Unearthing the Environmental Impact of Human Activity- A

Global CO2 Emission Analysis

1.INTRODUCTION

1.1-Overview:

It covers all CO2 capture, transport, storage, and utilization projects worldwide that have been commissioned since the 1970s, and have an announced capacity of more than 100 000 t per year (or 1 000 t per year for direct air capture facilities).

1.2-Purpose:

It includes projects with a clear emissions reduction scope, and excludes CO2 capture for utilization pathways which bring low climate benefits (e.g. food and beverages), or which are part of the conventional industrial process (e.g. internal use for urea production), as well as use of naturally occurring CO2 for enhanced oil recovery. The database complements other technology-related tracking efforts, such as the Hydrogen Projects database and the Clean Energy Demonstration Projects Database.

2. PROBLEM DEFINITION & DESIGN THINKING

2.1-Empathy map:

An empathy map is a collaborative visualization used to articulate what we know about a particular type of user. It externalizes knowledge about users in order to 1) create a shared understanding of user needs, and 2) aid in decision making. This article is a guide to empathy mapping and its uses.

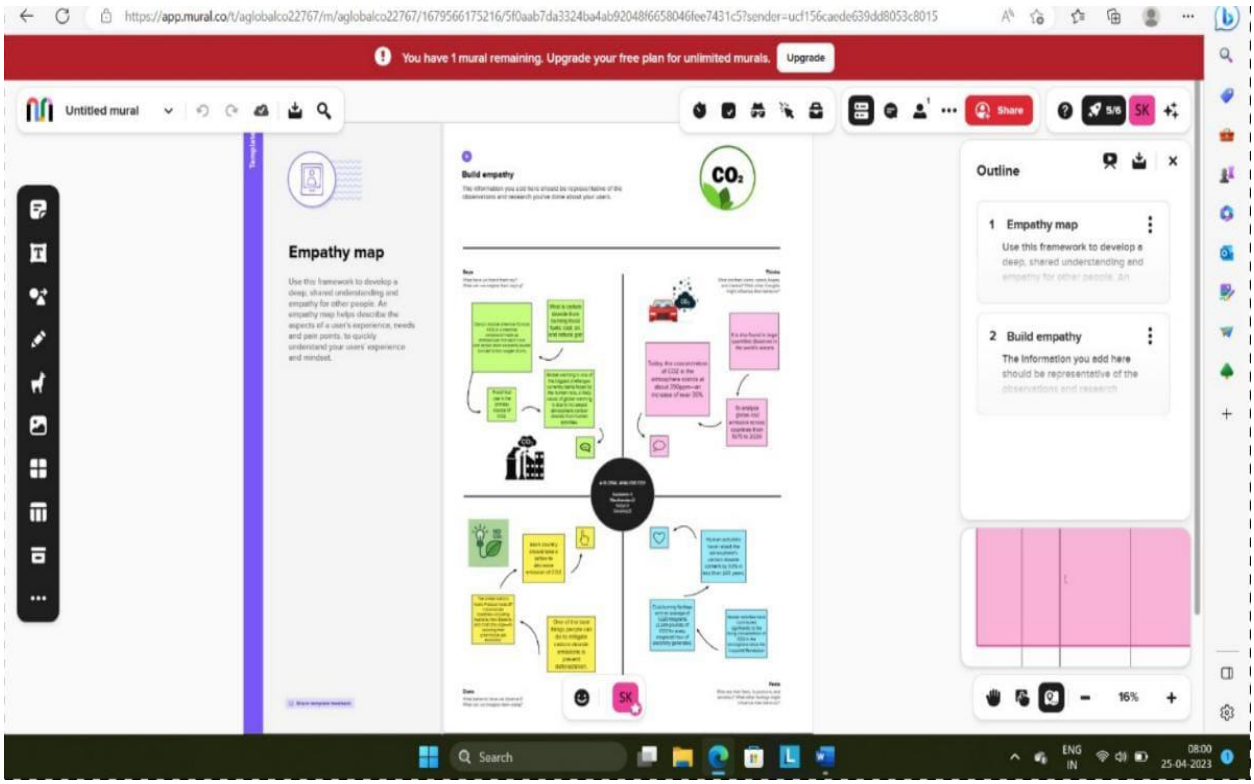


Fig 2.1 Empathy map

2.2-Ideation & Brainstorming Map:

An idea map is a visual representation of your thinking process. It's a tool for planning and organizing your ideas visually that doesn't rely on traditional note taking. Traditional linear pages of notes can slow down the process of planning a project, but an idea map lays everything out in a clear way that's easy for anyone to understand. One of the key advantages of creating an idea map with a digital tool like Mind Manager is the immediate clarity it gives you. Idea maps are a perfect way to collaborate and communicate ideas with members of your team, whether you're building a website, a company, or a project plan.

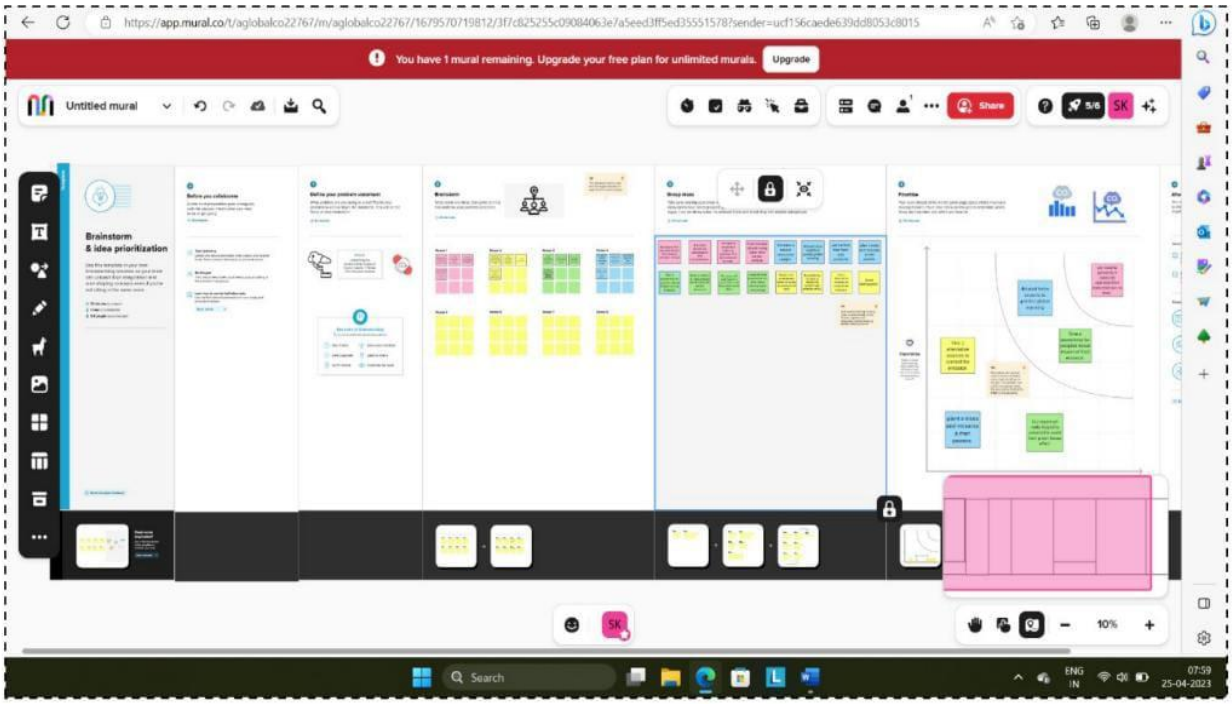


Fig 2.2 Ideation & Brainstroming map

3. RESULT

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

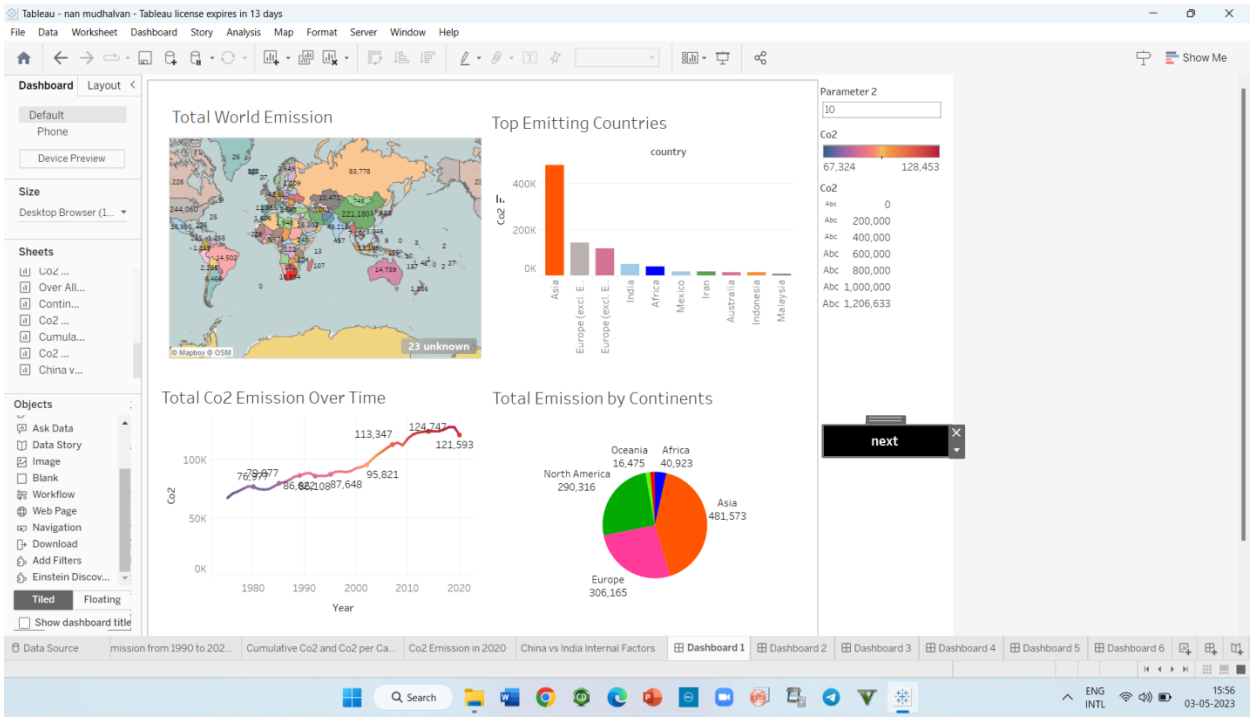


Tableau - nan mudhalvan - Tableau license expires in 13 days
Total World Emission
Top Emitting Countries
country
Asia
Europe (excl. E...
Europe (excl. E...
India
Africa
Mexico
Iran
Australia
Indonesia
Malaysia
Parameter 2
10
Co2
67,324
128,453
Total Co2 Emission Over Time
Year
Total Emission by Continents
Oceania
16,475
Africa
40,923
North America
290,316
Asia
481,573
Europe
306,165
next
Dashboard 1
Dashboard 2
Dashboard 3
Dashboard 4
Dashboard 5
Dashboard 6

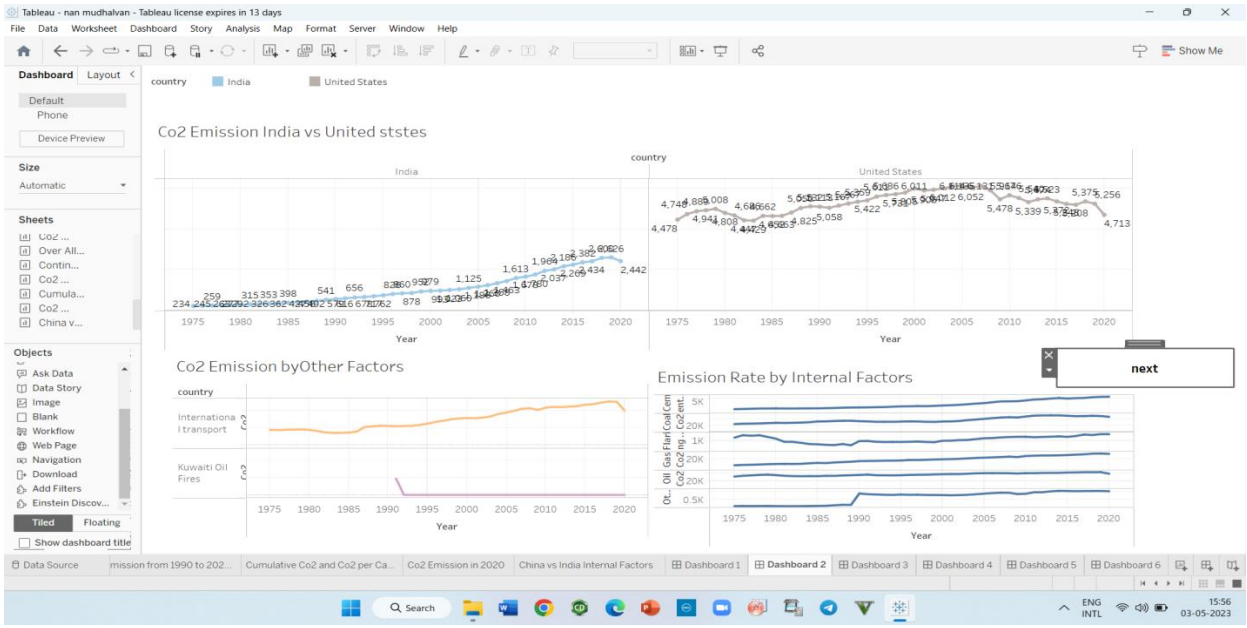


Tableau - nan mudhalvan - Tableau license expires in 13 days
country
India
United States
Co2 Emission India vs United ststes
Year
Co2 Emission byOther Factors
Emission Rate by Internal Factors
next
Dashboard 1
Dashboard 2
Dashboard 3
Dashboard 4
Dashboard 5
Dashboard 6

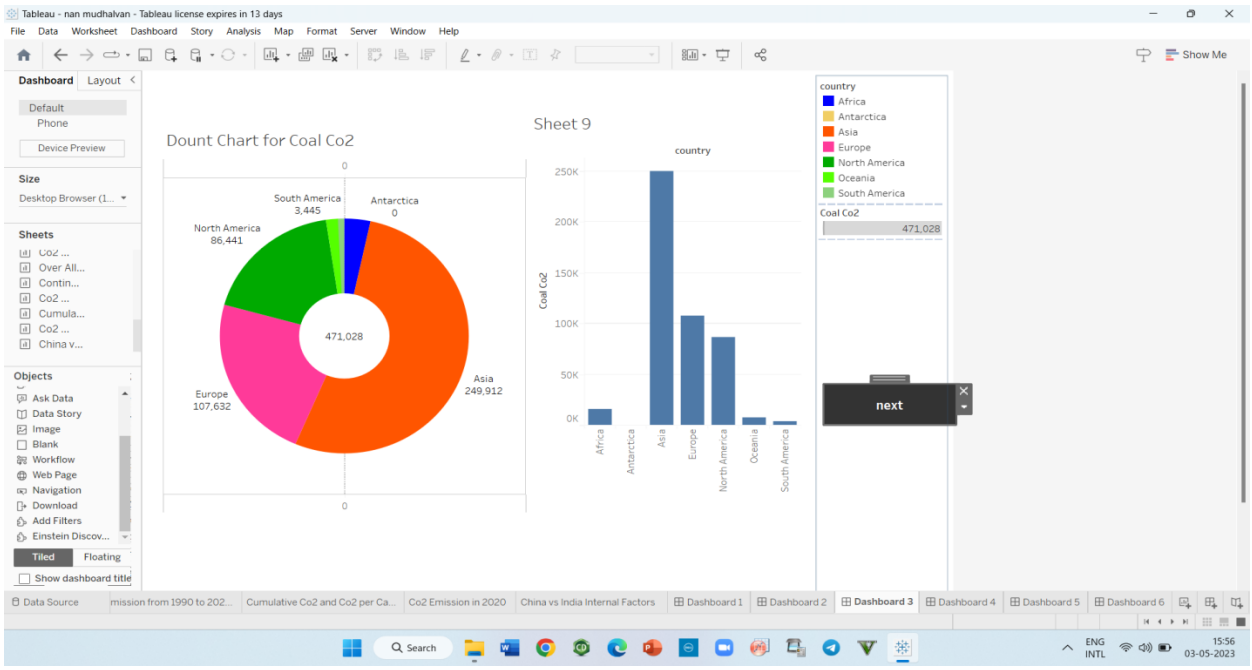


Tableau - nan mudhalvan - Tableau license expires in 13 days
Dount Chart for Coal Co2
South America 3,445
Antarctica 0
North America 86,441
471,028
Europe 107,632
Asia 249,912
Sheet 9
country
Coal Co2
Africa
Antarctica
Asia
Europe
North America
Oceania
South America
country
Africa
Antarctica
Asia
Europe
North America
Oceania
South America
Coal Co2
471,028
next

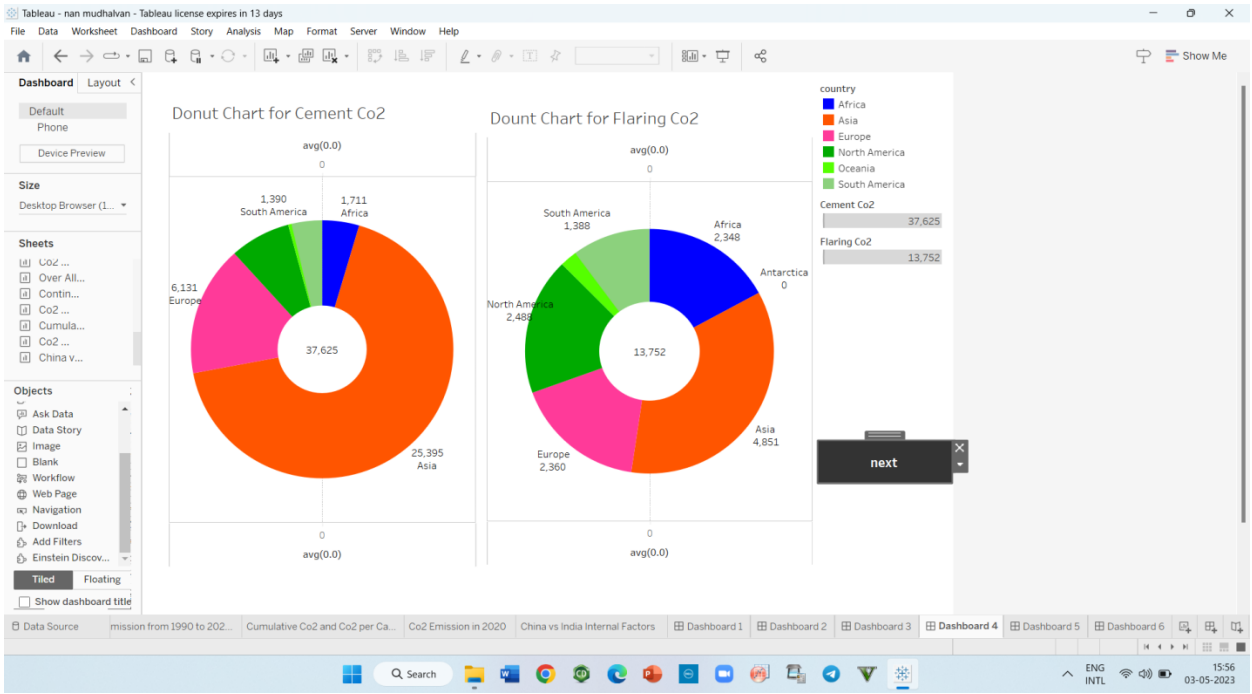


Tableau - nan mudhalvan - Tableau license expires in 13 days
Donut Chart for Cement Co2
1,390 South America
1,711 Africa
6,131 Europe
37,625
25,395 Asia
Dount Chart for Flaring Co2
South America 1,388
Africa 2,348
Antarctica 0
North America 2,488
13,752
Europe 2,360
Asia 4,851
country
Africa
Asia
Europe
North America
Oceania
South America
Cement Co2
37,625
Flaring Co2
13,752
next

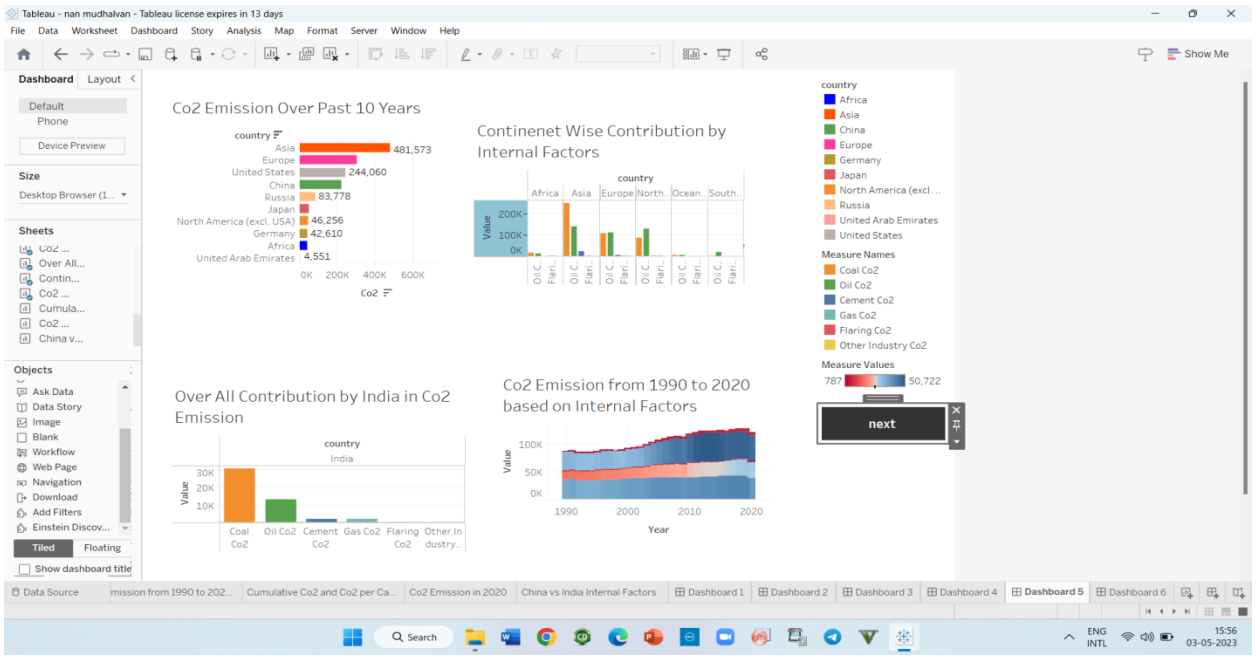
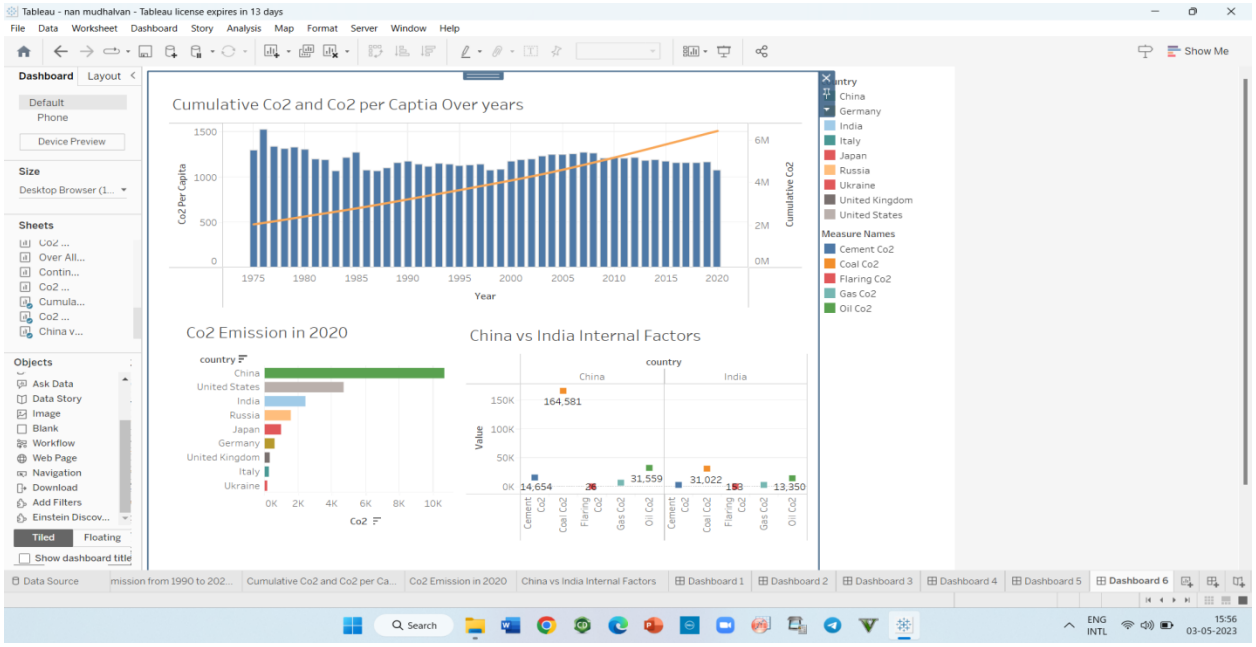


Tableau - nan mudhalvan - Tableau license expires in 13 days
Co2 Emission Over Past 10 Years
Asia 481,573
Europe
United States 244,060
China
Russia 83,778
Japan
North America (excl. USA) 46,256
Germany 42,610
Africa
United Arab Emirates 4,551
Continenet Wise Contribution by Internal Factors
Over All Contribution by India in Co2 Emission
Co2 Emission from 1990 to 2020 based on Internal Factors
country
Africa
Asia
China
Europe
Germany
Japan
North America (excl. ...
Russia
United Arab Emirates
United States
Measure Names
Coal Co2
Oil Co2
Cement Co2
Gas Co2
Flaring Co2
Other Industry Co2
Measure Values
787
50,722
next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Cumulative Co2 and Co2 per Captia Over years
Co2 Emission in 2020
China vs India Internal Factors
country
China
Germany
India
Italy
Japan
Russia
Ukraine
United Kingdom
United States
Measure Names
Cement Co2
Coal Co2
Flaring Co2
Gas Co2
Oil Co2

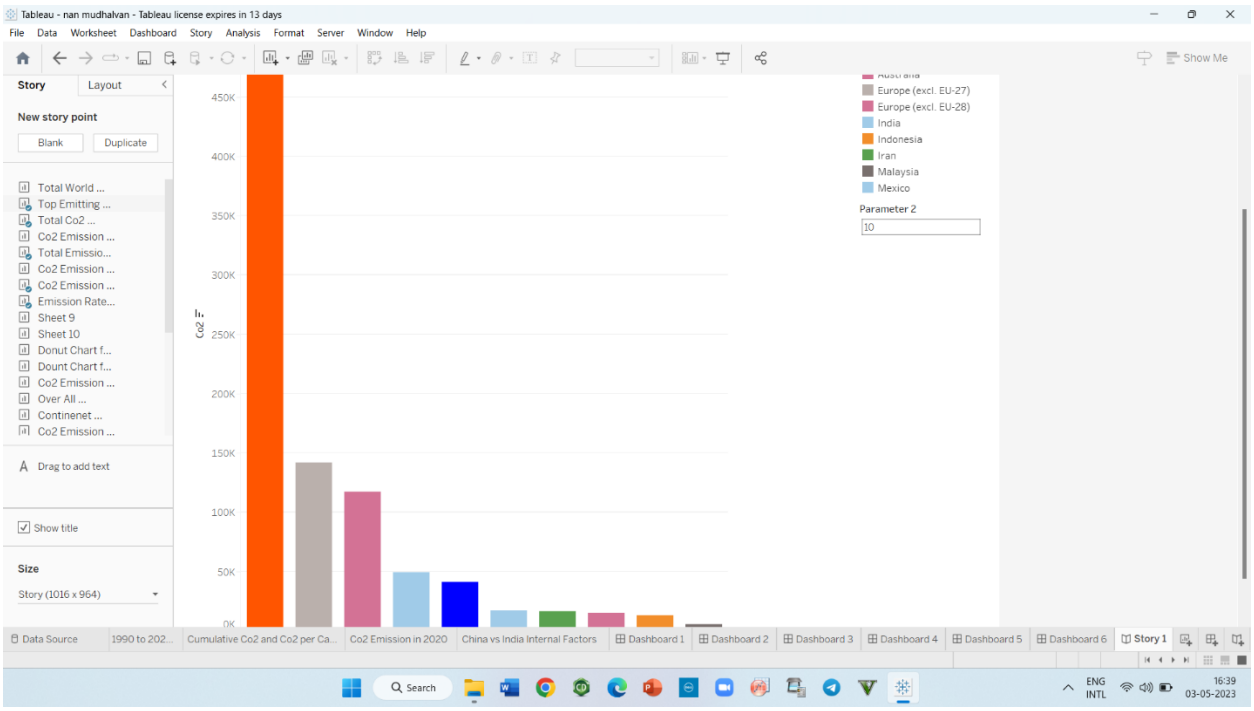


Tableau - nan mudhalvan - Tableau license expires in 13 days
File Data Worksheet Dashboard Story Analysis Format Server Window Help
Story
Layout
New story point
Blank
Duplicate
Total World ...
Top Emitting ...
Total Co2 ...
Co2 Emission ...
Total Emissio...
Co2 Emission ...
Co2 Emission ...
Emission Rate...
Sheet 9
Sheet 10
Donut Chart f...
Dount Chart f...
Co2 Emission ...
Over All ...
Continenet ...
Co2 Emission ...
Drag to add text
Show title
Size
Story (1016 x 964)
450K
400K
350K
300K
250K
200K
150K
100K
50K
0K
Co2
Europe (excl. EU-27)
Europe (excl. EU-28)
India
Indonesia
Iran
Malaysia
Mexico
Parameter 2
10
Data Source
1990 to 202...
Cumulative Co2 and Co2 per Ca...
Co2 Emission in 2020
China vs India Internal Factors
Dashboard 1
Dashboard 2
Dashboard 3
Dashboard 4
Dashboard 5
Dashboard 6
Story 1
Search
ENG
INTL
16:39
03-05-2023

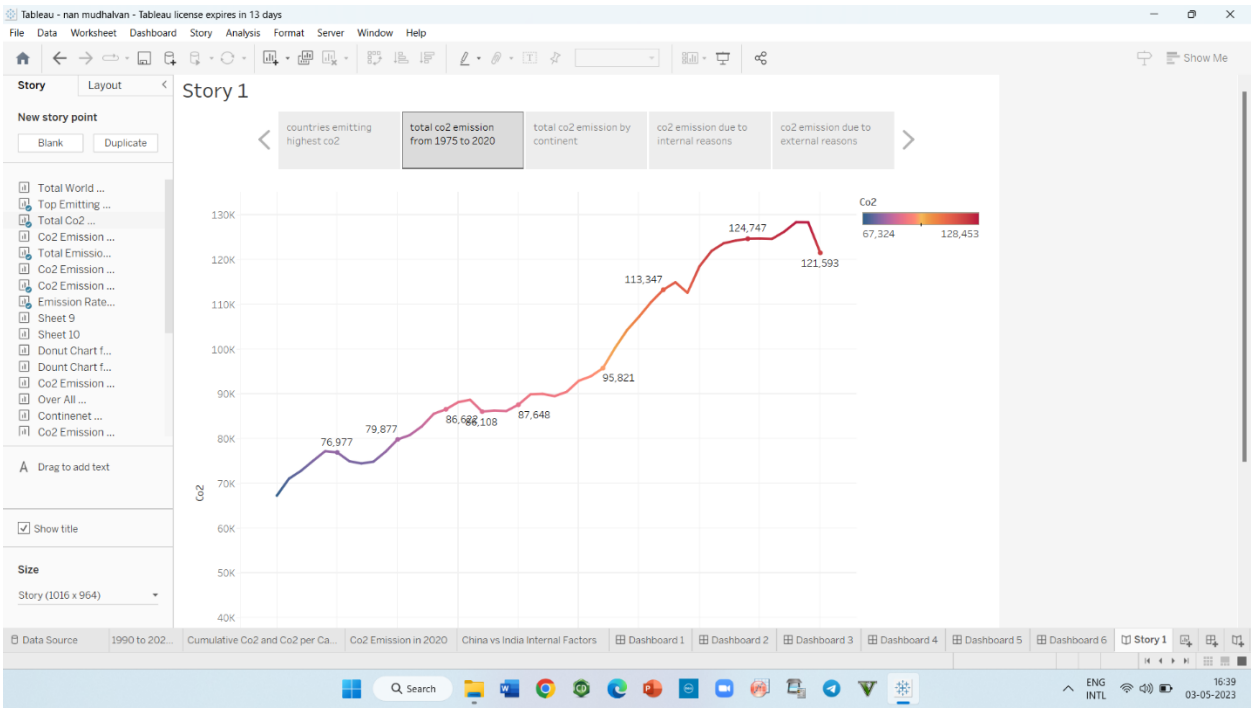
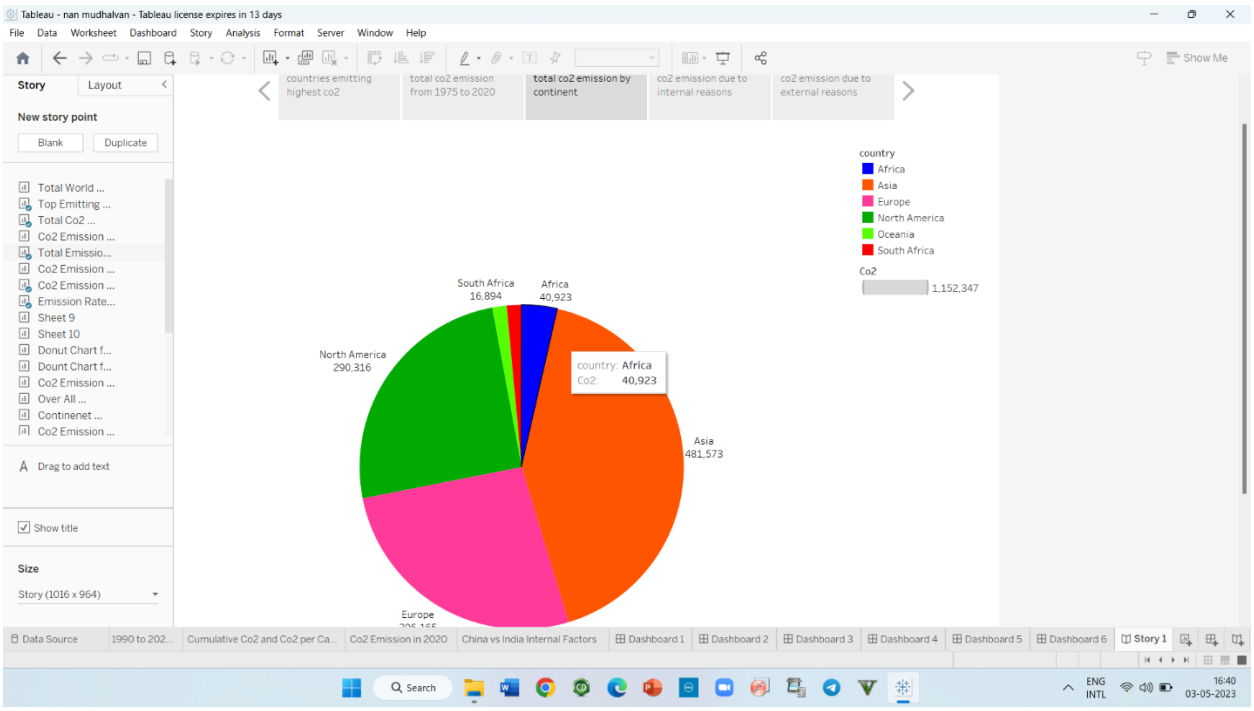


Tableau - nan mudhalvan - Tableau license expires in 13 days
File Data Worksheet Dashboard Story Analysis Format Server Window Help
Story
Layout
Story 1
countries emitting highest co2
total co2 emission from 1975 to 2020
total co2 emission by continent
co2 emission due to internal reasons
co2 emission due to external reasons
New story point
Blank
Duplicate
Total World ...
Top Emitting ...
Total Co2 ...
Co2 Emission ...
Total Emissio...
Co2 Emission ...
Co2 Emission ...
Emission Rate...
Sheet 9
Sheet 10
Donut Chart f...
Dount Chart f...
Co2 Emission ...
Over All ...
Continenet ...
Co2 Emission ...
Drag to add text
Show title
Size
Story (1016 x 964)
130K
120K
110K
100K
90K
80K
70K
60K
50K
40K
Co2
Co2
67,324
128,453
76,977
79,877
86,622
86,108
87,648
95,821
113,347
124,747
121,593
Data Source
1990 to 202...
Cumulative Co2 and Co2 per Ca...
Co2 Emission in 2020
China vs India Internal Factors
Dashboard 1
Dashboard 2
Dashboard 3
Dashboard 4
Dashboard 5
Dashboard 6
Story 1
Search
ENG
INTL
16:39
03-05-2023



4. ADVANTAGES & DISADVANTAGES

4.1-Advantages

- Reduced data redundancy
- Reduced updating errors and increased consistency
- Greater data integrity and independence from applications programs
- Improved data access to users through use of host and query languages
- Improved data security
- Reduced data entry, storage, and retrieval costs
- Facilitated development of new applications program

• 4.2-Disadvantages

- Database systems are complex, difficult, and time-consuming to design
- Substantial hardware and software start-up costs
- Damage to database affects virtually all applications programs
- Extensive conversion costs in moving form a file-based system to a database system
- Initial training required for all programmers and users

5. APPLICATIONS

- **Banking¬**
  - **Database the executive's framework is utilized to store the exchange data of the client in the information base.**
- **Healthcare:**
  - **DBMS is used in healthcare to manage patient data, medical records,¬ and billing information.**
- **Data retrieval:**
  - **DBMS provides a way to retrieve data quickly and easily using¬ search queries.**
- **Data manipulation:**
  - **DBMS provides tools to manipulate data, such as sorting,¬ filtering, and aggregating data.**
- **Security:**
  - **DBMS provides security features to ensure that only authorized users¬ have access to the data.**
- **Data backup and recovery:**
  - **DBMS provides tools to back up data and recover it in¬ case of system failures or data loss.**
- **Multi-user access:**
  - **DBMS allows multiple users to access and modify data¬ simultaneously.**
- **Reporting and analysis:**
  - **DBMS provide tools to generate reports and analyze data¬ to gain insights and make informed decisions.**

6. CONCLUSION

In conclusion. Database implementation plan is essential for any organization that once to boost is sales or increase their customers experience, a good database implementation plan I supposed to have, all the factors and the significance value towards the organization, not forgetting the requirements that are needed. In my opinion, I could have recommended using a computerized, database management system. This is because it is faster to implement and also it requires less amount of time and finance to set up, the future of database lies on the power of the organization .and the funds that they can be able to set aside to implement new database management system

7. FUTURE SCOPE

Many types of data sources exist in nature that includes transactional, Spatial, temporal, Spatial-Temporal text, multi-media, etc. Mining techniques that should be used for mining these kinds of databases differ in many manners. The way the patterns are identified also differ in many ways; Negative patterns exist in almost all the databases. Therefore, each type of database must be investigated individually for finding the negative patterns.

Regularity is considered in this issue .as a relative distance between the patterns of the same type through its record placement. However, the regularity, if considered through time stamping, will be relevant though the process is complicated. It will be more interesting if negative associations mined from fixed databases are adjusted when new transactions arises and a fresh set of negative associations are generated.

The negative pattern mining considering inflow of data stream needs to be done considering building the transactions table and simultaneously, and then building the vertical table simultaneously leading to generating negative patterns concurrently will make the negative patent mining instant and up-to-date. In the thesis, frequent regular and maximal patterns are considered. The work can be extended to colossal, multi-dimensional and high dimensional pattern

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In Story link:

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