

# ***Introduction:***

## ***Overview:***

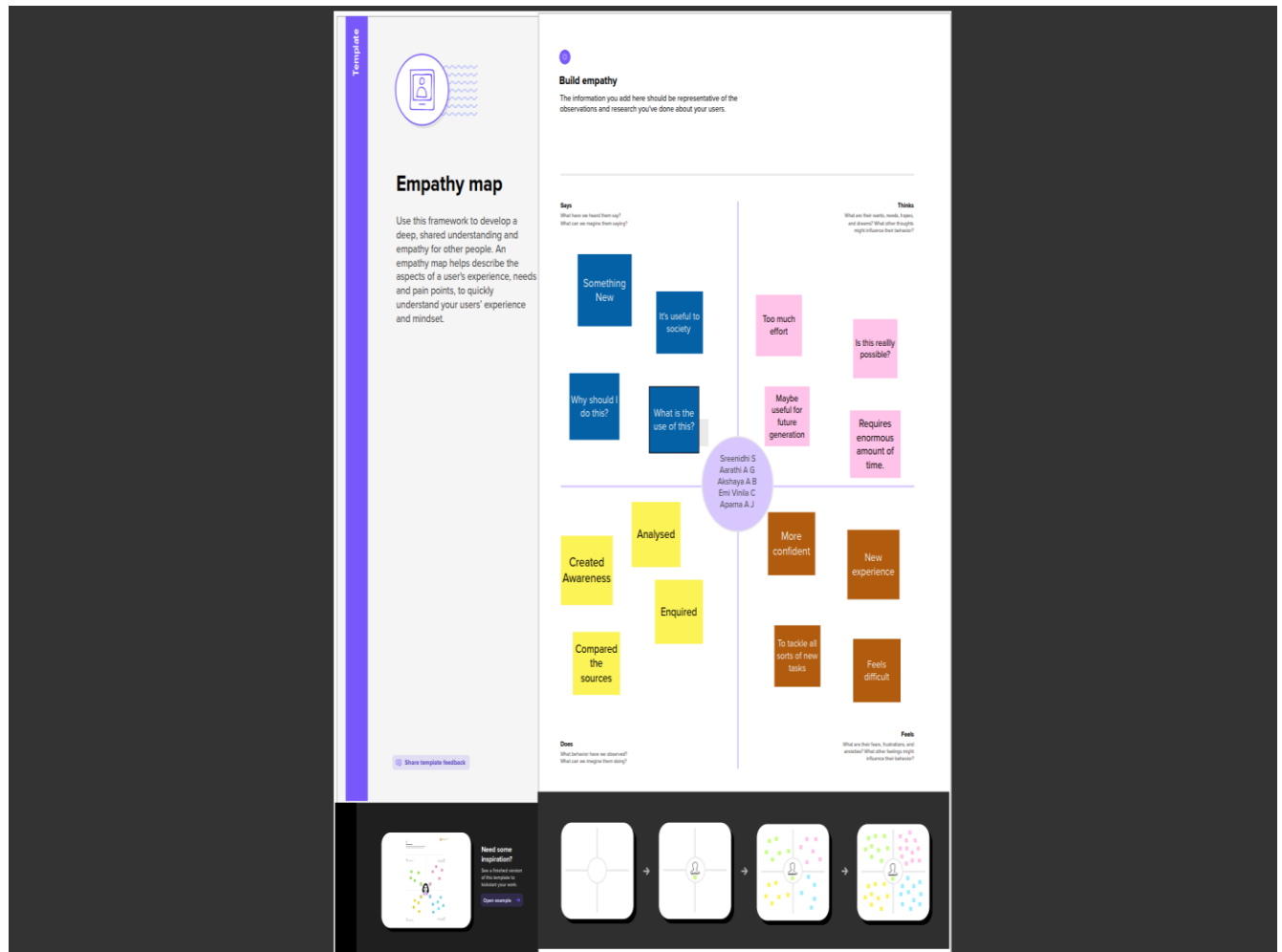
*India is the 3<sup>rd</sup> largest producer and consumer of electricity. During this fiscal year (2019-2020), the total electricity generation in the country was 1598 TWH, of which 1383 TWH generated by utilities. Analyzing Electricity Consumption in India from January 2019 till 5<sup>th</sup> December 2020. This dataset contains a record of Electricity Consumption in each states of India. Here we are going to analyze State wise, Region wise and Overall Electricity Consumption in India.*

## ***Purpose:***

*We analyze this data to know the rate of consumption of electricity in different states or regions in month wise and year wise patterns and to identify which states or regions consume large amount of electricity, so we can take steps to reduce enormous amount of electricity consumption in India.*

# Problem Definition and Design thinking:

## Empathy Map



# Ideation & Brainstorming

**Brainstorm & idea prioritization**

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts that if you're not sitting in the same room.

1. Welcome to session  
2. Take 10 minutes  
3. Welcome everyone

**Before you collaborate**

Write out a problem statement along with the context. Have everyone read it out loud to get going.

**Define your problem statement**

What problem are you trying to solve? Frame your problem as a challenge to overcome. The goal is to focus on your brainstorm.

**Brainstorm**

Write down any ideas that come to mind. Don't worry about your problem statement.

**Group ideas**

Take a look at your ideas and group them into related ones. Group them into categories. You can also group them into categories that are related to the problem statement.

**After you collaborate**

You can report the results of your session at the end of the session. You can also report the results of your session at the end of the session.

**Prioritize**

Use this template to prioritize your ideas. The template is divided into two main sections: 'Brainstorm & idea prioritization' and 'Prioritize'. The 'Brainstorm & idea prioritization' section includes steps for collaboration, problem definition, brainstorming, and grouping ideas. The 'Prioritize' section includes a prioritization matrix and a final ideation step.

**Brainstorm & idea prioritization**

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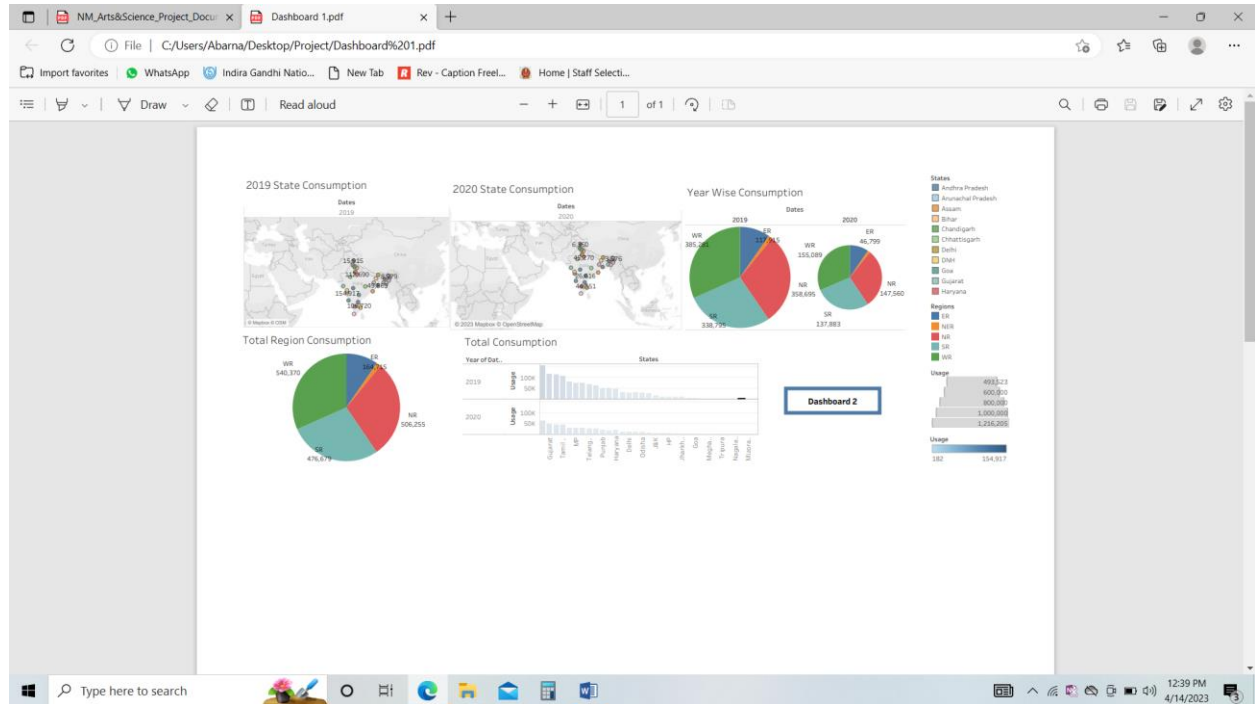
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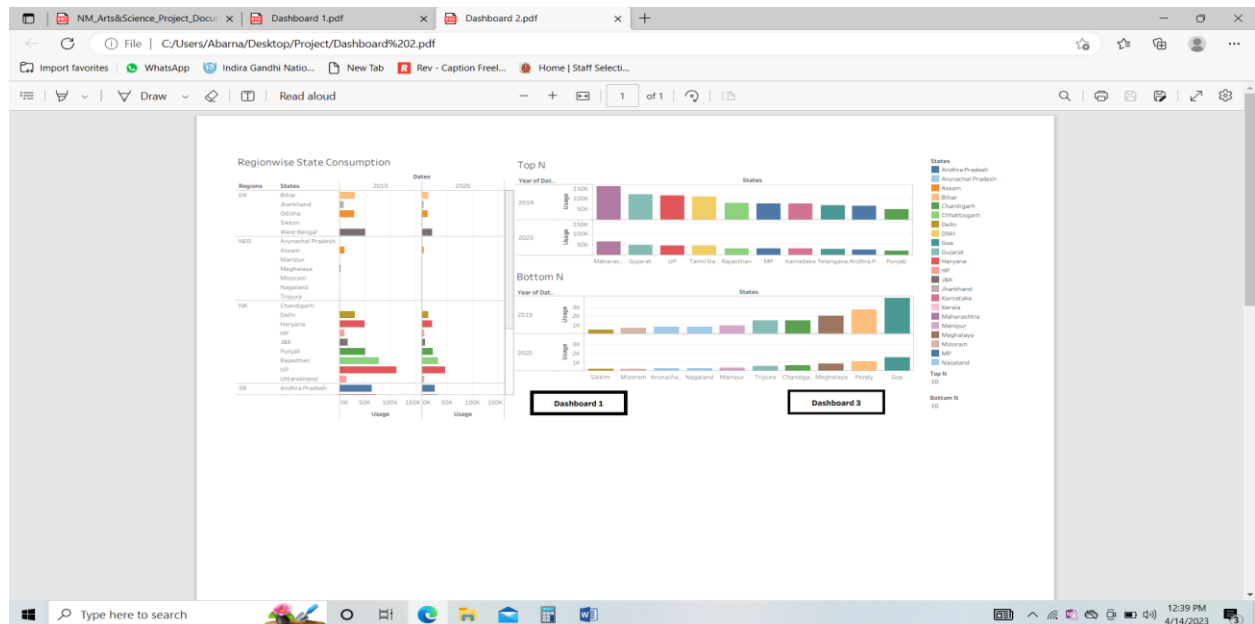
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# Result:

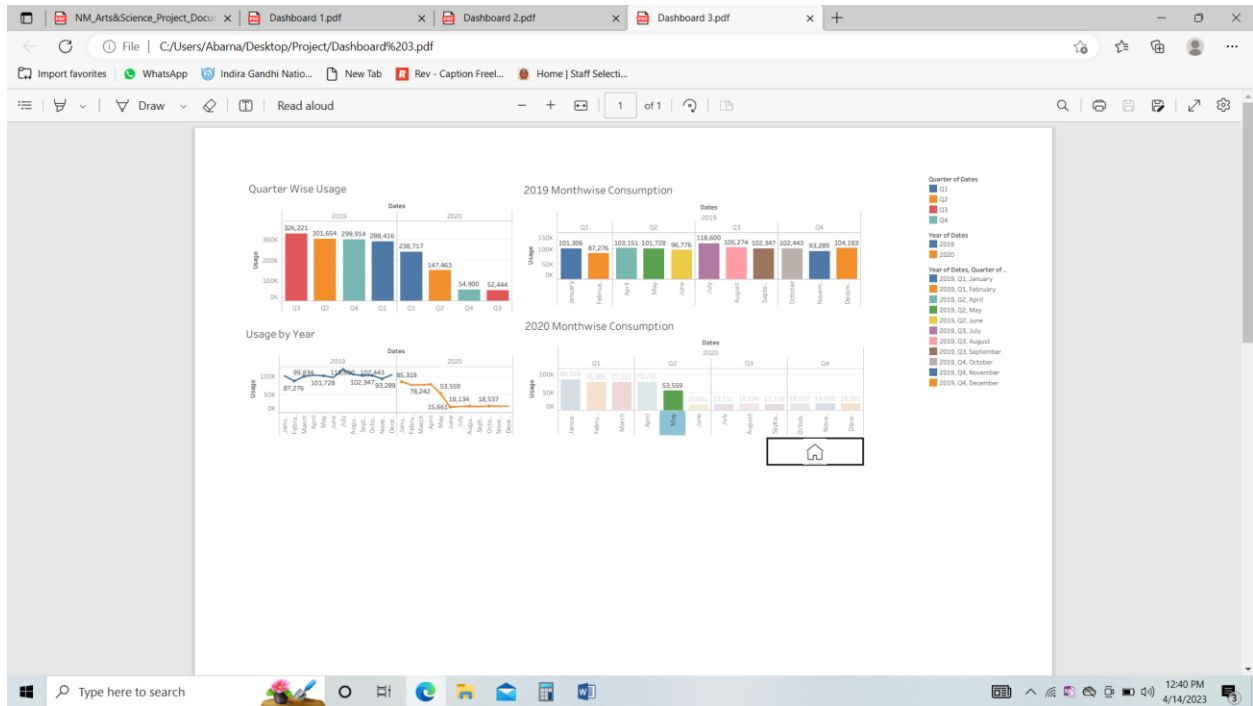
## Dashboard 1



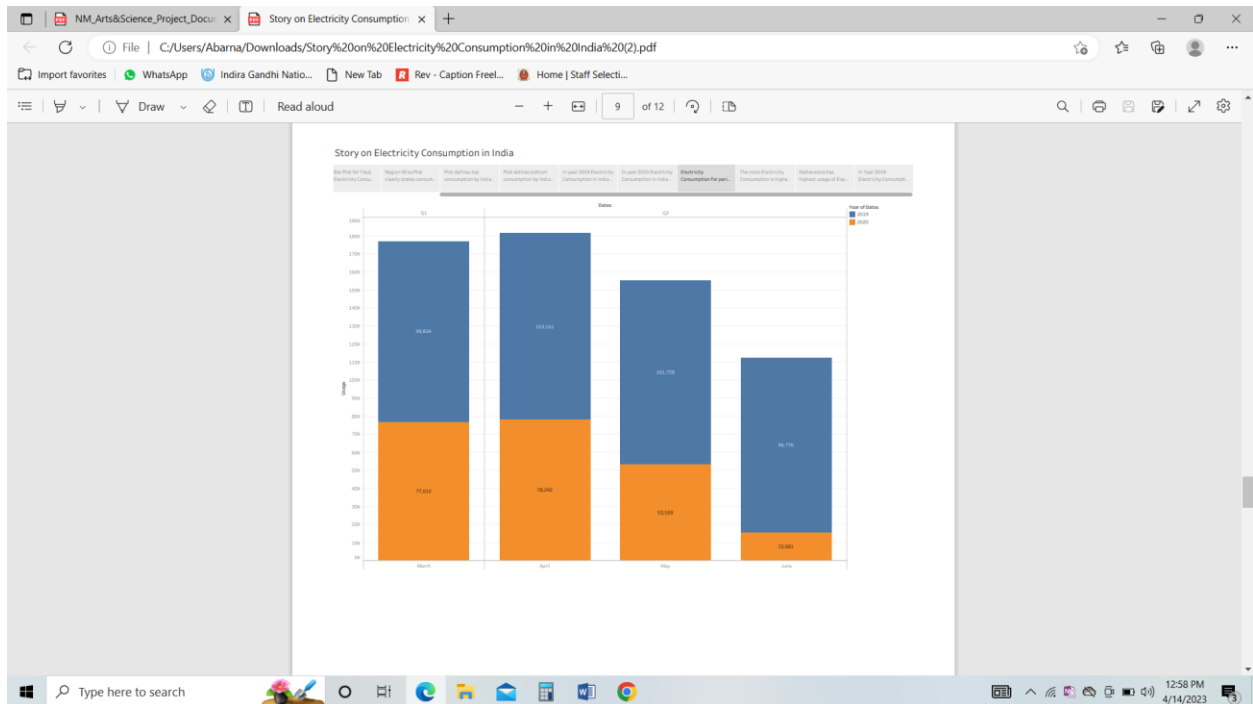
## Dashboard 2



# Dashboard 3



# Story



## ***Advantages & Disadvantages:***

*By analyzing the given data, we identified the states which use enormous amount of electricity. We found metro cities like Maharashtra consumed large amount of electricity followed by Gujarat, UP, TN, Rajasthan, MP, Karnataka, Telangana and so on. We also found that electricity consumption during covid-19 reached its peak in India. We found a large drop in electricity consumption in 2020 compared to 2019 which is our covid-19 period.*

*Since we have small sample data, we cannot predict the result to be absolute true.*

## ***Applications:***

*From the output, we found the states where electricity consumption is quite high. This will help us to take necessary steps to reduce electricity consumption in these states.*

## **Conclusion:**

*The data of 2019 and 2020 electricity consumption were studied and categorized into various criteria. Then by combining them, it was found that electricity consumption is quite high in 2019 compared to 2020. The Western Region has the highest consumption of electricity. In the month of June of 2019 and January of 2020, electricity consumption was very high. By comparison, metro cities are the higher consumer of electricity. One of the metro cities Maharashtra is found to be the highest consumer of electricity.*

## **Future scope:**

*This data analyzes can help to identify patterns and trends in electricity usage, identify opportunities for electricity consumption.*