Project Design Phase
Problem – Solution Fit Template

Date	15 February 2025
Team ID	LTVIP2025TMID36498
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	2 Marks

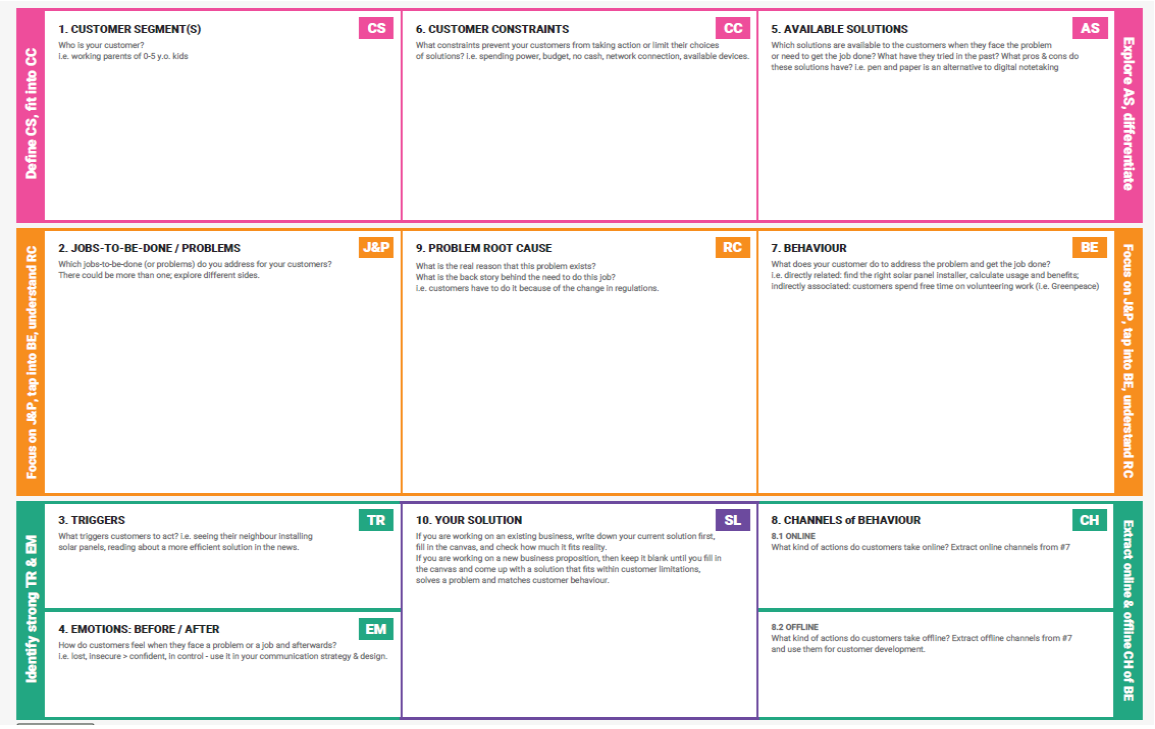
Problem – Solution Fit Template:

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 problems in a way that fits the state of your customers.
- ❑ 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 your target group.**

Template:



Project Name

TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning

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🧩 Problem Statement (Customer Pain Point)

Urban traffic congestion is a growing problem due to unpredictable factors like weather, events, and insufficient data-driven systems. Transportation authorities, city planners, and commuters often struggle with reactive decisions and inefficient travel, which leads to longer commute times, environmental impact, and planning challenges.

💡 Proposed Solution (What Your Project Does)

TrafficTelligence leverages machine learning to analyze historical traffic data, weather conditions, and real-time events to provide accurate traffic volume estimations and predictions. It supports:

- **Dynamic traffic control** through adaptive signal timing and congestion reduction.
- **Urban development planning** using predictive insights for road and infrastructure design.
- **Commuter navigation** by delivering route suggestions and alternative travel times based on predicted congestion.

🎯 Why This Solution Works (Fit Justification)

TrafficTelligence is grounded in real user needs:

- **Transportation authorities** gain actionable insights for proactive traffic flow adjustments.
- **Urban planners** make informed infrastructure decisions aligned with future growth.
- **Commuters** benefit from smarter travel planning through integration with navigation platforms.

The solution addresses critical pain points using familiar platforms and data sources, increasing its likelihood of adoption and effectiveness.

References:

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