SMARTBRIDGE
Let's Bridge the Gap

Smart Internz

Visualization Tool for Electric Vehicle Charge and Range Analysis

Project Based Experiential Learning Program

VISUALISATION TOOL FOR ELECTRIC VEHICLE CHARGE AND RANGE ANALYSIS

1. INTRODUCTION

1.1 Overview

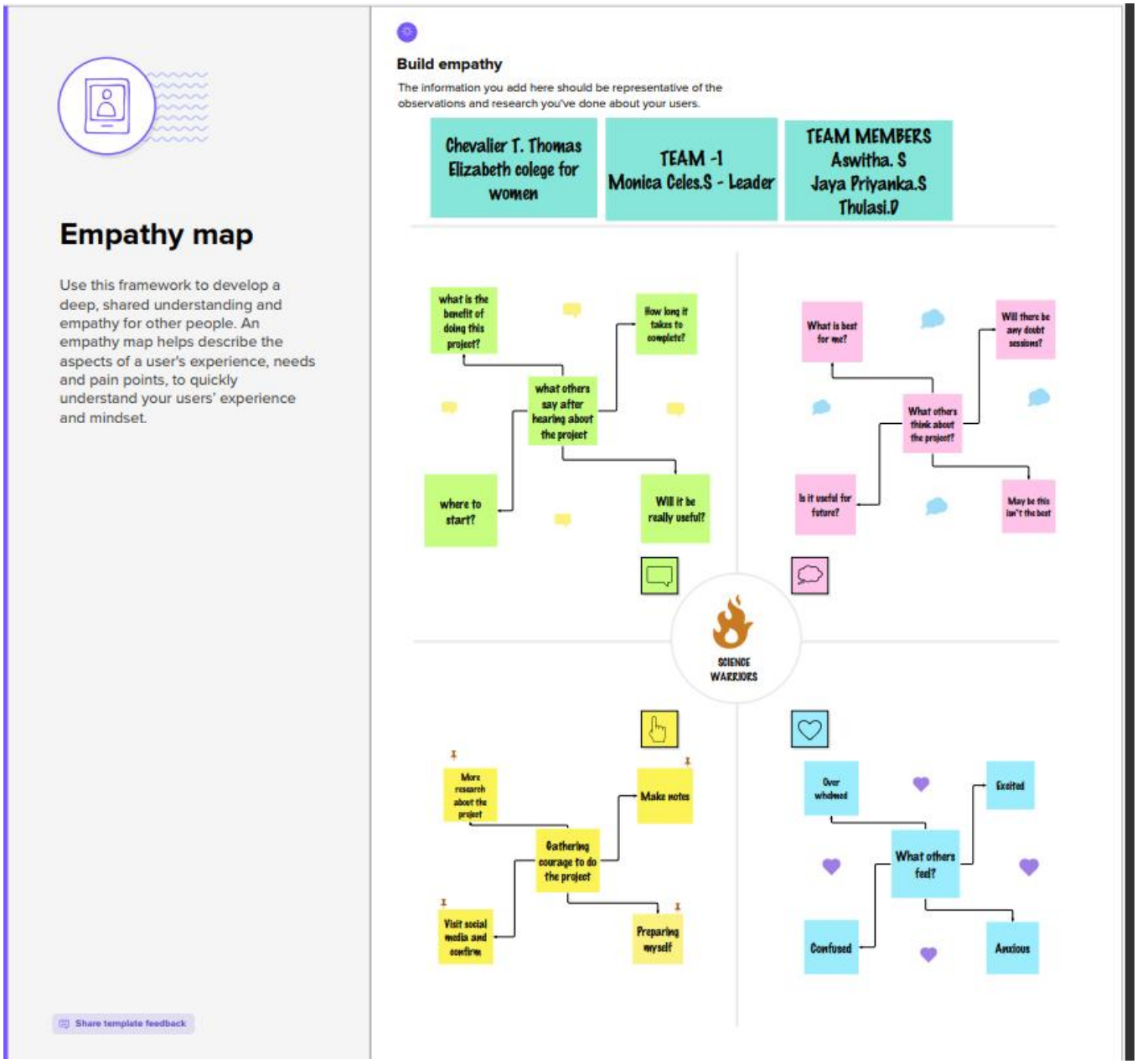
Electric vehicles are the key technology to decarbonise road transport, a sector that accounts for 16% of global emissions. Recent years have seen exponential growth in the sale of electric vehicles together with improved range, wider model availability and increased performance. Passenger electric cars are surging in popularity - we estimate that 13% of new car sold in 2022 will be electric; if the growth experienced in the past two years is sustained, CO_2 emissions from cars can be put on a path in line with the Net Zero Emissions by 2050 Scenario. However, electric vehicles are not yet a global phenomenon. Sales in developing and emerging countries have been slow due to higher purchase costs and a lack of charging infrastructure availability.

1.2 Purpose

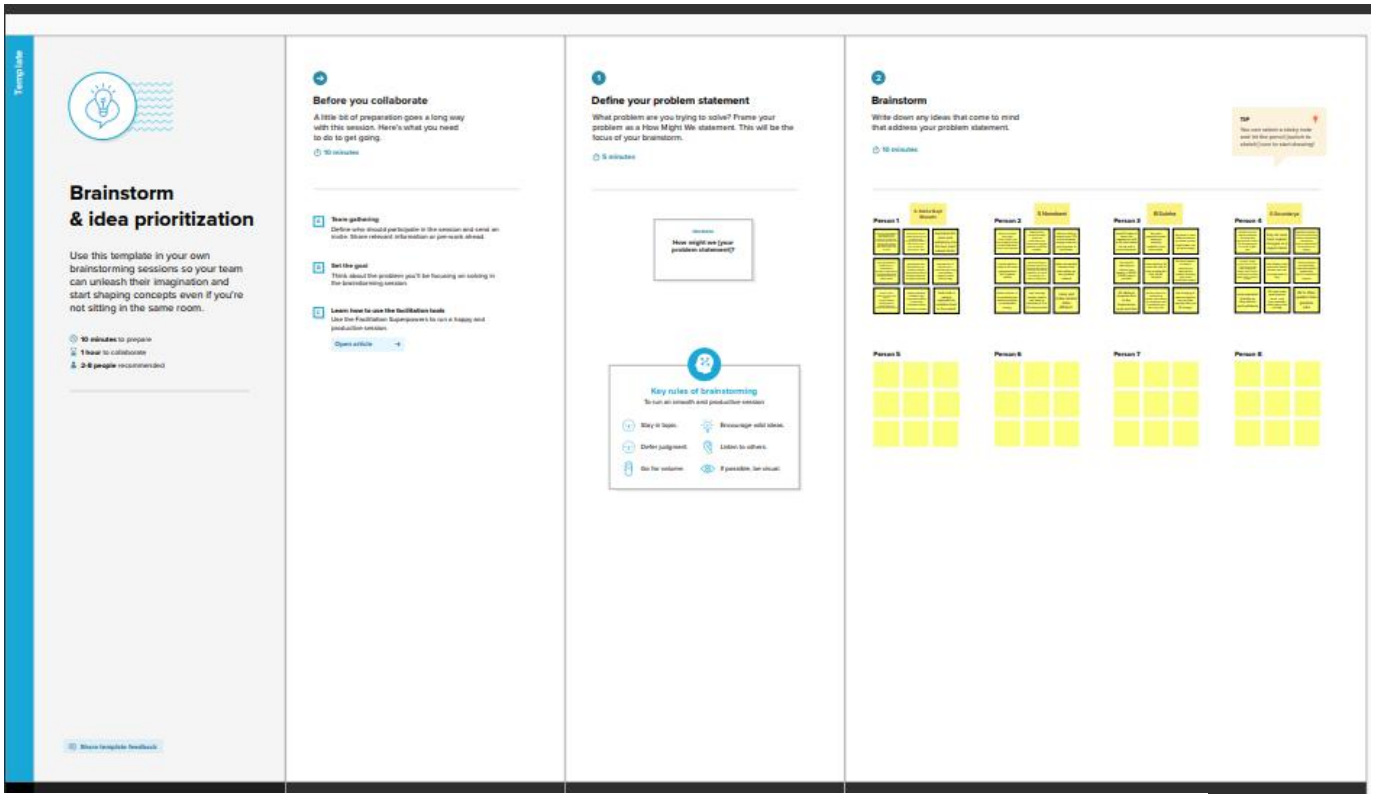
EV Charging Station project report is a necessary document that will help you get all the necessary licenses, help you set up this business and avail financial assistance from the banks. You can use it as a map that has all the solutions to your doubts and can resolve your problems in a gist of time.
An electric vehicle, often known as an EV, is propelled by one or more electric motors or traction motors. An electric vehicle can be self-contained using a battery, solar panels, or an electric generator to convert gasoline to energy. It can be fuelled by electricity from off-vehicle sources through a collector system. An electric vehicle charging station (EV charging station), also known as an electric recharging point, charging point, charge point, or electronic charging station (ECS), is a component of an infrastructure that provides electric energy for the recharging of plug-in electric vehicles, such as electric cars, neighbourhood electric vehicles, and plug-in hybrids.
Nowadays, energy efficiency is a foremost priority, fuelled by a growing concern about climate change and rising oil prices in nations that rely heavily on imported fossil fuels, resulting in high demand for electric vehicle charging stations in the country.

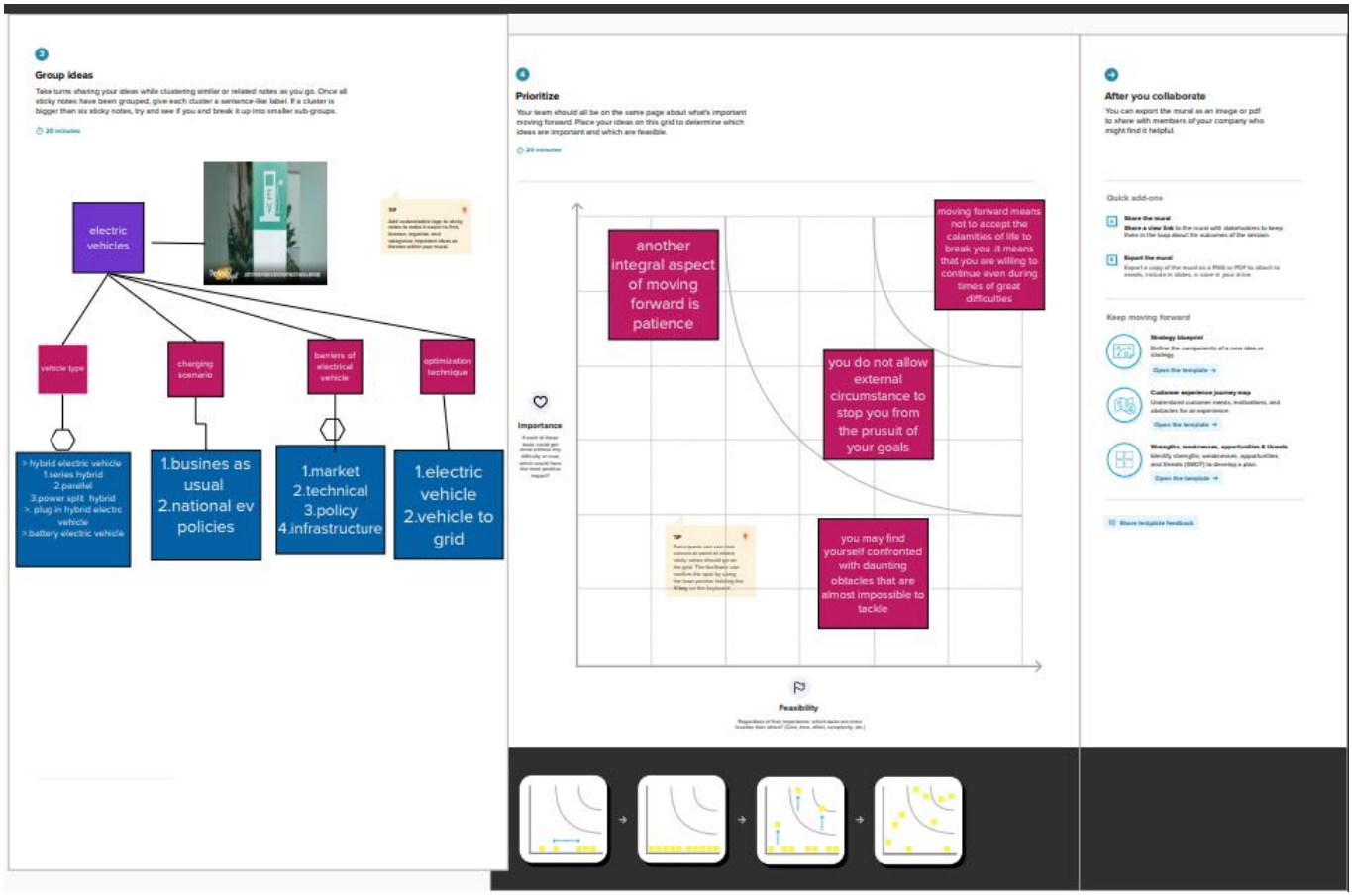
2. PROBLEM DEFINING & DESIGN THINKING

2.1 Empathy Map



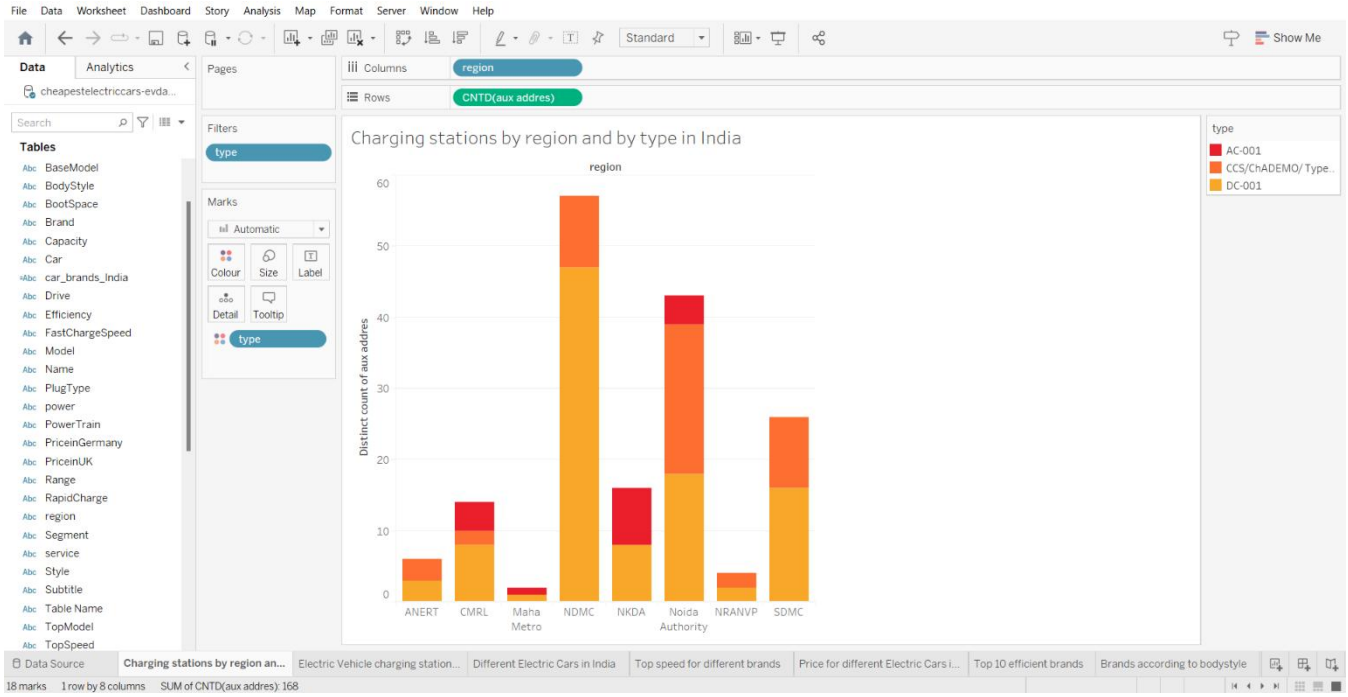
2.2 Brainstorming and Idea Prioritization

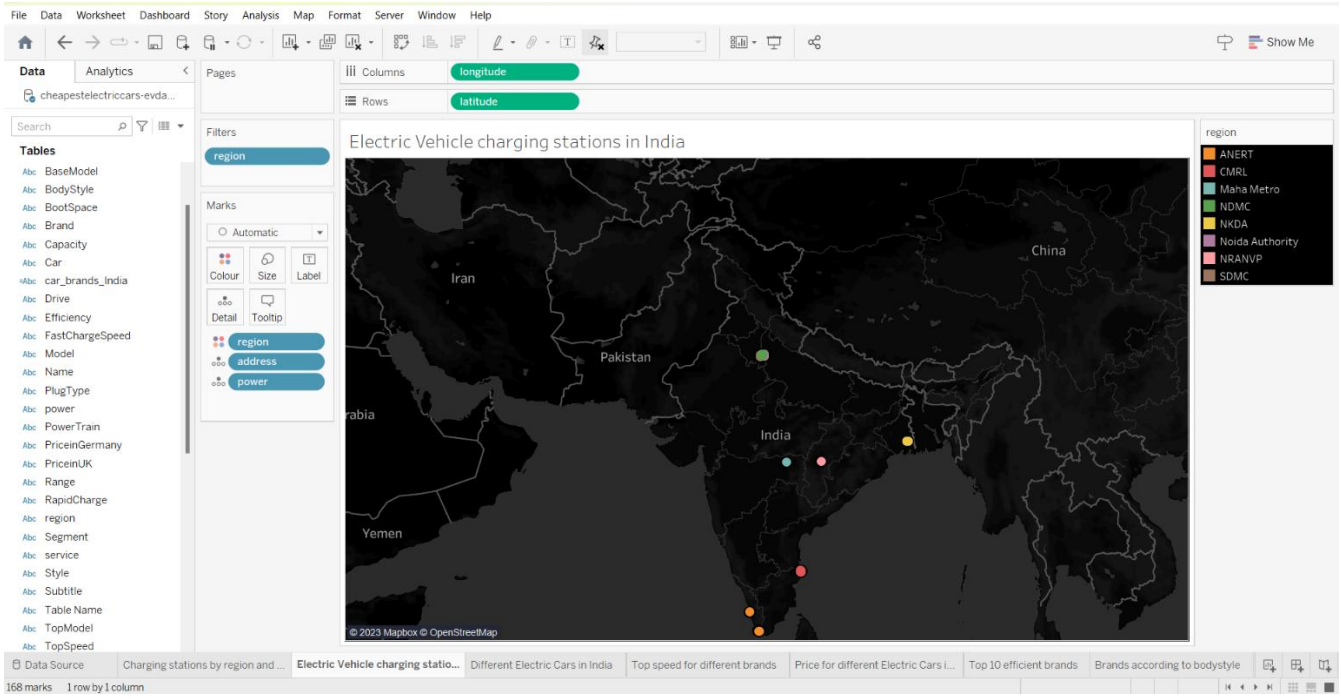

Template
Brainstorm
& idea prioritization
Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.
10 minutes to prepare
1 hour to collaborate
2-8 people recommended
Before you collaborate
A little bit of preparation goes a long way with this session. Here's what you need to do to get going.
10 minutes
Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.
Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.
Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.
Open article
Share template feedback
1
Define your problem statement
What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.
5 minutes
How might we (your problem statement)?
Key rules of brainstorming
To run an smooth and productive session
Stay in topic.
Encourage wild ideas.
Defer judgment.
Listen to others.
Go for volume.
If possible, be visual.
2
Brainstorm
Write down any ideas that come to mind that address your problem statement.
10 minutes
TIP
Person 1
Person 2
Person 3
Person 4
Person 5
Person 6
Person 7
Person 8

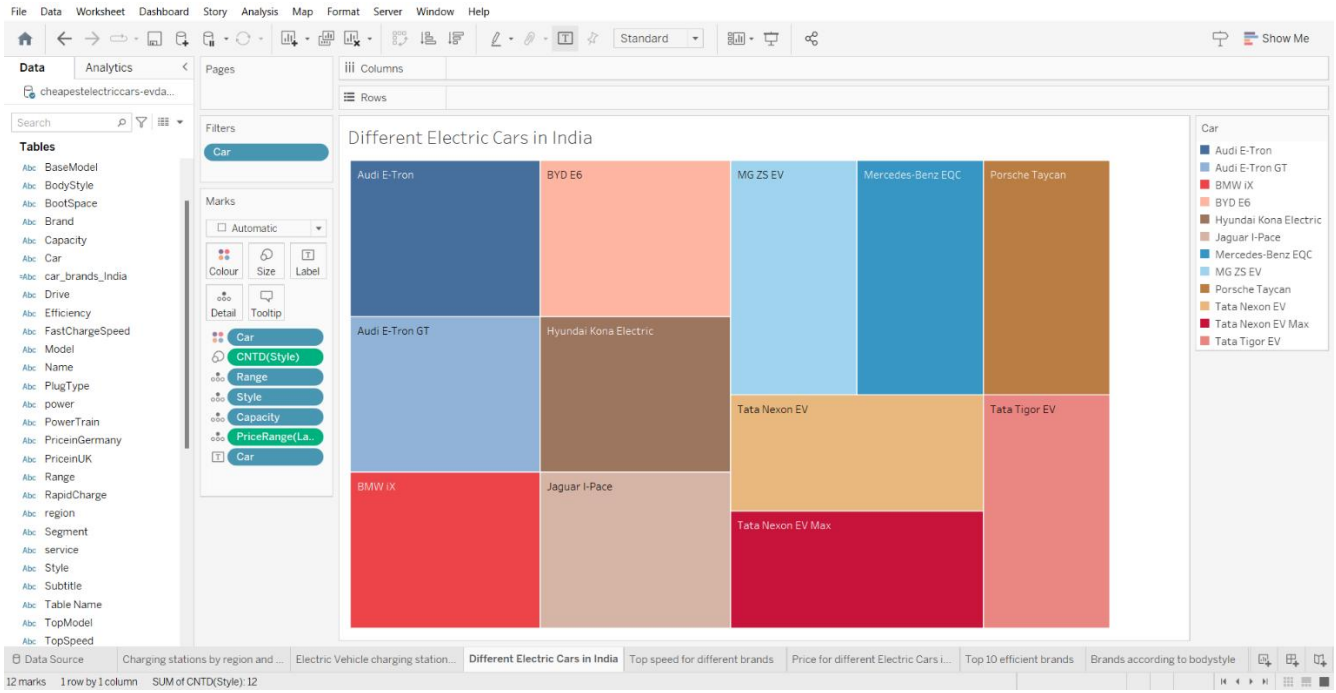

3
Group ideas
Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.
20 minutes
electric vehicles
vehicle type
charging scenario
barriers of electrical vehicle
optimization technique
> hybrid electric vehicle
1.series hybrid
2.parallel
3.power split hybrid
>. plug in hybrid electric vehicle
> battery electric vehicle
1.busines as usual
2.national ev policies
1.market
2.technical
3.policy
4.infrastructure
1.electric vehicle
2.vehicle to grid
4
Prioritize
Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.
20 minutes
another integral aspect of moving forward is patience
moving forward means not to accept the calamities of life to break you .it means that you are willing to continue even during times of great difficulties
you do not allow external circumstance to stop you from the prusuit of your goals
you may find yourself confronted with daunting obtacles that are almost impossible to tackle
Importance
Feasibility
After you collaborate
You can export the mural as an image or pdf to share with members of your company who might find it helpful.
Quick add-ons
Share the mural
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.
Export the mural
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.
Keep moving forward
Strategy blueprint
Define the components of a new idea or strategy.
Open the template
Customer experience journey map
Understand customer needs, motivations, and obstacles for an experience.
Open the template
Strengths, weaknesses, opportunities & threats
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.
Open the template
Share template feedback

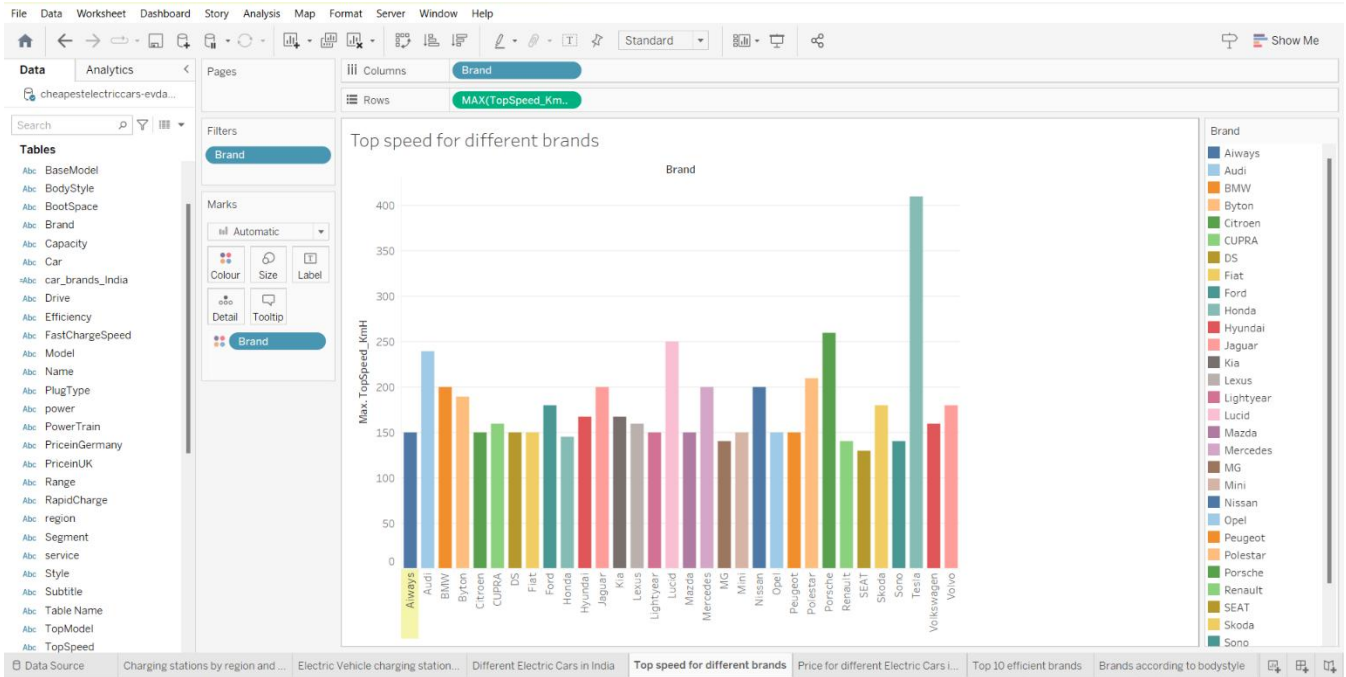
3.RESULTS

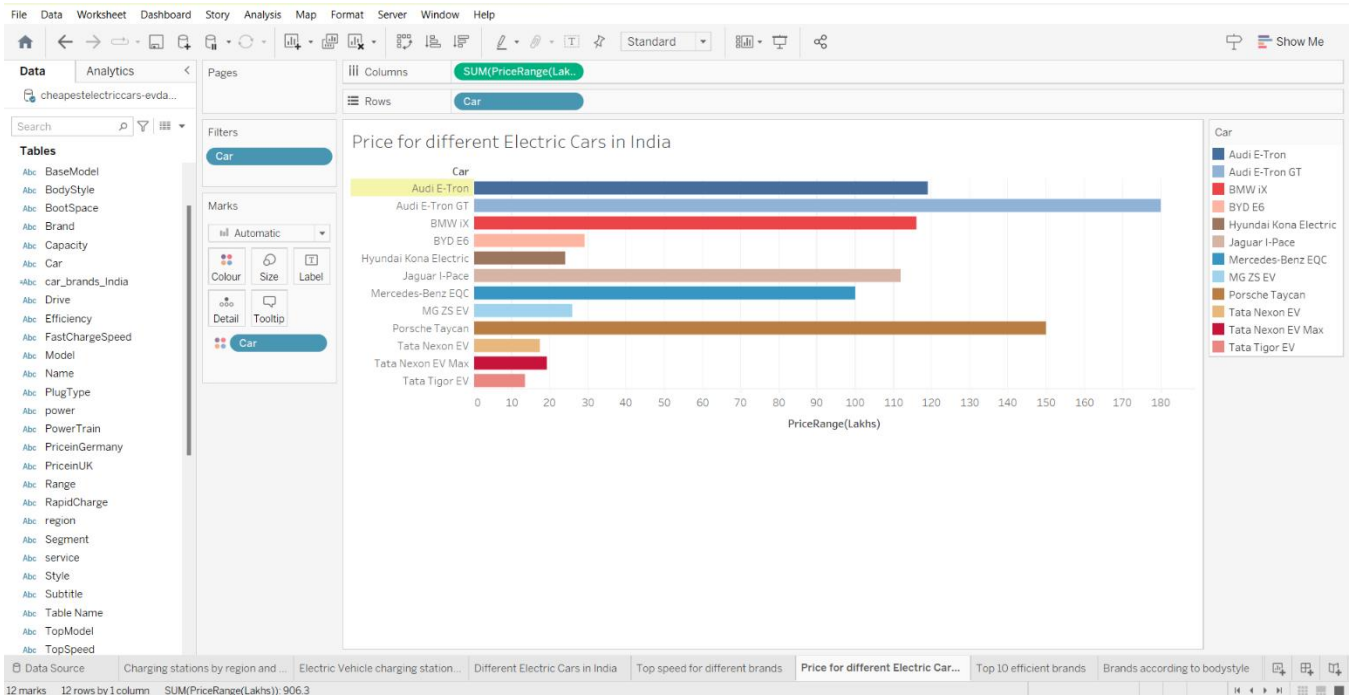
3.1 Output of the project

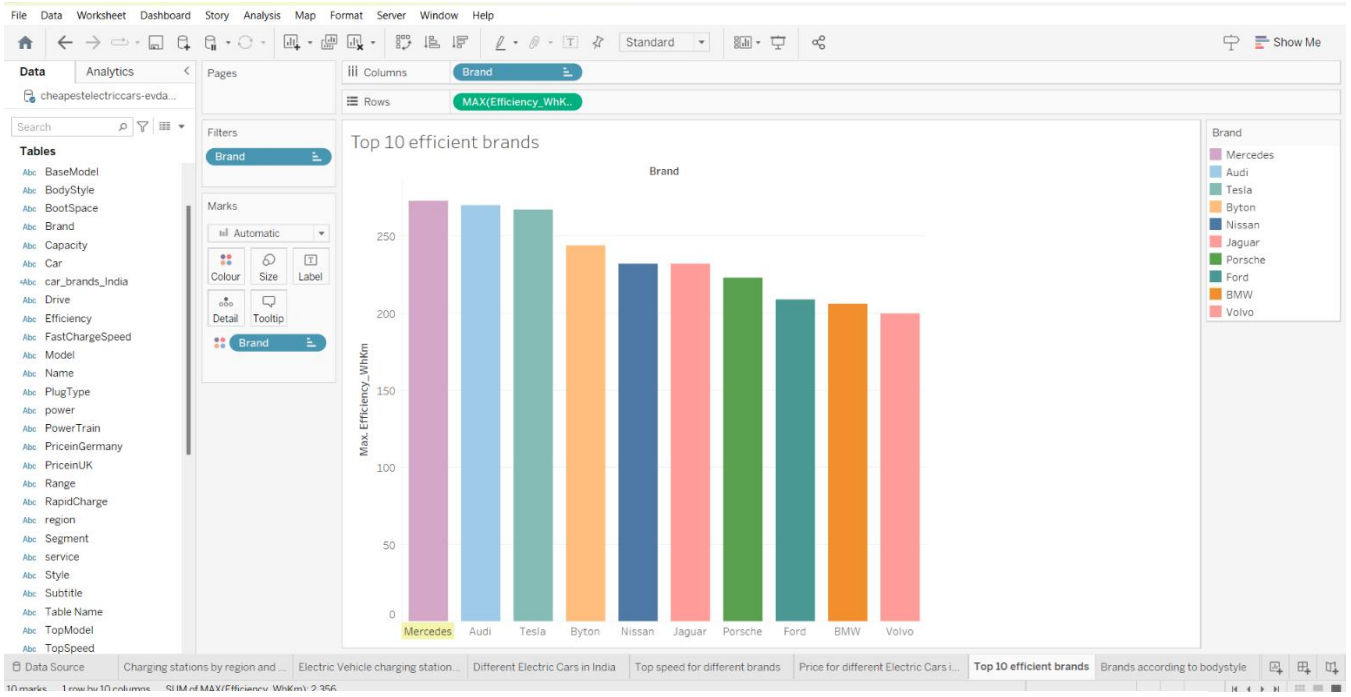





File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Standard
Show Me
Data
Analytics
cheapestelectriccars-evda...
Search
Tables
BaseModel
BodyStyle
BootSpace
Brand
Capacity
Car
car_brands_India
Drive
Efficiency
FastChargeSpeed
Model
Name
PlugType
power
PowerTrain
PriceinGermany
PriceinUK
Range
RapidCharge
region
Segment
service
Style
Subtitle
Table Name
TopModel
TopSpeed
Pages
Filters
Car
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Car
CNTD(Style)
Range
Style
Capacity
PriceRange(La..
Car
Columns
Rows
Different Electric Cars in India
Audi E-Tron
BYD E6
MG ZS EV
Mercedes-Benz EQC
Porsche Taycan
Audi E-Tron GT
Hyundai Kona Electric
Tata Nexon EV
Tata Tigor EV
BMW iX
Jaguar I-Pace
Tata Nexon EV Max
Car
Audi E-Tron
Audi E-Tron GT
BMW iX
BYD E6
Hyundai Kona Electric
Jaguar I-Pace
Mercedes-Benz EQC
MG ZS EV
Porsche Taycan
Tata Nexon EV
Tata Nexon EV Max
Tata Tigor EV
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Cars i...
Top 10 efficient brands
Brands according to bodystyle
12 marks
1 row by 1 column
SUM of CNTD(Style): 12


File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Standard
Show Me
Data
Analytics
cheapestelectriccars-evda...
Search
Tables
BaseModel
BodyStyle
BootSpace
Brand
Capacity
Car
car_brands_India
Drive
Efficiency
FastChargeSpeed
Model
Name
PlugType
power
PowerTrain
PriceinGermany
PriceinUK
Range
RapidCharge
region
Segment
service
Style
Subtitle
Table Name
TopModel
TopSpeed
Pages
Filters
Brand
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Brand
Columns
Brand
Rows
MAX(TopSpeed_Km..
Top speed for different brands
Brand
Max. TopSpeed_KmH
0
50
100
150
200
250
300
350
400
Aiways
Audi
BMW
Byton
Citroen
CUPRA
DS
Fiat
Ford
Honda
Hyundai
Jaguar
Kia
Lexus
Lightyear
Lucid
Mazda
Mercedes
MG
Mini
Nissan
Opel
Peugeot
Polestar
Porsche
Renault
SEAT
Skoda
Sono
Tesla
Volkswagen
Volvo
Brand
Aiways
Audi
BMW
Byton
Citroen
CUPRA
DS
Fiat
Ford
Honda
Hyundai
Jaguar
Kia
Lexus
Lightyear
Lucid
Mazda
Mercedes
MG
Mini
Nissan
Opel
Peugeot
Polestar
Porsche
Renault
SEAT
Skoda
Sono
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Cars i...
Top 10 efficient brands
Brands according to bodystyle


File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Standard
Show Me
Data
Analytics
cheapestelectriccars-evda...
Search
Tables
BaseModel
BodyStyle
BootSpace
Brand
Capacity
Car
car_brands_India
Drive
Efficiency
FastChargeSpeed
Model
Name
PlugType
power
PowerTrain
PriceinGermany
PriceinUK
Range
RapidCharge
region
Segment
service
Style
Subtitle
Table Name
TopModel
TopSpeed
Pages
Filters
Car
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Car
Columns
SUM(PriceRange(Lak..
Rows
Car
Price for different Electric Cars in India
Car
Audi E-Tron
Audi E-Tron GT
BMW iX
BYD E6
Hyundai Kona Electric
Jaguar I-Pace
Mercedes-Benz EQC
MG ZS EV
Porsche Taycan
Tata Nexon EV
Tata Nexon EV Max
Tata Tigor EV
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180
PriceRange(Lakhs)
Car
Audi E-Tron
Audi E-Tron GT
BMW iX
BYD E6
Hyundai Kona Electric
Jaguar I-Pace
Mercedes-Benz EQC
MG ZS EV
Porsche Taycan
Tata Nexon EV
Tata Nexon EV Max
Tata Tigor EV
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Car...
Top 10 efficient brands
Brands according to bodystyle
12 marks
12 rows by 1 column
SUM(PriceRange(Lakhs)): 906.3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BaseModel
BodyStyle
BootSpace
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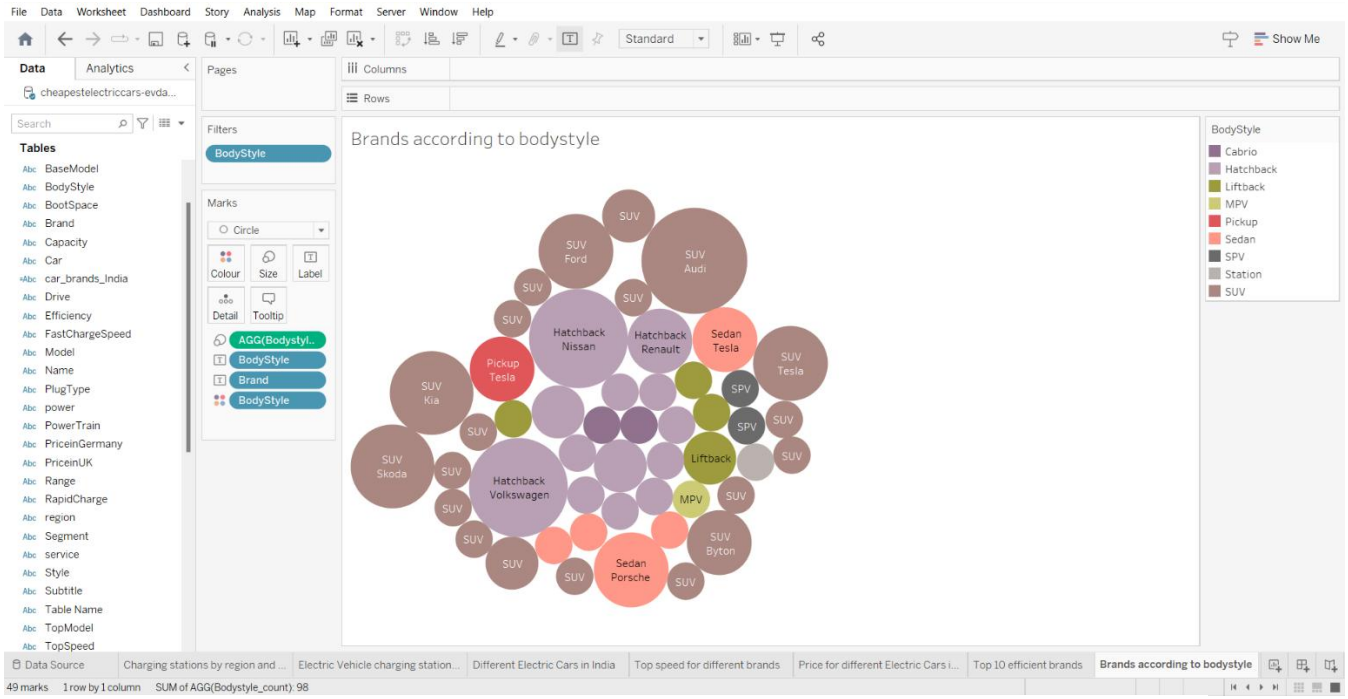
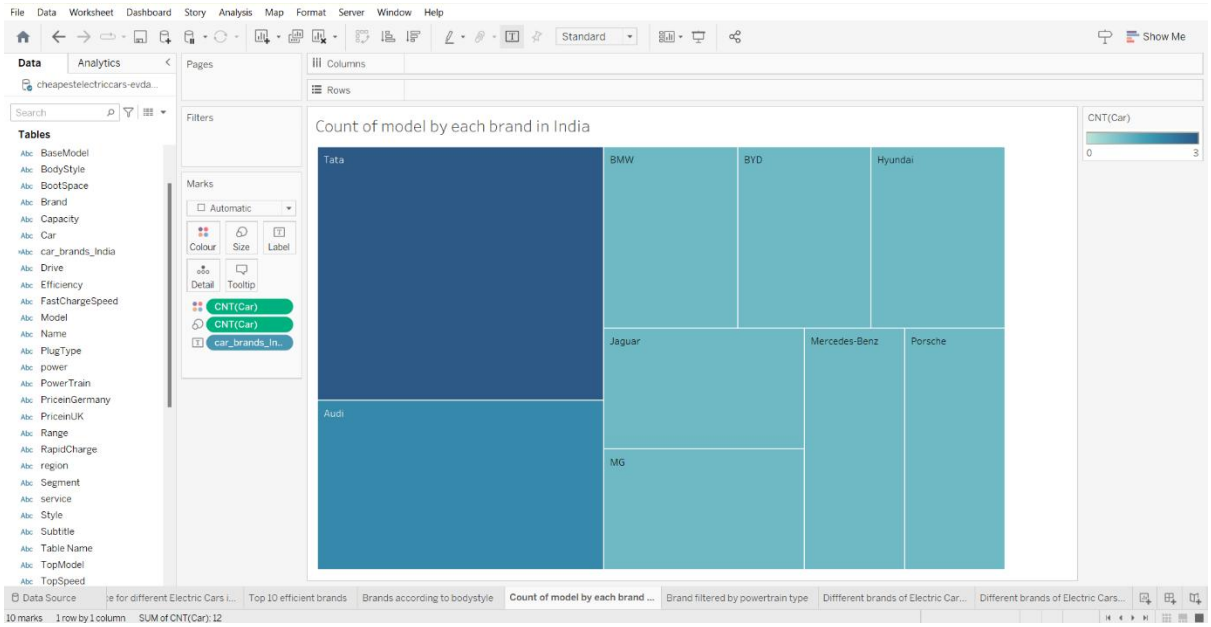
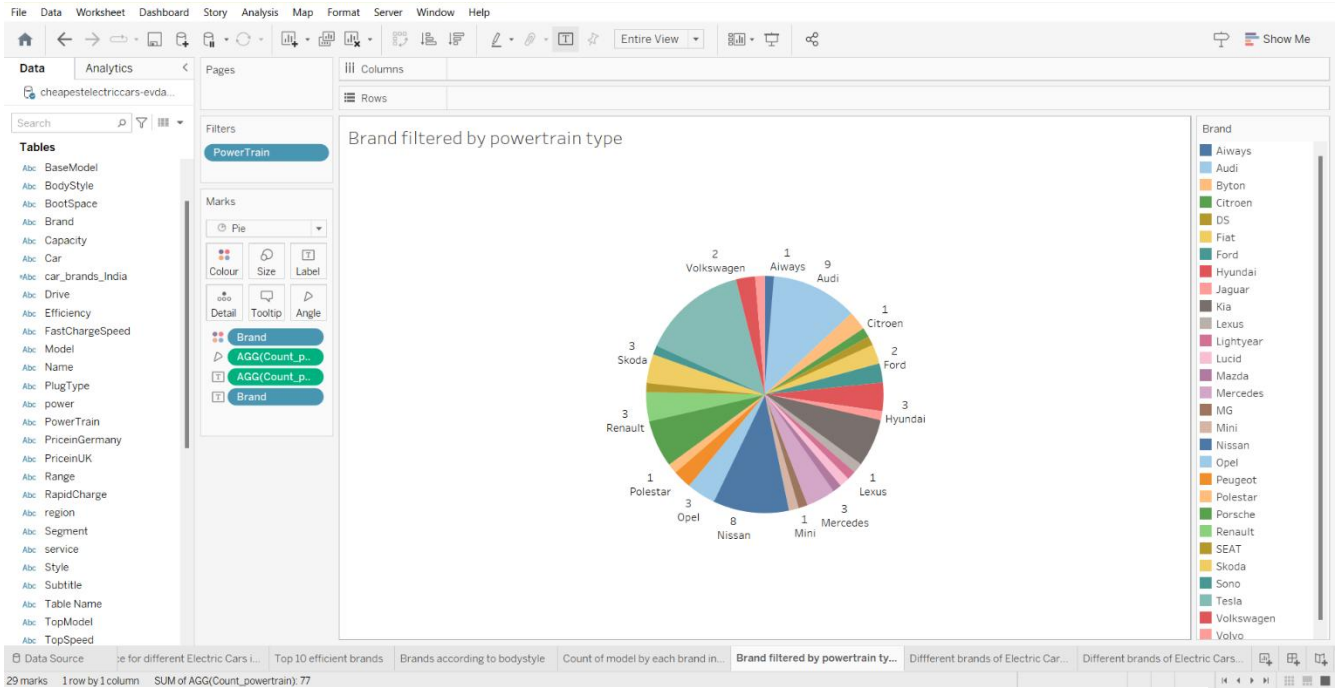
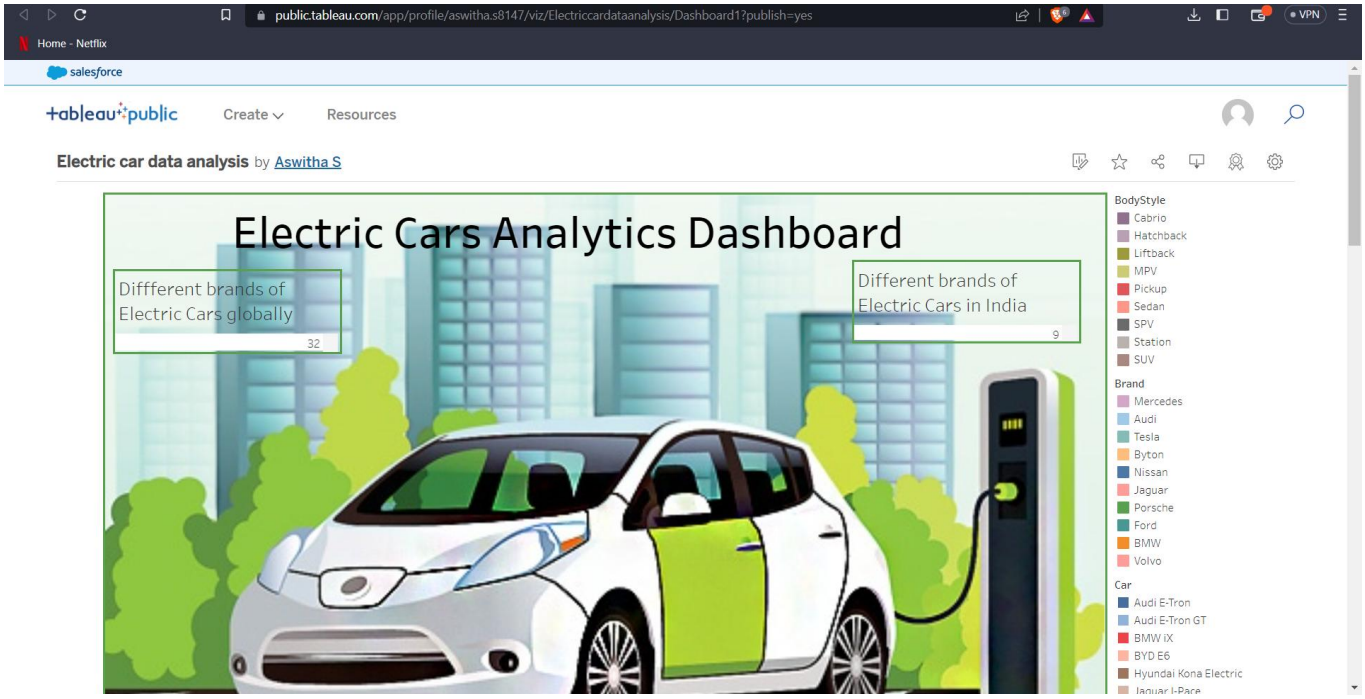
Car
car_brands_India
Drive
Efficiency
FastChargeSpeed
Model
Name
PlugType
power
PowerTrain
PriceinGermany
PriceinUK
Range
RapidCharge
region
Segment
service
Style
Subtitle
Table Name
TopModel
TopSpeed
Pages
Filters
Brand
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Brand
Columns
Brand
Rows
MAX(Efficiency_WhK..
Top 10 efficient brands
Brand
Max. Efficiency_WhKm
0
50
100
150
200
250
Mercedes
Audi
Tesla
Byton
Nissan
Jaguar
Porsche
Ford
BMW
Volvo
Brand
Mercedes
Audi
Tesla
Byton
Nissan
Jaguar
Porsche
Ford
BMW
Volvo
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Cars i...
Top 10 efficient brands
Brands according to bodystyle
10 marks
1 row by 10 columns
SUM of MAX(Efficiency_WhKm): 2,356

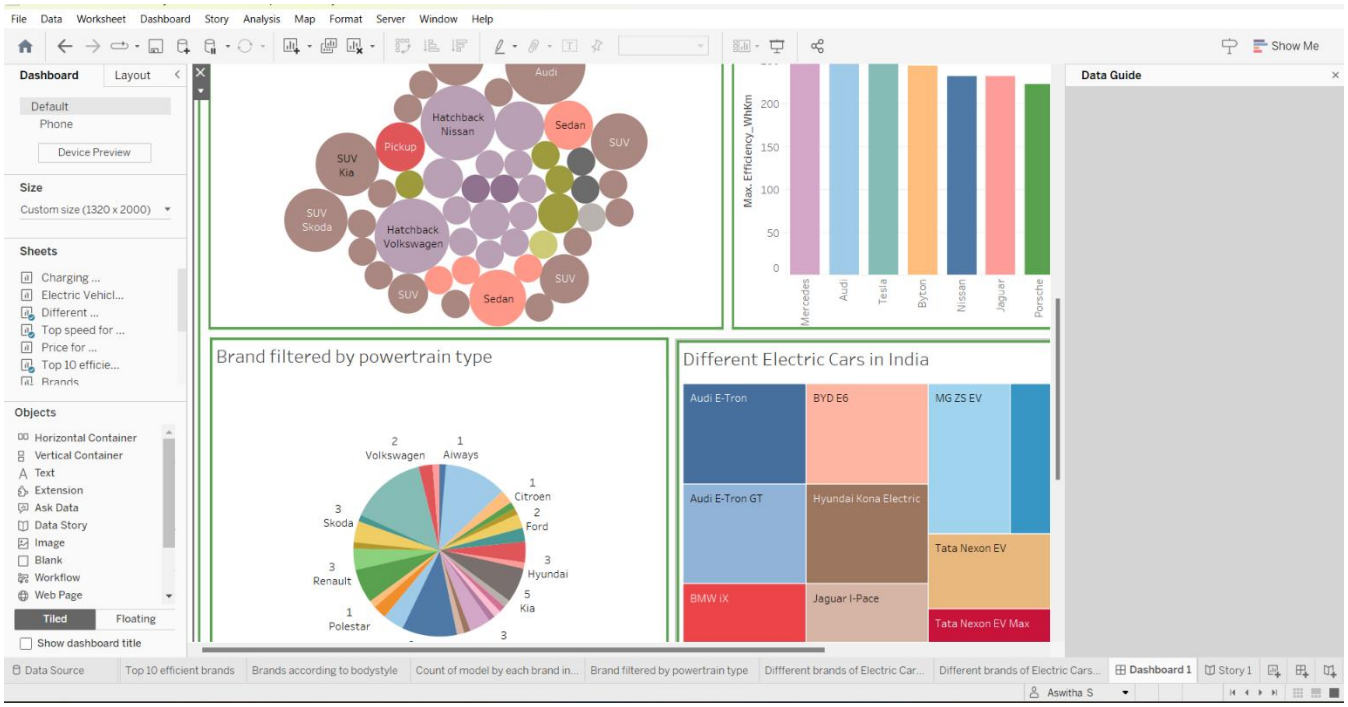

Brands according to bodystyle
BodyStyle
Cabrio
Hatchback
Liftback
MPV
Pickup
Sedan
SPV
Station
SUV
SUV Audi
SUV Ford
Hatchback Nissan
Hatchback Renault
Sedan Tesla
SUV Tesla
Pickup Tesla
SUV Kia
SUV Skoda
Hatchback Volkswagen
Liftback
MPV
SUV Byton
Sedan Porsche
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Cars i...
Top 10 efficient brands
Brands according to bodystyle
49 marks
1 row by 1 column
SUM of AGG(Bodystyle_count): 98


Count of model by each brand in India
CNT(Car)
0
3
Tata
BMW
BYD
Hyundai
Jaguar
Mercedes-Benz
Porsche
Audi
MG
Data Source
Top 10 efficient brands
Brands according to bodystyle
Count of model by each brand ...
Brand filtered by powertrain type
Diffferent brands of Electric Car...
Different brands of Electric Cars...
10 marks
1 row by 1 column
SUM of CNT(Car): 12



3.2 Dashboard Results




File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Show Me
Dashboard
Layout
Default
Phone
Device Preview
Size
Custom size (1320 x 2000)
Sheets
Charging ...
Electric Vehicl...
Different ...
Top speed for ...
Price for ...
Top 10 efficie...
Brands
Objects
Horizontal Container
Vertical Container
Text
Extension
Ask Data
Data Story
Image
Blank
Workflow
Web Page
Tiled
Floating
Show dashboard title
Audi
Hatchback Nissan
Sedan
SUV
Pickup
SUV Kia
SUV Skoda
Hatchback Volkswagen
SUV
Sedan
SUV
Max. Efficiency_WhKm
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50
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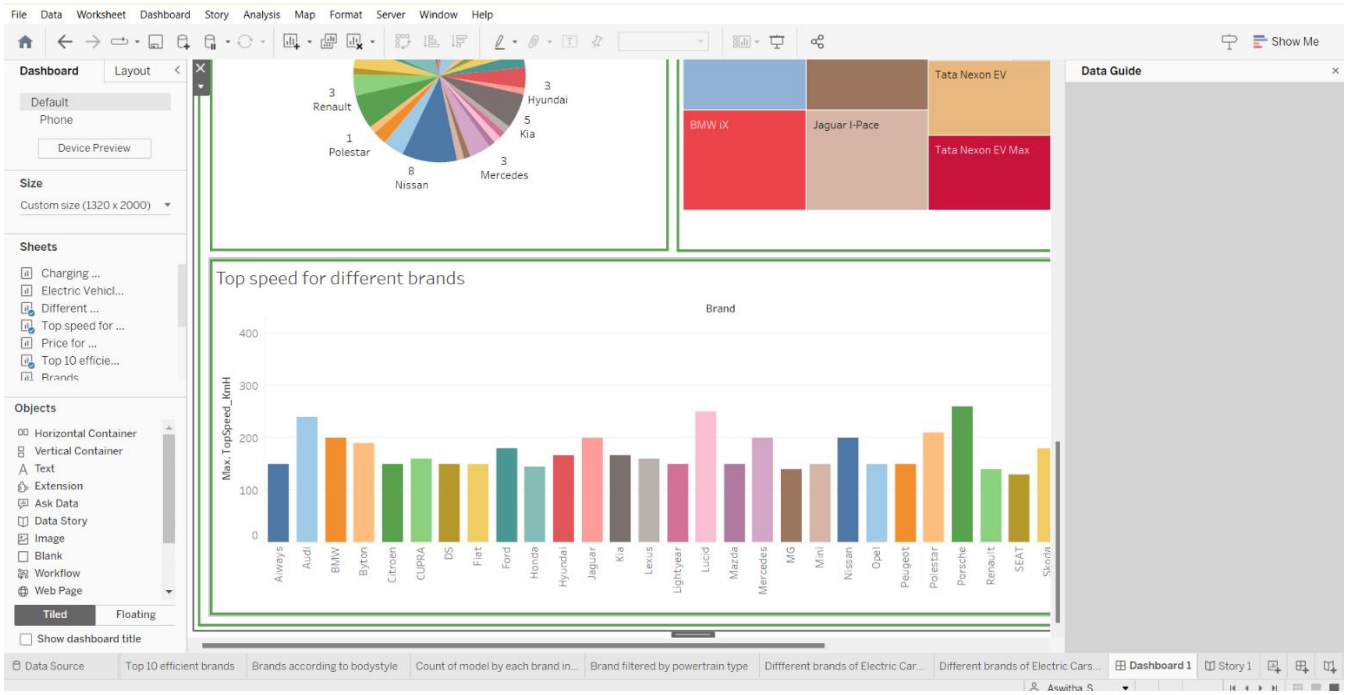
Mercedes
Audi
Tesla
Byton
Nissan
Jaguar
Porsche
Data Guide
Brand filtered by powertrain type
2 Volkswagen
1 Aiways
1 Citroen
2 Ford
3 Hyundai
5 Kia
3
1 Polestar
3 Renault
3 Skoda
Different Electric Cars in India
Audi E-Tron
BYD E6
MG ZS EV
Audi E-Tron GT
Hyundai Kona Electric
Tata Nexon EV
BMW iX
Jaguar I-Pace
Tata Nexon EV Max
Data Source
Top 10 efficient brands
Brands according to bodystyle
Count of model by each brand in...
Brand filtered by powertrain type
Diffferent brands of Electric Car...
Different brands of Electric Cars...
Dashboard 1
Story 1
Aswitha S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Show Me
Dashboard
Layout
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Phone
Device Preview
Size
Custom size (1320 x 2000)
Sheets
Charging ...
Electric Vehicl...
Different ...
Top speed for ...
Price for ...
Top 10 efficie...
Brands
Objects
Horizontal Container
Vertical Container
Text
Extension
Ask Data
Data Story
Image
Blank
Workflow
Web Page
Tiled
Floating
Show dashboard title
3 Renault
3 Hyundai
5 Kia
1 Polestar
8 Nissan
3 Mercedes
Tata Nexon EV
BMW iX
Jaguar I-Pace
Tata Nexon EV Max
Data Guide
Top speed for different brands
Brand
Max. TopSpeed_KmH
400
300
200
100
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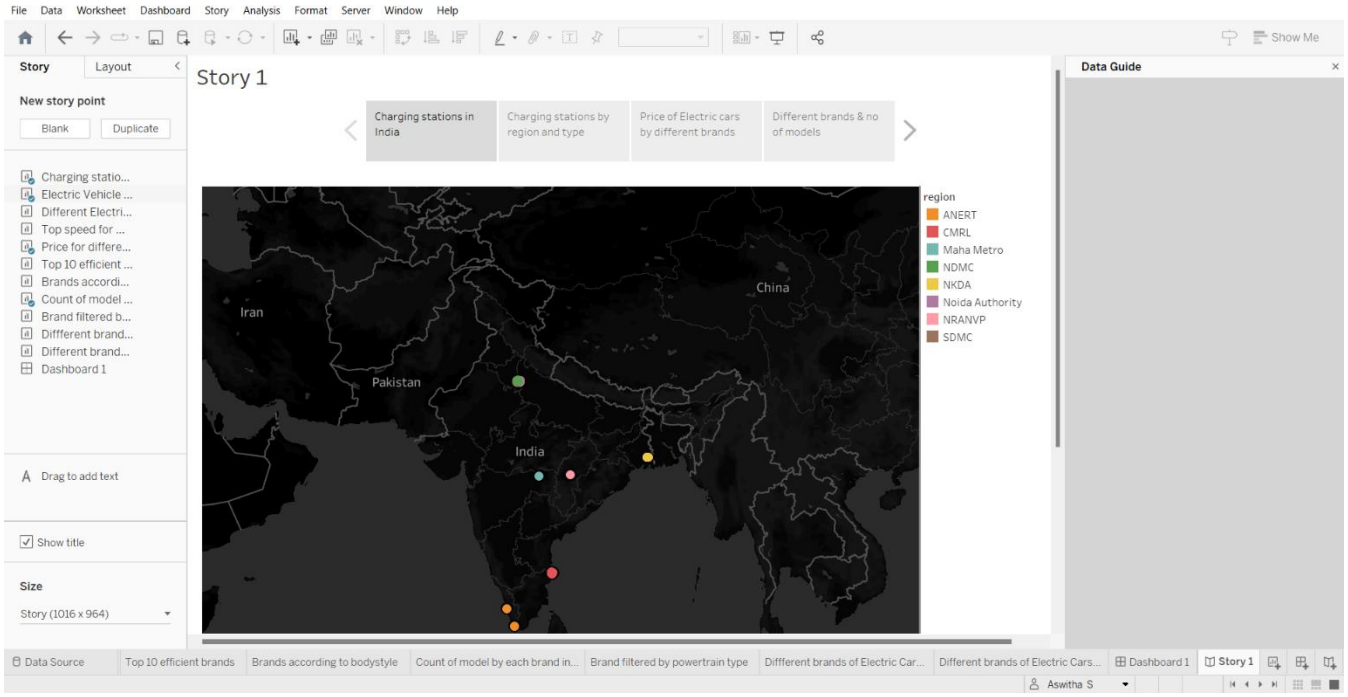
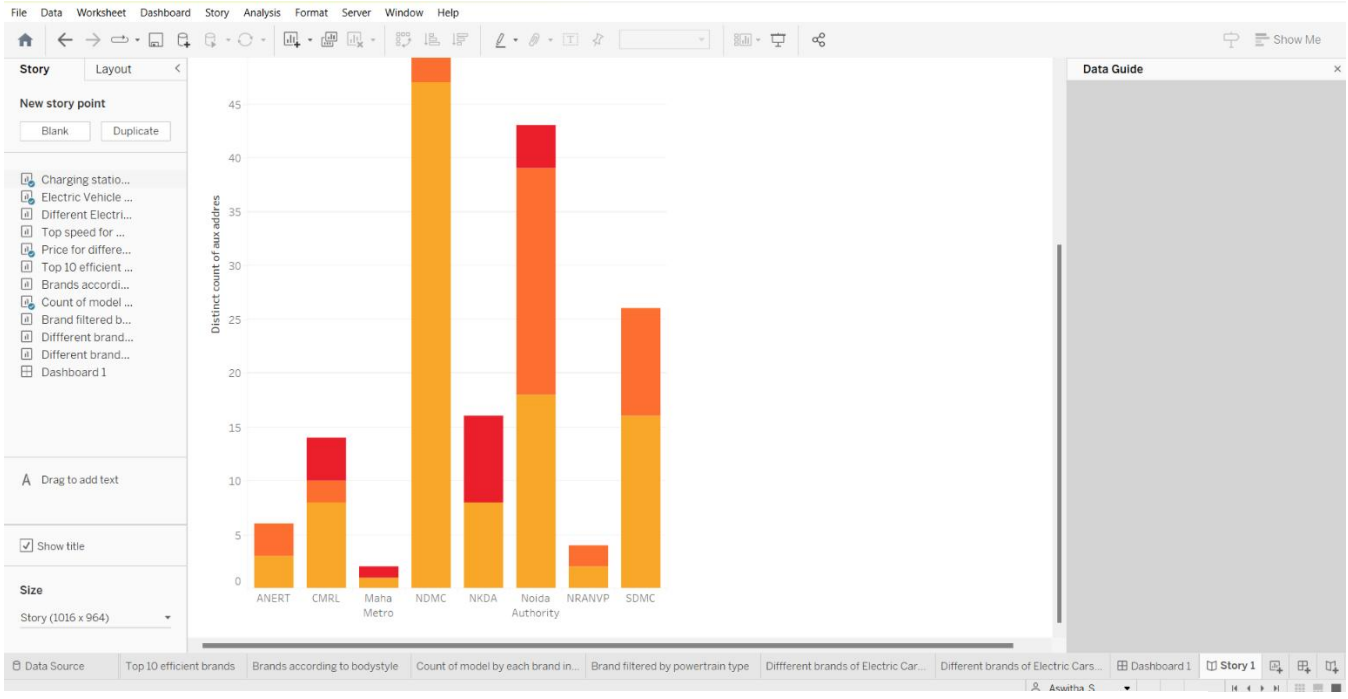
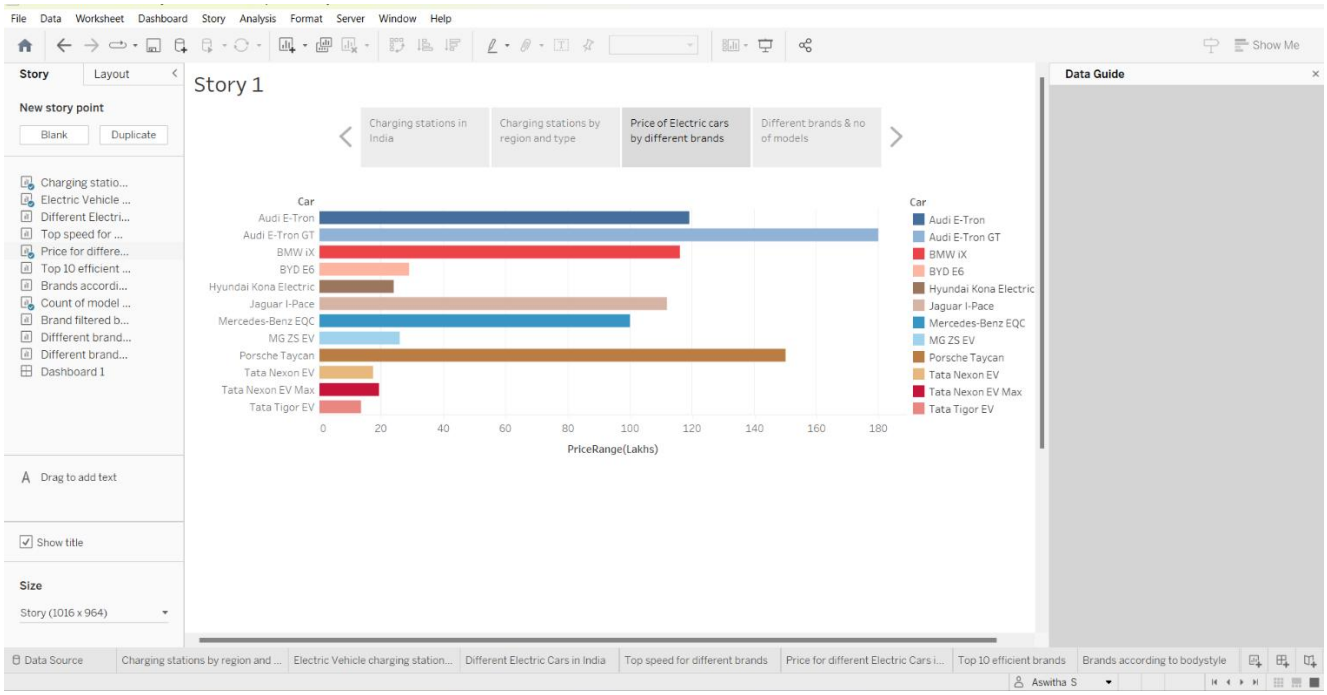
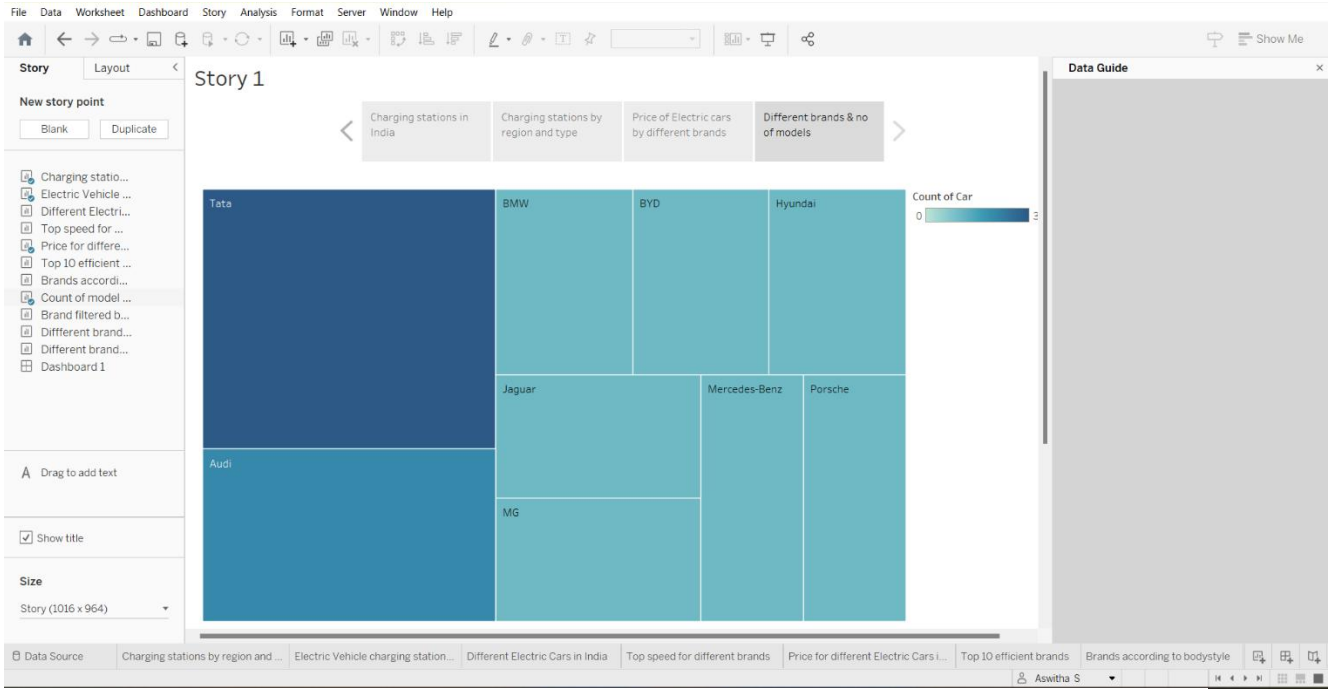
Aiways
Audi
BMW
Byton
Citroen
CUPRA
DS
Fiat
Ford
Honda
Hyundai
Jaguar
Kia
Lexus
Lightyear
Lucid
Mazda
Mercedes
MG
Mini
Nissan
Opel
Peugeot
Polestar
Porsche
Renault
SEAT
Skoda
Data Source
Top 10 efficient brands
Brands according to bodystyle
Count of model by each brand in...
Brand filtered by powertrain type
Diffferent brands of Electric Car...
Different brands of Electric Cars...
Dashboard 1
Story 1
Aswitha S

3.3 Story


File Data Worksheet Dashboard Story Analysis Format Server Window Help
Story
Layout
New story point
Blank
Duplicate
Charging statio...
Electric Vehicle ...
Different Electri...
Top speed for ...
Price for differe...
Top 10 efficient ...
Brands accordi...
Count of model ...
Brand filtered b...
Diffferent brand...
Different brand...
Dashboard 1
Drag to add text
Show title
Size
Story (1016 x 964)
Story 1
Charging stations in India
Charging stations by region and type
Price of Electric cars by different brands
Different brands & no of models
Iran
China
Pakistan
India
region
ANERT
CMRL
Maha Metro
NDMC
NKDA
Noida Authority
NRANVP
SDMC
Data Guide
Show Me
Data Source
Top 10 efficient brands
Brands according to bodystyle
Count of model by each brand in...
Brand filtered by powertrain type
Diffferent brands of Electric Car...
Different brands of Electric Cars...
Dashboard 1
Story 1
Aswitha S


File Data Worksheet Dashboard Story Analysis Format Server Window Help
Story
Layout
New story point
Blank
Duplicate
Charging statio...
Electric Vehicle ...
Different Electri...
Top speed for ...
Price for differe...
Top 10 efficient ...
Brands accordi...
Count of model ...
Brand filtered b...
Diffferent brand...
Different brand...
Dashboard 1
Drag to add text
Show title
Size
Story (1016 x 964)
Distinct count of aux addres
0
5
10
15
20
25
30
35
40
45
ANERT
CMRL
Maha Metro
NDMC
NKDA
Noida Authority
NRANVP
SDMC
Data Guide
Show Me
Data Source
Top 10 efficient brands
Brands according to bodystyle
Count of model by each brand in...
Brand filtered by powertrain type
Diffferent brands of Electric Car...
Different brands of Electric Cars...
Dashboard 1
Story 1
Aswitha S


File Data Worksheet Dashboard Story Analysis Format Server Window Help
Show Me
Story Layout
New story point
Blank Duplicate
Charging statio...
Electric Vehicle ...
Different Electri...
Top speed for ...
Price for differe...
Top 10 efficient ...
Brands accordi...
Count of model ...
Brand filtered b...
Diffferent brand...
Different brand...
Dashboard 1
Drag to add text
Show title
Size
Story (1016 x 964)
Story 1
Charging stations in India
Charging stations by region and type
Price of Electric cars by different brands
Different brands & no of models
Car
Audi E-Tron
Audi E-Tron GT
BMW iX
BYD E6
Hyundai Kona Electric
Jaguar I-Pace
Mercedes-Benz EQC
MG ZS EV
Porsche Taycan
Tata Nexon EV
Tata Nexon EV Max
Tata Tigor EV
0 20 40 60 80 100 120 140 160 180
PriceRange(Lakhs)
Data Guide
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Cars i...
Top 10 efficient brands
Brands according to bodystyle
Aswitha S


File Data Worksheet Dashboard Story Analysis Format Server Window Help
Show Me
Story Layout
New story point
Blank Duplicate
Charging statio...
Electric Vehicle ...
Different Electri...
Top speed for ...
Price for differe...
Top 10 efficient ...
Brands accordi...
Count of model ...
Brand filtered b...
Diffferent brand...
Different brand...
Dashboard 1
Drag to add text
Show title
Size
Story (1016 x 964)
Story 1
Charging stations in India
Charging stations by region and type
Price of Electric cars by different brands
Different brands & no of models
Tata
BMW
BYD
Hyundai
Jaguar
Mercedes-Benz
Porsche
Audi
MG
Count of Car
0
Data Guide
Data Source
Charging stations by region and ...
Electric Vehicle charging station...
Different Electric Cars in India
Top speed for different brands
Price for different Electric Cars i...
Top 10 efficient brands
Brands according to bodystyle
Aswitha S

4. ADVANTAGES & DISADVANTAGES

4.1 Advantages of Electric Vehicle

Transport is a fundamental requirement of modern life, but the traditional combustion engine is quickly becoming outdated. Petrol or diesel vehicles are highly polluting and are being quickly replaced by fully electric vehicles. Fully electric vehicles (EV) have zero tailpipe emissions and are much better for the environment.

- **Lower Running Cost**

The running cost of an electric vehicle is much lower than an equivalent petrol or diesel vehicle. Electric vehicles use electricity to charge their batteries instead of using fossil fuels like petrol or diesel. Electric vehicles are more efficient, and that combined with the electricity cost means that charging an electric vehicle is cheaper than filling petrol or diesel for your travel requirements. Using renewable energy sources can make the use of electric vehicles more eco-friendly. The electricity cost can be reduced further if charging is done with the help of renewable energy sources installed at home, such as solar panels.

- **Low Maintenance cost**

Electric vehicles have very low maintenance costs because they don't have as many moving parts as an internal combustion vehicle. The servicing requirements for electric vehicles are lesser than the conventional petrol or diesel vehicles. Therefore, the yearly cost of running an electric vehicle is significantly low.

- **Zero Tailpipe Emissions**

Driving an electric vehicle can help you reduce your carbon footprint because there will be zero tailpipe emissions. You can reduce the environmental impact of charging your vehicle further by choosing renewable energy options for home electricity.

- **Tax and Financial Benefit**

Registration fees and road tax on purchasing electric vehicles are lesser than petrol or diesel vehicles. There are multiple policies and incentives offered by the government depending on which state you are in.

- **Petrol and diesel use is destroying our planet**

The availability of fossil fuels is limited, and their use is destroying our planet. Toxic emissions from petrol and diesel vehicles lead to long-term, adverse effects on public health. The emissions impact of electric vehicles is much lower than petrol or diesel vehicles. From an efficiency perspective, electric vehicles can covert around 60% of the electrical energy from the grid to power the wheels, but petrol or diesel cars can only convert 17%-21% of the energy stored in the fuel to the wheels. That is a waste of around 80%. Fully electric vehicles have zero tailpipe emissions, but even when electricity production is taken into account, petrol or diesel vehicles emit almost 3 times more carbon dioxide than the average EV. To reduce the impact of charging electric vehicles, India is ambitious to achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by the year 2030. Therefore, electric vehicles are the way forward for Indian transport, and we must switch to them now.

- **Electric Vehicles are easy to drive and quiet**

Electric vehicles don’t have gears and are very convenient to drive. There are no complicated controls, just accelerate, brake, and steer. When you want to charge your vehicle, just plug it in to a home or public charger. Electric vehicles are also quiet, so they reduce noise pollution that traditional vehicles contribute to.

4.2 Disadvantages of Electric Vehicle

- **Higher Purchase Cost**

Compared to regular automobiles, electric vehicles are highly pricey. A gasoline vehicle costs between three and four lakh rupees. However, you would be surprised to learn that the beginning price of an electric vehicle is merely ten to twelve lakhs. Due to the high cost of purchasing, not everyone in this position can utilize it

- **Low Speed and Range**

An electric car will not be able to go vast distances. Electric vehicles cannot travel farther at a faster rate of speed than those powered by engines if speed is the issue. The driving range is also very limited in addition to this.

- **Low Price on Selling**

Even though fuel-powered cars are expensive to maintain, they sell for a high price. When it comes to electric vehicles, you may acquire them for less than three times the price you paid. After operating an electric car, the relevance of its capacity reduces substantially, resulting in a low selling price.

- **The Inconvenience of Service Station**

The utilization of electric vehicles is still in its infancy. As a result, the stations that serve it are similarly built in small numbers. Even after traveling great distances, service locations where cars may be refueled with electricity are few and far between.

- **Low Energy**

The most significant disadvantage of electric vehicles is that they must be charged regularly. Aside from that, increasing the weight of these vehicles reduces their capacity. Electric cars with little energy and capacity can sometimes fall behind fuel-powered ones.

- **Battery Expenses**

Although electric vehicles do not utilize gasoline, the batteries that power them are quite powerful. Aside from that, if the battery is not changed within a defined time interval, it might cause the vehicle to be damaged.

- **Slow Charging**

Electric vehicles require many hours to charge, unlike engine-powered vehicles, which can recharge quickly. The charging of these automobiles is quite sluggish.

- **Expensive Recharging Options**

If there is any other choice than recharging the electric vehicles at a charging station, it is to charge them with the electrical power supply connected to their houses. If you do this, your electricity bill may surprise you considerably. To recharge these vehicles, a high-voltage electric current is required.

- **Problem For Fuel-Producing Countries**

You may already be aware that many nations only have relevance because of the fuel they provide. Fuel sales power the economies of numerous nations, including Iran, Oman, and Saudi Arabia. If the number of diesel fuel cars suddenly declines, these nations may face a financial crisis. As a result, the popularity of fuelless electric cars may prove to be a problem for fuel-producing countries.

- **Fewer Users**

Due to the high cost of electric vehicles, it is not accessible to everyone. It is not incorrect to suggest that electric vehicles are exclusively available to the wealthy. One of the main reasons for its high price is that the number of electric vehicles is also limited due to low product availability. The costs of low commodities and excess demand are high.

5. CONCLUSION

So, in conclusion, electric cars have both advantages and disadvantages. They are a great way to minimize environmental pollution but also have certain disadvantages. We all know that nothing is perfect or adequate. Thus, in this article, we made you aware of these things. This article may be helpful when considering choosing an electric vehicle in the future.

6. FUTURE SCOPE

While the price of an EV may be close to that of most comparable petrol or diesel automobiles, the cost of ownership is much lower, especially over the vehicle's lifetime. You may spend significantly less on an electric vehicle than you do on your present automobile, thanks to tax benefits and special government grants, as well as improved fuel efficiency, lower electricity costs, and fewer maintenance requirements.

For having one of the best electric scooters available in the market choose Kinetic Green’s Electic Scooter. The Kinetic Green comes in two models Zing and Zoom. The Kinetic Zing Electric Scooter is a cost-effective alternative to petrol. There is no need for a licence or registration. It comes with a multi-functional remote key that makes riding even easier and more luxurious. The hydraulic shock absorbers take on bumpy roads while also ensuring a smooth and comfortable ride.

A cruise control switch is included in the Kinetic Zoom Electric scooter. Its use does not necessitate the acquisition of a licence or registration. It has a Twin-

LED headlight, an aerodynamic design, plenty of under-seat storage, a speed mode option, and more. This scooter comes in three gorgeous colour options.

7.REFERENCES

- www.kineticenergyvehicle.com
- www.wikipedia.com
- www.sciencedirect.com