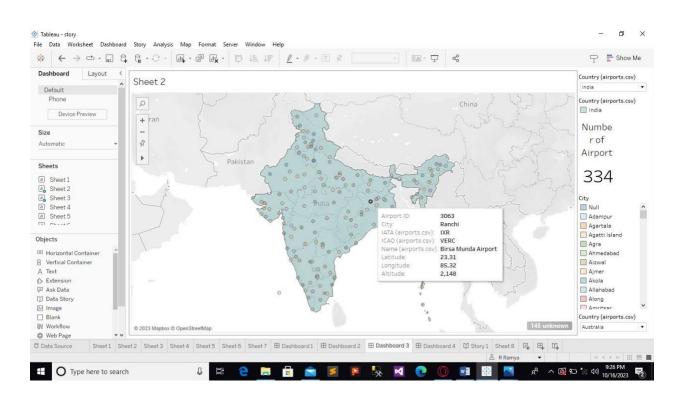


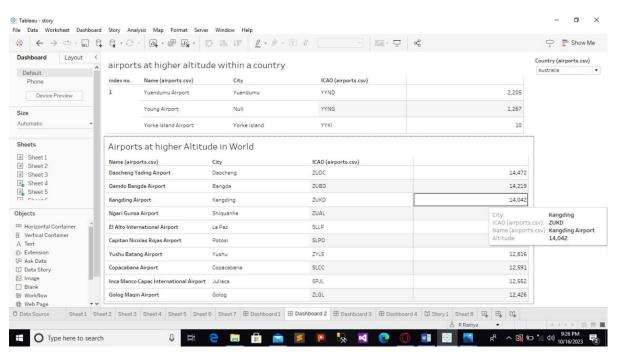
2.2 IDEATION &BRAINSTORMING MAP

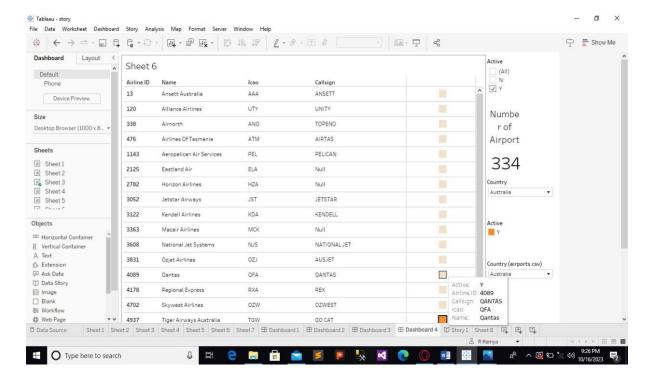


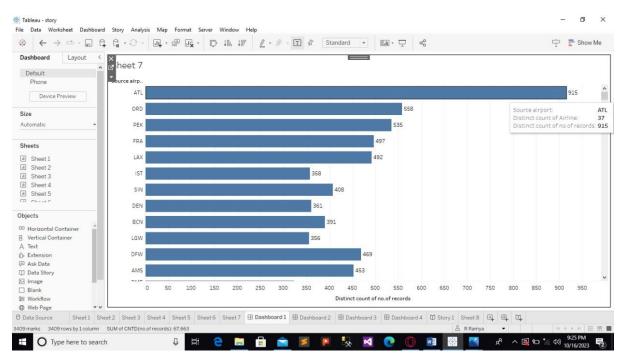
3. RESULT

DASHBOARD

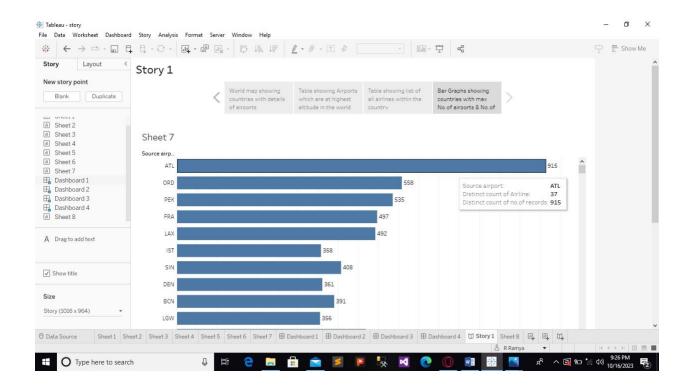








STORY



4. ADVANTAGES AND DISADVANTAGES

Advantages

- It is the fastest mode of transport that exists and, therefore, it is especially recommended when time is an important factor.
- There are no physical barriers: thanks to this it is possible to make a trip without interruption choosing the shortest and most direct route through seas, and mountains.
- Easy access: Air transport can transport goods to areas that are not easily accessible by other means of transport.
- Suitable for transporting high-value or perishable goods over long distances.

Disadvantages

• Very expensive economically: it is the most expensive means of transport.

- Uncertain: air transport is largely conditioned by weather conditions. Snow, rain, fog, etc., can cause the cancellation of scheduled flights and the suspension of air service.
- Not suitable for cheap and high-volume goods due to its limited capacity and high cost.
- Legal restrictions: Many countries have legal restrictions in the interest of their own security.

5. APPLICATIONS

- General merchandise: It does not require special treatment on the aircraft or in the cargo terminal.
 These are products whose fragility is not too high, and whose value makes exporters choose to bring them by air.
- Perishable goods: Perishable goods are those that deteriorate after a period of time due, for example, to weather conditions, shock, or humidity. In this way, fresh foods (meat, fish, fruits, vegetables) or flowers and plants are perishable goods.
- Pharmaceutical goods: We refer to medicines, vaccines, or pharmaceutical products. In the same
 way, as in the case of perishable goods, pharma products often require extensive temperature
 control.
- Dangerous Goods (DG): As their name indicates, they are those products that can cause harm to human health and/or the environment, such as explosives, flammable gases, liquids or solids, or toxic substances. In this way, this type of merchandise can only be transported by air.
- Urgent goods: As we mentioned at the beginning, one of the main advantages of air transport is speed, for this reason, it is ideal for urgent goods, that is, those that have to reach their destination as soon as possible.
- Goods of value: These are those that have a high economic value. Although the ship is a safe means of transport, the plane offers greater guarantees. Some examples of valuable goods are jewelry, precious stones, or certain works of art.

6. CONCLUSION

The air transport industry is not only a vital engine of global socio-economic growth but is also of vital importance as a catalyst for economic development in most countries and for many regions within each country. Its importance arises not only from its ability to facilitate the movement of people but also its ability to expedite the movement of goods. Currently, rising operating costs, stoked by the high price of aviation fuel combined with slowing or even negative demand growth, will lead to dramatic restructuring of the airline industry and the collapse of many airlines especially smaller ones. Reduced access to air services for both passengers and freight may put many communities at a disadvantage.

7. FUTURE SCOPE

- The future of the aviation industry in India is likely to see continued growth and expansion, driven by factors such as a growing middle class, increased tourism, and government policies supporting the industry.
- The market size of the aviation industry in India has grown significantly in recent years, driven by a combination of factors, including a growing middle class, increased tourism, and the government's efforts to open up the sector to foreign investment.
- Overall, the future of the aviation industry in India is likely to be one of growth and expansion, with opportunities such as a growing middle class and supportive government policies.