

Problem Solution fit Template

Project Title: Virtualization tool for electric vehicle charge & range analysis

Team Id: LTVIP2026TMIDS47701

Define CS, fit into CC	Focus on J&P, tap into BE, understand RC	Explore AS, differentiate
<p>1. CUSTOMER SEGMENT(S)</p> <ul style="list-style-type: none">• Electric Vehicle (EV) owners (2-wheelers, 3-wheelers, cars)• Fleet operators (ride-hailing, delivery, logistics)• EV buyers evaluating range performance• Charging infrastructure planners• Automotive engineers & data analysts <p>CS</p>	<p>6. CUSTOMER CONSTRAINTS</p> <ul style="list-style-type: none">• Limited technical knowledge of battery behavior• Inaccurate or static range estimates.• Lack of real-time data visualization• Poor integration with driving conditions• Data overload without clear insights <p>RC</p>	<p>5. AVAILABLE SOLUTIONS</p> <ul style="list-style-type: none">• Basic dashboard range estimators in EVs• Mobile apps showing battery percentage only• Static manufacturer-claimed range values• Simple navigation apps with charging points <p>AS</p>

<p>3. TRIGGERS</p> <ul style="list-style-type: none"> • Low battery warning • Planning a long or unfamiliar trip • Unexpected drop in remaining range • Searching for nearby charging stations • Comparing EV efficiency across routes or vehicles <p>TR</p>	<p>10. YOUR SOLUTION</p> <p>SL Interactive visual dashboard showing:</p> <ul style="list-style-type: none"> • Battery charge vs distance • Energy consumption trends • Predicted remaining range <p>Real-time data integration (speed, terrain, weather)</p> <ul style="list-style-type: none"> • Route-based range forecasting • Charging station visualization and recommendations • User-friendly graphs, alerts, and insights 	<p>8. CHANNELS of BEHAVIOUR</p> <p>CH</p> <ul style="list-style-type: none"> • In-vehicle infotainment system • Mobile application (Android / iOS) • Web dashboard for analytics • Alerts & notifications • Navigation and maps integration
<p>4. EMOTIONS: BEFORE / AFTER</p> <p>EM</p> <p>Before</p> <ul style="list-style-type: none"> • Anxiety about reaching destination • Uncertainty and lack of trust in range estimates • Frustration due to inaccurate predictions <p>After</p> <ul style="list-style-type: none"> • Confidence in trip planning • Reduced stress while driving • Trust in EV performance and data insights 		