

Ideation Phase

Define the Problem Statements

Date	28 june 2025
Team ID	LTVIP2025TMID44706
Project Name	Traffic volume Estimation
Maximum Marks	2 Marks

Customer Problem Statement Template:

Urban commuters, traffic management authorities, and city planners face significant challenges due to the lack of accurate and real-time traffic volume estimation. This results in increased congestion, inefficient traffic control, delayed infrastructure development, and poor commuter experiences. There is a need for an intelligent system that can predict and estimate traffic volume using machine learning by analyzing historical data, weather conditions, and real-time factors to enable smarter traffic decisions and planning.

I am	Describe the customer and their attributes here	- Transportation Authorities: Public sector professionals managing urban traffic, data-driven, focused on efficiency. - Urban Planners: City officials or developers, strategic thinkers, concerned with long-term growth. - Commuters: Daily travelers, time-sensitive, tech-savvy individuals using navigation apps.
I'm trying to	List the thing they are trying to achieve here	- Authorities: Reduce congestion, optimize traffic flow, improve safety. - Planners: Design efficient infrastructure, enhance urban accessibility. - Commuters: Minimize travel time, avoid delays, plan optimal routes.
but	Describe the problems or barriers that get in the way here	- Authorities: Inaccurate real-time data, unpredictable events (e.g., accidents), outdated traffic systems. - Planners: Limited predictive tools, insufficient historical data, resistance to change. - Commuters: Unreliable traffic updates, sudden congestion, lack of personalized route options.
because	Describe the reason the problems or	- Authorities: Legacy systems lack integration, data silos, manual processes. - Planners: Lack of

	barriers exist	advanced forecasting models, funding constraints. - Commuters: Inconsistent data sources, lack of real-time adaptive solutions.
which makes me feel	Describe the emotions the result from experiencing the problems or barriers	- Authorities: Frustrated by inefficiencies, pressured to meet public demands. - Planners: Overwhelmed by uncertainty, anxious about future traffic issues. - Commuters: Annoyed by delays, stressed during peak travel times.

Example:

Problem Statement (PS)	I am (Customer)	I’m trying to	But	Because	Which makes me feel
PS-1	a transportation authority	reduce congestion in real-time	the current system lacks accurate data	legacy systems are not integrated	stressed
PS-2	an urban planner	design efficient road networks	predictions are unreliable	insufficient historical data	overwhelmed