Problem-Solution fit canvas 2.0

visualization tool for electric vehicle charge and range analysis

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Define CS, fit into

1. CUSTOMER SEGMENT(S) `CS`

EV Policy Makers – Government and municipal planners shaping electric mobility strategie

Automotive Analysts – Researchers studying model performance, pricing trends, and adoption rates

EV Consumers – Potential buyers seeking model comparisons and charger availability

Developers & Students – Building solutions or exploring EV data for academic and tech innovation

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6. CUSTOMER `CC`

⬚ Inconsistent data formats (range in km vs miles, different powertrain naming)

- Scattered data across Indian and global sources, hard to compare
- Difficulty understanding charger coverage or finding affordable EVs
- Poor visual tools or dashboards for non-technical stakeholders

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5. AVAILABLE SOLUTIONS `AS`

Which solutions are available to the customers when they face the problem

⬚ Static policy PDFs or non-interactive reports

- OEM marketing brochures (with brand bias)
- Individual EV comparison websites (without regional charger insights)
- Google Maps for manual charger location checking (not power-rated)

Explore AS,

Focus on J&P, tap into BE, understand

2. JOBS-TO-BE-DONE / PROBLEMS `J&P`

⬚ **EV Consumers**: Find a model that fits budget, range needs, and nearby charging

- **Policy Makers**: See region-wise charging density, highlight underserved zones
- **Analysts**: Compare efficiency (Wh/km), cost-to-range ratio, charger types
- **Developers**: Build dashboards that narrate EV stories across India & globally

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9. PROBLEM ROOT CAUSE `RC`

⬚ No centralized, cleaned dataset combining specs and infrastructure

- Lack of unit normalization across sources (e.g., "Type 2" vs "CHAdeMO")
- Very few open-access dashboards tailored to Indian EV market with global benchmarks
- Deployment tools not integrated with web-based analytics

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7. BEHAVIOUR `BE`

What does your customer do to address the problem and get the job done?

⬚ Relies on spreadsheets, articles, or multiple websites to compare models

- Hesitates due to "range anxiety" and unknown charging station status
- Developers and analysts waste time preprocessing before visualizing
- Policy teams struggle to translate stats into relatable user journeys

Focus on J&P, tap into BE, understand

Identify strong TR & EM

3. TRIGGERS `TR`

⬚ Public push for sustainable mobility and EV subsidies

- Student and academic interest in EV analytics
- Pressure to decentralize charging infrastructure in Tier-2 & 3 cities
- EV brand launches and competitive pricing shifts

4. EMOTIONS: BEFORE / AFTER `EM`

Before:
Uncertain, confused by scattered or biased data, overwhelmed by decisions

After:
Confident, empowered, informed through an intuitive visual journe

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10. YOUR SOLUTION `SL`

⬚ **Interactive Tableau dashboards: Range vs price, charger maps, brand comparisons**

- **Integrated dataset pipeline using Python and SQL**
- **Story-based navigation for public, academic, and technical users**
- **Web app via Flask + Render: Accessible anywhere, anytime**
- **Filterable dashboards by brand, charger type, body style, region, and cost**

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8. CHANNELS of BEHAVIOUR `CH`

8.1 ONLINE
Using Tableau Public / Tableau Online dashboards
- Reviewing competitor or retail performance via e-commerce sites and analytics |

8.2 OFFLINE
Industry expos, trade shows
- Internal meetings for sales/performance reviews
- Manufacturer and distributor interviews |

Extract online & offline CH of BE

AMALTAMA