

Project Design Phase

Problem – Solution Fit Template

Date	19 July 2025
Team ID	LTVIP2025TMID38062
Project Name	Traffic Telligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	2 Marks

Problem – Solution Fit Template:

Modern cities face increasing congestion, delays, and pollution due to inefficient traffic flow management. Traditional traffic monitoring systems (e.g., manual counting or basic sensors) are:

- Inaccurate during peak hours
- Costly to maintain
- Unable to handle real-time decision-making
- Not scalable for smart city planning

Moreover, accurate **traffic volume data** is crucial for:

- Urban planning
- Signal optimization
- Public transport scheduling
- Emergency response routing

Template:

Define CS, M, MC, CC 1. CUSTOMER SEGMENT(S) Who is your customer? (e.g. working parents of 5-9 p.m. kids)	CS 6. CUSTOMER CONSTRAINTS What constraints prevent your customers from taking action to solve their problem? (e.g. no parking spaces, budget, no cash, network connectivity, available resources)	CC 5. AVAILABLE SOLUTIONS Which solutions are available to the customers when they find the problem or need to get the job done? What have they tried in the past? What have others done? (e.g. paper and pen, or alternatives to digital marketing)	Explore AS, differentiate
	JP 2. JOBS-TO-BE-DONE / PROBLEMS Which jobs-to-be-done (or problems) do you address for your customer? (There could be more than one, require different skills)	BC 9. PROBLEM ROOT CAUSE What is the root reason that this problem exists? What is the last thing behind the need to do this job? (e.g. customer have to do it because of the change in regulations)	
Identify strong TB & EM 3. TRIGGERS What triggers customers to act? (e.g. seeing their neighbour building a new house, meeting about a more efficient solution for the house) 4. EMOTIONS: BEFORE / AFTER How do customers feel when they face a problem or a job and afterwards? (e.g. feel frustrated + confused, to excited + calm to your communication strategy & design)	TS 10. YOUR SOLUTION If you are working on an existing business, how does your current solution fit? (If in the future, and check how much it fits the reality) If you are working on a new business proposition, how does it break and give fit to the existing and current up with a solution that the entire customer (segments) achieve a problem and matches customer behaviour)	CH 8. CHANNELS of BEHAVIOUR 8.1 ONLINE What kind of actions do customers take online? (e.g. online channels from 0-1) 8.2 OFFLINE What kind of actions do customers take offline? (e.g. offline channels from 0-1 and give them the customer development)	Expand and differentiate CH of BE

References:

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