

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, call signs 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.

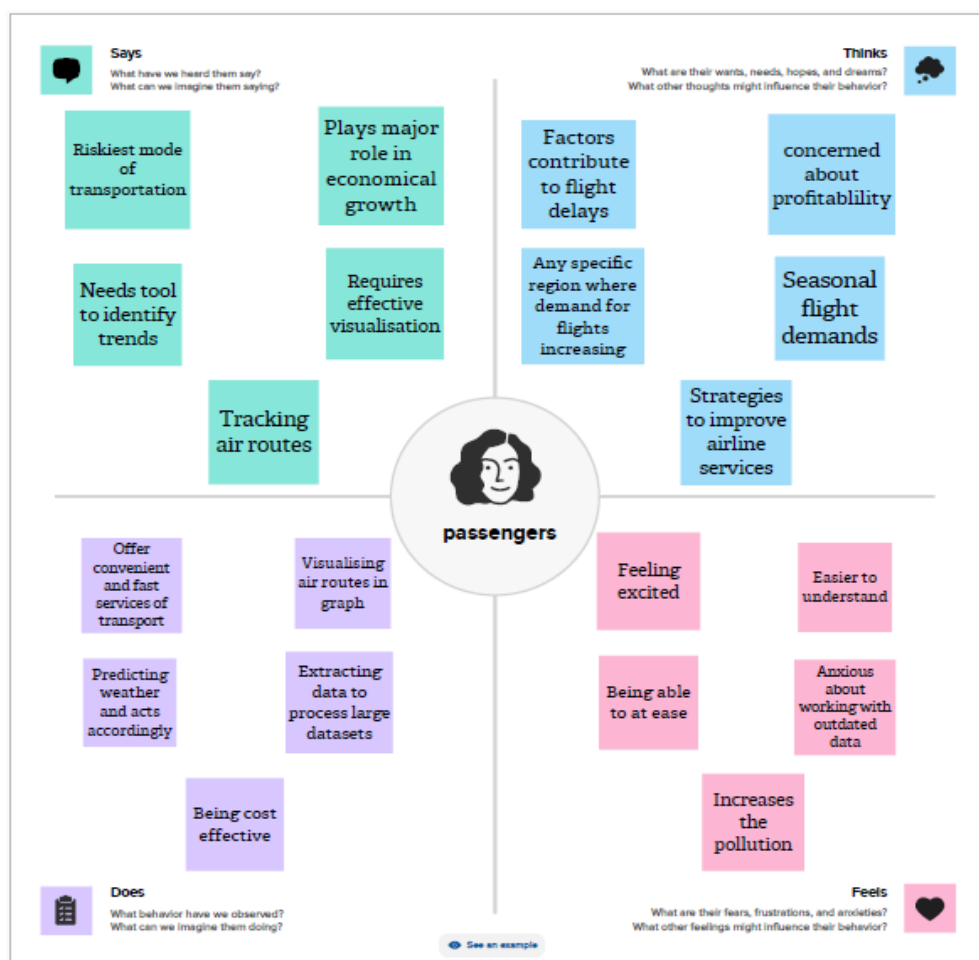
1.2. Purpose:

To give you a comprehensive detail into air transportation networks from around the globe.

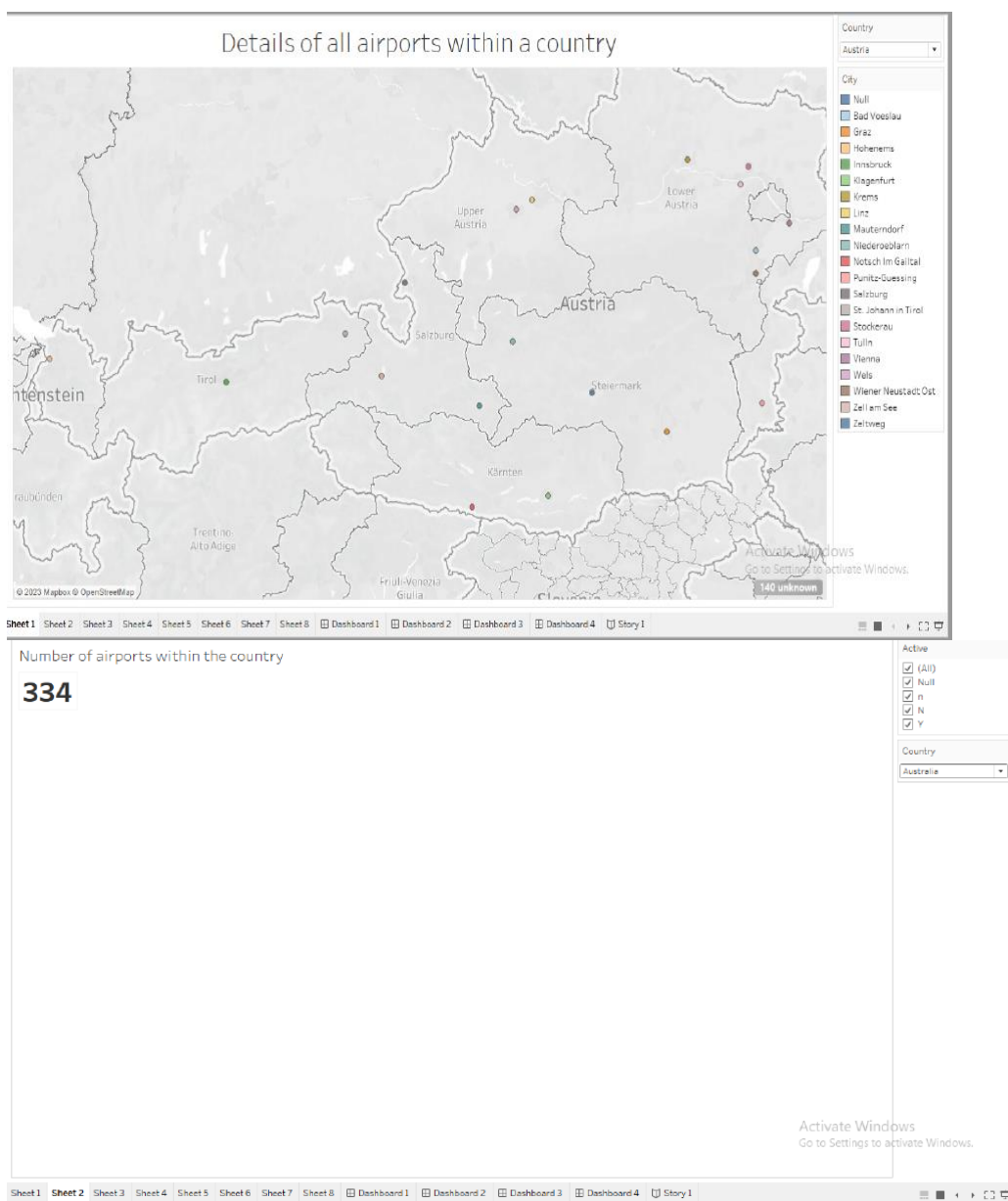
2. Problem statement and Design thinking:

Comprehensive detail into air transportation networks from around the globe.

2.1. Empathy map:



2.2. Ideation and Brainstorming map:



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Airports at higher altitude within a country

Index	Name	City	ICAO Code	
593	Ireland West Knokk Airport	Connaught	EIKN	665
590	Cork Airport	Cork	EICK	502
595	Casement Air Base	Casement	ETME	319
592	Dublin Airport	Dublin	EDDW	242
4,283	Weston Airport	Lavilly	EHWT	150
598	Waterford Airport	Waterford	EWFF	119
594	Kerry Airport	Kerry	EIKY	112
591	Gelwey Airport	Gelwey	EICM	81
5,051	Connemara Regional Airp...	Indreshban	SICA	70
596	Shannon Airport	Shannon	EINN	46
5,325	Inisheer Aerodrome	Inisheer	EIIR	40
4,282	Donegal Airport	Donloe	EDIL	30
5,050	Inishmore Aerodrome	Inis Mor	EIIM	24
5,606	Inishmaan Aerodrome	Inishmaan	EIMN	15
597	Sligo Airport	Sligo	EISG	11
6,279	Bantry Aerodrome	Bantry	EBBN	7
6,269	Newcastle Aerodrome	Newcastle	EINC	1

Country: Ireland

alt: 5

Activate Windows
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Airports at higher altitude in the world

Name	City	ICAO Code	
Daocheng Yading Airport	Daocheng	ZUOC	14,472
Oando Bangdo Airport	Bangdo	ZUBD	14,219
Kangding Airport	Kangding	ZUKD	14,042
Ngeri Gunse Airport	Shiquanhe	ZURL	14,022
El Alto International Airport	La Paz	SLLP	13,355
Capitan Nicolas Rojas Airport	Potosi	SLPQ	12,913
Yushu Botang 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	12,425

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Airlines within a country

Airline ID	Name	ICAO Code	Callsign	
Null	Bery El Gawi Airport	DTT1	Null	■
	Djerba Zarzis Internation...	DTTJ	Null	■
	El Borma Airport	DTTR	Null	■
	Enfidha - Hammamet Inte...	DTNH	Null	■
	Gabès Matmata Internati...	DTTG	Null	■
	Gafsa Ksar International ...	DTTF	Null	■
	Monastir Habib Bourguib...	DTMB	Null	■
	Remada Air Base	DTTD	Null	■
	Sfax Thyna International ...	DTTX	Null	■
	Sidi Ahmed Air Base	DTTB	Null	■
	Tabarka 7 Novembre Airp...	DTKA	Null	■
	Tozeur Nefta Internationa...	DTTZ	Null	■
	Tunis Carthage Internatio...	DTTA	Null	■
2413	Fly International Airways	NVJ	NOU/INTER	■
3105	Karthago Airlines	KAJ	KARTHAGO	■
3740	Nouvel Air Tunisie	LB7	NOUVELAIR	■
4879	Tunisair	TAR	TUNAIR	■
4882	Tubelair	TBR	TUBELAIR	■
4975	Tunisavia	TAJ	TUNISAVIA	■
5085	Tuninter	TUI	Null	■
11833	Sevenair	SEN	SEVENAIR	■

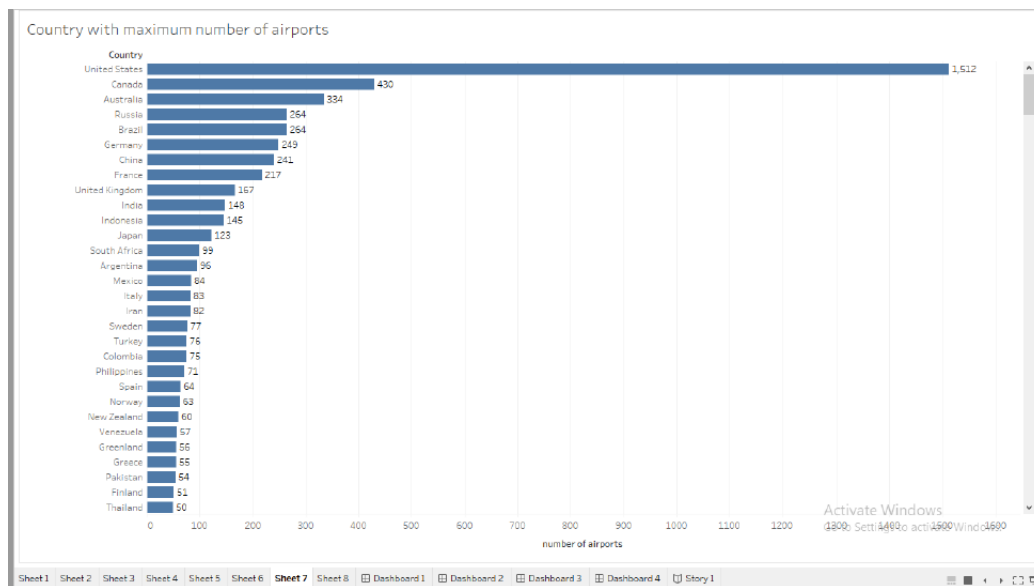
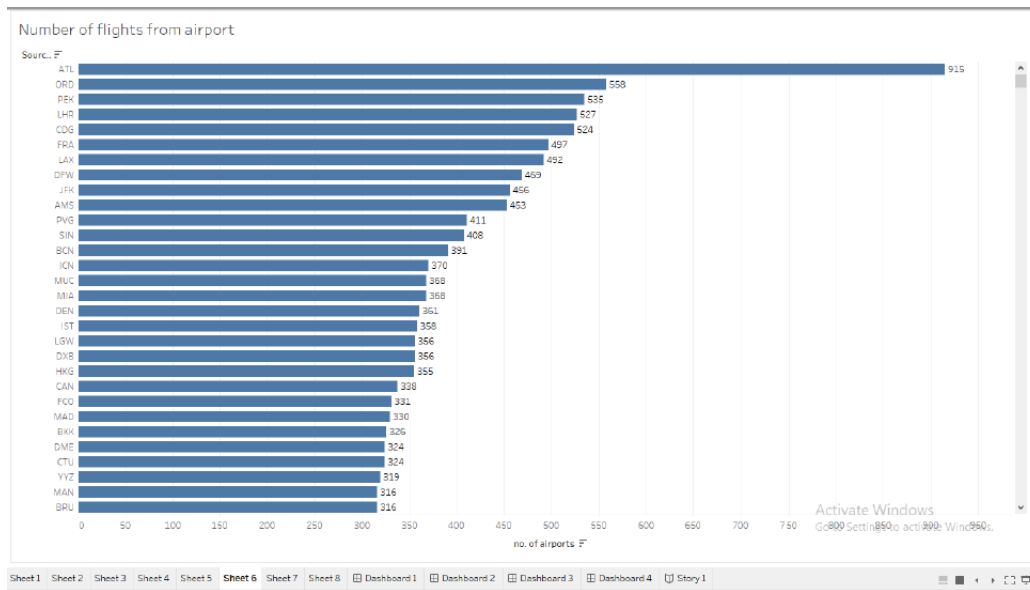
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Country: Tunisie

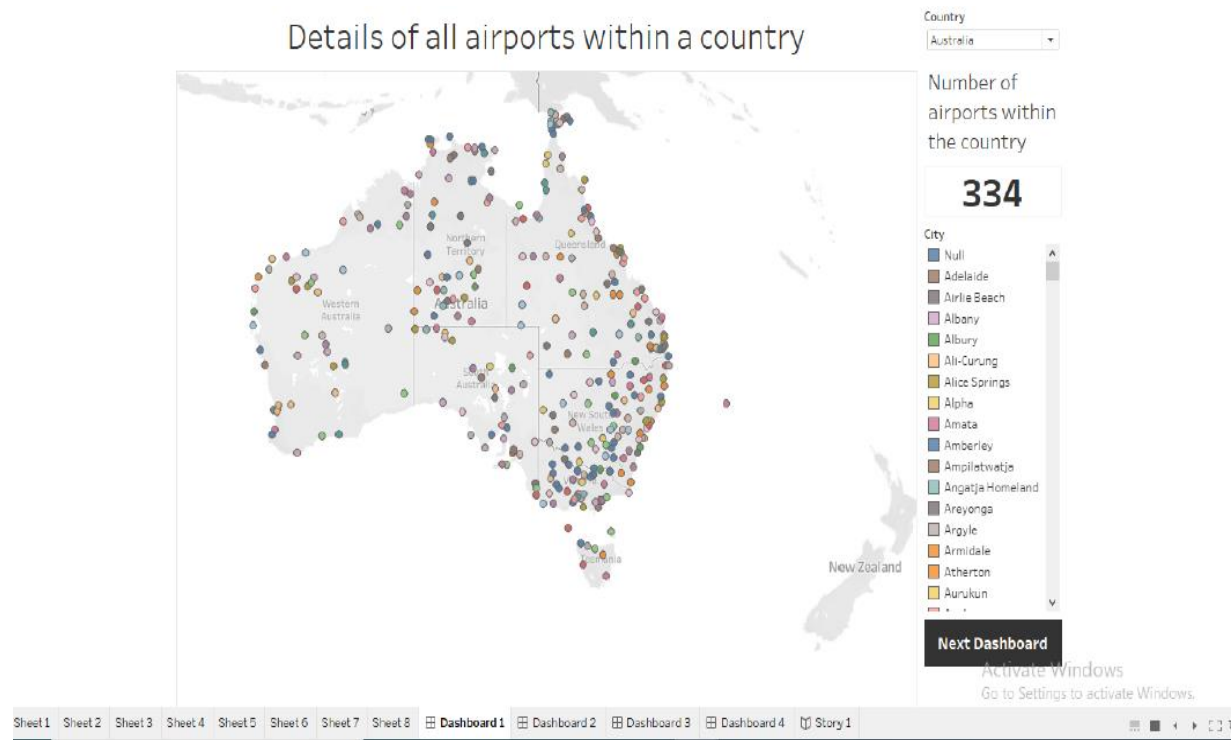
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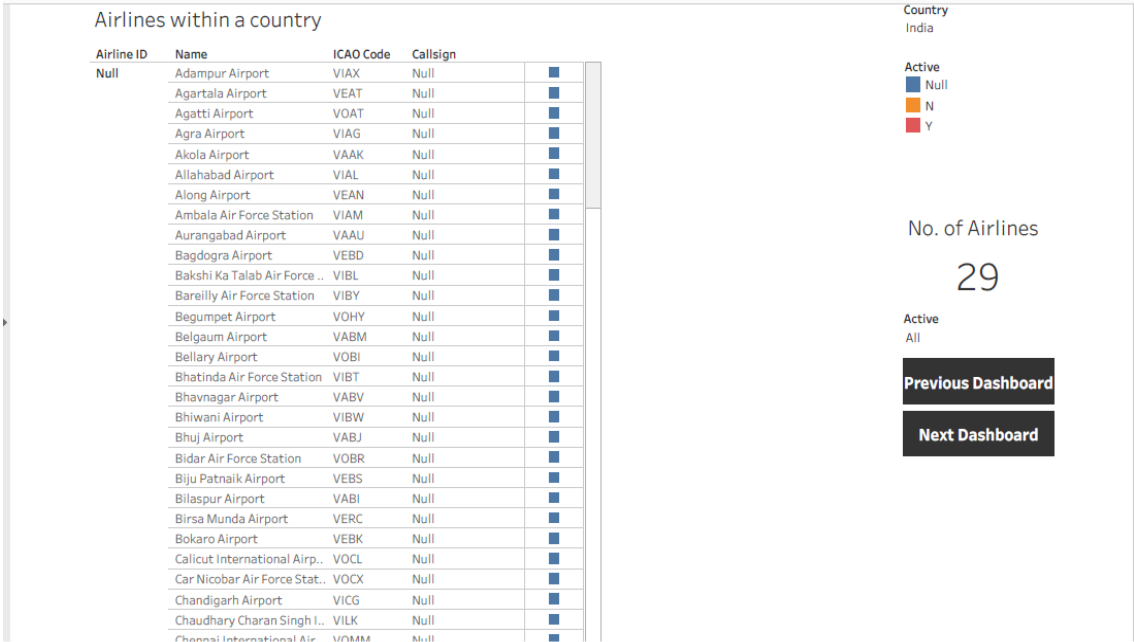
Country: Ireland

alt: 5

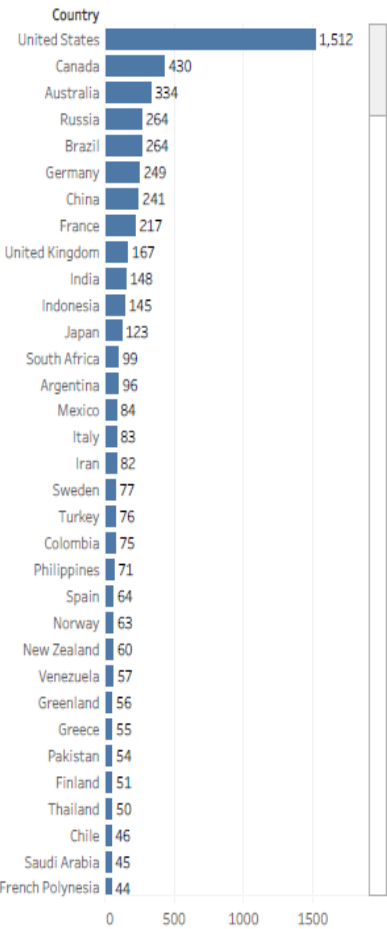
Previous Dashboard

Next Dashboard

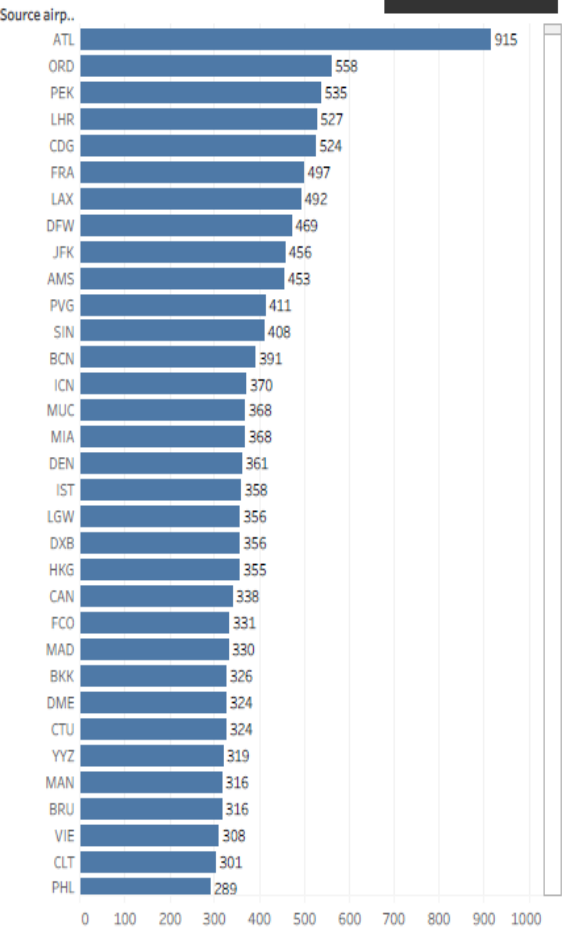
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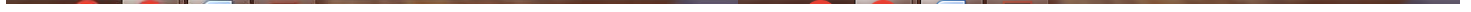


Country with maximum number of airports



Number of flights from airport





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Disadvantages:

- Requires a lot of knowledge
- Hard to handle

5. Application:

The application of this network is providing data to people who require information about aviation for traveling, doing business, rescuing missions and so on.

6. Conclusion:

So, in this project, we have seen about details of airports, no. of airports within the country, airlines within the country, no. of airlines, its active status, airports at higher altitude within the country and in the world, country with maximum number of airports and no. of flights from airport.

7. Future scope:

It can be used in various sectors like choosing shortest path distance to reach the destination, for quick disaster response, effective air traffic management and so on.