

Project Design Phase

Problem – Solution Fit

Date	26 June 2025
Team ID	LTVIP2025TMID32654
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	2 Marks

Problem – Solution Fit :

The problem of traffic management has been increasing day by day which needs continuous monitoring and data-driven decision making to address it properly. The current application using AI/ML is a viable solution to the problem. This could assess the traffic on a variety of parameters and can given estimated traffic volume promptly. This could help traffic managing authorities to address the problem effectively and accurately.

Purpose:

- ☐ To solve problems posed by ever increasing traffic volume
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for the target group.**

Problem-Solution Fit canvas

Purpose / Vision

Version:

<div style="background-color: #f8d7da; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">1. CUSTOMER SEGMENT(S) CS</div> <div style="border: 1px solid #dee2e6; padding: 5px; min-height: 100px;"> Worried to control traffic effectively and avoid road accidents </div>	<div style="background-color: #f8d7da; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">6. CUSTOMER LIMITATIONS <small>EG. BUDGET, DEVICES</small> CL</div> <div style="border: 1px solid #dee2e6; padding: 5px; min-height: 100px;"> Non availability of traffic data </div>	<div style="background-color: #f8d7da; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">5. AVAILABLE SOLUTIONS <small>PROS & CONS</small> AS</div> <div style="border: 1px solid #dee2e6; padding: 5px; min-height: 100px;"> Using AI/ML for data processing and estimating the traffic </div>
<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">2. PROBLEMS / PAINS + ITS FREQUENCY PR</div> <div style="border: 1px solid #ffee58; padding: 5px; min-height: 100px;"> Increasing road accidents </div>	<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">9. PROBLEM ROOT / CAUSE RC</div> <div style="border: 1px solid #ffee58; padding: 5px; min-height: 100px;"> Lack to data to analyse the traffic </div>	<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">7. BEHAVIOR + ITS INTENSITY BE</div> <div style="border: 1px solid #ffee58; padding: 5px; min-height: 100px;"> Frequent road accidents and high waiting time due to traffic </div>
<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">3. TRIGGERS TO ACT TR</div> <div style="border: 1px solid #c3e6cb; padding: 5px; min-height: 100px;"> Increasing incidents of road accidents Loss of productive day hours for working people in cities </div>	<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">10. YOUR SOLUTION SL</div> <div style="border: 1px solid #c3e6cb; padding: 5px; min-height: 100px;"> Technology driven decision making </div>	<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">8. CHANNELS of BEHAVIOR CH</div> <div style="border: 1px solid #c3e6cb; padding: 5px; min-height: 100px;"> ONLINE Can access the estimated traffic volume through application </div>
<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; margin-bottom: 2px;">4. EMOTIONS <small>BEFORE / AFTER</small> EM</div> <div style="border: 1px solid #c3e6cb; padding: 5px; min-height: 100px;"> Unable to control traffic </div>		

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IdeaHackers .NL

References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>