

Project Report Template

Visualization tool for electric vehicle charge and range analysis

1.INTRODUCTION

1.1 overview

A vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source and have an electric motor instead of an internal combustion engine

1.2 Purpose

EV charging involves supply of direct current(DC) to the battery pack.As electricity distribution systems supply alternate current(AC) power a converter is required to provide DC power to the battery

2.Problem Definition & Design Thinking

2.1 Empathy Map

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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

Share template feedback

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

1. Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

2. Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.

3. Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.

Open article

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

electric vehicle charging solution website

Key rules of brainstorming
To run a smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

Tip: You can select a sticky note and hit the pencil icon to edit it. Select a note to edit.

Person 1: 1. Increase charging speed, 2. Add more charging stations, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 2: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 3: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 4: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 5: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 6: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 7: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

Person 8: 1. Offer fast charging, 2. Provide charging stations in public places, 3. Offer incentives for using EV charging, 4. Provide real-time status updates, 5. Integrate with mobile apps, 6. Offer subscription services, 7. Provide weather-dependent charging options, 8. Offer parking spaces for charging.

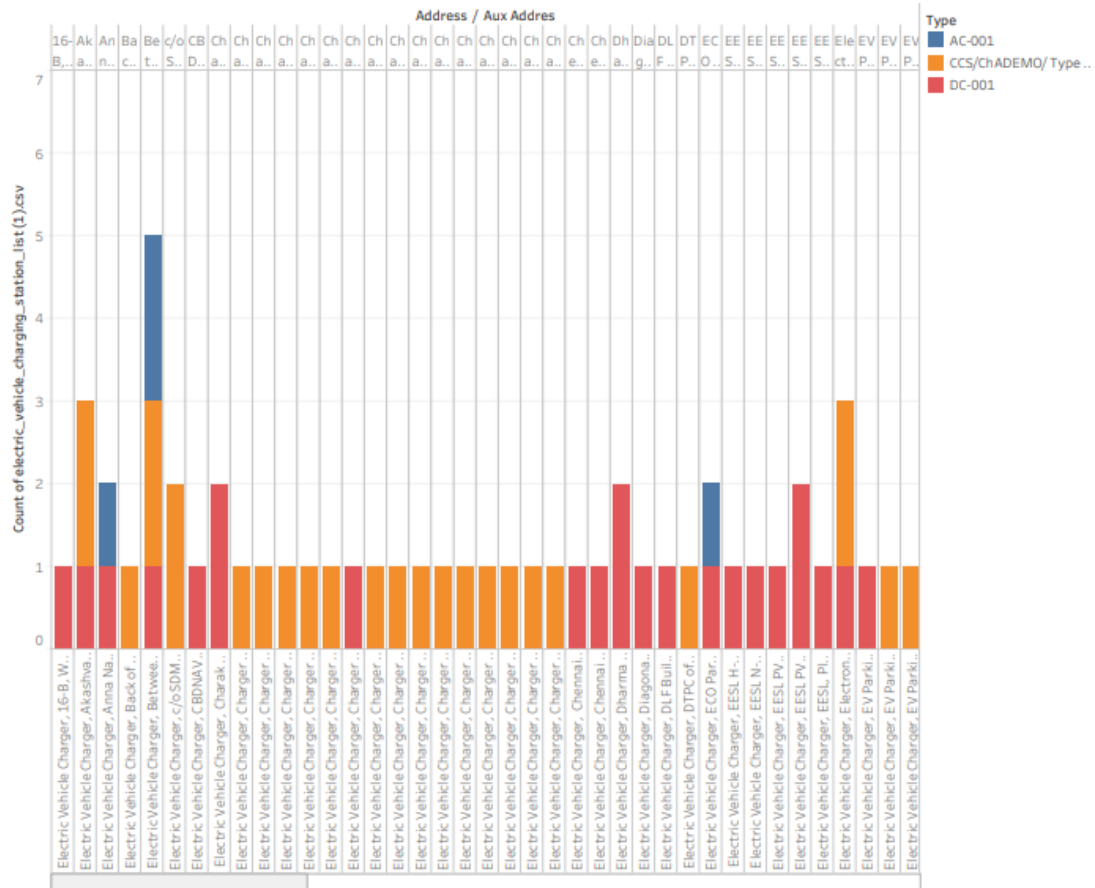
Need some inspiration?
See a previous version of this template in format and more.

Open example

3. RESULT

In 2019-20 about 3.8 lakh electric vehicles were sold in India of which 58% were low –speed E3 and E2W.

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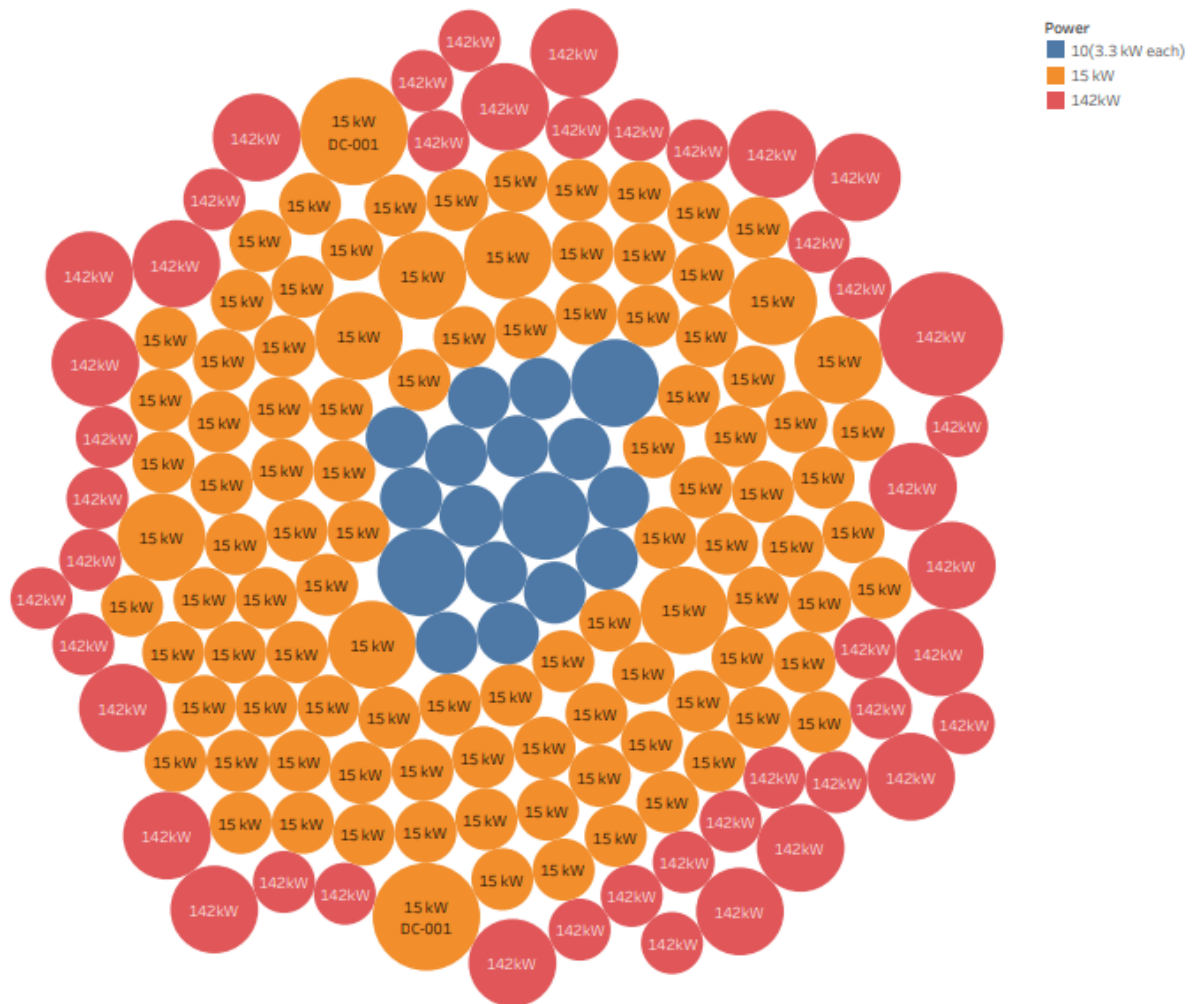


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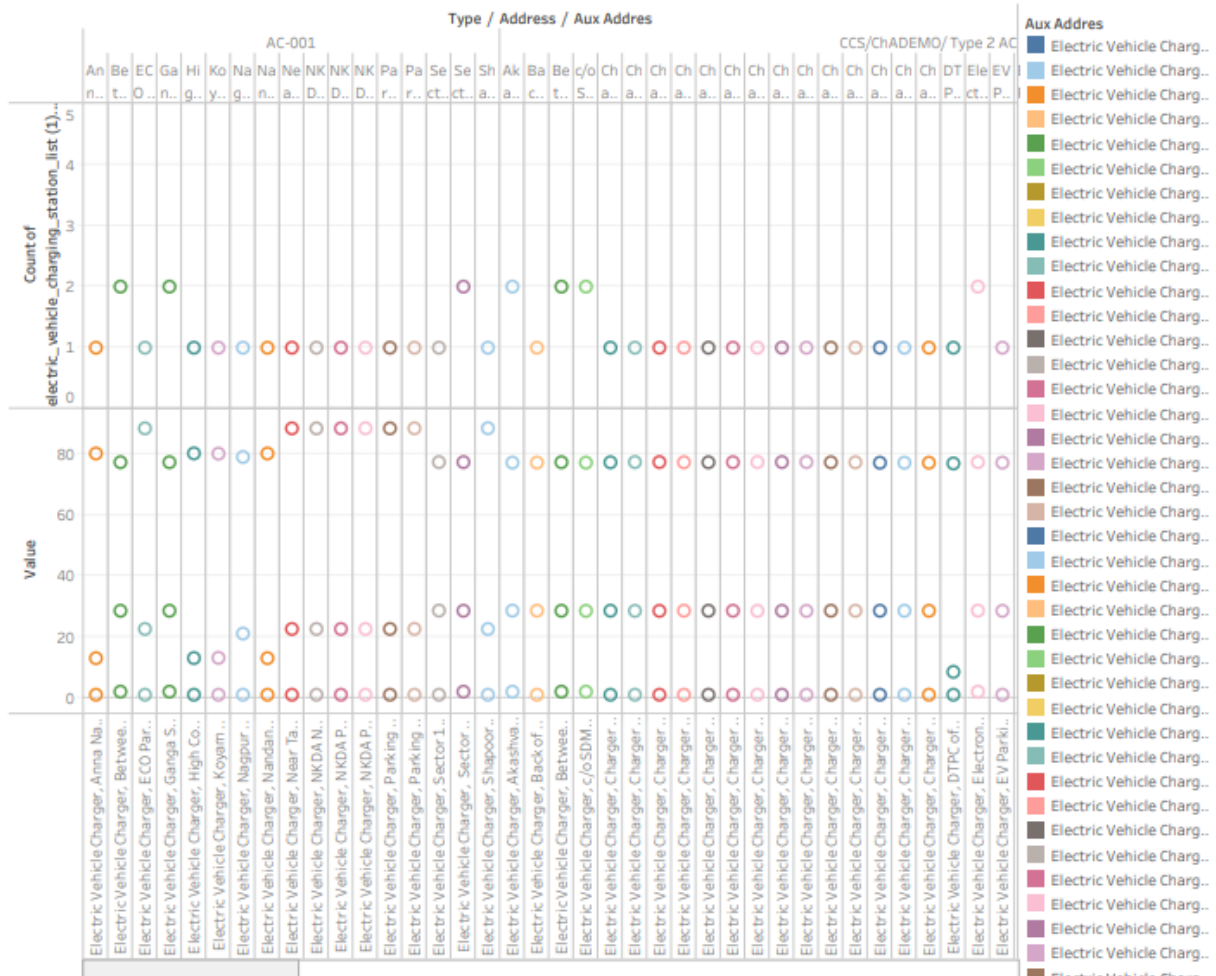
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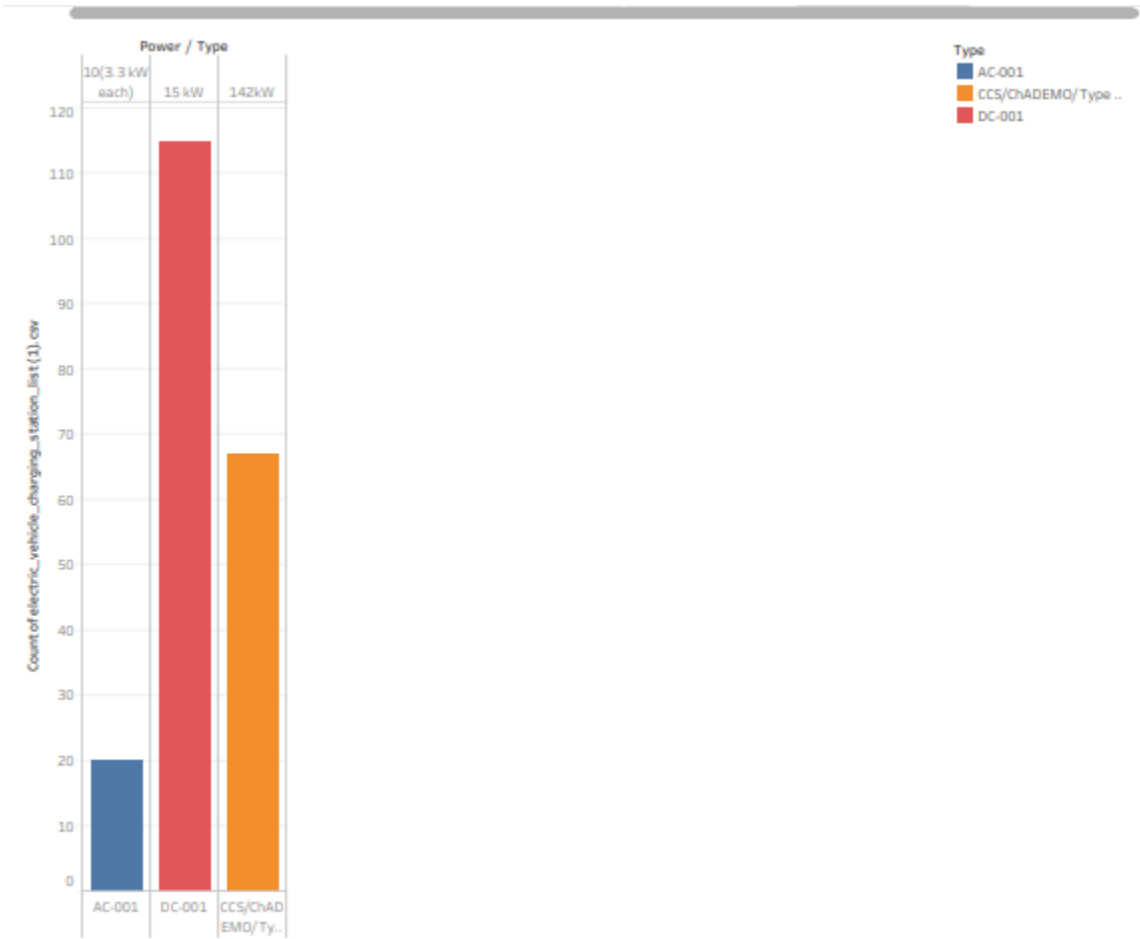


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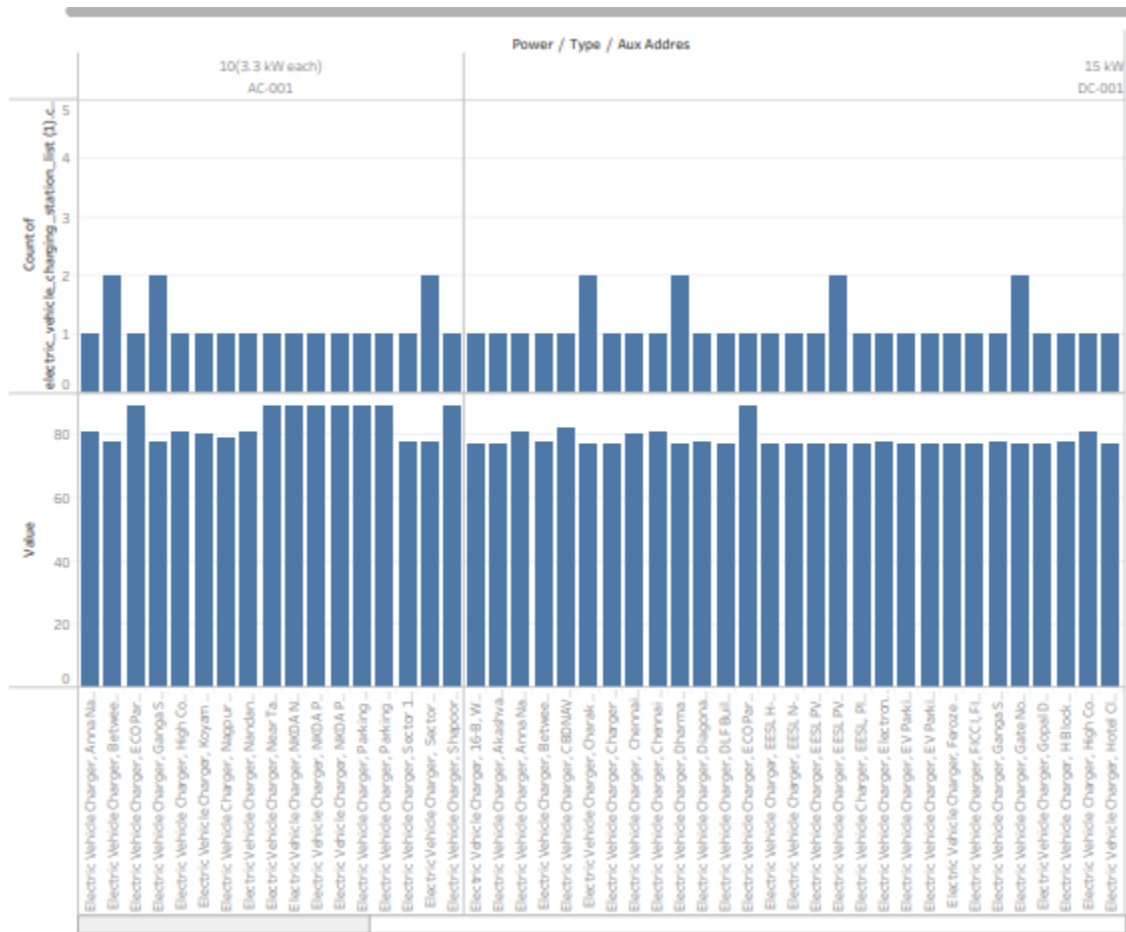
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4. ADVANTAGES

- *No fuel required so you save money on gas
- *Environmental friendly as they do not emit pollutants
- *lower maintenance due to an efficient electric motor
- *Better performance

5.DISADVANTAGE

- *Charging takes longer

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- *The driving range on a full charge
- *Higher initial purchase cost
- *Replacing the batteries is expensive

6.APPLICATIONS

- *Electric motors
- *Batteries
- *Inverters
- *Charging stations

7.CONCLUSION

By 2030 NITI aayog expects to reach 70%EV market penetration for all commercial vehicles.

8.FUTURE SCOPES

The government wants India to be a 100% electric vehicle nation by the year 2030.Under the new plan of the govertment every car which will get sold in India from 2030 will be electric