

Unlocking Insights Into The Global Air Transportation Network With Table

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. 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.

Air transportation plays a critical role in connecting people and businesses around the world, providing faster and more efficient transportation options than other modes of transportation.

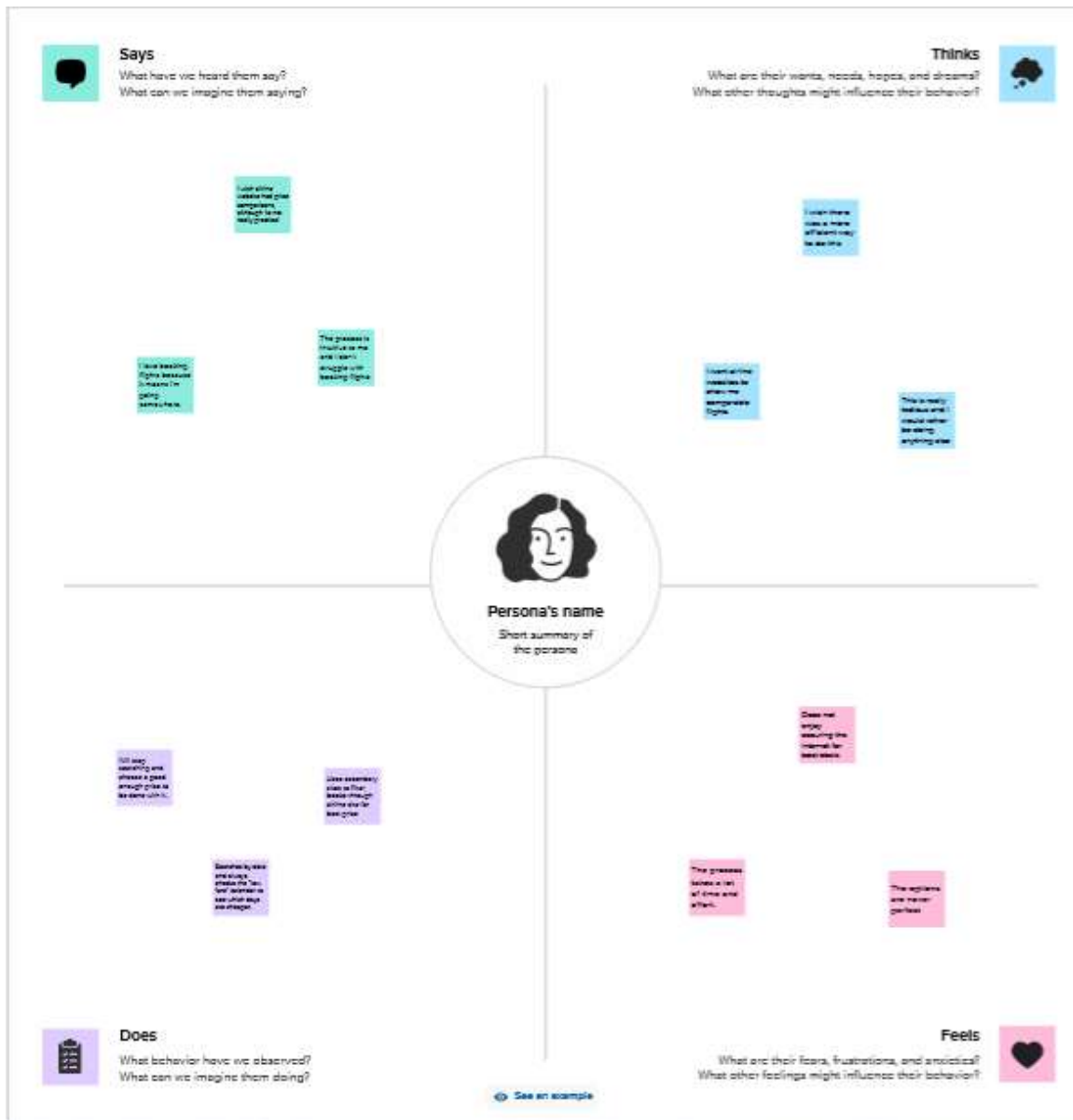
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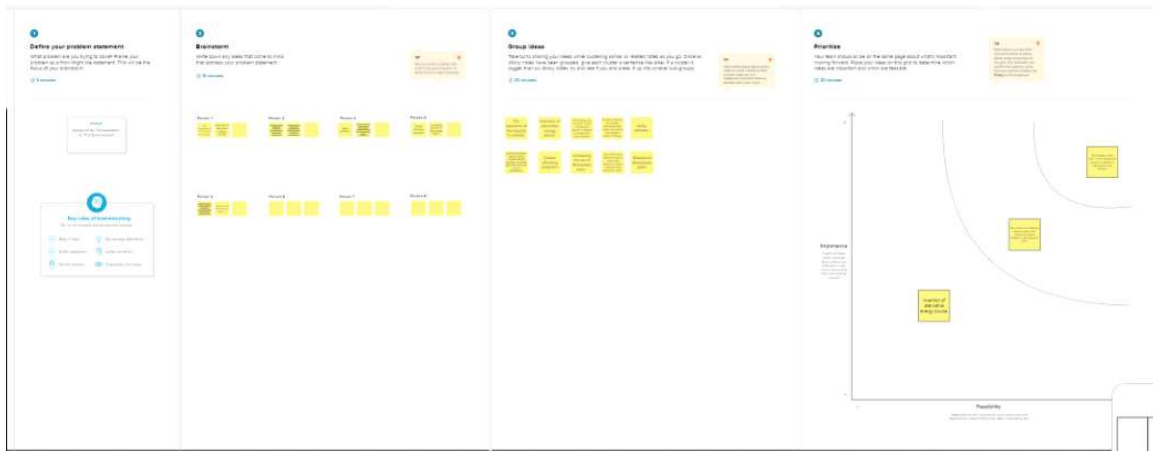
personal, business, medical, and tourism purposes.

PROBLEM DEFINITION & DESIGN THINKING:

Empathy Map:



Brainstorming Map:



ADVANTAGES & DISADVANTAGES:

Advantages:

1. High Speed

Air is the type of freight capable of traveling long distances in short periods of time. This makes this model an optimum choice if the client has an urgent need to ship a product or if their freight demands special standards of protection or acclimation. It is the quickest transport mode and is therefore ideal for long-distance transport of goods. It takes less time.

2. Fast Service

Air transportation offers convenient, reliable and fast services of transport. It is considered the cheapest way to ship peregrinated goods. It offers a standard, convenient, reliable and fast service.

3. Send almost everywhere your freight

In regions that are not readily accessible to other modes of transport, air transport is considered to be the only means of transport. Open to all regions, irrespective of land interference. A vast network of airlines covering nearly the whole globe is available for many airlines. This ensures that the package can be sent almost anywhere.

4. High Standard of Security

High standard of protection with a low risk of robbery and injury. Shipping by air has a high degree of security since airport safety restrictions on cargo are strictly enforced. Tightly controlled airport controls also minimise cargo theft and loss.

5. Natural Route

An aircraft can fly to any location without seeing any natural obstacles or barriers. Since customs formalities are easily compiled. It eliminates the need for more time to seek clearance. Air travel is used for relief operations during earthquakes, floods, accidents, and famines.

6. There is less need for heavy packaging

Air exports, in general, entail less hard packaging than ocean shipments. This ensures you save both time and money by not having to provide extra packaging services.

Disadvantages:

1. Risky

Air travel is the riskiest mode of transport, since there can be considerable losses to goods, customer and crews as a result of a minor crash. Compared to other means of travel, the risks of collisions are higher.

2. Cost

Air travel is considered to be the most expensive means of transportation. The cost of maintaining aircraft is higher and the costs for the building of aerodromes and avions are much higher. That's why air travel is so expensive that it gets beyond ordinary people's grasp.

3. Some Product Limitation

There is a whole variety of materials not suitable for such products, from explosives, gases, batteries, fired solids and liquids, which cannot be shipped by air to name but a few.

4. Capacity for Small Carriage

carriage of voluminous and cheaper materials. As is seen for rails, the load volume cannot be raised.

5. Enormous investment

Air travel calls for enormous spending in aerodrome building and servicing. It also calls for professional, qualified and qualified staff that need a significant investment.

CONCLUSION:

Planes, jets, rockets, helicopters, and drones are all examples of air transport. Recreational usage of hot air balloons, blimps, gliders, hang gliders and other types of air travel is an option. High speeds and long-term profitability mean there are distinct approaches for each type of air transport. A sailplane is a kind of glider aircraft that is used in the sport of gliding as well as for recreational reasons. A rocket

is a vehicle that uses a rocket engine, including missiles, spaceships, aeroplanes, and other similar vehicles.

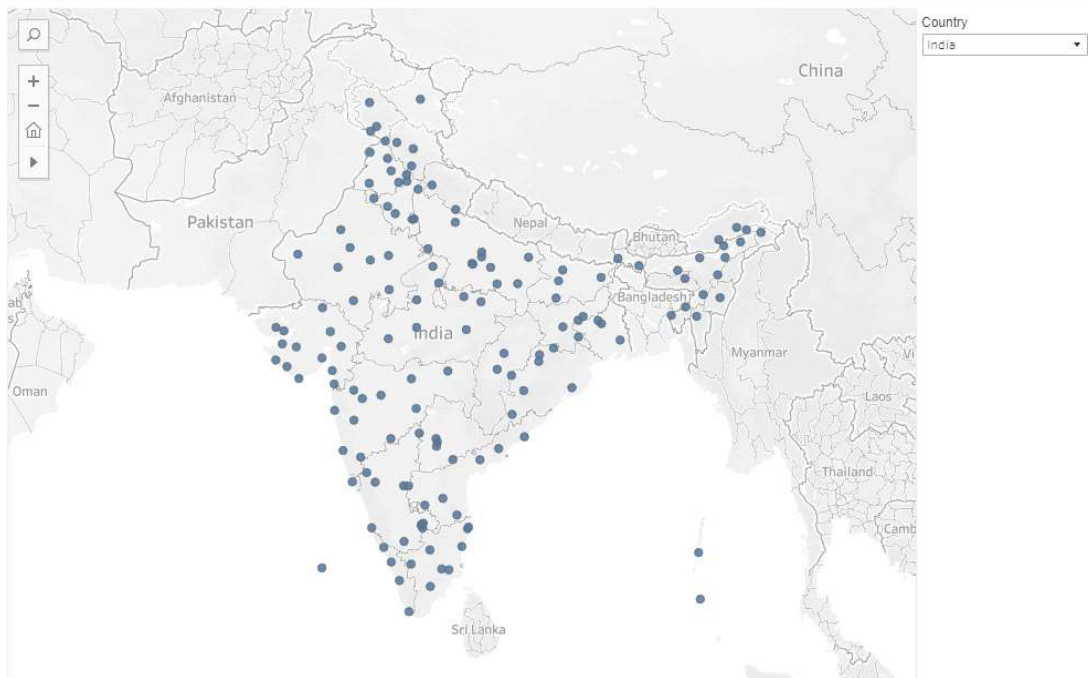
FUTURE SCOPES:

Emerging technologies are reshaping with robotics, artificial intelligence, the internet of things, unmanned aircraft systems and the push for hybrid and electric airplanes – just to name a few. Alternative fuels can significantly change the current scenario of aviation in support of the environmental protection.

Increased efficiency: New technologies are making aviation more efficient, from the use of lightweight composite materials that reduce fuel consumption to more efficient engines that produce less pollution. Improved air traffic control systems are also making air travel more efficient by reducing congestion and delays.

VISUALATION

sheet 1



World Map Showing Countries with details of Airports.

sheet 2

29

Country (airlines.csv)
India

Worksheet showing number of Airports within the country.

sheet 3

Index (Route..	Name	City	ICAO code		Country
2,836	Sardar Vallabhbhai Patel Int..	Ahmedabad	Null	189	India
2,837	Akola Airport	Akola	Null	999	
2,838	Aurangabad Airport	Aurangabad	Null	1,911	
2,839	Chhatrapati Shivaji Internati..	Mumbai	Null	39	
2,840	Bilaspur Airport	Bilaspur	Null	899	
2,841	Bhuj Airport	Bhuj	Null	268	
2,842	Belgaum Airport	Belgaum	Null	2,487	
2,843	Vadodara Airport	Baroda	Null	129	
2,844	Raja Bhoj International Airp..	Bhopal	Null	1,711	
2,845	Bhavnagar Airport	Bhaunagar	Null	44	
2,846	Daman Airport	Daman	Null	33	
2,847	Deesa Airport	Deesa	Null	485	
2,848	Guna Airport	Guna	Null	1,600	
2,849	Dabolim Airport	Goa	Null	150	
2,850	Devi Ahilyabai Holkar Airport	Indore	Null	1,850	
2,851	Jabalpur Airport	Jabalpur	Null	1,624	
2,852	Jamnagar Airport	Jamnagar	Null	69	
2,853	Kandla Airport	Kandla	Null	96	
2,854	Khajuraho Airport	Khajuraho	Null	728	
2,855	Kolhapur Airport	Kolhapur	Null	1,996	
2,856	Keshod Airport	Keshod	Null	167	
2,857	Dr. Babasaheb Ambedkar Int..	Nagpur	Null	1,033	
2,858	Nashik Airport	Nasik Road	Null	1,900	
2,859	Pune Airport	Pune	Null	1,942	
2,860	Porbandar Airport	Porbandar	Null	23	
2,861	Rajkot Airport	Rajkot	Null	441	
2,862	Raipur Airport	Raipur	Null	1,041	
2,863	Solapur Airport	Sholapur	Null	1,584	
2,864	Surat Airport	Surat	Null	16	













Table showing Airports which are at highest altitude in the world and within the country.

sheet 4

Name	City	ICAO code	
Siglufjörður Airport	Siglufjörður	\N	10
Arviat Airport	Eskimo Point	\N	32
Îles-de-la-Madeleine Airport	Iles De La Madeleine	\N	35
Natashquan Airport	Natashquan	\N	39
Tofino / Long Beach Airport	Tofino	\N	80
Stephenville Airport	Stephenville	\N	84
Nanaimo Airport	Nanaimo	\N	92
Kingston Norman Rogers Airport	Kingston	\N	305
Campbell River Airport	Campbell River	\N	346
Geraldton Greenstone Regional Airport	Geraldton	\N	1,144
Fort McMurray Airport	Fort McMurray	\N	1,211
Prince Albert Glass Field	Prince Albert	\N	1,405
Kelowna International Airport	Kelowna	\N	1,421
Fort St John Airport	Fort Saint John	\N	2,280
Williams Lake Airport	Williams Lake	DC91	3,085
Djanet Inedbirene Airport	Djanet	C130	3,176
Rocky Mountain House Airport	Rocky Mountain House	C25C	3,244

Table showing Airports which are at highest altitude in world.

sheet 5

Airline ID ..	Name (airlines.csv)	ICAO (air..	Callsign	
218	Air India Limited	AIC	AIRINDIA	
241	Air Sahara	RSH	SAHARA	
569	Air India Express	AXB	EXPRESS INDIA	
1026	Alliance Air	LLR	ALLIED	
1370	Blue Dart Aviation	BDA	BLUE DART	
2001	Deccan Aviation	DKN	DECCAN	
2575	Go Air	GOW	GOAIR	
2634	Gujarat Airways	GUJ	GUJARATAIR	
2850	IndiGo Airlines	IGO	IFLY	
2851	India International Airways	IIL	INDIA INTER	
2852	Indian Air Force	IFC	INDIAN AIRFORCE	
2853	Indian Airlines	IAC	INDAIR	
3000	Jet Airways	JAI	JET AIRWAYS	
3142	Kingfisher Airlines	KFR	KINGFISHER	
3907	Paramount Airways	PMW	PARAWAY	
3918	Pawan Hans	PHE	PAWAN HANS	
4375	Spicejet	SEJ	SPICEJET	
13105	Air India Regional	\N	ALLIED	
13106	MDLR Airlines	\N	MDLR	
13107	Jagson Airlines	JGN	JAGSON	
13905	Skyline nepc	\N	Null	
16327	Indya Airline Group	IG1	Indya1	

Active
☒ (All)
☒ N
☒ Y
Country (airlines.csv)
India



Active
 N
 Y

Table showing llist of all airlines wihin the country.

story

Story 1

