

# Unlocking Insights into the Global Air Transportation Network with Tableau.

## 1). 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.

### 1.1 Overview:

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.

### 1.2 Purpose:

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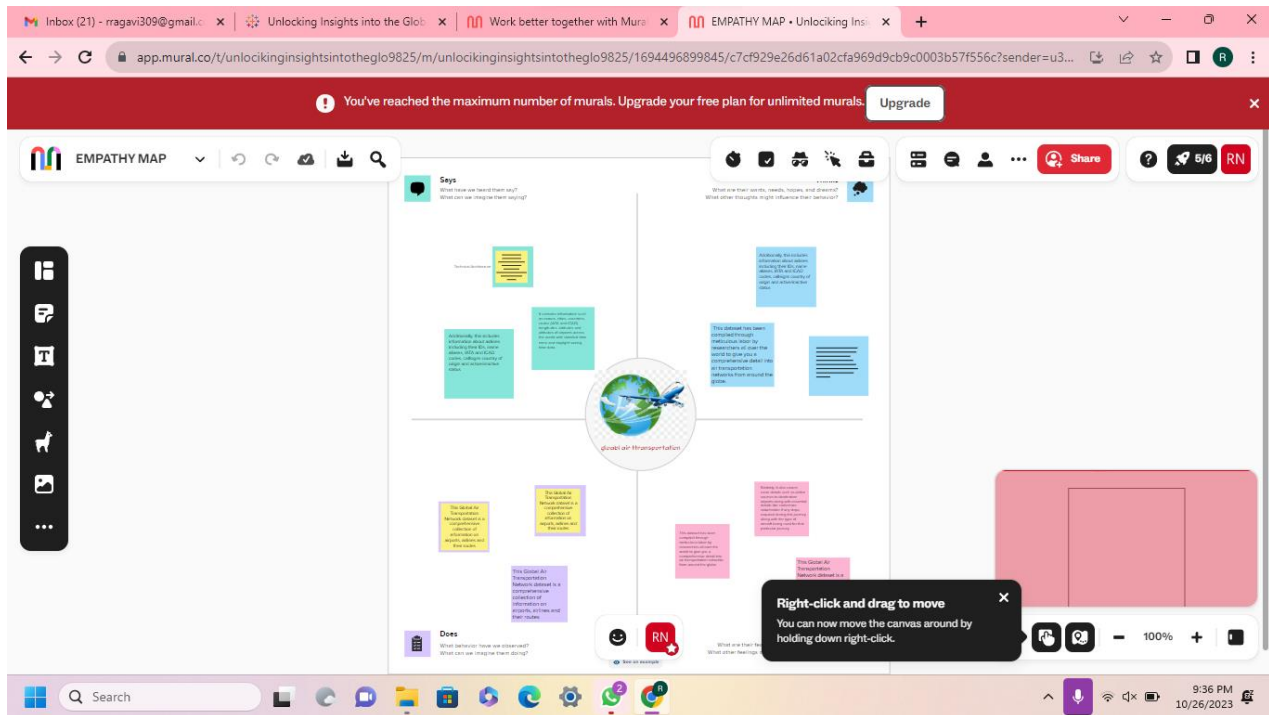
## 2).Problem Definition & Design Thinking:

### 2.1 Empathy Map:

\*An Empathy Map consists of four quadrants. The four quadrants reflect four key traits, which the user demonstrated/possessed during the observation/research stage. The four quadrants refer to what the user: Said, Did, Thought, and Felt.

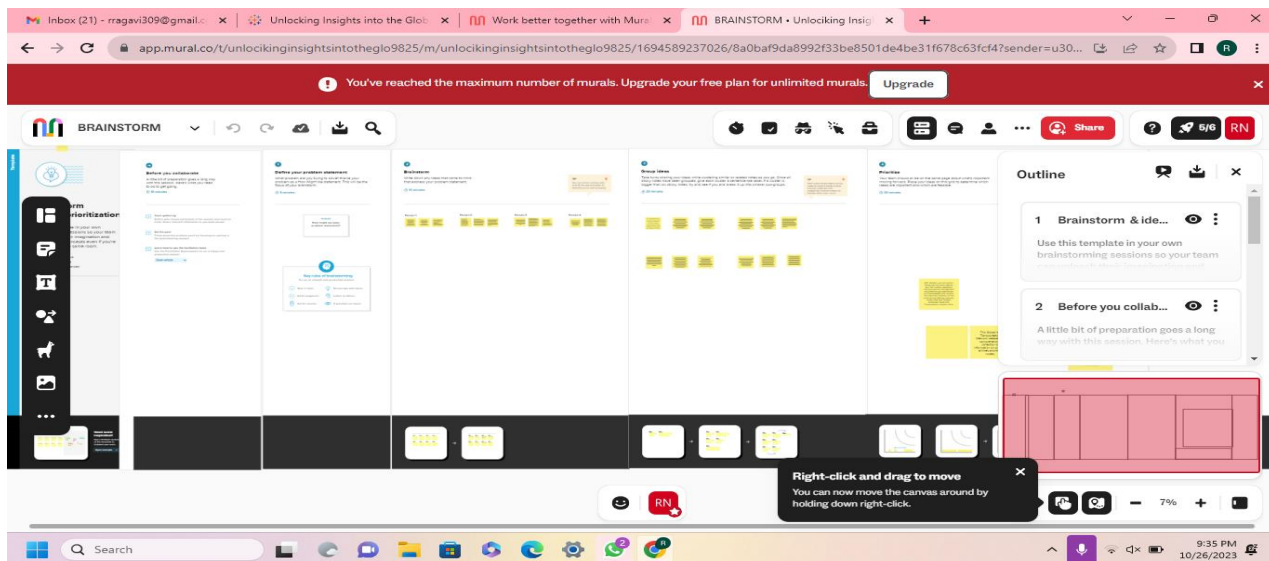
### Examble:

\* For example, you likely smile and take the trouble to remember people's names: that's empathy in action. Giving people your full attention in meetings, being curious about their lives and interests, and offering constructive feedback are all empathic behaviors, too.



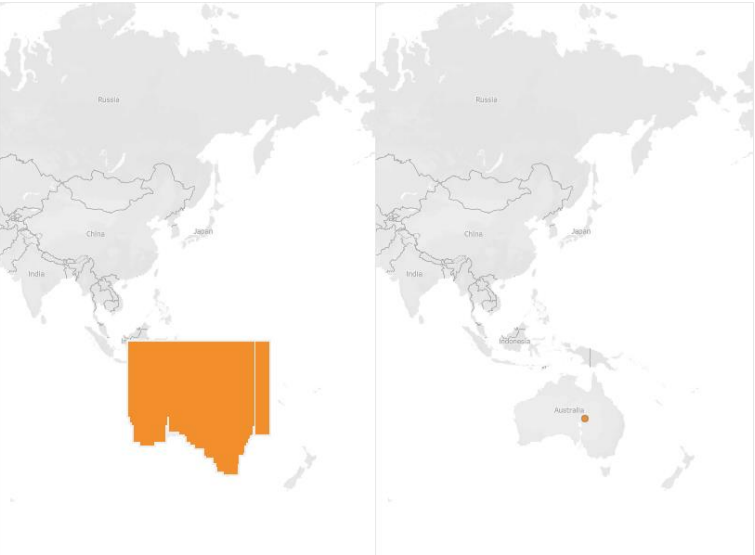
## 2.2 Ideation & Brainstorming Map:

\* Ideation is often closely related to the practice of brainstorming, a specific technique that is utilized to generate new ideas. A principal difference between ideation and brainstorming is that ideation is commonly more thought of as being an individual pursuit, while brainstorming is almost always a group activity.



## 3) RESULT:

Airport



country01  
Australia

country01  
Australia

Number of  
air ports  
334

country01  
Australia

Airlines with in a Country

Airline ID (a..	Name (airlines.csv1)	ICAO (airlin..	Callsign (airlines.csv1)	
15	Abelag Aviation	AAB	ABG	■
271	Allied Command Europe (.	ALF	ACEFORCE	■
538	ASL	XXX	Null	■
634	Airventure	RVE	AIRVENTURE	■
1346	Belgian Air Force	BAF	BELGIAN AIRFORCE	■
1373	Belgian Army	AYB	BELGIAN ARMY	■
1428	Belgavia	BLG	BELGAVIA	■
1515	Brussels International Air..	BXI	XENIA	■
1531	Brussels Airlines	DAT	BEE-LINE	■
1551	Belgian Navy	NYB	BELGIAN NAVY	■
2235	Eurocontrol	EUC	Null	■
2252	European Air Transport	BCS	EUROTRANS	■
2431	Flying Service	PYG	FLYING GROUP	■
2528	Gendarmerie Belge	GDB	BELGIAN GENERMERIE	■
2800	International Air Carrier A..	ITC	Null	■
3032	Jetairfly	JAF	BEAUTY	■
3821	Ostend Air College	OCO	AIR COLLEGE	■
4445	SITA	SIT	Null	■
4734	Sky Service	SKS	SKY SERVICE	■
4873	TNT Airways	TAY	QUALITY	■
4896	Thomas Cook Airlines	TCW	THOMAS COOK	■

Active (airlines.csv1)

☒ (All)

☒ N

☒ Y

Country (airlines.csv1)

Belgium

Active (airlines.csv1)

■ N

■ Y

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4896	Thomas Cook Airlines	TCW	THOMAS COOK	■
6169	Thalys	Null	Null	■

Active (airlines.csv1)

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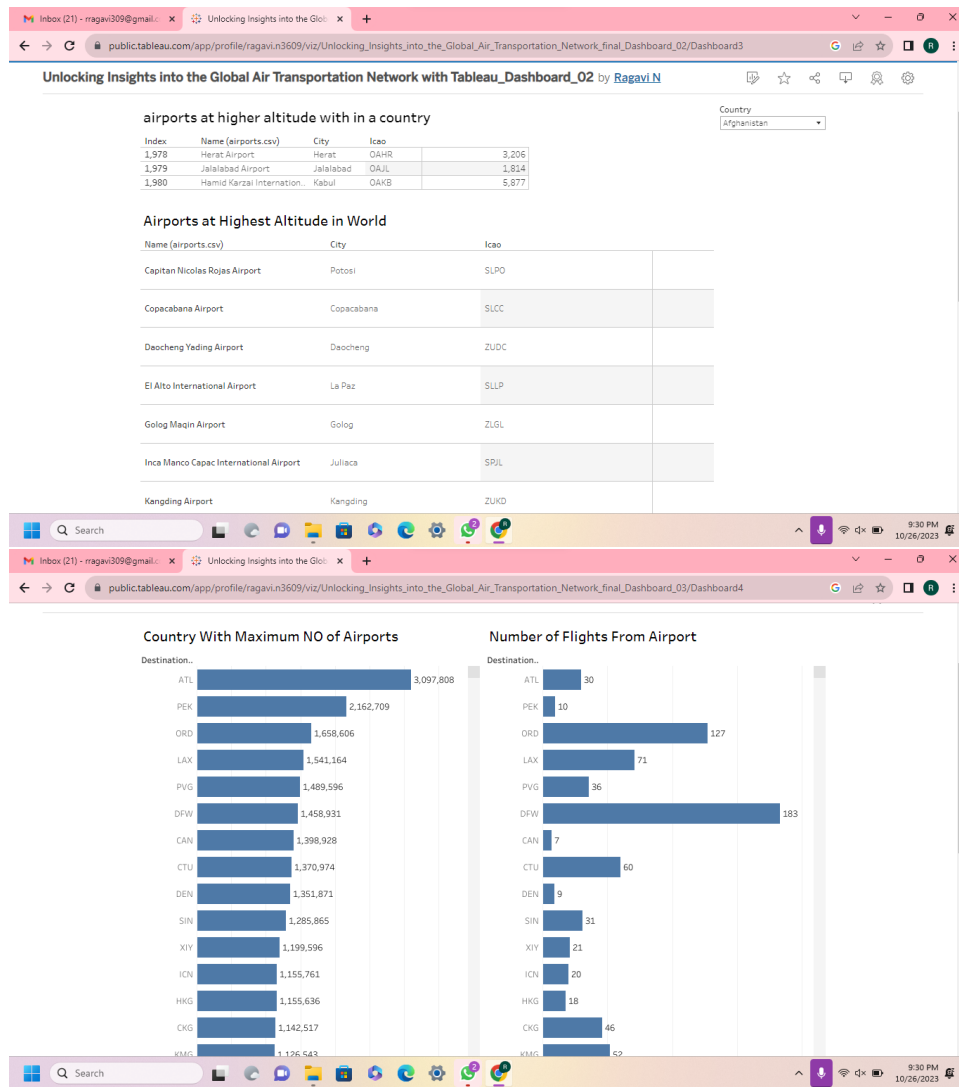
Belgium

Active (airlines.csv1)

■ N

■ Y

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#### 4)ADVANTAGES & DISADVANTAGES:

- High Speed. Air is the type of freight capable of traveling long distances in short periods of time. ...
- Fast Service. ...
- Send almost everywhere your freight. ...
- High Standard of Security. ...
- Natural Route. ...
- There is less need for heavy packaging. ...
- Risky. ...
- Cost.

air transport can involve higher costs than other options, and is not suitable for all goods. flights are subject to delay or cancellation. you will need to pay taxes at each airport you use. fuel and currency surcharges will usually be added to freight costs.

#### 5)APPLICATIONS:

The worldwide air transportation network is a small-world network in which (i) the number of nonstop connections from a given city and (ii) the number of shortest paths going through a given city have distributions that are scale-free.

#### 6)CONCLUSION:

Air transport includes planes, jets, rockets, helicopters, and drones. While hot air balloons and other kinds of air transport may be used for recreational purposes (such as parachuting), they can also be used to convey goods.

#### 7)FUTURE SCOPE:

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.