<u>Unearthing the Environmental Impact of Human Activity- A</u> <u>Global CO₂ Emission Analysis</u>

1.INTRODUCTION

1.1-Overview:

It covers all CO₂ capture, transport, storage, and utilisation 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 CO_2 capture for utilisation 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 CO_2 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.

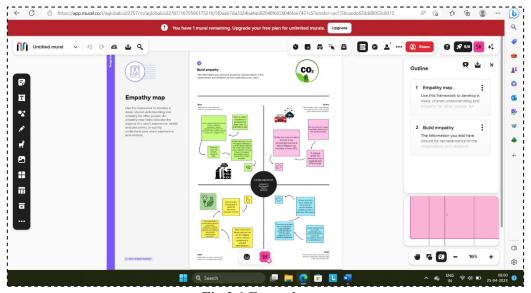


Fig 2.1 Empathy map

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 MindManager 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.

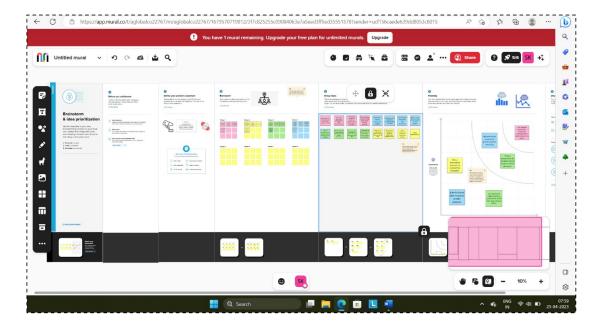
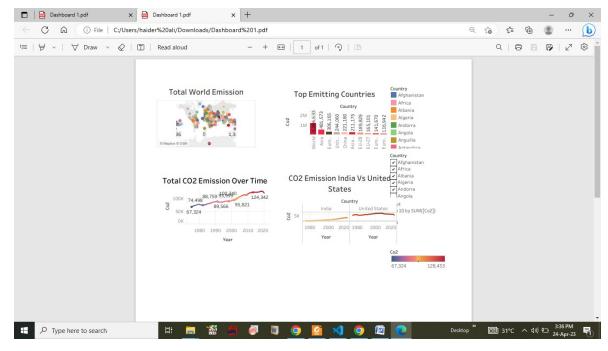
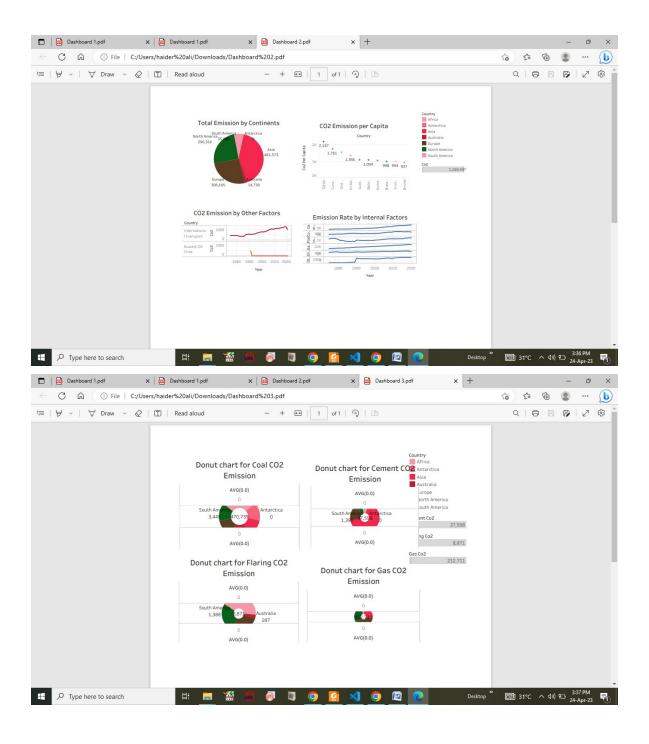


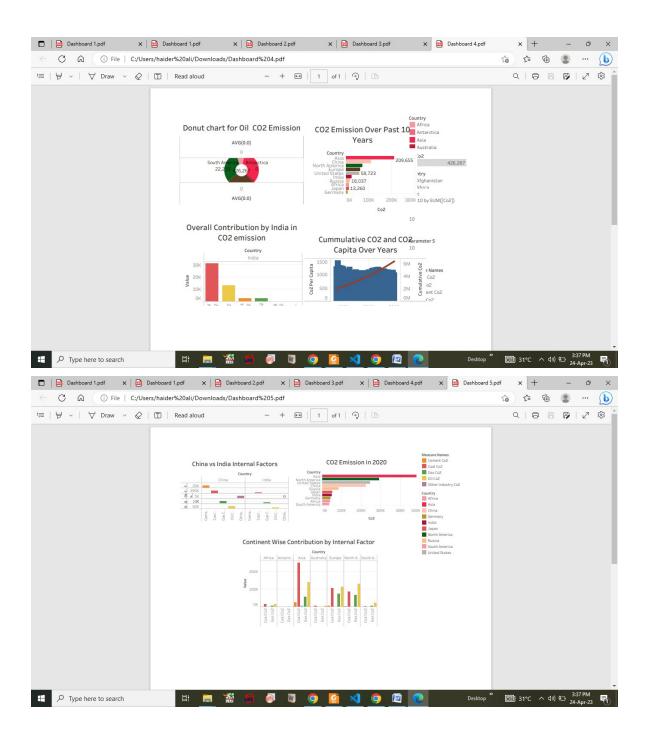
Fig 2.2 Ideation & Brainstorming Map:

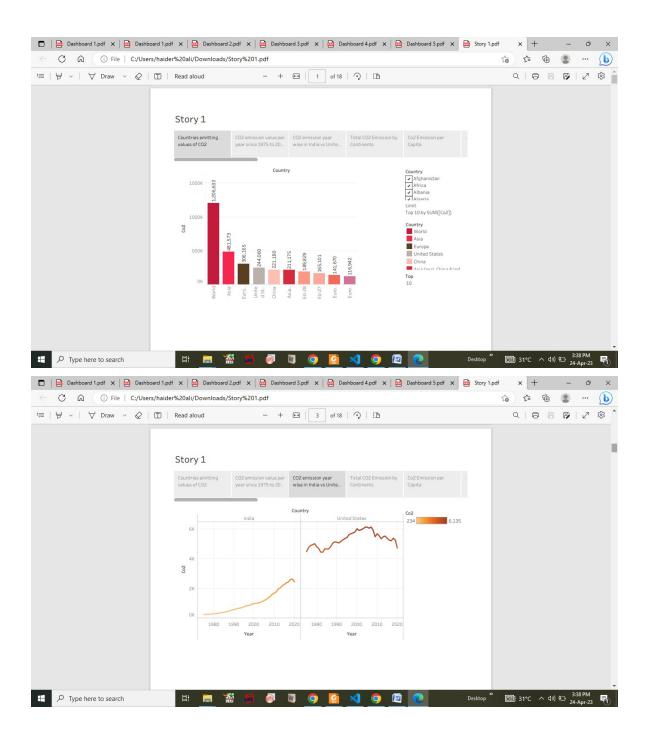
3. RESULT

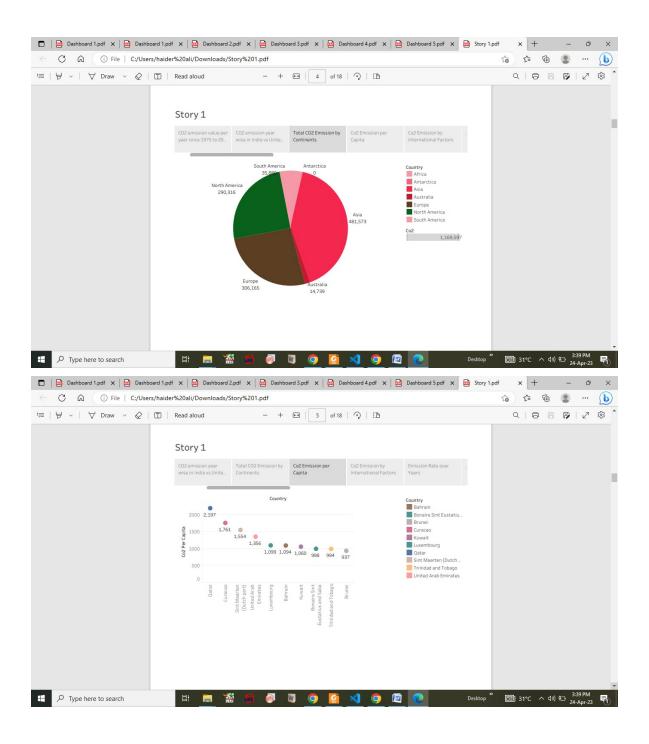
Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs,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

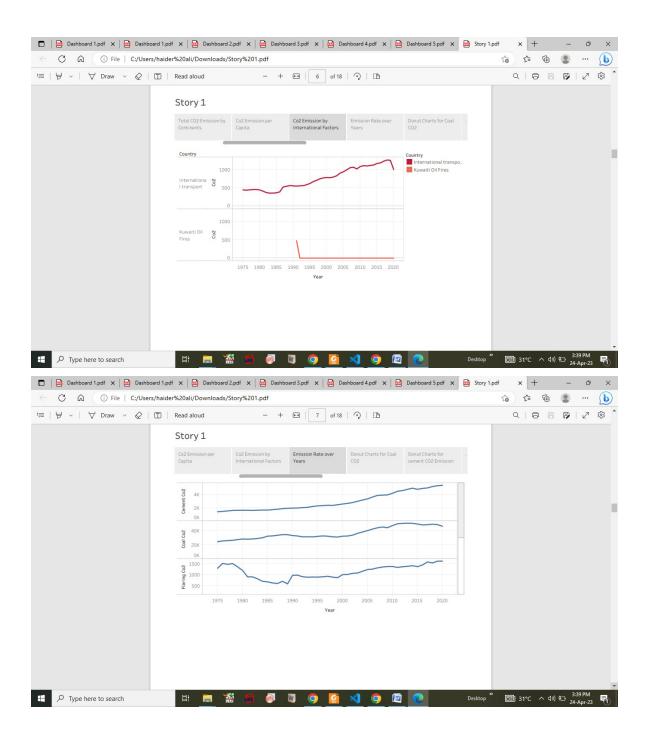


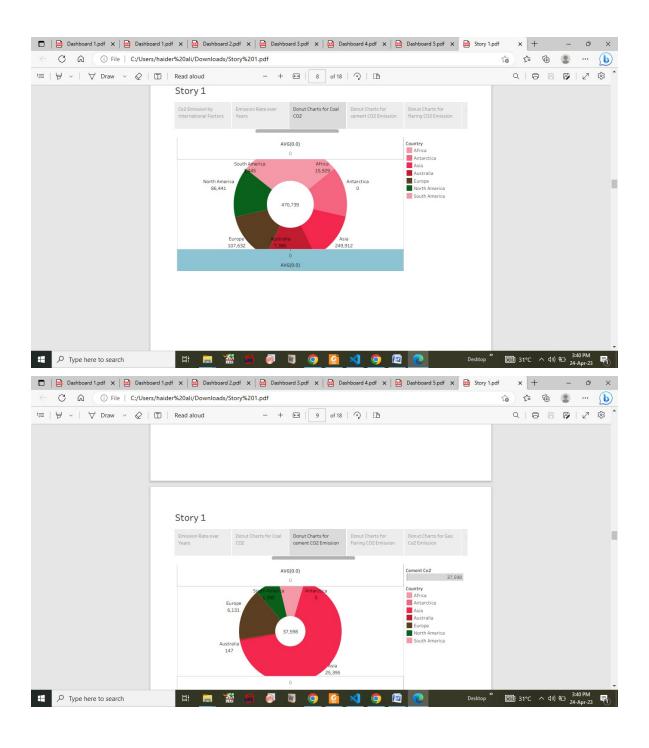


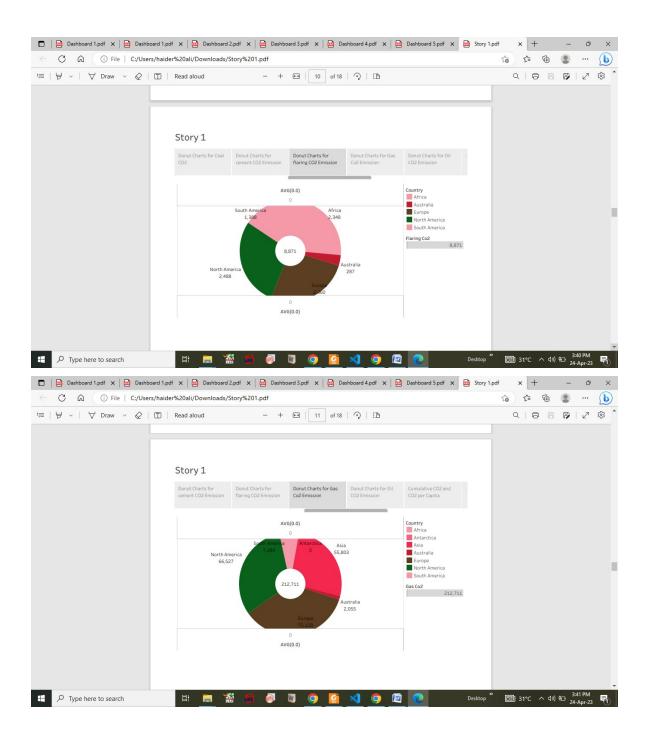


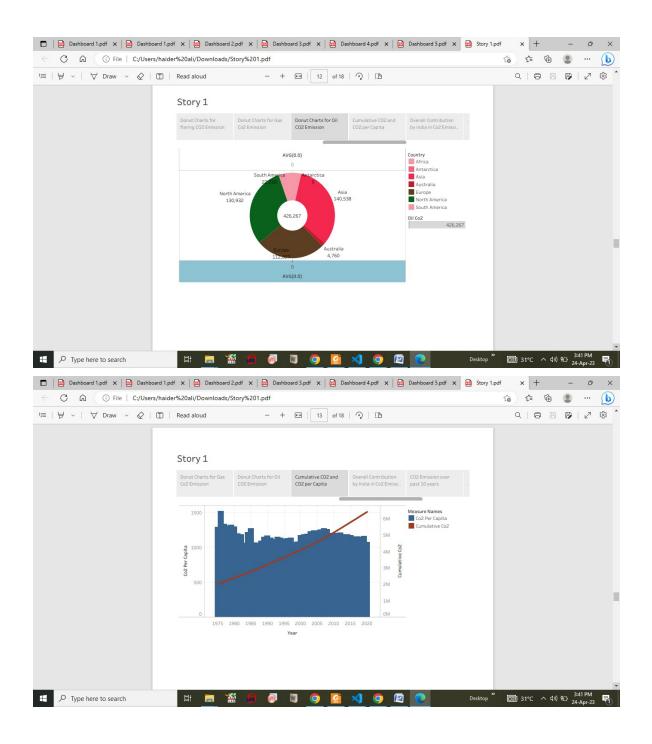


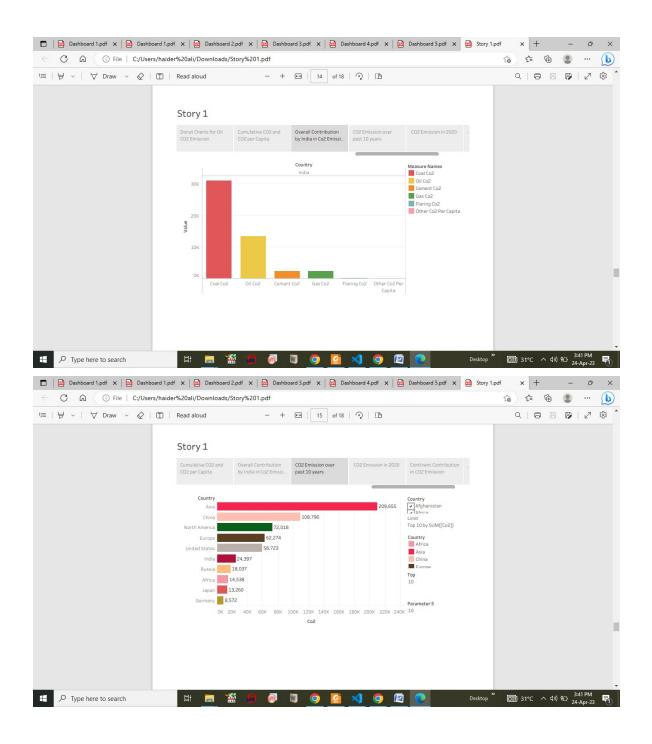


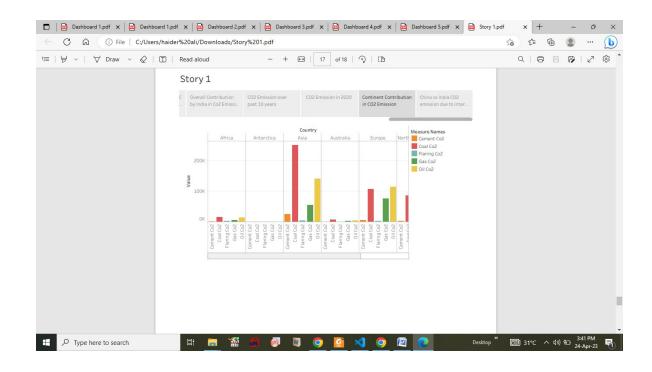


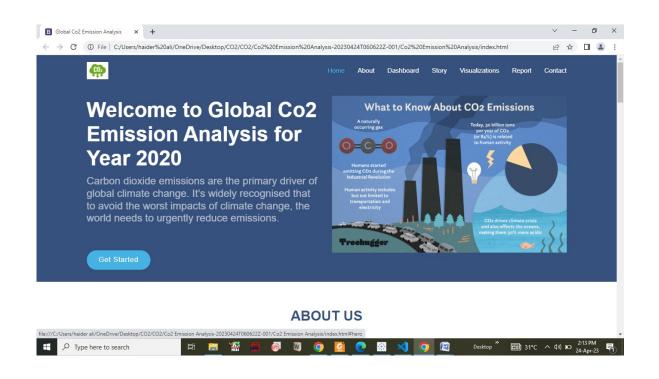




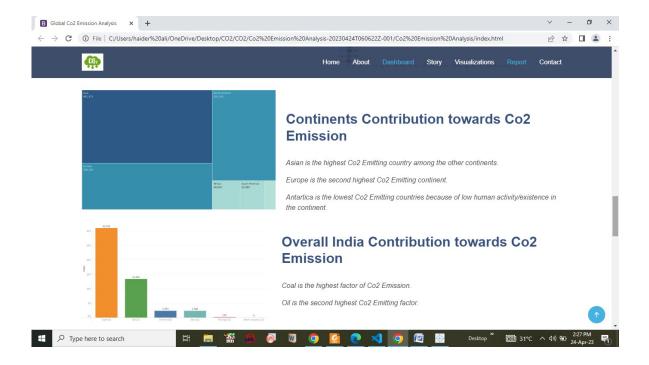












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4. ADVANTAGES & DISADVANTAGES

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 analyse 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 pattern 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