**Project Title:** Garage Management System (Salesforce Platform)

**Date:** November 09, 2025

**Team ID:** NM2025TMID02154

**Maximum Marks:** 2 Marks

## Proposed Solution Template

| S.No. | Parameter | Description |
|---|---|---|
| 1 | Social Impact / Customer Satisfaction | The solution directly improves customer satisfaction by minimizing vehicle downtime due to part shortages, ensures safety by tracking high-value component usage (e.g., brakes/airbags), and enhances transparency through digital service records. It increases operational efficiency, improves manager satisfaction through real-time visibility, and boosts technician job satisfaction through efficient, reliable access to necessary parts and job information. |
| 2 | Business Model (Revenue Model) / Sustainability | The platform is designed for automotive service organizations (independent garages, dealerships, chain service centers). Potential revenue models include: SaaS subscription pricing based on the number of service bays/active technicians, implementation services for customization, training and support packages, and integration services with existing booking and accounting systems. The system enhances profitability by increasing service throughput, minimizing parts waste, and optimizing procurement.<br>The solution can be extended to include multiple vehicle types (cars, trucks, motorcycles), geographic regions (chain expansion), and distribution channels. It can adapt to seasonal repair demands, integrate with supplier ordering platforms, add mobile barcode scanning for field repairs, support AI-powered demand forecasting, and accommodate role-based access for managers, technicians, service advisors, and suppliers. |
| 3 | Scalability of the Solution | Solution Description<br><br>To efficiently manage parts inventory and service workflow in automotive service organizations, a comprehensive Salesforce-based platform is implemented with the following architecture and workflow:<br><br>System Architecture<br><br>The Salesforce platform connects three main stakeholder groups:<br><br>Garage Managers & Service Advisors: Oversee service bay operations, set parts reorder thresholds, manage supplier relationships, and monitor technician performance through real-time dashboards.<br><br>Technicians & Service Staff: Access current parts stock levels, record parts consumption during repairs, update job status, and receive notifications about parts availability and tool location.<br><br>Suppliers & Vendors: Receive automated purchase orders, update delivery |

status for parts, provide product information, and maintain service level agreements.

Key Features & Workflow

Vehicle Part Registration & Management: Staff input comprehensive part details (SKU, brand, compatible models, pricing, supplier information) through user-friendly Salesforce forms with validation rules ensuring data accuracy.

Parts Location Tracking: The system tracks stock levels across multiple locations (main store, staging area, service bays) with real-time visibility of current quantities, reserved parts for active jobs, and available inventory.

Automated Reorder Alerts: Automated Salesforce flows monitor stock levels continuously and trigger notifications when inventory falls below minimum thresholds. Purchase orders are automatically generated and sent to suppliers, preventing critical service delays.

Job Card Consumption Tracking & Audit: Technicians record parts usage directly onto the Job Card via mobile interfaces. All consumption captures necessary details (e.g., part serial numbers) for comprehensive audit trails and warranty records.

Customer Service & Warranty Management: The system automatically tracks customer service history and triggers notifications for customers when their vehicle is due for maintenance or when a part's warranty is expiring.

Dashboard & Analytics: Real-time dashboards track key metrics: current stock levels, items below reorder points, technician utilization, Job Status tracking, parts consumption patterns by vehicle model, and supplier performance. Einstein Analytics provides AI-powered demand forecasting.

## Implementation Approach

| Phase | Description |
|---|---|
| Phase 1: System Design & Configuration (Weeks 1-2) | Design Salesforce data model with custom objects for Vehicle Part, Service Bay, Supplier, Job Card, and Purchase Order. Establish object relationships, validation rules, and role-based access controls. |
| Phase 2: User Interface & Automation Development (Weeks 2-3) | Build user interfaces (forms, dashboards, mobile views for technicians) and automated workflows (reorder alerts, customer service notifications, purchase order generation, approval processes for high-value components). |
| Phase 3: Integration & Business Rules (Weeks 3-4) | Implement integrations with barcode scanners, customer booking systems, and supplier ordering platforms. Configure business rules for data protection, validation, and compliance tracking. |
| Phase 4: Testing & Deployment (Weeks 4-5) | Test with pilot service bay; gather feedback from technicians and managers; refine workflows; train users; scale across the entire service organization. |

## Benefits

| Stakeholder | Benefit |
|---|---|
| Garage Managers | Real-time parts inventory visibility, automated reorder management, cost optimization, compliance assurance, data-driven service scheduling. |
| Technicians | Consistent parts availability, simplified parts usage recording, mobile access to stock and job information, reduced time searching for parts. |
| Service Advisors | Automated purchase order generation, supplier performance tracking, improved customer communication regarding vehicle status. |
| Customers | Minimized vehicle downtime, increased safety from traceable parts, proactive service reminders, better service quality. |
| Organization | 15-25% reduction in parts carrying costs, 70% reduction in manual data entry, minimized service delays and emergency ordering, scalable operations. |

## Conclusion

The proposed Salesforce-based solution for **Garage Management** addresses critical operational needs through innovative technology. By automating inventory tracking, reorder processes, service scheduling, and compliance documentation, the platform maximizes **operational efficiency** while ensuring **customer satisfaction** and organizational profitability. The solution is scalable, cost-effective, and sustainable—making it a powerful tool for service organizations committed to excellence in parts management, cost optimization, and service quality.