Ideation Phase

Define the problem Statement

Date	
Team ID	NM2025TMID04471
Project Name	Garage Management
Maximum Marks	2 Mark

Customer problem statement temnplate:

Our customer, the Service Manager at a multi-bay tire and oil change center who manages high daily vehicle turnover (60-80 cars), is currently struggling to provide accurate, immediate digital inspection reports to customers. They face this challenge because their inspection photos and notes are manually transferred from a mobile device to the central system after the vehicle is finished, which leads to service advisors lacking real-time, actionable data to upsell necessary maintenance. As a direct result, the garage experiences missed upselling opportunities (estimated at $500 per day) and slow approval times, which ultimately means lost revenue and a perpetually overwhelmed front-desk staff.

Example 1: Customer Communication and Trust

Our customer, the Service Advisor at a multi-brand repair workshop who handles approximately 15 customer interactions daily, is currently struggling to secure quick approval for unexpected or high-value repairs after the initial estimate. They face this challenge because the current process relies on phone calls and verbal descriptions of the vehicle's damage or issues, which leads to customers feeling pressured, confused, and lacking visual evidence to justify the cost. As a direct result, the garage experiences high vehicle dwell time (often adding 3+ hours to the repair window) and a 15% rate of refused recommended services, which ultimately means lost revenue from unapproved work and a reputation for poor, opaque customer service.

Example 2: Technician Efficiency and Time Tracking

Our customer, the Shop Foreman/Owner of an independent transmission and engine specialty shop who supervises 4 senior mechanics focused on complex repairs, is currently struggling to accurately track and bill the non-direct labor time (e.g., diagnosis, tool retrieval, consulting manuals) associated with each job. They face this challenge because the manual clock-in/clock-out system only captures major job start and finish times, requiring mechanics to guess their intermittent administrative/diagnostic time, which leads to inaccurate job costing and wasted time spent reconciling these discrepancies. As a direct result, the garage experiences an average of 5-8 billable minutes lost per hour across the shop and difficulty forecasting future job profitability, which ultimately means a persistent erosion of the shop's profit margin and frustration among the high-value technicians.


Appointment Scheduling
Work Order Management
Inventory Management
Invoicing and Billing
Custom Website
Customer Relationship Management
Reporting and Analytics
Vehicle Maintenance History Tracking