நான் முதல்வன்
உலகை வெல்லும் இளைய தமிழகம்

UNLOCKING INSIGHTS INTO THE GLOBAL AIR TRANSPORTATION NETWORK WITH TABLEAU

Smart Internz

Team ID : **NM2023TMID26948**

Team Members

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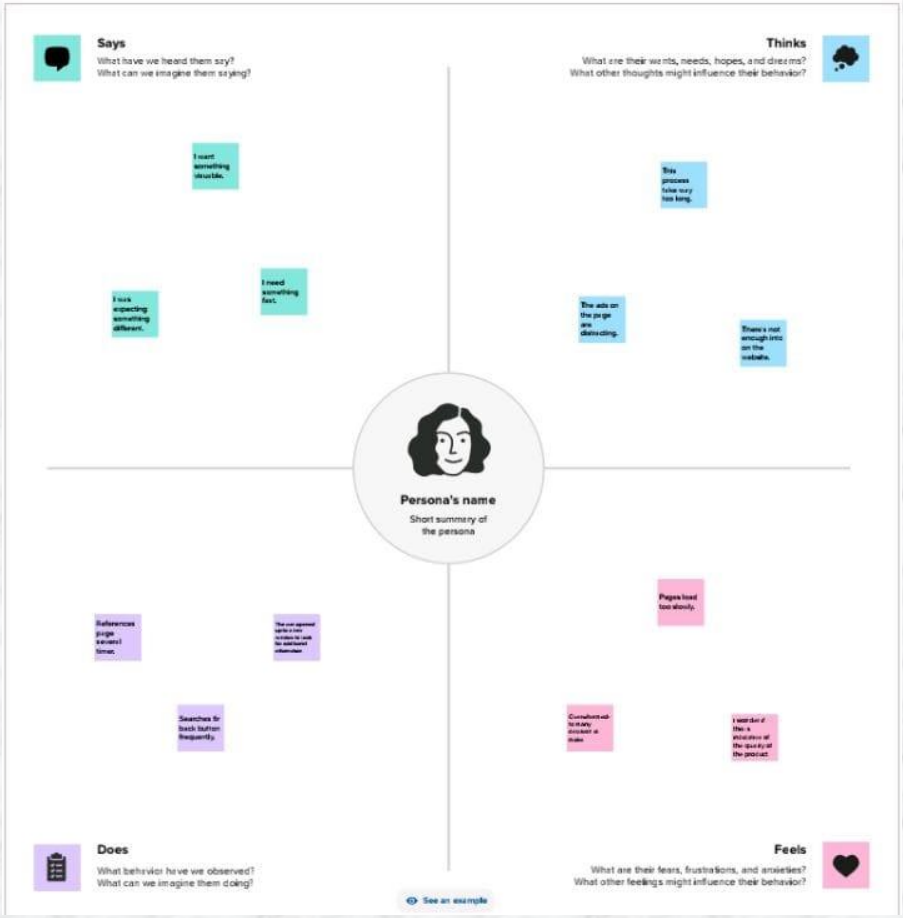
Introduction

- This Project titled “Unlocking Insights into the Global air transportation network with Tableau”. **Air transport network** or air transportation network (ATN) is an example of transport networks and spatial networks The nodes of the network are the airports and the links represent direct flight routes between two airports. Alternatively, cities can be considered as the nodes with links representing direct flight connection between them. Air transport networks can be defined worldwide as well as for one region or for one airline company; the scale of the network can be global or domestic.

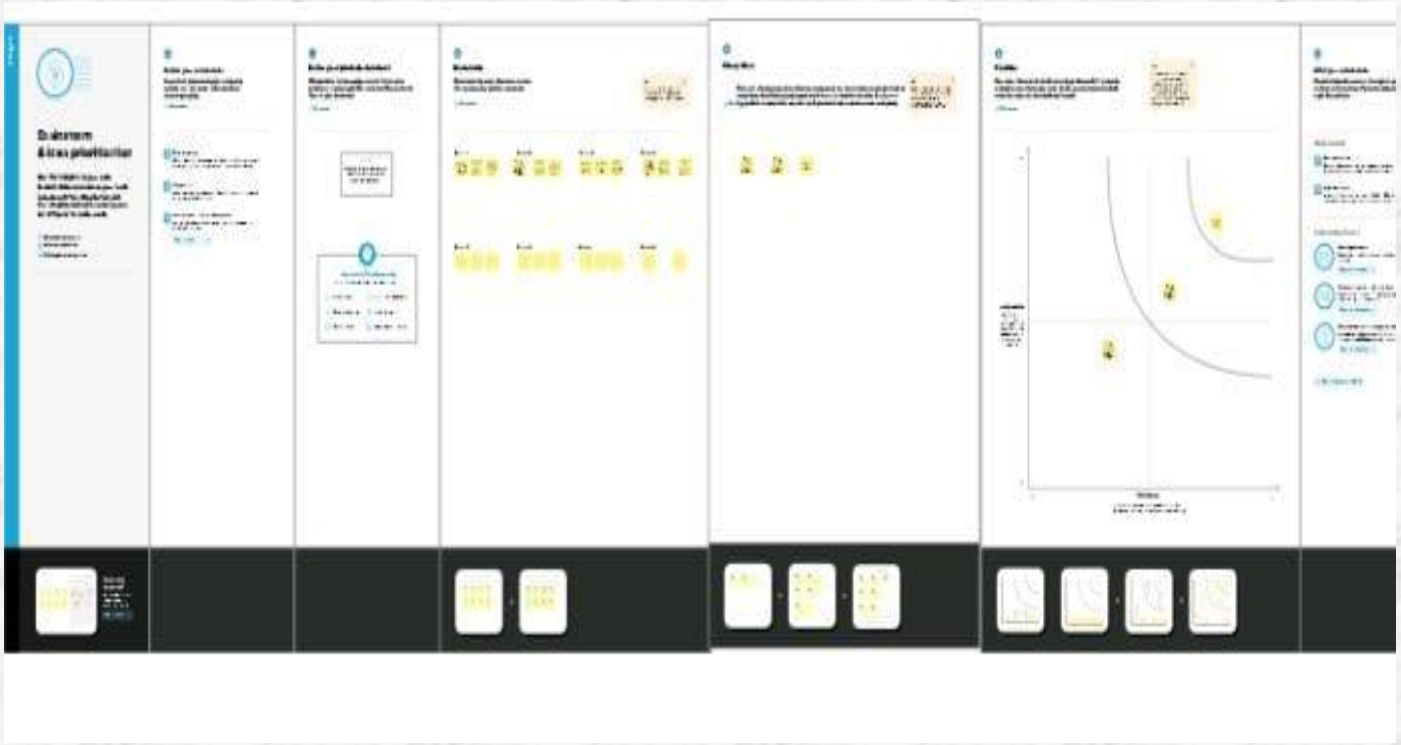
Visualization

- **The available dataset open the door to an array of unique visual depictions. Employing diverse visualization techniaues like bar charts,line charts,heat maps,scatter plots,pie charts,maps,and others,provides a versatile toolkit for developing into project performance and efficiency. These visual representations serve multiple functions,including performance comparison,temporal trend analysis,and showcasing the distribution and relationships between variables.**

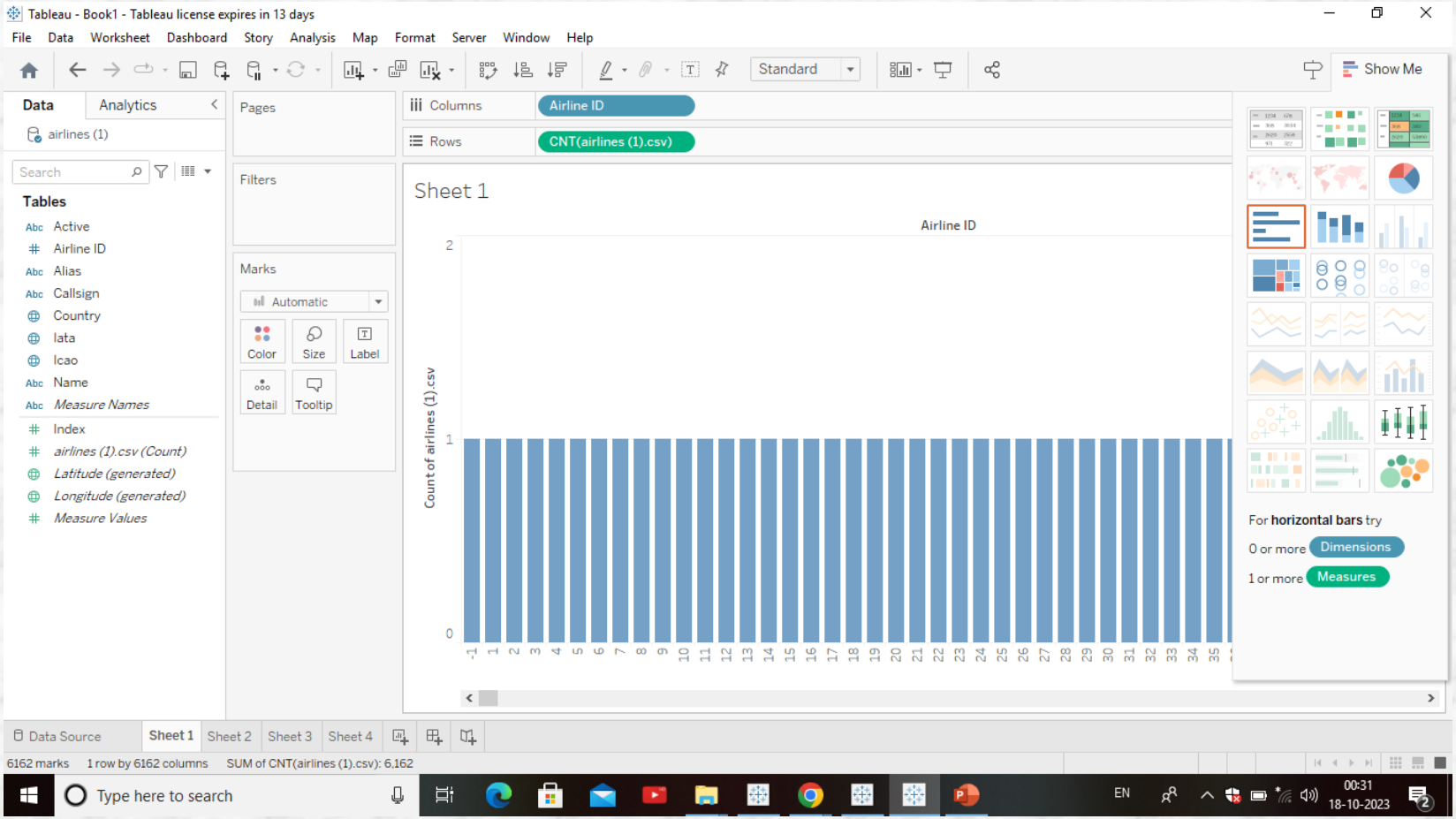
Empathy map


Says
What have we heard them say?
What can we imagine them saying?
Thinks
What are their wants, needs, hopes, and dreams?
What other thoughts might influence their behavior?
Persona's name
Short summery of the persona
Does
What behavior have we observed?
What can we imagine them doing?
Feels
What are their fears, frustrations, and anxieties?
What other feelings might influence their behavior?
See an example

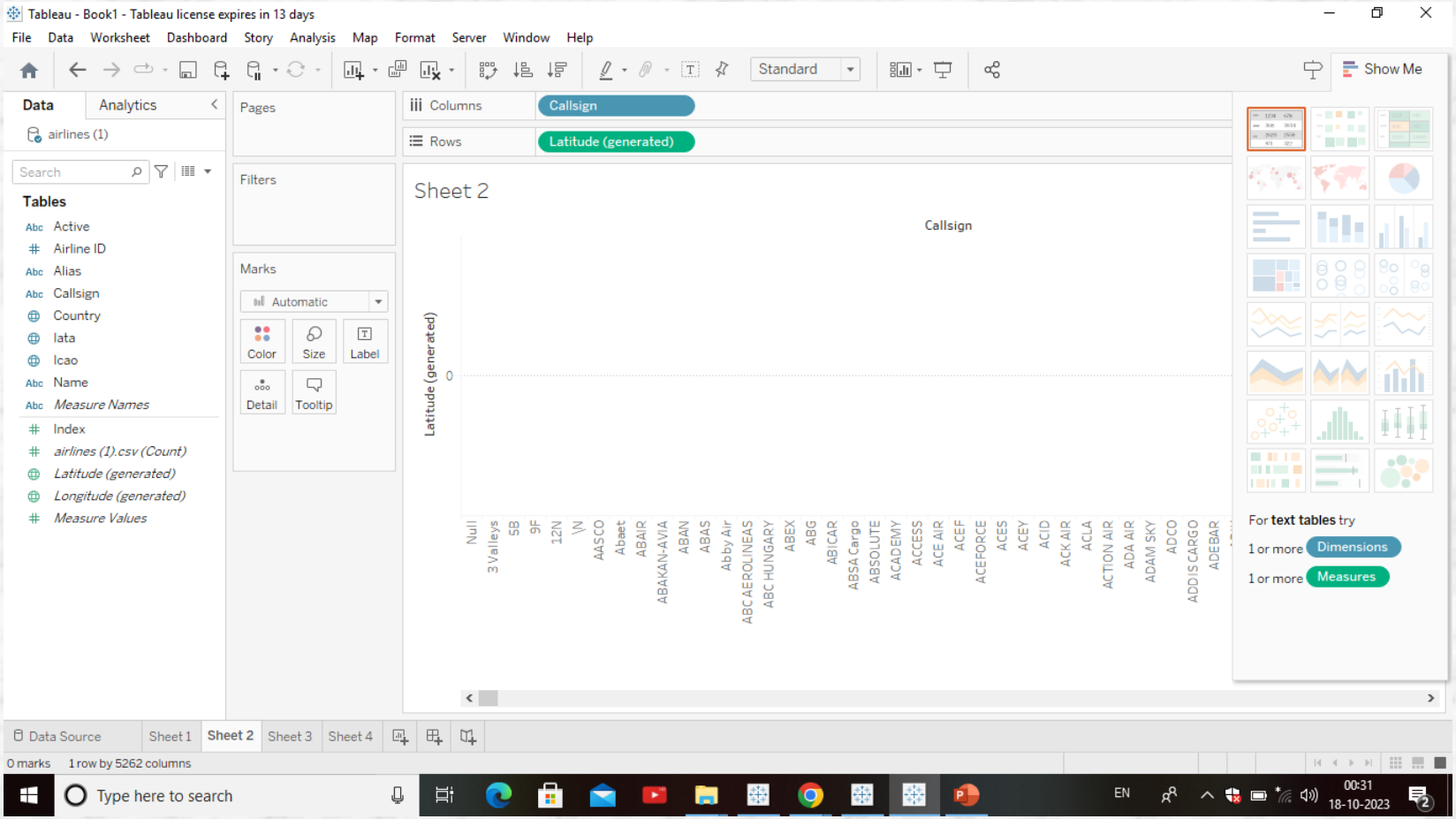
Brainstorming Map



Air Transportation Network



Global air insights with tableau



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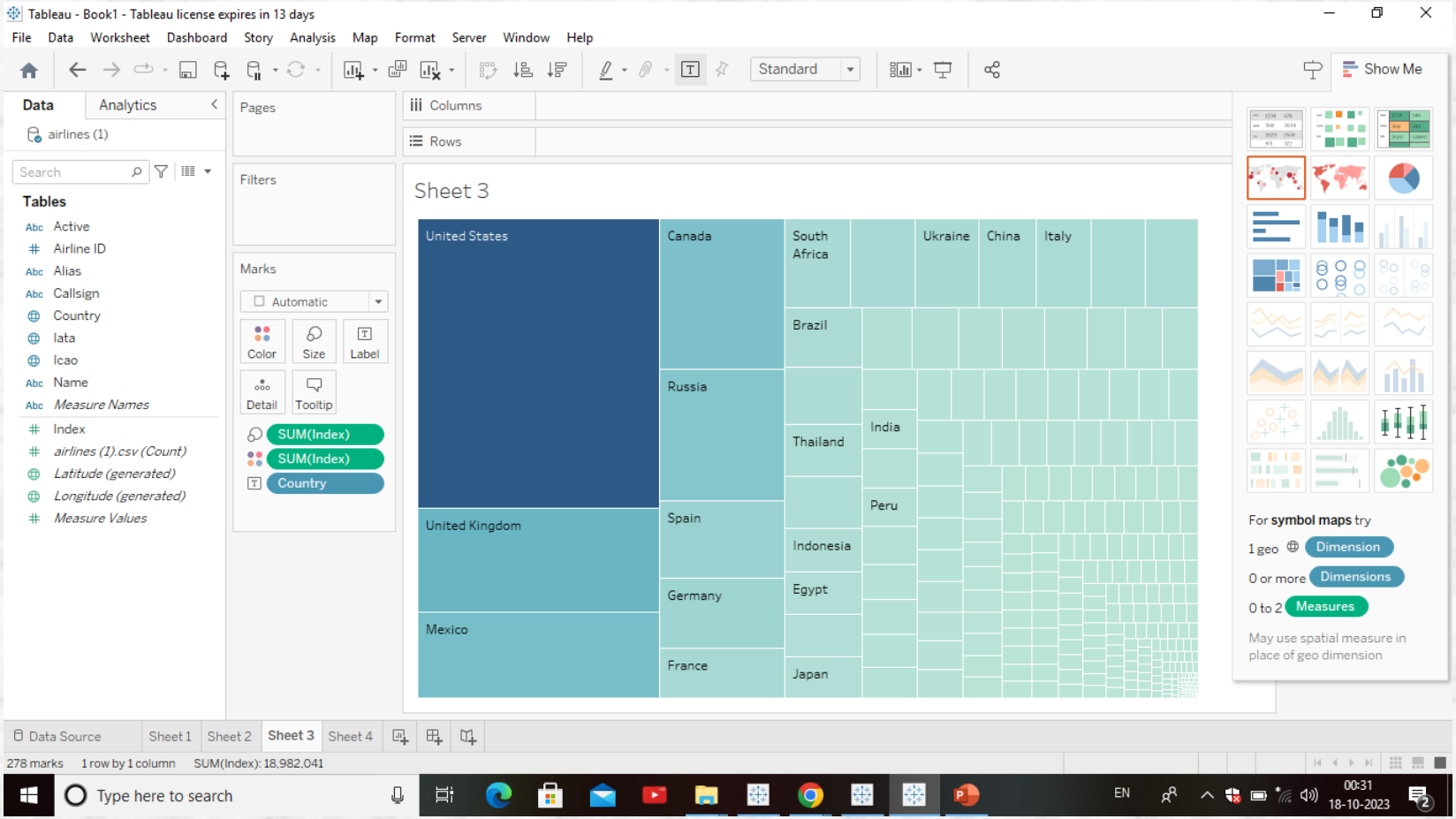
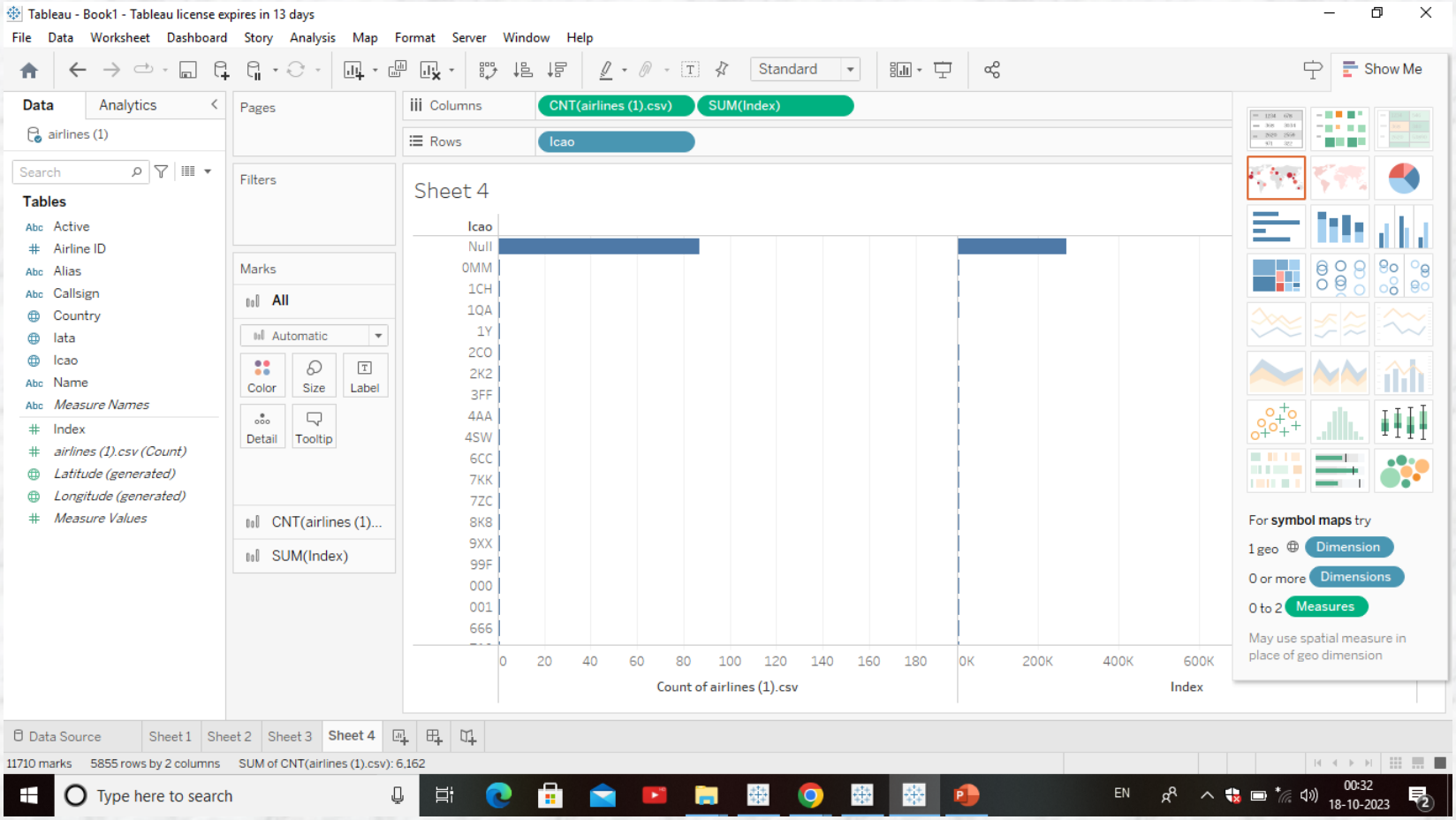


Unlocking Insights



Dashboard 1

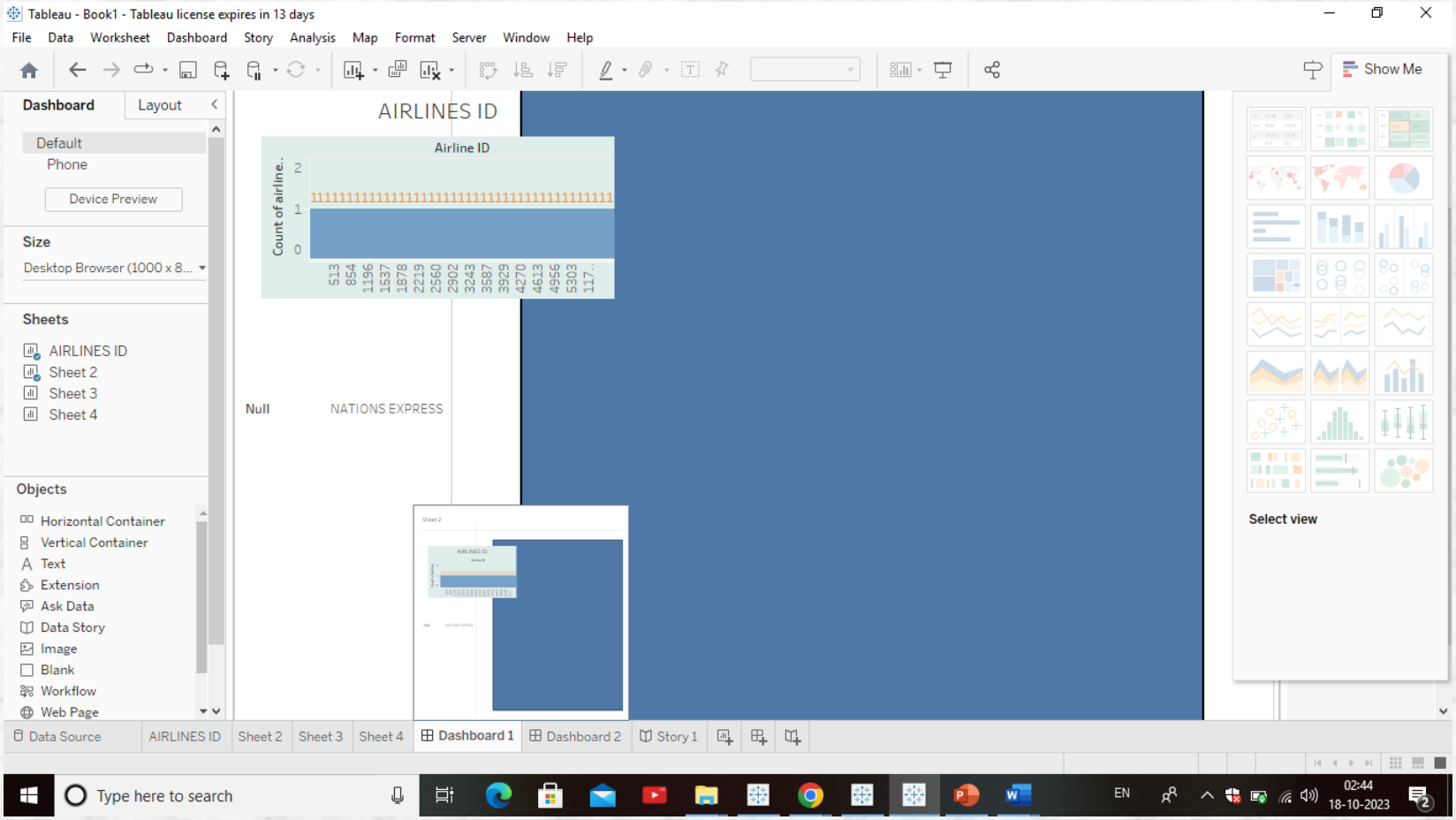


Tableau - Book1 - Tableau license expires in 13 days
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Show Me
Dashboard
Layout
Default
Phone
Device Preview
Size
Desktop Browser (1000 x 8...
Sheets
AIRLINES ID
Sheet 2
Sheet 3
Sheet 4
Objects
Horizontal Container
Vertical Container
Text
Extension
Ask Data
Data Story
Image
Blank
Workflow
Web Page
AIRLINES ID
Airline ID
Count of airline...
Null
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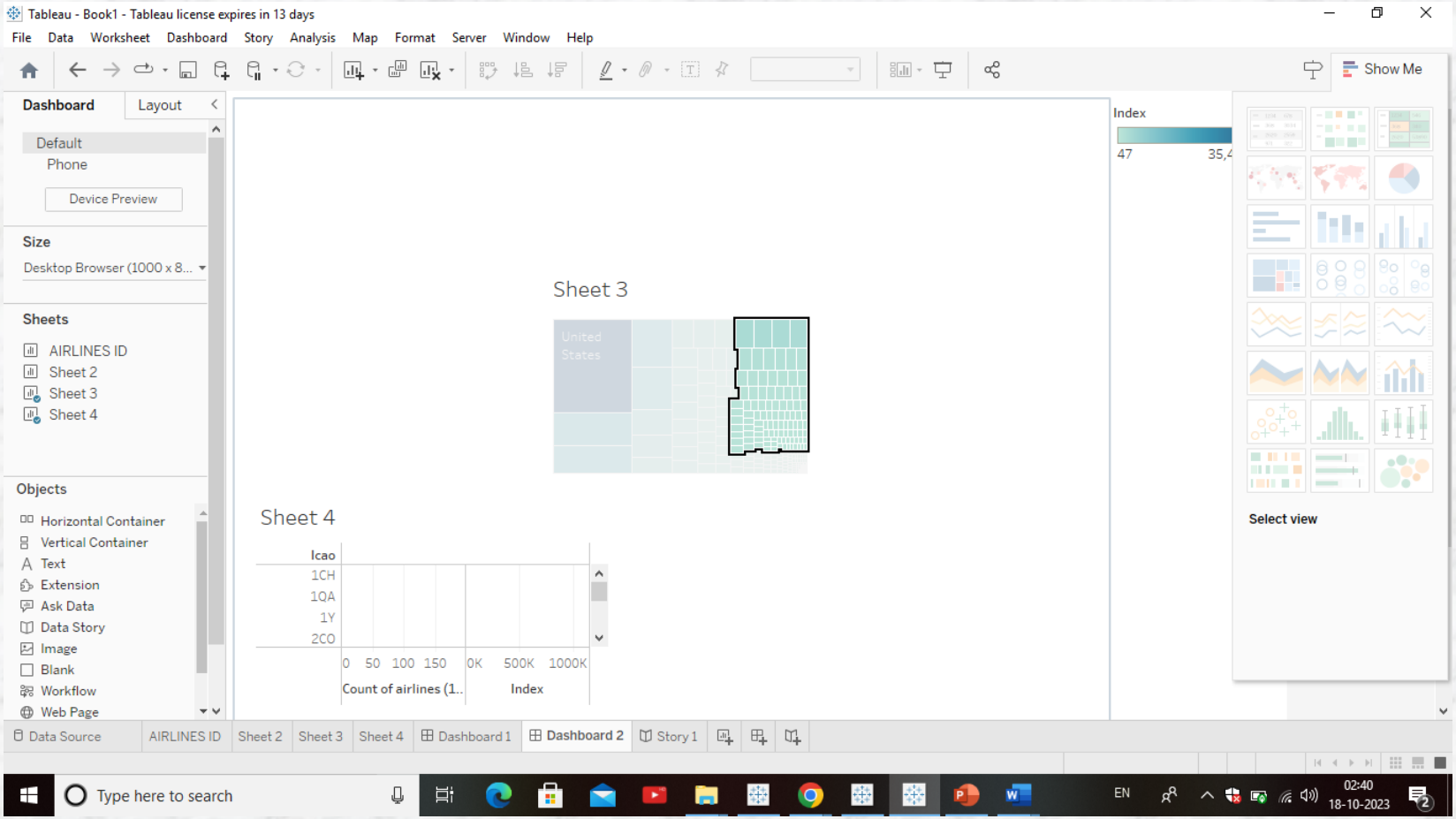
Select view
Data Source
AIRLINES ID
Sheet 2
Sheet 3
Sheet 4
Dashboard 1
Dashboard 2
Story 1
Type here to search
EN
02:44
18-10-2023

Dashboard 2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Sheets
AIRLINES ID
Sheet 2
Sheet 3
Sheet 4
Objects
Horizontal Container
Vertical Container
Text
Extension
Ask Data
Data Story
Image
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Workflow
Web Page
Sheet 3
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0K 500K 1000K
Index
Index
47
Select view
Data Source
AIRLINES ID
Sheet 2
Sheet 3
Sheet 4
Dashboard 1
Dashboard 2
Story 1
Type here to search
EN
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18-10-2023

Story

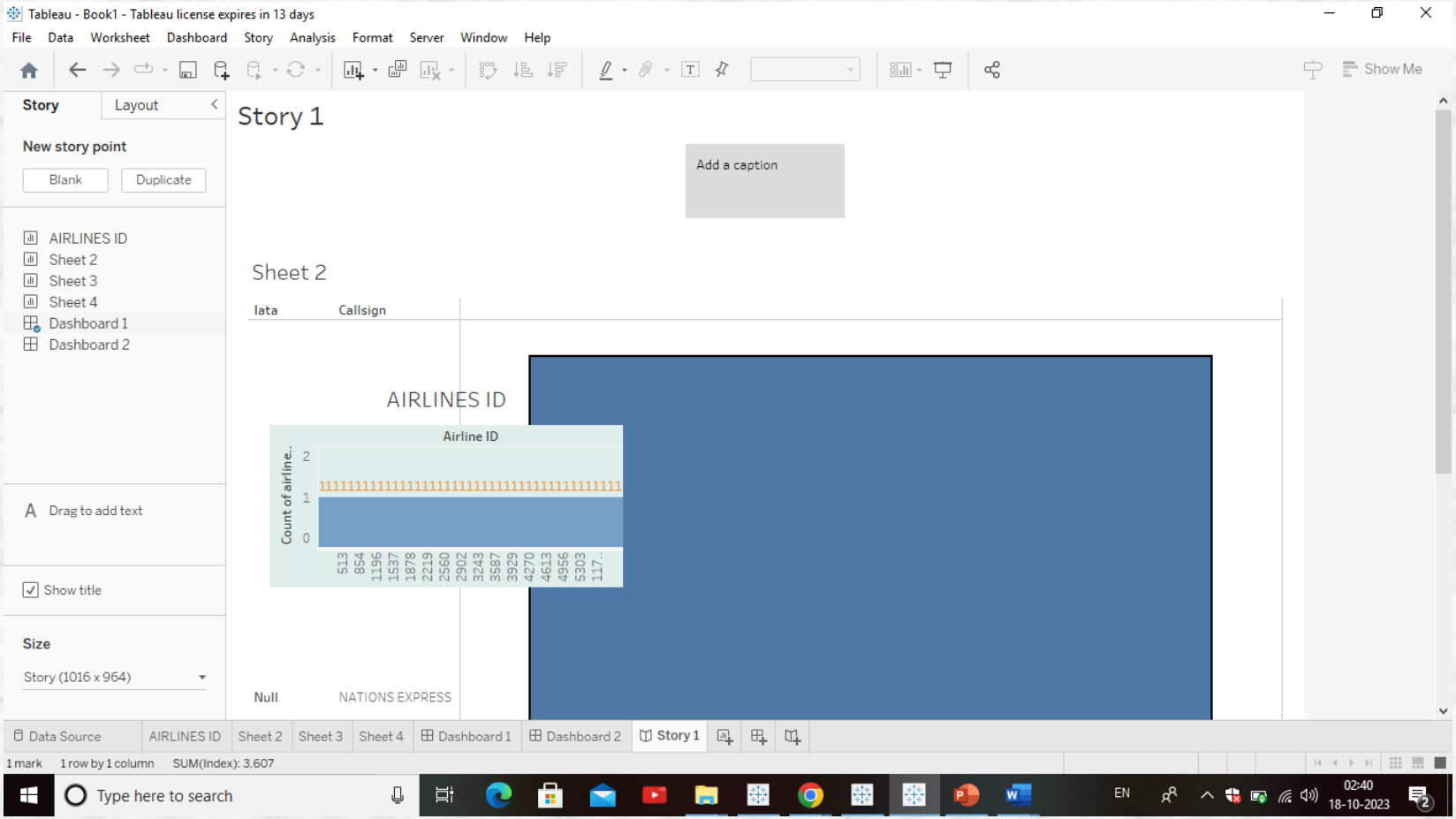
Tableau - Book1 - Tableau license expires in 13 days
File Data Worksheet Dashboard Story Analysis Format Server Window Help
Show Me
Story
Layout
New story point
Blank
Duplicate
AIRLINES ID
Sheet 2
Sheet 3
Sheet 4
Dashboard 1
Dashboard 2
Drag to add text
Show title
Size
Story (1016 x 964)
Story 1
Add a caption
Sheet 2
Iata
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AIRLINES ID
Airline ID
Count of airline...
Null
NATIONS EXPRESS
Data Source
AIRLINES ID
Sheet 2
Sheet 3
Sheet 4
Dashboard 1
Dashboard 2
Story 1
1 mark
1 row by 1 column
SUM(Index): 3,607
Type here to search
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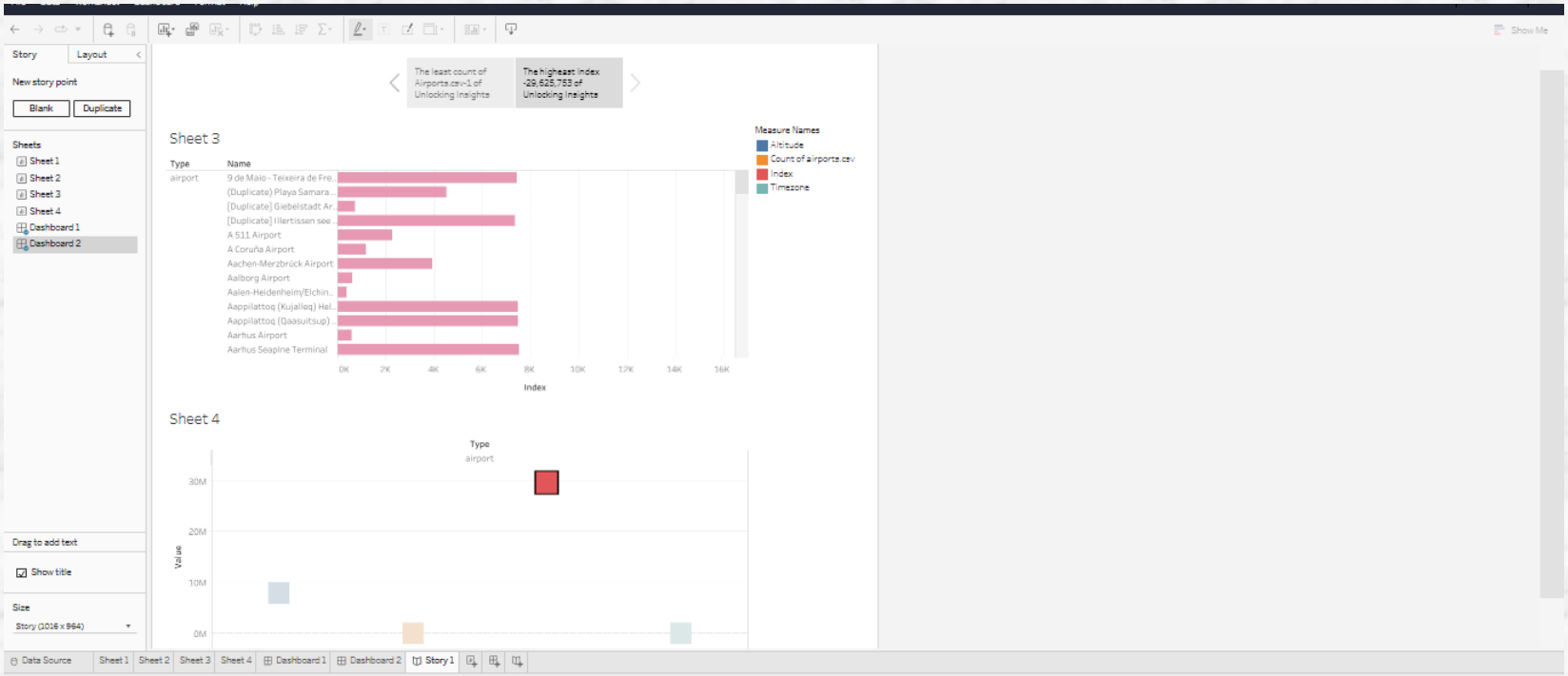
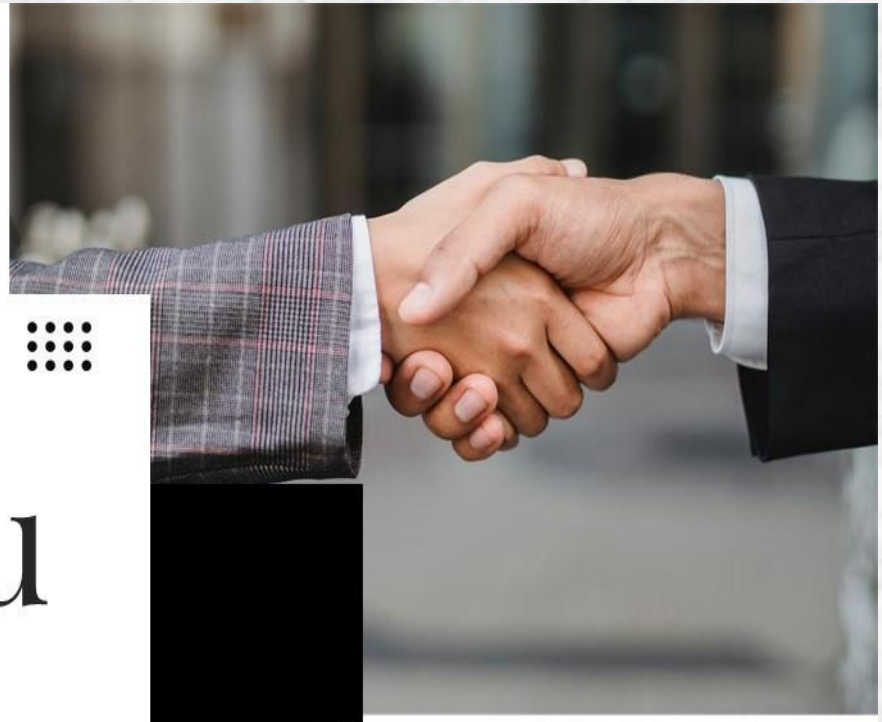
02:40
18-10-2023


Story
Layout
New story point
Blank
Duplicate
Sheets
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Dashboard 1
Dashboard 2
Drag to add text
Show title
Size
Story (1016 x 964)
The least count of Airports.csv-1 of Unlocking Insights
The highest Index -29,625,753 of Unlocking Insights
Sheet 3
Type
Name
airport
9 de Maio - Teixeira de Fre...
(Duplicate) Playa Samara ...
[Duplicate] Giebelstadt Ar...
[Duplicate] Illertissen see ...
A 511 Airport
A Coruña Airport
Aachen-Merzbrück Airport
Aalborg Airport
Aalen-Heidenheim/Elchin...
Aappilattoq (Kujalleq) Hel...
Aappilattoq (Qaasuitsup) ...
Aarhus Airport
Aarhus Seaplne Terminal
0K
2K
4K
6K
8K
10K
12K
14K
16K
Index
Measure Names
Altitude
Count of airports.csv
Index
Timezone
Sheet 4
Type
airport
30M
20M
10M
0M
Value
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Dashboard 1
Dashboard 2
Story 1

Conclusion

- The "Unlocking Insights" project successfully utilized Tableau to analyze spending behavior.This paper reveals the existence of alternative pair in the defined as a pair is defined as a paie of airports that,if one of them is closed,the other one take over part of its traffic load, We find these pairs of airports important as the network performance will not be affected largerly if only one airport in an alternative pair will worsen the network performance significantly, as no other airports can.

Future Scope

- The future scope of Unlocking Insights using Tableau is likely to be characterized by advancements in AI, real-time analytics, data security, and improved user experiences. As the field of data visualization and analytics continues to evolve, Tableau is poised to play a crucial role in empowering organizations with actionable insights for strategic air transportation

Thank You