

# 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.

### 1.1. OVERVIEW:

- ↔ includes information about airlines including their IDs, name aliases, IATA and ICAO codes, callsigns country of origin and active/inactive status.
- ↔ 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:

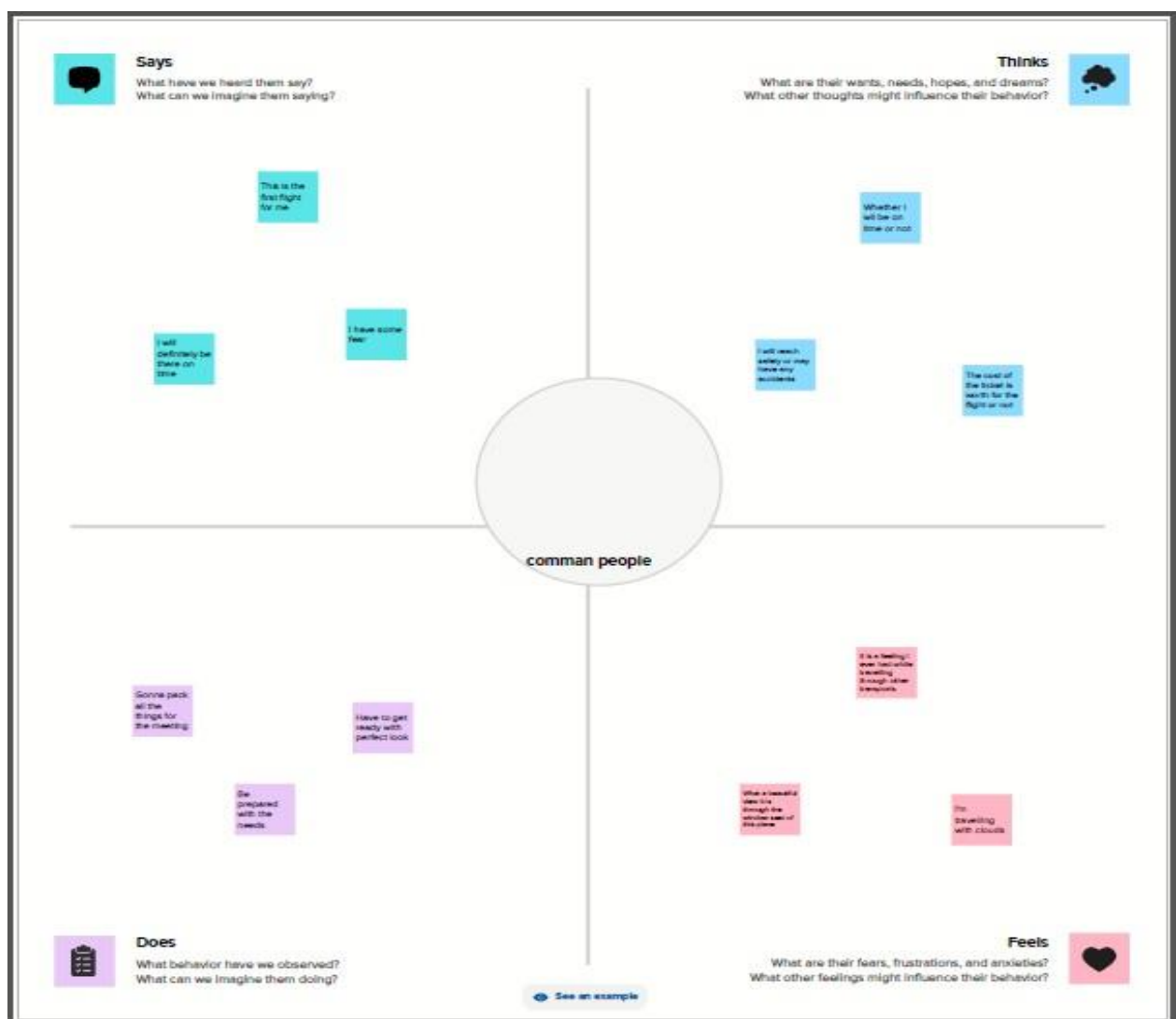
- ↔ covers route details such as airline sources to destination airports along with essential details like codeshare stakeholder if any stops required during this journey along with the type of aircraft being used for that particular journey.

## 2. PROBLEMS DEFING & DESIGN THINKING:

↔The business requirement of the dataset is to enable stakeholders in the aviation industry to gain a competitive advantage by making data-driven decisions.

↔For this Created KPI's and interactive Visualizations and Dashboard and story Board to bring clean and deep understanding of the data.

## 3. EMPATHY MAP:



## 2.2. BRAINSTORMING:

### Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 10 minutes to prepare
- 1 hour to collaborate
- 2-8 people recommended

#### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

- 10 minutes

- Team gathering**  
Define who should participate in the session and send an invite. Share relevant information to present ahead.
- Set the goal**  
Think about the problem you'll be focusing on solving in the brainstorming session.
- Learn how to use the facilitation tools**  
Use the facilitation capabilities to run a happy and productive session.  
[Open article](#)

#### Define your problem statement

What problem are you trying to solve? Frame your problem as a "How Might We" statement. This will be the focus of your brainstorm.

- 5 minutes

The resulting problem statement is a sentence that starts with "How might we..." followed by a verb and a noun. It should be specific, concise, and focused on a single problem. It should also be framed in a way that encourages creative thinking.

**Key rules of brainstorming**  
To run an smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgments.
- Listen to others.
- Go for volume.
- If possible, be visual.

#### Brainstorm

Write down any ideas that come to mind that address your problem statement.

- 10 minutes

**Tip**  
You can write in a sticky note and then use the panel (which is attached to the page) to add changes.

Person 1: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 2: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 3: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 4: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 5: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 6: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 7: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

Person 8: [Sticky Note: I think we should have a feature that allows users to customize their profile picture.]

#### Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

- 20 minutes

**Tip**  
Don't overthink it. It's better to have a cluster of ideas that are related than to have a cluster of ideas that are not related.

#### Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

- 20 minutes

**Tip**  
Remember, you can use that same sticky note to move ideas around on the grid. The facilitator can assist the team by using the same sticky note to move ideas around on the grid.

**Importance**  
How important is this idea to the overall goal of the project?

**Feasibility**  
How feasible is this idea to implement given the current state of the project?

#### After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

**Quick add-on**

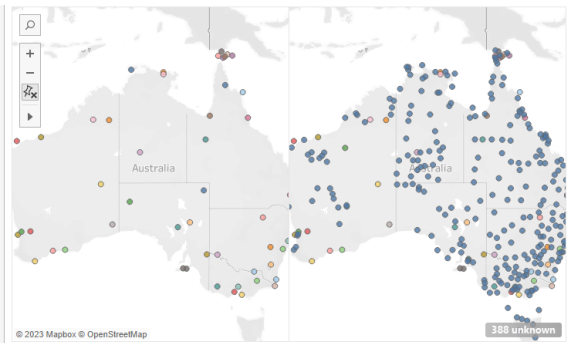
- Share the mural**  
Share a link to the mural with collaborators to keep them in the loop about the outcomes of the session.
- Export the mural**  
Export a copy of the mural as a PDF or PNG to attach to emails, include in slides, or save to your drive.

**Keep moving forward**

- Storyboard**  
Define the components of a new idea or strategy.  
[Open the template](#)
- Create user experience journey map**  
Understand customer needs, motivations, and obstacles to an experience.  
[Open the template](#)
- Strengths, weaknesses, opportunities & threats**  
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.  
[Open the template](#)

[Share template feedback](#)

RESULT:



AIRPORTS AT HIGHER ALTITUDE WITHIN A COUNTRY

Avg. index ...	Name (airports.csv)	City (copy)	ICAO (airport..)	
Null	Zhigansk Airport	Zhigansk	UWKV	292
	Zheleznogorsk Airport	Zheleznogorsk	UIBV	1,946
	Zerbst Airport	Zerbst/Anhalt	EDUZ	289
	Zanesville Municipal Airport	Zanesville	KZZV	900
	Zabrat Airport	Baku	UBTT	36
	Yuanmou Air Base	Yuanmou	ZPYM	3,810
	Young Airport	Null	YYNG	1,267
	Yingkou Lanqi Airport	Yingkou	ZYYK	0
	Yermolino Airport	Balabanovo	UUWE	640
	Xingcheng Air Base	Null	ZYXC	30
	Wuhu Air Base	Wuhu	ZSWU	0
	Winnemucca Municipal Airport	Winnemucca	KWMC	4,308
	West Wyalong Airport	West Wyalong	YWWL	859
	West Woodward Airport	Woodward	KWWR	2,189
	West Sale Airport	Sale	YWSL	72
	Wasilla Airport	Wasilla	PAWS	354
	Warren Airport	Null	YWRN	669
	Warracknabeal Airport	Null	YWKB	397
	Wangaratta Airport	Null	YWGT	504
	W K Kellogg Airport	Battle Creek	KBTL	952
	Volodonsk Airport	Null	URRY	276

NO OF AIRPORTS

4,336

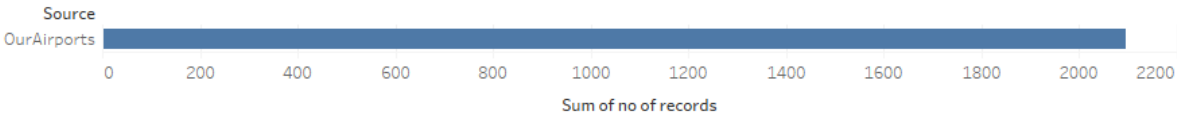
AIRPORTS AT HIGHEST ALTITUDE IN THE WORLD

Name (airports.csv)	City (copy)	ICAO (airports.csv)	
Daocheng Yading Airport	Daocheng	ZUDC	14,472
Qamdo Bangda Airport	Bangda	ZUBD	14,219
Kangding Airport	Kangding	ZUKD	14,042
Ngari Gunsa Airport	Shiquanhe	ZUAL	14,022
El Alto International Airport	La Paz	SLLP	13,355
Capitan Nicolas Rojas Airport	Potosi	SLPO	12,913
Yushu Batang Airport	Yushu	ZYLS	12,816
Copacabana Airport	Copacabana	SLCC	12,591
Inca Manco Capac International Airport	Julica	SPJL	12,552
Golog Maqin Airport	Golog	ZLGL	12,426

AIRLINES WITHIN A COUNTRY

Airline ID	airport name	IACO Code	Callsign	
3127	Kevis	KVS	KEVIS	
3128	Key Airlines	KEY	KEY AIR	
3129	Key Lime Air	LYM	KEY LIME	
3130	Keystone Aerial Surve	FTP	FOOTPRINT	
3131	Keystone Air Services	KEE	KEYSTONE	
3132	Khalifa Airways	KZW	KHALIFA AIR	
3133	Kharkov Aircraft Manu	WKH	WEST-KHARKOV	
3134	Khazar	KHR	KHAZAR	
3135	Khozeestan Photros Ai	KHP	PHOTROS AIR	
3136	Khoriv-Avia	KRV	KHORIV-AVIA	
3137	Khors Aircompany	KHO	AIRCOMPANY KHORS	
3138	Khyber Afghan Airlines	KHY	KHYBER	
3139	Klay Aviation Plant	LAK	AVIATION PLANT	
3140	King Aviation	KNG	KING	
3141	Kingfisher Air Services	BEZ	SEA BREEZE	
3142	Kingfisher Airlines	KFR	KINGFISHER	
3143	Knighthawk Air Express	KNX	KNIGHT FLIGHT	
3144	Kingston Air Services	KAS	KINGSTON AIR	
3145	Kinnarps	KIP	KINNARPS	
3146	Kinshasa Airways	KNS	KINSHASA AIRWAYS	
3147	Kirov Air Enterprise	KTA	VYATKA-AVIA	

NUMBER OF FLIGHTS FROM AIRPORT



## 4. ADVANTAGES AND DISADVANTAGES:

### 4.1.ADVANTAGES:

- ↔ 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.

### 4.2. DISADVANTAGES:

- ↔ You could outgrow your premises in the short-term. There may not be enough space for everyone to work efficiently.
- ↔ Morale may drop if staff cannot cope with the extra work. Productivity can decrease.
- ↔ There may be a shortage of cash to meet expansion costs. Taking on more and more work to generate more income places additional pressure on your premises and staff.
- ↔ Management may be under pressure, operating reactively rather than proactively.
- ↔ Staff turnover may increase due to heavy workloads. Vital knowledge could be lost as staff leave. Hiring and training new staff takes time and money.
- ↔ However, growing your business because you are experiencing problems can sometimes make your problems bigger, with more money and risk involved.

## **5. APPLICATION:**

- ↔ This can contribute to the overall well-being of communities around the world, by making air travel more accessible, affordable, and eco-friendly.
- ↔ Generate more sales and profits.
- ↔ Influence market price.
- ↔ Reach new customers and markets.
- ↔ Put more money back into your business.

## **6. CONCLUSION:**

- ↔ From a business perspective, the dataset can have a significant impact on the aviation industry.
- ↔ It also discusses various factors that affect consumer spending nature etc.

## **7. FUTURE SCOPE:**

- ↔ 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.
- ↔ As businesses identify growth opportunities and optimize their strategies, they often experience increased revenue and expansion.

**THANK YOU!**