Unlocking Insights Into The Global Air Transportation Network With Tableau

1.Introduction:

1.1.Overview:

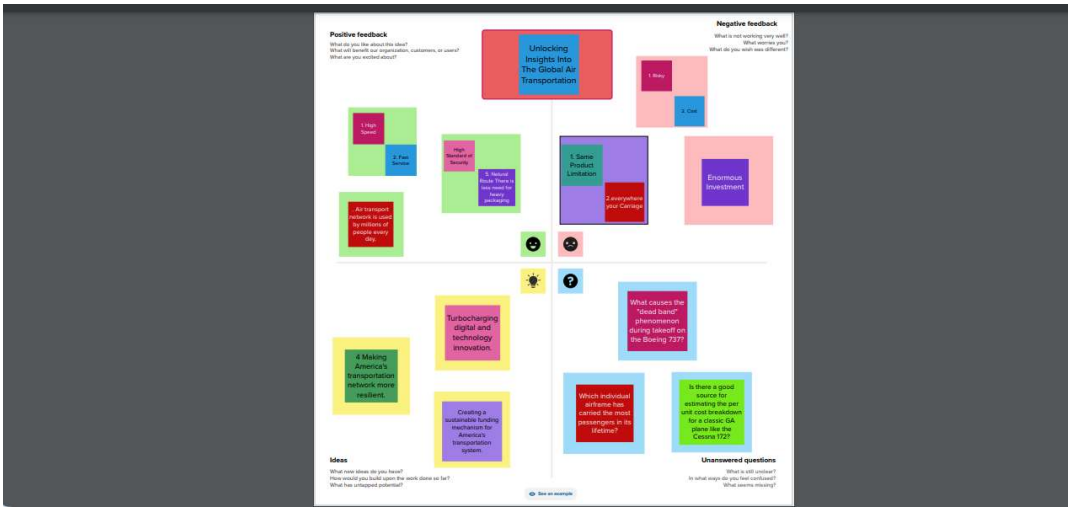
This Global Air Transportation Network dataset is a comprehensive collection of information on airports, airlines and their routes. It contains information such as names, cities, countries, codes (IATA and ICAO) longitudes, latitudes and altitudes of airports across the world with detailed time zone and daylight saving time data. Additionally, this includes information about airlines including their IDs, name aliases, IATA and ICAO codes, 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.

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.

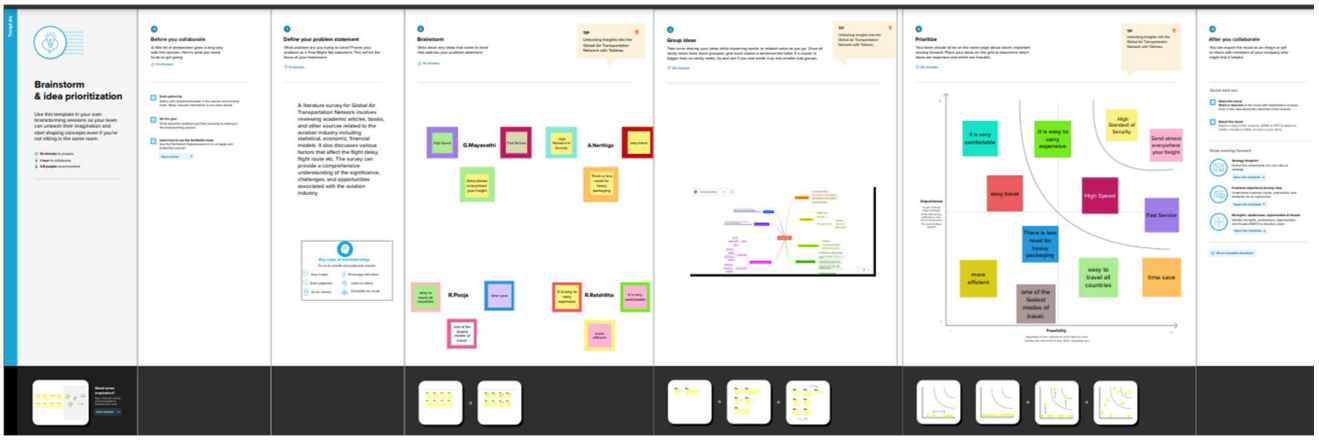
Ultimately, the business requirement of the dataset is to enable stakeholders in the aviation industry to gain a competitive advantage by making data-driven decisions. By providing a comprehensive collection of data related to the air transportation network, the dataset can help stakeholders stay ahead of the curve in a dynamic and rapidly changing industry.

2.Problem Statement&Design thinking

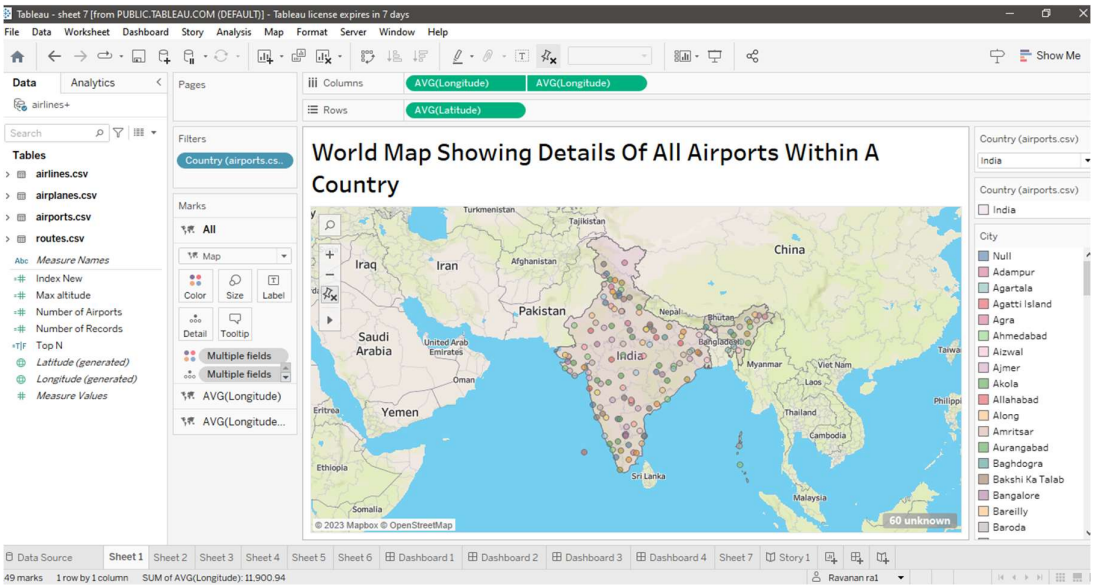
2.1.Empathy map



2.2. Ideation and Brainstorming map:



3.Result: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World Map Showing Details Of All Airports Within A Country
Turkmenistan
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Nepal
Bhutan
Bangladesh
India
Saudi Arabia
United Arab Emirates
Oman
Yemen
Eritrea
Ethiopia
Somalia
Sri Lanka
Myanmar
Viet Nam
Laos
Thailand
Cambodia
Malaysia
Philippi
Taiwa
© 2023 Mapbox © OpenStreetMap
60 unknown
Country (airports.csv)
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India
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Bareilly
Baroda
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 5
Sheet 6
Dashboard 1
Dashboard 2
Dashboard 3
Dashboard 4
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Story 1
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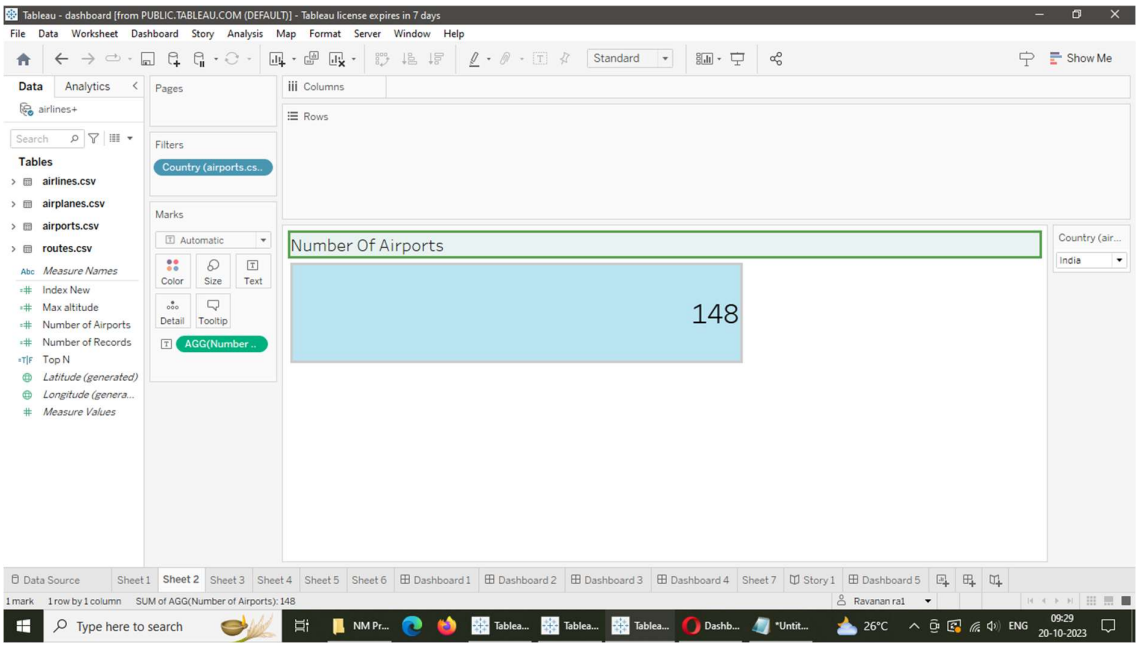
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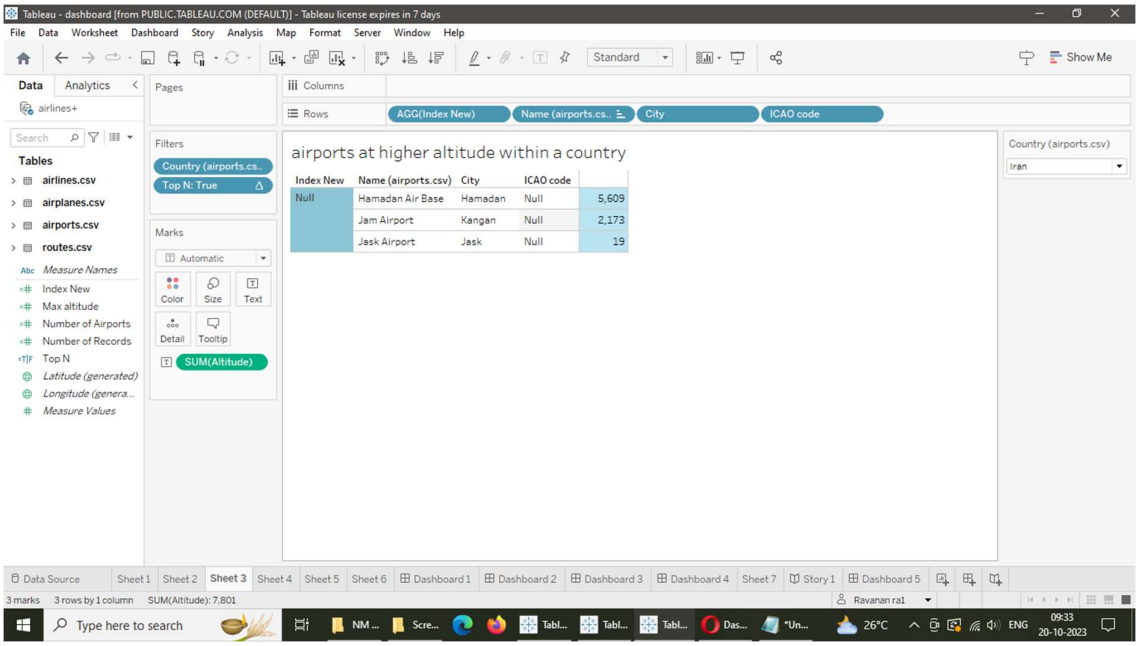
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airports at higher altitude within a country
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ICAO code
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Jam Airport
Kangan
Null
2,173
Jask Airport
Jask
Null
19
Country (airports.csv)
Iran
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Sheet 3
Sheet 4
Sheet 5
Sheet 6
Dashboard 1
Dashboard 2
Dashboard 3
Dashboard 4
Sheet 7
Story 1
Dashboard 5
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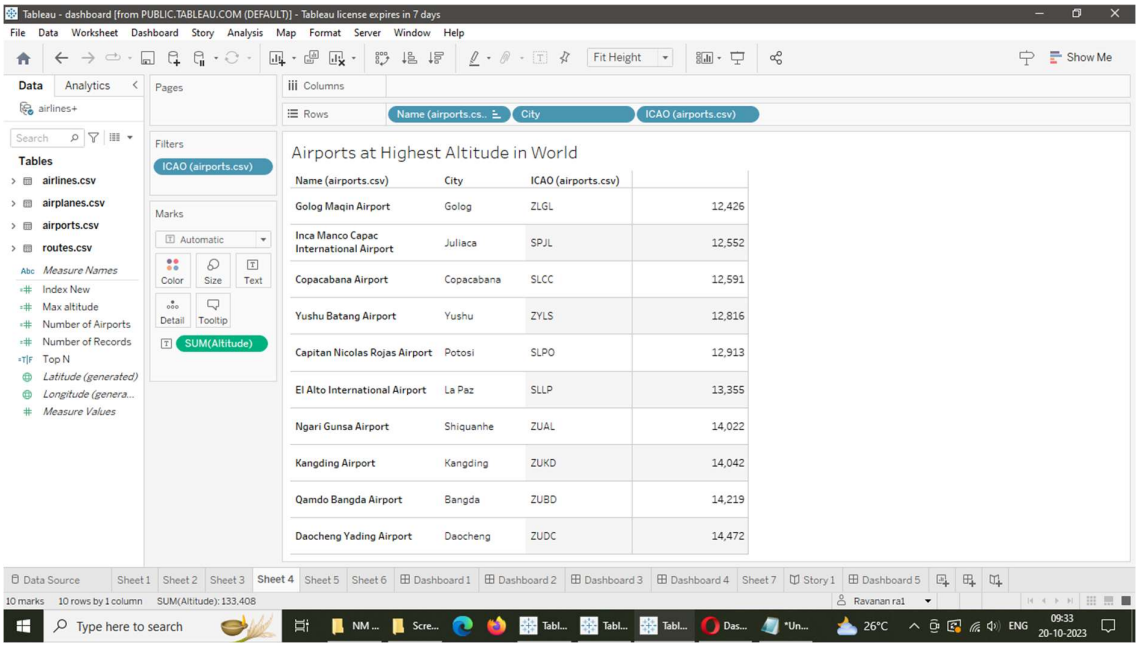
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Airports at Highest Altitude in World
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Golog Maqin Airport
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Inca Manco Capac International Airport
Juliaca
SPJL
12,552
Copacabana Airport
Copacabana
SLCC
12,591
Yushu Batang Airport
Yushu
ZYLS
12,816
Capitan Nicolas Rojas Airport
Potosi
SLPO
12,913
El Alto International Airport
La Paz
SLLP
13,355
Ngari Gunsa Airport
Shiquanhe
ZUAL
14,022
Kangding Airport
Kangding
ZUKD
14,042
Qamdo Bangda Airport
Bangda
ZUBD
14,219
Daocheng Yading Airport
Daocheng
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Dashboard 1
Dashboard 2
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Sheet 7
Story 1
Dashboard 5
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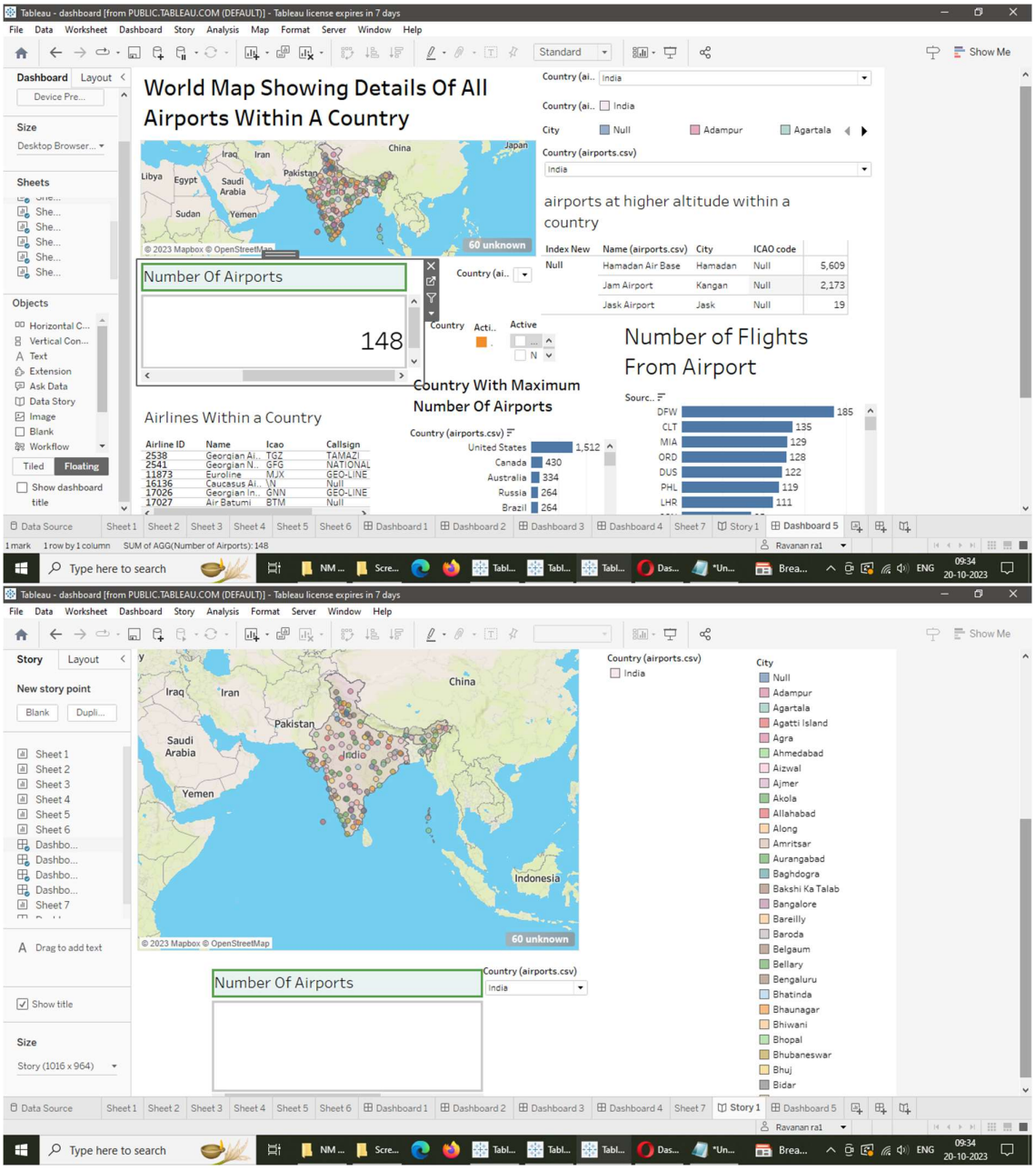
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World Map Showing Details Of All Airports Within A Country
Number Of Airports
148
airports at higher altitude within a country
Number of Flights From Airport
Country With Maximum Number Of Airports
Airlines Within a Country
Dashboard 5
Tableau - dashboard [from PUBLIC.TABLEAU.COM (DEFAULT)] - Tableau license expires in 7 days
Number Of Airports
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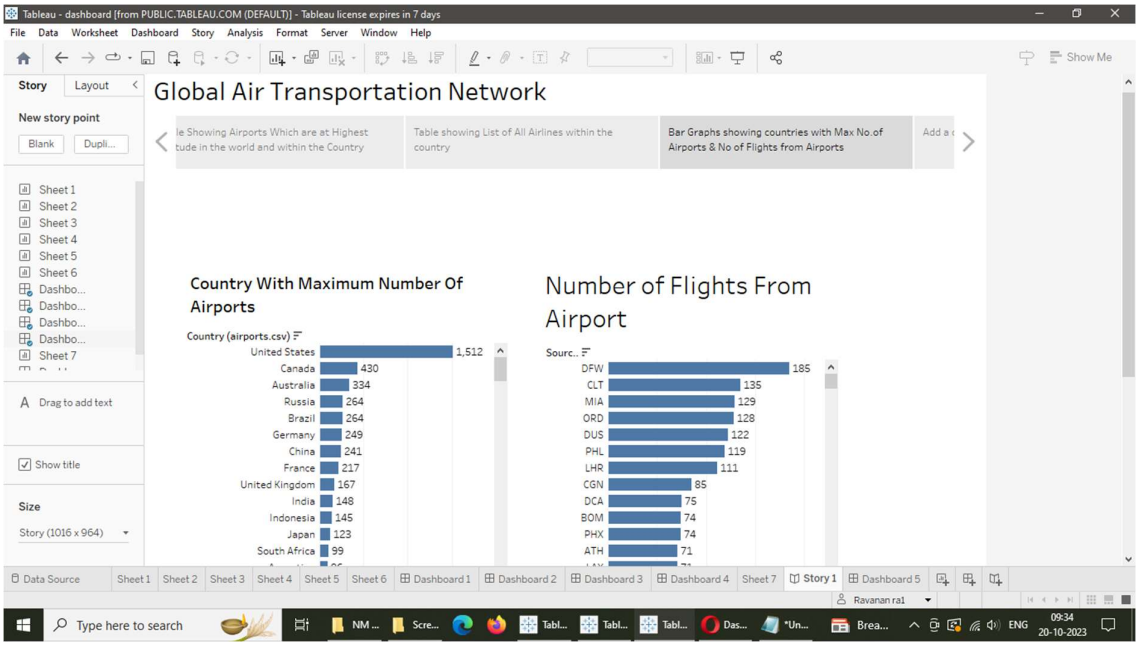


4.Advantages &Disadvantages:

4.1.Advantages:

1. High Speed

2. Fast Service

1 Send almost

everywhere your

4. High Standard of Security

5. Natural Route There is less need for heavy packaging

4.2.Disadvantages:

1. Risky

2 Cost

1. Same Product Limitation

4. Capacity for Small Carriage

5. Enormous Investment

5.Aplications:

Air transport is an important enabler to achieving economic growth and development. Air transport facilitates integration into the global economy and provides vital connectivity on a national, regional, and international scale. It helps generate trade, promote tourism, and create employment opportunities.

6.conclusion:

The 24st 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.

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

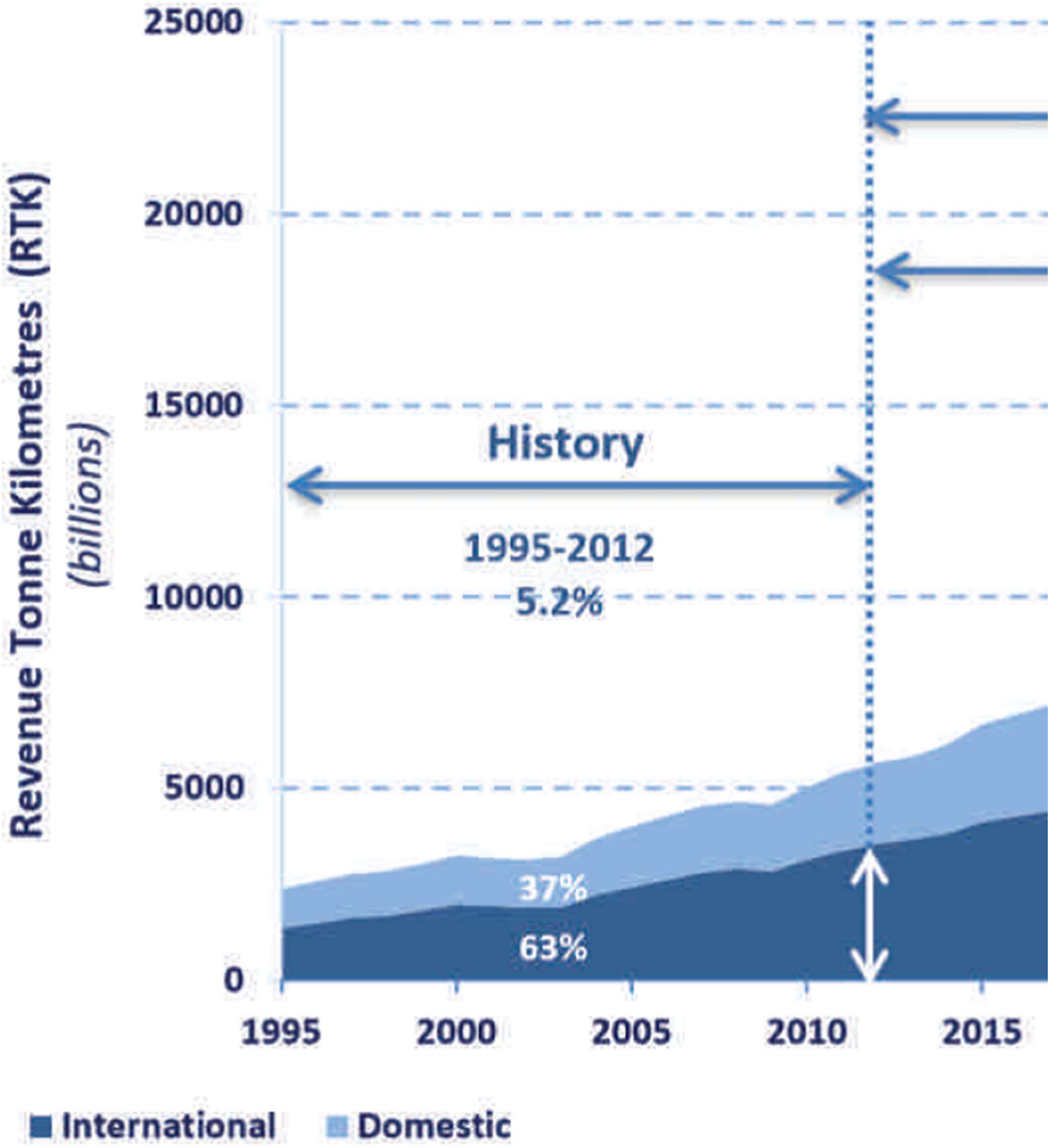
technologies and processes that enhance global welfare. To allow the flows of ideas, goods, and persons

that facilities 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:

The most recent estimates suggest that demand for air transport will increase by an average of 4.3% per annum over the next 20 years.



If this growth path is achieved by 2036 the air transport industry will then contribute

15.5 million in direct jobs and $1.5 trillion of GDP to the world economy. Once the impacts of global tourism are taken into account, these numbers could rise to 97.8 million jobs and $5.7 trillion in GDP.

By mid-2030s no fewer than 200,000 flights per day are expected to take off and land all over the world.