**Ideation Phase**

**Define the Problem Statements**

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| --- | --- |
| Date | 16 june 2025 |
| Team ID | LTVIP2025TMID41921 |
| Project Name | TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning |
| Maximum Marks | 2 Marks |

**Customer Problem Statement Template:**

High customer traffic volume can lead to several operational challenges across both physical and digital environments. In physical locations like retail stores or service centers, it often results in long wait times, overworked staff, inventory shortages, and potential safety hazards due to overcrowding. These issues can harm customer satisfaction and employee performance. Additionally, logistical problems such as parking limitations and access bottlenecks may discourage potential customers from visiting.

In digital spaces like websites and apps, high traffic can cause server crashes, slow loading times, and payment failures, which directly affect user experience and sales. Online businesses may also face increased security threats during peak traffic periods and struggle with customer support overload. Without proper planning and predictive tools, companies may misallocate resources, leading to inefficiencies and operational bottlenecks. Implementing data-driven traffic prediction systems and scalable infrastructure can help mitigate these challenges effectively.

**Customer Problem Statement**

Start

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Understand the Customer

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├─> Conduct Surveys & Interviews

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└─> Analyze Customer Behavior & Feedback

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Identify Pain Points

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├─> What problems are customers facing?

└─> Are these problems recurring or critical?

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Categorize Problems

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├─> Functional (related to features, usability)

└─> Emotional (frustrations, expectations)

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Prioritize Problems

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├─> High Impact & High Frequency?

└─> Alignment with Business Goals?

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Formulate Problem Statement

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├─> Who is affected?

├─> What is the problem?

└─> Why does it matter?

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Validate with Customers

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├─> Review statements with users

└─> Adjust based on feedback

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End (Use in Design/Development Process)