Proposed Solution Template

Project Design Phase

TeamID:LTVIP2025TMID35728

Project Name:Traffictelligence:Advanced Traffice Volume Estimation With Machine

Maximum Marks:2 Marks

1.Problem Statement(Problem to be Solved)

Traditional traffic volume estimation methods are inefficient, costly, and lack real-time accuracy, making it difficult for city planners, traffic authorities, and logistics providers to make informed, timely decisions for infrastructure development and traffic management.

2.Idea/Solution Description

Trafficelligence is an AI-powered system that uses machine learning algorithms to analyze real-time and historical traffic data, providing accurate, automated, and scalable traffic volume estimations. This enables smarter decision-making for urban planning, traffic control, and logistics optimization.

3.Novelty/Uniqueness

Trafficelligence stands out by combining machine learning with real-time data streams to deliver highly accurate traffic volume estimations without relying solely on physical sensors. Its adaptive, self-improving model ensures continuous accuracy and scalability, making it ideal for dynamic urban environments and smart city systems.

4.Social Impact/Customer Satisfaction

Trafficelligence enhances urban living by reducing congestion and emissions through accurate traffic forecasting, while ensuring high customer satisfaction with reliable, real-time insights that improve planning and operational efficiency.

5.Business Model(Revenue Model)

Trafficelligence follows a subscription-based SaaS model, offering tiered pricing plans based on data volume, feature access, and user type (e.g., government,

enterprise). Additional revenue streams include custom analytics services, API integrations, and licensing for smart city infrastructure projects

6.Scalability of the Solution

Trafficelligence is highly scalable, capable of integrating with diverse data sources (CCTV, sensors, GPS, etc.) and expanding across cities, regions, or countries. Its cloud-based architecture and modular machine learning models allow seamless adaptation to growing data volumes and varied urban infrastructures without compromising performance