PROJECT REPORT TEMPLATE

PLUGGING INTO THE FUTURE: AN EXPLORATION OF ELECTRICITY CONSUMPTION PATTERNS

1. INTRODUCTION

1.1 OVERVIEW

Electricity consumption represents the amount of electrical en2ergy that has been consume over a specific time, in units of Wh (kWh), electricity demand represents that rate at which electrical energy is consumed for a needed output rating ,in units of W(or Kw).

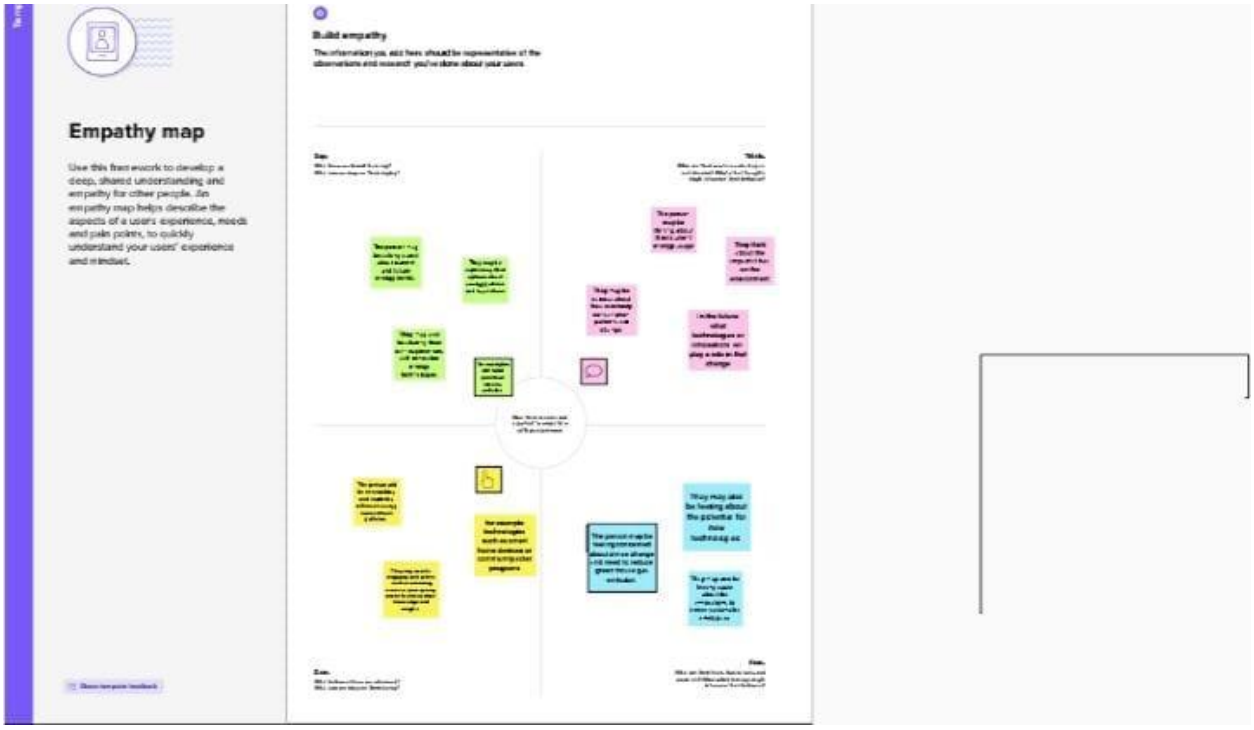
About a fifth of global energy is consumed as electricity: for residential, industrial, commercial, transportation and other purposes. Quickly increasing this share by further electrification is extremely important to limit climate change, because most other energy is consumed by burning fossils fuels thus emitting greenhouse gases which trap heat.

1.2. PURPOSE

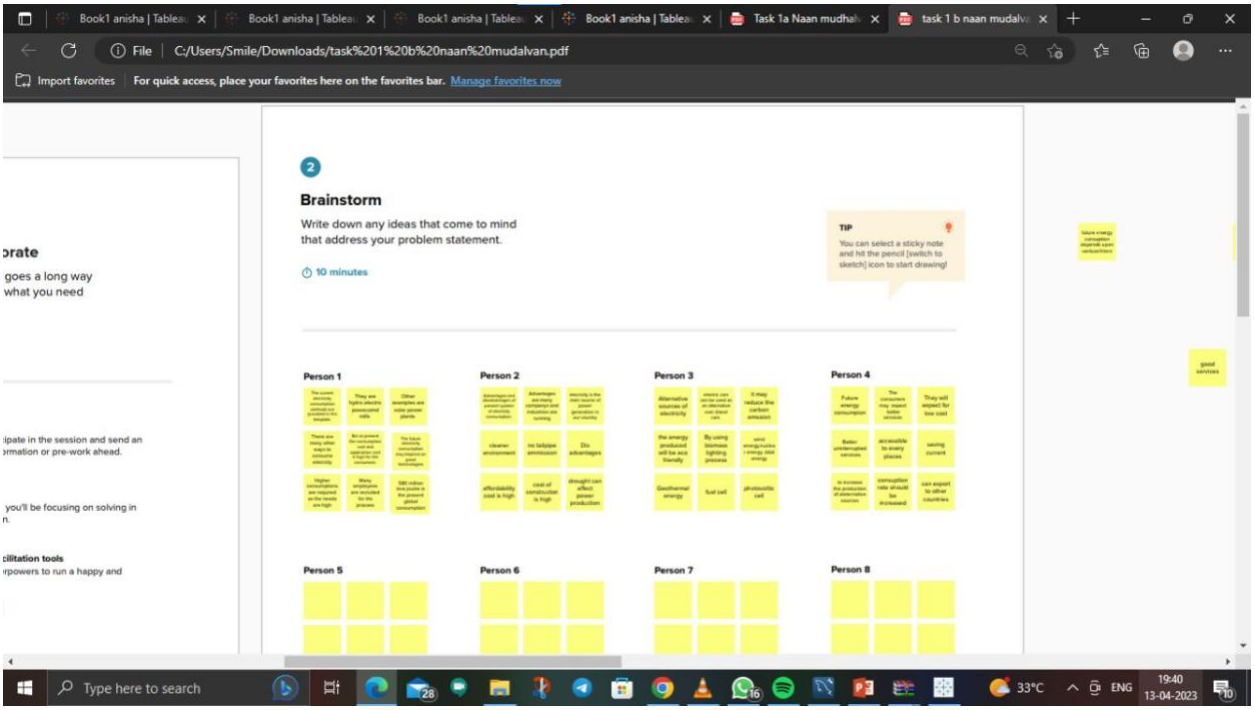
Heating and cooling our homes, lighting office buildings, driving cars and moving freight, and manufacturing the products we rely on in our daily lives are all functions that require energy.

2. PROBLEM THINKING AND DESIGN THINKING

2.1. EMPATHY MAP



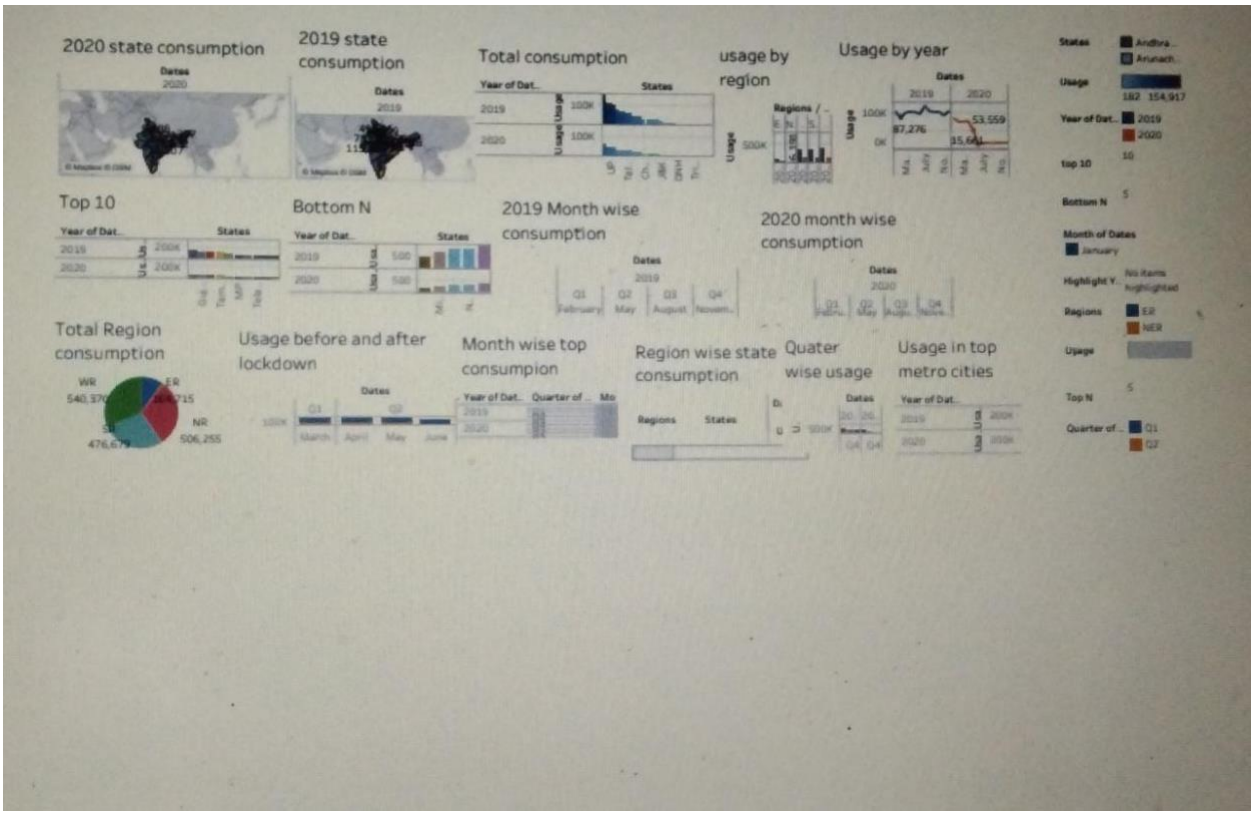
2.2. IDEATION & BRAINSTROMING MAP



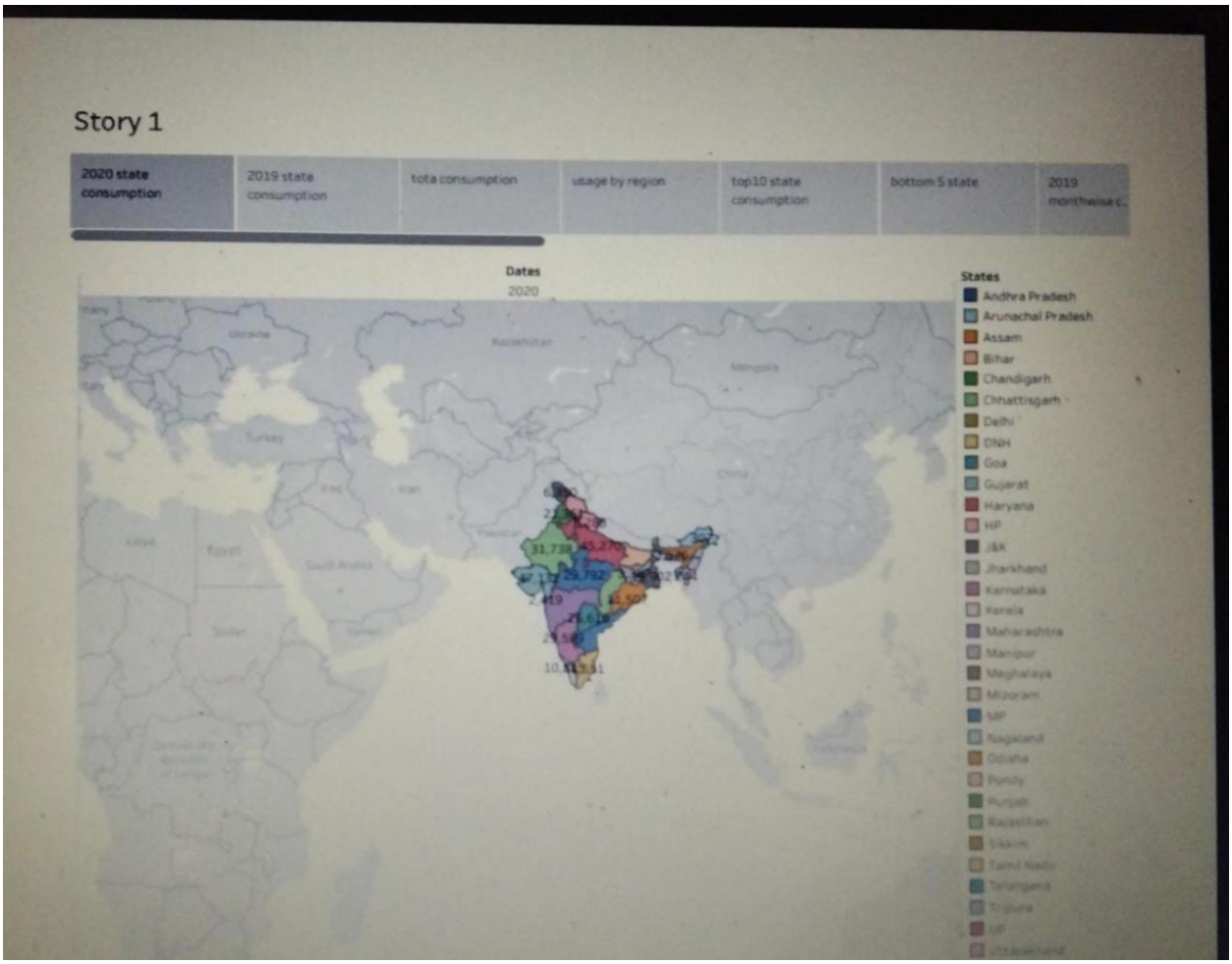
3. RESULT

We have used the dataset to create visualization .Then we have organized the data into dashboard and story which is data in an organized easy -to-read format

3.1. DASH BOARD



3.2. STORY



4. ADVANTAGES & DISADVANTAGES

4.1. ADVANTAGES

- ❖ lower energy bills
- ❖ improved indoor air quality
- ❖ cleaner environment
- ❖ low maintenance cost
- ❖ more efficient

4.2. DISADVANTAGE

- ❖ More expensive than gasoline.
- ❖ Loss of fish species
- ❖ Sometimes messes up wildlife
- ❖ Dependent on precipitation
- ❖ More power plants and more pollution
- ❖ Damming can cause loss of land suitable for agriculture as well as recreation.
- ❖ Costs for construction
- ❖ Change in river or stream quality

5. APPLICATIONS

- ❖ The street lights on the road use electricity to function
- ❖ The pool requires electricity to heat the water in colder regions
- ❖ It is use in operating industrial motors and machinery, lights, computer, and office equipment.
- ❖ Kerosene-space heating
- ❖ Natural gas –space and water heating, clothes, drying, cooking.

6. CONCLUSION

"It should be saved because it's not at all free"**.** Energy conservation is the effort made by us to reduce the consumption of energy by using less of an energy service or using renewable energy.

7. FUTURE SCOPE

Global electricity demand grows at 2.1% per year to 2040, twice the rate of primary energy demand. This raises electricity's share in total final energy consumption from 19% in 2018 to 24% in 2040. Electricity demand growth is set to be particularly strong in developing economies.

The ever-expanding industrialization and urbanization will primarily drive the energy demand that is forecasted to reach 405 Gig watts of renewable energy capacity by 2030.