

UNLOCKING INSIGHT INTO THE GLOBAL AIR TRANSPORTATION NETWORK

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 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. It requires your generous donations in order for them to keep updating this data source so please do donate if possible.

1.2) PURPOSE:

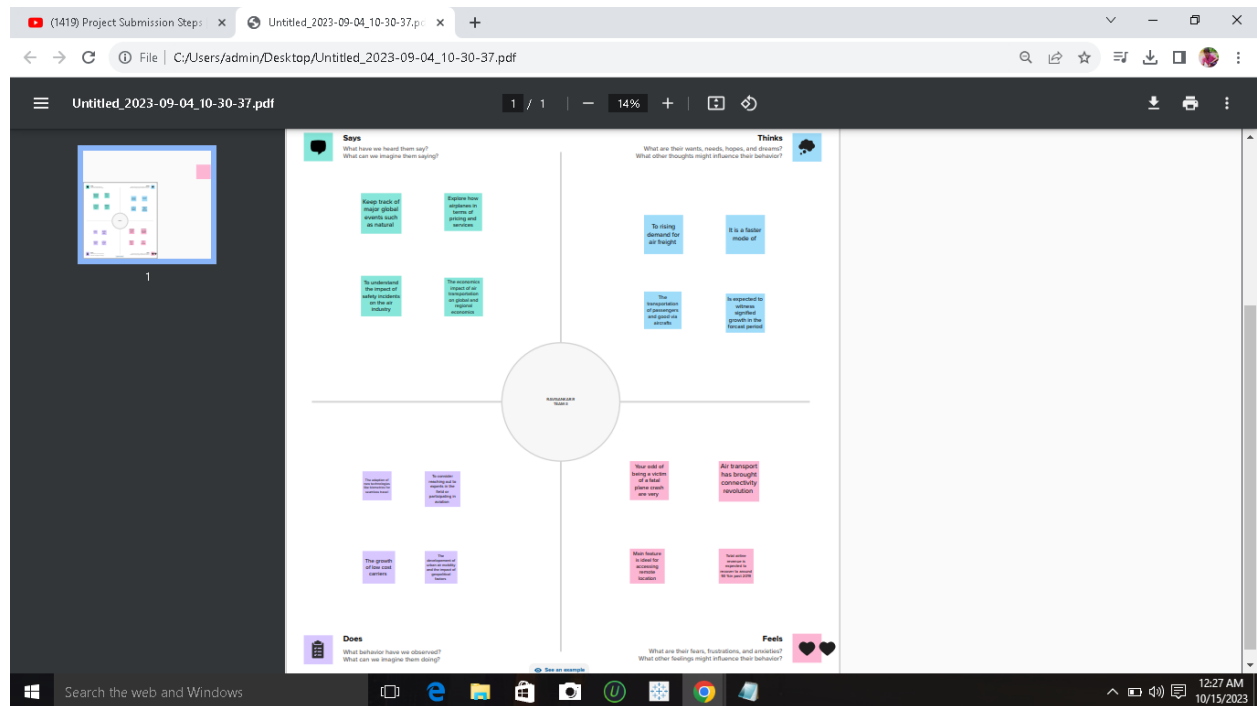
The business requirement of the Global Air Transportation Network- Airports, Airlines, and Routes dataset is to provide stakeholders in the aviation industry with accurate, up-to-date information on the worldwide air transportation network. The dataset is intended to help stakeholders make informed decisions related to business growth, investment, capacity planning, and infrastructure development. Using data analytics and visualization tools like Tableau, the dataset can be analyzed to identify trends and patterns in the air transportation network, providing valuable insights into the state of the industry. This information can be used to optimize routes, improve operational efficiency, and enhance customer experience. Ultimately, the business requirement of the dataset is to enable stakeholders in the aviation industry to gain a competitive advantage by making data-driven decisions. By providing a comprehensive collection of data related to the air transportation network, the dataset can help stakeholders stay ahead of the curve in a dynamic and rapidly changing industry.

2) PROBLEM STATEMENT AND DESIGN THINKING:

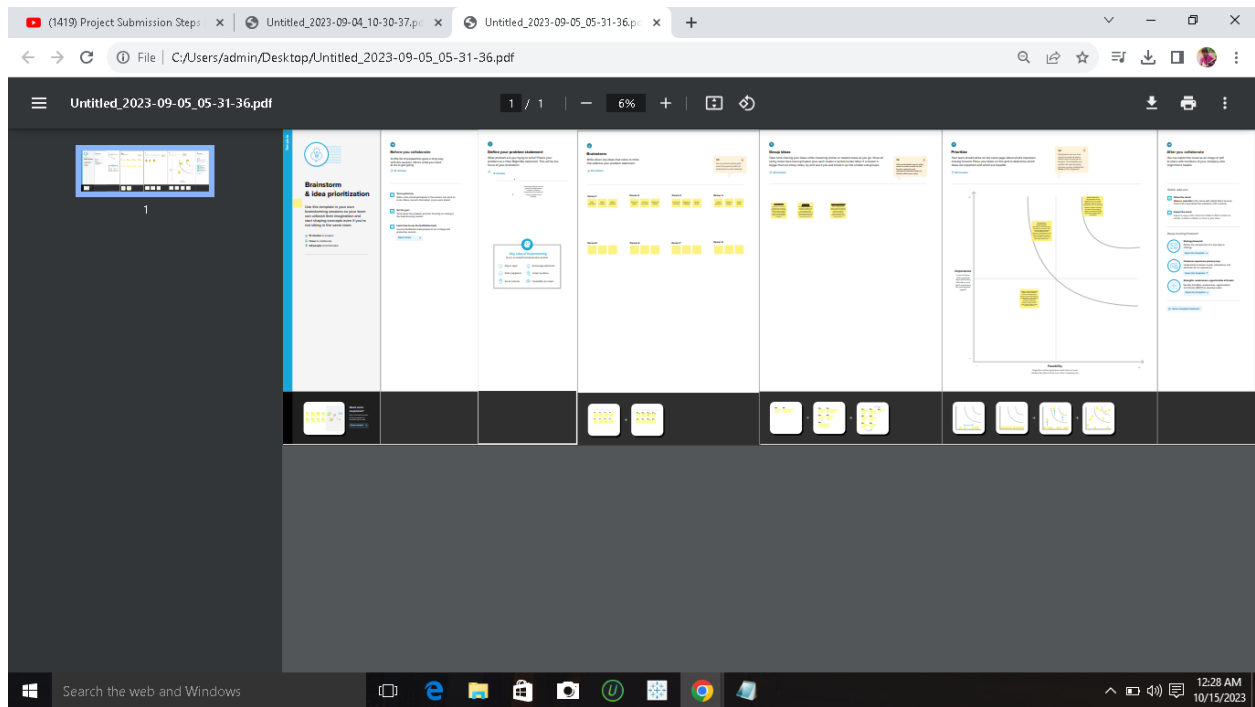
Socially, the dataset can contribute to the development of air transportation networks that are more efficient, safe, and environmentally sustainable. By providing stakeholders with a comprehensive understanding of the air transportation network, the dataset can help to optimize routes and reduce congestion in the air, leading to improved air quality and reduced carbon emissions. This can contribute to the overall well-being of communities around the world, by making air travel more accessible, affordable, and eco-friendly. From a business perspective, the dataset can have a significant impact on the aviation industry. By enabling stakeholders to make data-driven decisions, the dataset can help

airlines, airport authorities, tourism boards, and government agencies to identify new business opportunities, optimize capacity planning, and streamline operations. This can lead to increased profitability and competitiveness, as well as improved customer experience. Moreover, the dataset can be used by investors to identify promising sectors and geographic areas for investment in the aviation industry.

2.1 JEMPATHY MAP:



2.2 IDEATION AND BRAINSTORMING MAP:



3.)RESULT:



Dashboard Layout <

Device Preview

Size

Desktop Browser (1000 x 800)

Sheets

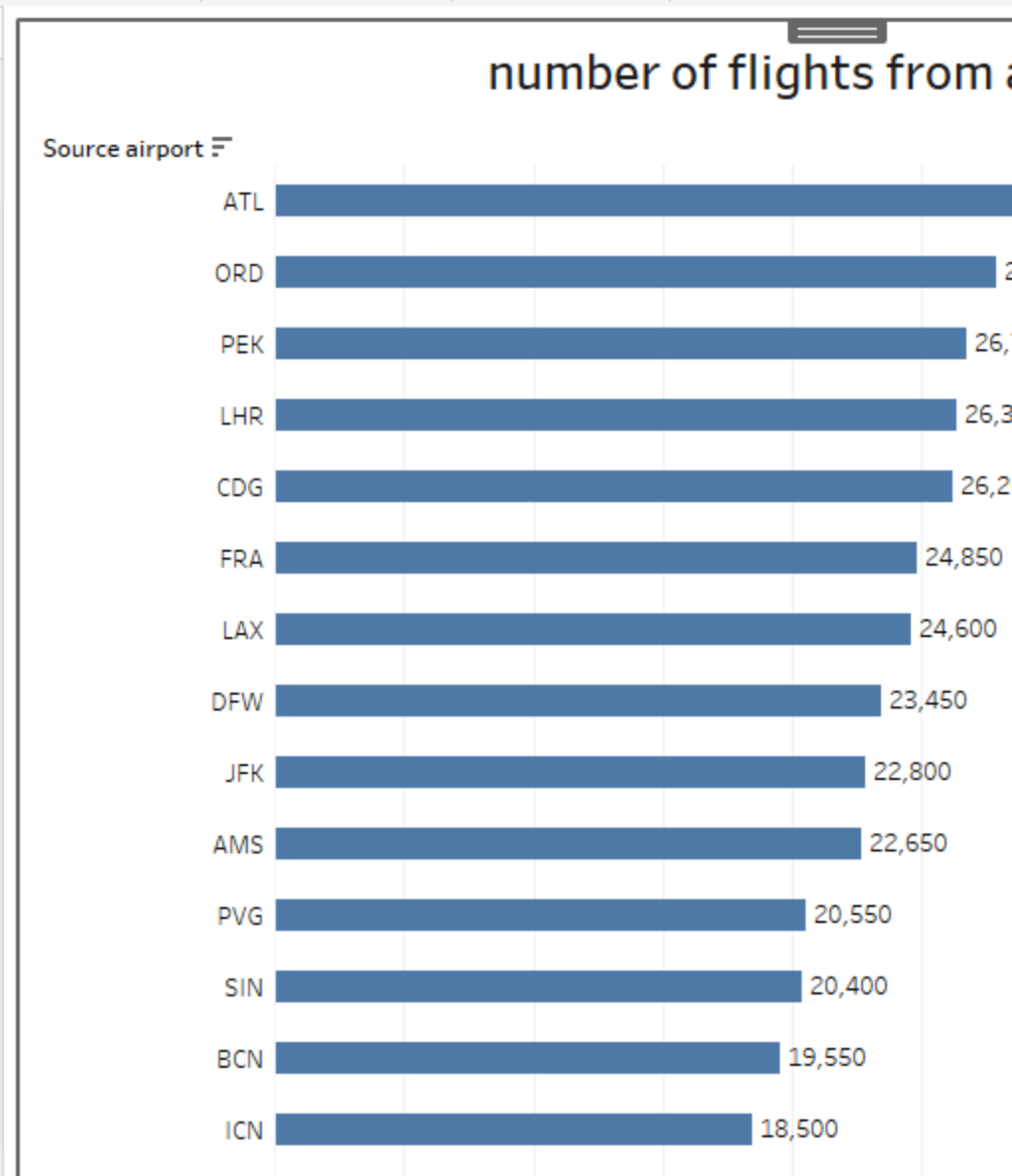
- Sheet 2
- Sheet 3
- Sheet 4
- Sheet 5
- Sheet 6

Objects

- Horizontal Container
- Vertical Container
- Text
- Extension
- Ask Data
- Data Story
- Image
- Blank
- Workflow
- Web Page

Tiled Floating

☐ Show dashboard title



Dashboard Layout

Device Preview

Size

Desktop Browser (1000 x 800)

Sheets

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Objects

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- Image
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- Workflow
- Web Page

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airlines within country

Name	Icao	Callsign	Airline ID
12 North	N12	12N	16901
Air Carnival	\N	Null	21270
Air Costa	\N	Null	19451
Air India Express	AXB	EXPRESS INDIA	569
Air India Limited	AIC	AIRINDIA	218
Air India Regional	\N	ALLIED	13105
Air Pegasus	PPL	Null	20286
Air Sahara	RSH	SAHARA	241
Air Vistara	VTI	Null	20264
Alliance Air	LLR	ALLIED	1026
Blue Dart Aviation	BDA	BLUE DART	1370
Deccan Aviation	DKN	DECCAN	2001
Go Air	GOW	GOAIR	2575
Gujarat Airways	GUJ	GUJARATAIR	2634
India International Airways	IIL	INDIA INTER	2851
Indian Air Force	IFC	INDIAN AIRFORCE	2852
Indian Airlines	IAC	INDAIR	2853
IndiGo Airlines	IGO	IFLY	2850
Indya Airline Group	IG1	Indya1	16327
Jagson Airlines	JGN	JAGSON	13107
Jet Airways	JAI	JET AIRWAYS	3000
Kingfisher Airlines	KFR	KINGFISHER	3142
MDLR Airlines	\N	MDLR	13106
NEPC Airlines	\N	Null	16738
OCEAN AIR CARGO	IXO	Null	16362
Paramount Airways	PMW	PAPAWAY	3907

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Dashboard 1 Dashboard 2 Dashboard 3

29 marks 29 rows by 1 column Highlighting on Active

Search the web and Windows

Dashboard Layout <

Device Preview

Size

Desktop Browser (1000 x 800)

Sheets

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- Sheet 6

Objects

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- Vertical Container
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- Ask Data
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number of airports within the c

airports at higher altitude within a cou

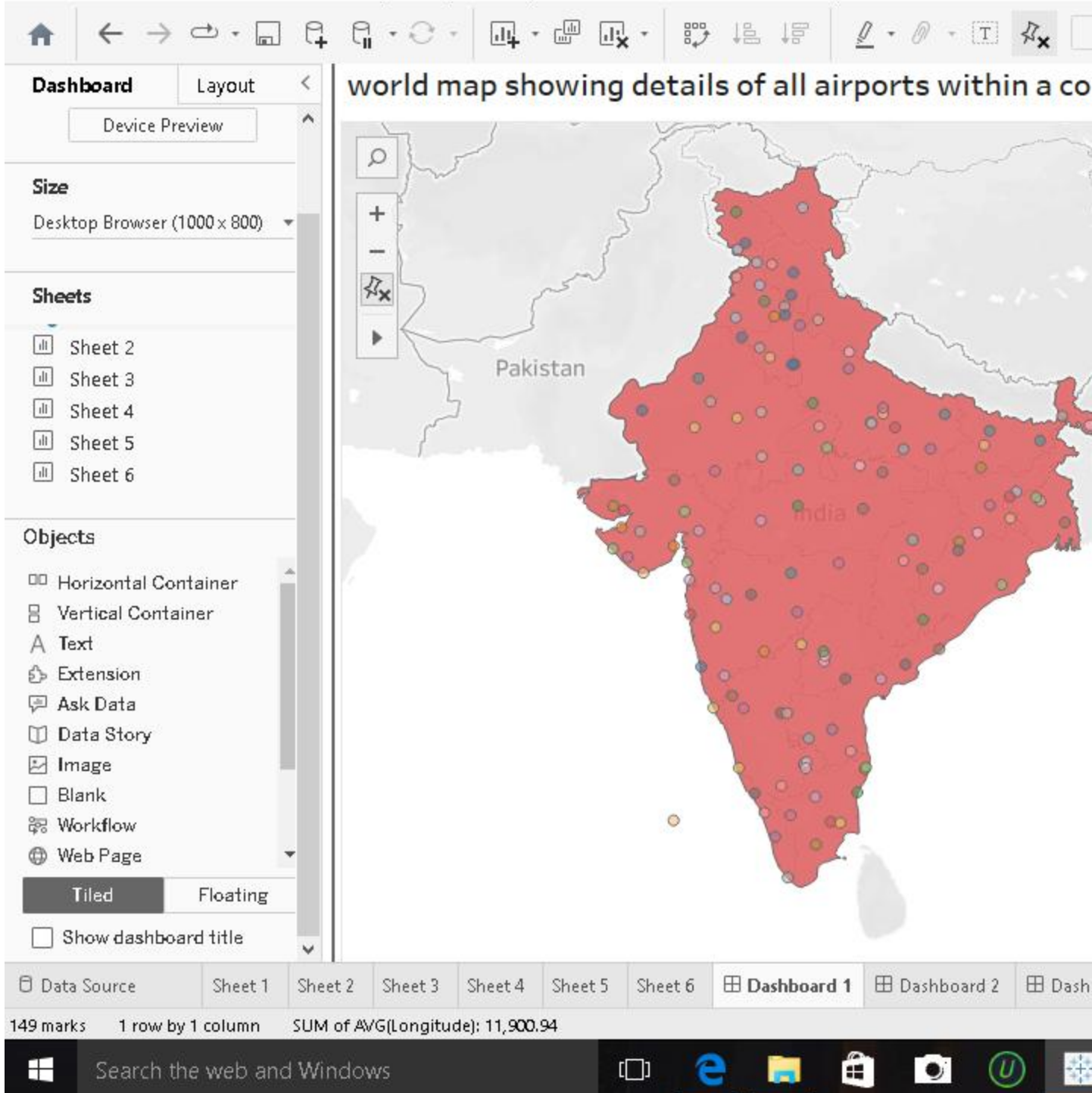
	Name	City	Icao
1	Ziro Airport	Zero	VEZO
	Yelahanka Air Force Stati..	Bangalore	VOYK
	Vishakhapatnam Airport	Vishakhapatnam	VEVZ
	Vir Savarkar International..	Port Blair	VOPB
	Vijayawada Airport	Vijayawada	VOBZ
	Vijayanagar Aerodrome (J..	Toranagallu	VOJV
	Vadodara Airport	Baroda	VABO
	Utkela Airport	Utkela	VEUK
	Udhampur Air Force Stati..	Null	VIUX
	Trivandrum International ..	Trivandrum	VOTV
	Tirupati Airport	Tirupeti	VOTP

airports in higher altitude in the world

Name	City	Icao
Golog Maqin Airport	Golog	ZLGL
Inca Manco Capac Inter..	Juliaca	SPJL
Copacabana Airport	Copacabana	SLCC

10 marks 10 rows by 1 column SUM(Altitude): 133,408

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Story

Layout

New story point

Blank

Duplicate

Sheet 1

Sheet 2

Sheet 3

Sheet 4

Sheet 5

Sheet 6

Dashboard 1

Dashboard 2

Dashboard 3

Dashboard 4

Drag to add text

Show title

Size

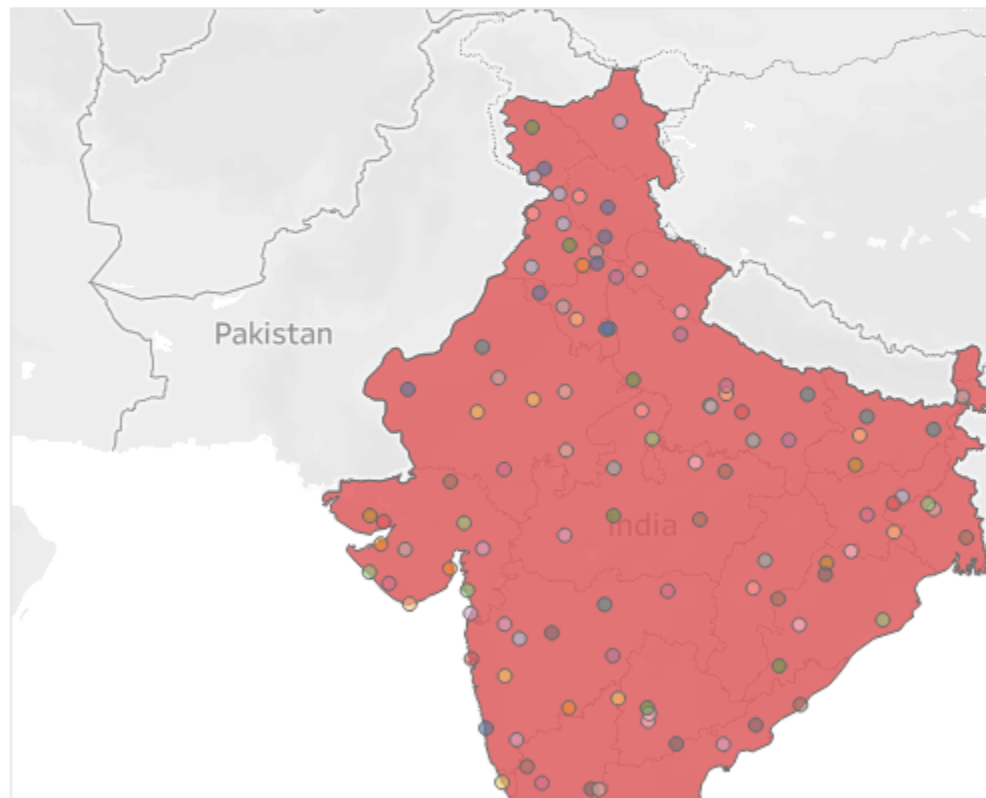
Story (1016 x 964)

Story 1

World map showing countries with details of airports

table showing airports which are at higher altitude in the world and within the country and number of

world map showing details of all airports within a co



Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Dashboard 1 Dashboard 2 Dash



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4)ADVANTAGES AND DISADVANTAGES:

1. [Advantages and Disadvantages of Air Transport](#)
2. [Advantages of Air Transport](#)
 1. [1. High Speed](#)
 2. [2. Fast Service](#)
 3. [3. Send almost everywhere your freight](#)
 4. [4. High Standard of Security](#)
 5. [5. Natural Route](#)
 6. [6. There is less need for heavy packaging](#)
3. [Disadvantages of Air Transport](#)
 1. [1. Risky](#)
 2. [2. Cost](#)
 3. [3. Some Product Limitation](#)
 4. [4. Capacity for Small Carriage](#)
 5. [5. Enormous investment](#)

5)APPLICATION:

The worldwide air transportation network is a critical infrastructure with high impact on mobility, trade and economy. Another examples are the air transport systems of a country or a country's own air transport company.

You can copy a crosstab version of a view so that you can paste or transfer the data into another application. The pasted data always appears as a crosstab, even if the initial view of the data in Tableau did not use a crosstab format.

It is used for various purposes, such as business and leisure travel, the delivery of time-sensitive goods, and emergency response and rescue mission.

6) CONCLUSION:

The 21st century has seen the continued internationalization and globalization of the world's economy. There is also evidence of deeper globalization of cultures and politics. Air transport has played a part in fostering these developments, but airlines, and to a greater degree, air transport infrastructure has had to respond to changing demands for its services. Air transport is a facilitator and, as such, the demands for its services are derived from the requirements for high-quality, speedy, and reliable international transport. Globalization, almost by definition, means demands for greater mobility and access, but these demands are for different types of passengers and cargoes, to different places, and over different distances than was the previous norm. 94. International air transport is less than a century old, but is now a major contributor to globalization and is continually reshaping itself to meet the demands of the economic and social integration that globalization engenders. Economically, in static terms, globalization occurs to facilitate the greater division of labor and allows countries to exploit their comparative advantage more completely. Perhaps, however, more importantly, in the longer term, globalization

stimulates technology and labor transfers and allows the dynamism that accompanies entrepreneurial activities to stimulate the development of new technologies and processes that enhance global welfare. To allow the flows of ideas, goods, and persons that facilitates both static and dynamic efficiency on a global scale, air transport has played a role in the past, and it seems inevitable that it this role will continue in the future.

7.)FUTURE SCOPE:

Airplanes are faster, safer, more efficient, and more environmentally friendly than cars and buses. While road transportation may be suitable for short distances, air transportation is the clear choice for travel over long distances.

Rapidity: Compared to other types of transportation, air travel was the fastest. Special Preparations: Special preparations are needed for air travel, such as wheel links, weather stations, floodlighting, and searchlights. Expensive: The most costly form of transportation is air travel.