

## Project Design Phase

### Problem – Solution Fit Template

Date	26th June 2025
Team ID	LTVIP2025TMID41765
Project Name	Traffictelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	2 Marks

#### Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer’s problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.

#### Purpose:

- Solve complex urban traffic monitoring and forecasting problems using real-time machine learning.
- Succeed faster and increase adoption by integrating with existing municipal traffic infrastructure (e.g., CCTV, sensors, IoT).
- Sharpen communication with traffic authorities by presenting measurable performance improvements (e.g., reduced congestion, predictive alerts).
- Increase touch-points with urban mobility platforms by solving high-cost, high-frequency traffic management issues.
- Understand the limitations of traditional manual or sensor-based estimation, and improve it with AI-driven automation and scalability.

#### Template:

Stage	Step	Experience	Interactions	Goal	Positive	Negative	Opportunity
Entice: Awareness	Discover Traffictelligence	Searching for a traffic forecasting solution	Website, online ads, social media, word of mouth	Help me understand traffic flow patterns in my city to improve planning	Impressed by the AI/ML focus	Overwhelmed by many traffic solutions	Highlight differentiators (ML-based, real-time accuracy)
Enter: First Visit	Visit website or platform	Landing on Traffictelligence's homepage	Website, demo video, brochure	Help me find the right tool quickly	Clean UI and strong technical claims	May not immediately grasp tech depth	Provide clear, simple use-case visualizations
Browse: Exploring Features	Explore features and case studies	Looking at tools, models, and integration guides	Interactive dashboard, API docs, data samples	Help me ensure it can integrate with my city's infrastructure	Impressed by past deployment success	Needs confirmation of compatibility	Add plug-and-play tutorials and sample integrations
Engage: Trial Use or Demo	Request demo or upload traffic data	Tests with local data or a mock dataset	Upload portal, demo dashboard	Help me validate that this prediction model is accurate	Seeing real predictive graphs and heatmaps	Requires some data prep	Offer data pre-cleaning scripts or a support chat
Purchase / Commit	Decide to subscribe or purchase license	Finalizing terms, budget, data policies	Email negotiation, contract, platform onboarding	Help me justify this investment to stakeholders	ROI estimates help convince decision-makers	Long procurement process	Provide ROI calculator and customizable proposal decks
Confirm: Integration and Training	Onboard and connect with city infrastructure	API integration, team onboarding session	Developer docs, customer success team, Slack/Teams channel	Help me get it running smoothly in our ecosystem	Support team is knowledgeable	Some latency in initial data sync	Real-time onboarding tracker and chat-based support
Experience: Active Use	Use the prediction tools regularly	Analyze trends, generate reports, make planning decisions	Weekly traffic dashboards, alert systems	Help me make smarter, data-driven decisions	Trust in the model's accuracy improves	Needs occasional model explanation	Integrate AI explainability modules
Extend: Post-Implementation	Continuous feedback, updates, and support	Model retraining, receiving updates, user community	Feedback forms, monthly webinars	Help me stay current and maximize the tool's value	Appreciates proactive feature releases	May miss critical updates without alerts	Offer in-app changelogs, usage tips, and update alerts
Review & Recommendation	Provide feedback, case studies, or referrals	Shares success metrics, joins client spotlight	Feedback forms, email, webinars	Help others benefit from what we've learned	Recognition for innovation	Hesitation if no incentive	Launch a "city partner spotlight" or referral program

### References:

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