**Future of Mobility**

Problem Statement 2: Smart Batching

**Problem Statement:**

Smart batching refers to grouping people with similar destinations and travel schedules to minimize the number of vehicles needed for transportation. The goal of smart batching is to reduce traffic, lower costs, and reduce the environmental impact. Typical problems to be solved include real-time tracking systems, last-mile connectivity, optimal matching algorithms, safety measures, managing peak-time demand, etc.

**Solution Scope & Deliverables**

Smart Batching's goal is to improve accessibility, affordability and sustainability. The solutions can be one or more of the below:

● Tech Platforms: Leverage technology to solve the typical issues in batching.

● BatchingProcess/BusinessModel: Innovate a new business model or batching process

● SmartVehicles: Design vehicles that are more conducive for smart batching and/or last-mile

connectivity.

● Infrastructure: Improve / Build infrastructure that will support smart batching.

**Solution** :

Real-Time Tracking Systems: An efficient real-time tracking system can be developed that can monitor the location and movements of people. This can be achieved by integrating GPS technology with a mobile app that can track the location of passengers and optimize pickup and drop-off points.

Last-Mile Connectivity: Shared mobility options such as bike-sharing, e-scooters, and auto-rickshaws can be introduced to provide last-mile connectivity between the pickup and drop-off points and the passengers' final destination.

Optimal Maatching Algorithms: Advanced algorithms can be developed that can efficiently group people with similar travel schedules and destinations. This can be achieved by analyzing the data collected from the real-time tracking system and using machine learning algorithms to optimize the matching process.

Safety Measures: Stringent safety measures can be implemented, such as background checks, vehicle inspections, and driver training, to ensure the safety of passengers. The vehicles used for smart batching can also be equipped with safety features like airbags, seat belts, and GPS trackers.

Managing Peak-Time Demand: Strategies can be developed to manage the demand during peak hours, such as incentivizing passengers to travel during off-peak hours or offering discounts to passengers who are willing to share rides.