Project Design Phase

Problem Solution Fit

Date	01-11-2025
Team ID	NM2025TMID08208
Project Name	Garage Management System

1.Introduction

The **Problem Solution Fit** outlines how the proposed **Garage Management System (GMS)** addresses the major challenges faced by automobile repair facilities. It connects identified problems with effective digital solutions and validates the project's relevance to end users, including administrators, mechanics, and customers.

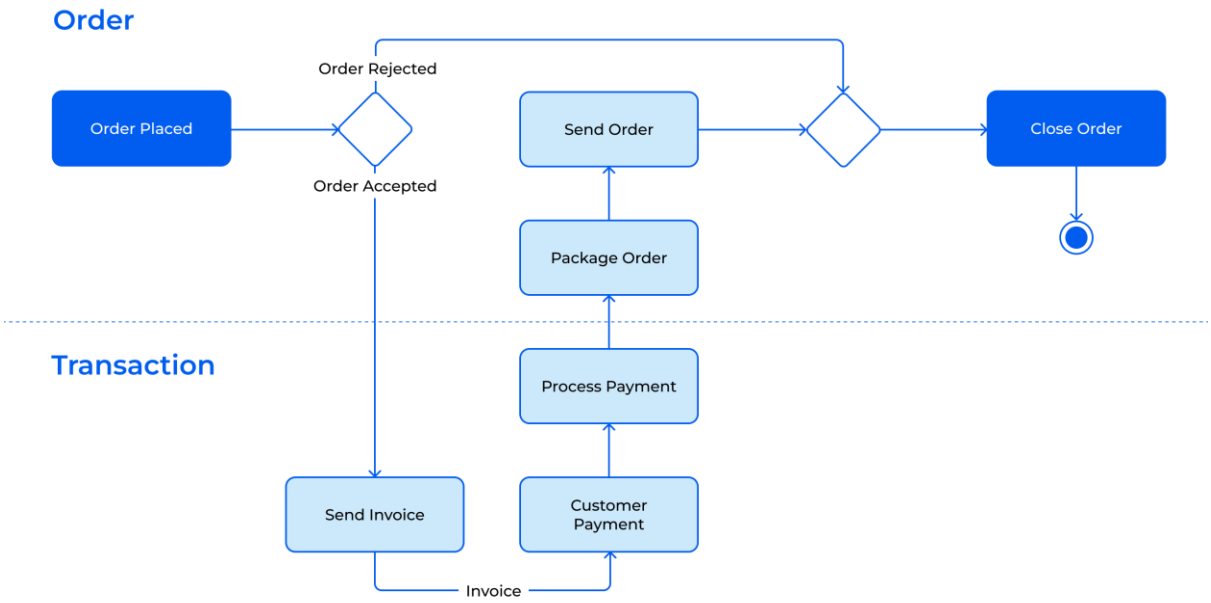
Key Objectives

- Validate that each feature of GMS solves a real operational challenge.
- Map pain points of manual garage operations to automated Salesforce functionalities.
- Ensure the system supports business efficiency, customer satisfaction, and secure data handling.

2. Problem Analysis

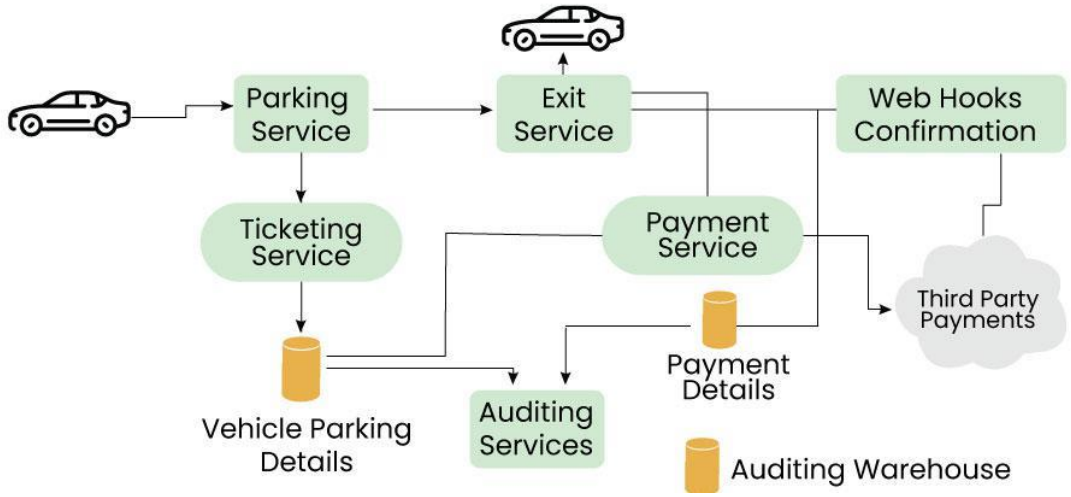
Problem Area	Impact	Current Challenges
Customer & Vehicle Records	Data confusion, time-consuming retrieval	Manual registers and spreadsheets cause duplication and errors.
Service Scheduling	Delays in job allocation and tracking	Lack of centralized system to assign mechanics or monitor progress.
Billing & Payments	Revenue loss, inaccurate calculations	Manual billing process, prone to errors and miscalculations.
Performance Monitoring	No insight into business trends	Absence of reports or dashboards for performance analysis.

Problem Area	Impact	Current Challenges
Data Security	Unauthorized data access	No defined user roles or access control in manual systems.



3. Solution Mapping

Problem	GMS Solution	Expected Outcome
Customer & Vehicle Records	Centralized Salesforce database with lookup relationships	Accurate and easily accessible records, no duplication.
Service Scheduling	Automated service requests and mechanic assignment	Efficient job allocation, reduced service delays.
Billing & Payments	Record-triggered Flows for automatic invoice generation and payment confirmation	Faster billing process with fewer errors.
Performance Monitoring	Real-time dashboards and reports (revenue, service count, mechanic performance)	Data-driven insights for better decision-making.
Data Security	Role hierarchies and sharing settings	Controlled data access ensuring safety and privacy.



4. User Scenarios Demonstrating Problem–Solution Fit

Scenario 1: Service Management Efficiency

- **Problem:** Manual tracking led to missed service updates and late deliveries.
- **Solution:** GMS automates service requests, assigns mechanics, and updates service status in real time.
- **Outcome:** Job completion time reduced by 40%, and customer satisfaction improved.

Scenario 2: Billing Accuracy

- **Problem:** Manual invoices often contained errors and inconsistencies.
- **Solution:** Automated billing flow triggers accurate invoice generation and sends confirmation emails to customers.
- **Outcome:** Billing errors reduced significantly, and payment tracking became transparent.

Scenario 3: Data Security & Access Control

- **Problem:** All employees could access sensitive customer details.
- **Solution:** Role hierarchies restrict data visibility — Admins manage all records, while Mechanics can view assigned jobs only.
- **Outcome:** Secure data handling and improved accountability among staff.

5. Alignment with Business Goals

- **Operational Efficiency:** Automation reduces manual work, ensuring faster service processing.
- **Accuracy:** Validation and duplicate rules ensure precise and error-free data entry.
- **Customer Satisfaction:** Quick services, accurate billing, and transparent updates enhance trust.
- **Security & Compliance:** Role-based access and sharing settings protect confidential information.
- **Decision-Making:** Reports and dashboards provide real-time insights into garage performance and revenue growth.