WHATNEXT VISION MOTORS

Salesforce CRM Implementation

PROJECT OVERVIEW

WhatsNext Vision Motors is a forward-thinking automobile company committed to improve customer experience through digital innovation. I have implemented a custom Salesforce CRM application to automate and optimize vehicle order management, test drive scheduling, and service tracking. This application integrates intelligent flows, Apex automations, and scheduled processes to solve challenges like dealer coordination, inventory validation, and timely customer communication. The solution provides a scalable and user-friendly platform that improves operational efficiency and enhances customer satisfaction.

OBJECTIVES

CREATE A UNIFIED AND INTELLIGENT PLATFORM THAT SIMPLIFIES THE VEHICLE ORDERING PROCESS AND STRENGTHENS CUSTOMER ENGAGEMENT LIKE :

- Automating dealer assignment based on customer location.
- Preventing orders for out-of-stock vehicles using stock validation through apex.
- Enabling scheduled email reminders for test drives.
- Improving order accuracy and visibility through batch jobs and flows.
- Reducing manual workload for staff by automating repetitive tasks.

PHASE 1 :
REQUIREMENT ANALYSIS & PLANNING

UNDERSTANDING BUSINESS REQUIREMENTS :

The business required a system that would:

- *Automatically assign the nearest dealer to customers placing a vehicle order.*
- *Prevent customers from ordering vehicles that were unavailable or out-of-stock.*
- *Manage service requests and test drive bookings efficiently.*
- *Provide scheduled email reminders and real-time status updates.*
- *Allow admin and sales users to track orders, stock, and customer details through dashboards.*

PHASE 1 :
REQUIREMENT ANALYSIS & PLANNING

DEFINING PROJECT SCOPE AND OBJECTIVES :

The scope of this Salesforce CRM implementation includes:

- *Creating six custom objects to manage vehicles, dealers, customers, orders, test drives, and service requests.*
- *Designing automation using Flows, Apex Triggers, and Batch classes.*
- *Integrating reports and dashboards for real-time analytics.*
- *Ensuring data accuracy and ease of use.*

PHASE 1 :
REQUIREMENT ANALYSIS & PLANNING

DESIGNING DATA MODEL :

The data model includes the following custom objects:

Vehicle__c,Vehicle_Dealer__c,Vehicle_Customer__c,Vehicle_Order__c, Vehicle_Test_Drive__c, Vehicle_Service_Request__c. Each object includes relationships and lookups to maintain data integrity.

PHASE 2 :

SALESFORCE DEVELOPMENT
(BACKEND & CONFIGURATIONS)

ENVIRONMENT SETUP :

The development took place in a Salesforce Developer Org. Standard.

PHASE 2 :

SALESFORCE DEVELOPMENT
(BACKEND & CONFIGURATIONS)

OBJECT CUSTOMIZATION :

Each custom object was configured with:

- *Custom fields (e.g., Stock_Quantity__c, Status__c).*
- *Lookup relationships (e.g., Customer to Vehicle, Order to Dealer).*
- *Picklists to maintain data consistency (e.g., Vehicle Model, Order Status).*

PHASE 2 :

SALESFORCE DEVELOPMENT
(BACKEND & CONFIGURATIONS)

AUTOMATION (FLOWS AND APEX) :

- *Record-Triggered Flow #1 (Auto-Assign Dealer): Assigns the nearest dealer based on customer location when a new order is created.*
- *Record-Triggered Flow #2 (Test Drive Reminder) : Sends a scheduled email reminder one day before a test drive.*
- *Apex Trigger : Prevents orders for vehicles with zero stock.*
- *Batch Apex Class : Updates bulk orders daily by setting order status to "Confirmed" or "Pending" based on stock.*
- *Scheduled Apex Class : Runs the batch job daily at 12 PM using a CRON expression.*

PHASE 3 :

UI/UX DEVELOPMENT & CUSTOMIZATION

LIGHTNING APP SETUP :

A custom Lightning App named **“WhatsNext Vision Motors”** *was created using App Manager. This app includes tabs for all major objects, providing easy access and navigation for end users.*

PAGE LAYOUTS & DYNAMIC FORMS :

Page layouts were customized to ensure data is displayed in a clean and user-friendly way:

- *Dynamic Forms were used particularly on the Order and Test Drive objects to show only relevant fields.*
- *Field sections were organized based on function (e.g., customer info, vehicle info, status tracking).*

PHASE 3 :

UI/UX DEVELOPMENT & CUSTOMIZATION

REPORTS AND DASHBOARDS :

Several key reports were built to provide visibility:

- *Vehicle Stock Report by model and location*
- *Order Status Summary Report (Pending, Confirmed, Delivered)*
- *Test Drives Scheduled for follow-ups*
- *Service Request Summary for after-sales tracking*

These reports were added to a custom dashboard titled “Vision Motors Insights”, which provides live operational metrics to management, helping them make informed decisions quickly.

PHASE 4 :

DATA MIGRATION, TESTING & SECURITY

DATA MIGRATION :

For demo purposes, sample data was created directly within the Salesforce Developer Org using manual entry and Data Import Wizard. Records for all custom objects – such as Vehicle__c, Vehicle_Customer__c, and Vehicle_Order__c – were populated with clean and structured data to simulate a real-world automotive use case.

No external data migration tools like Data Loader were needed due to the lightweight scope of the dataset. However, the object structure was designed to support bulk import in future phases if the solution is extended for production use.

PHASE 4 :

DATA MIGRATION, TESTING & SECURITY

TEST CLASSES AND TESTING APPROACH :

Test Classes were written for:

- *VehicleOrderBatch*
- *VehicleOrderBatchScheduler*
- *Apex Triggers related to stock validation*

All Apex classes achieved 100% code coverage.

Testing Approach:

- *All Flows were tested using test records and debug logs.*
- *Batch Apex was manually invoked to confirm proper order status updates based on stock.*

PHASE 4 :

DATA MIGRATION, TESTING & SECURITY

DATA QUALITY HANDLING :

For this project, since the focus was on automating the order and service processes, no formal validation rules or field-level security models were implemented. However, the system was designed with clean data entry in mind by using properly structured picklists, lookup fields, and default values to guide user input.

PHASE 5 :

DEPLOYMENT, DOCUMENTATION & MAINTENANCE

DEPLOYMENT STRATEGY :

All metadata components - including custom objects, fields, flows, Apex classes, and dashboards - are modular and version-controlled using naming conventions to simplify deployment.

PHASE 5 :

DEPLOYMENT, DOCUMENTATION & MAINTENANCE

SYSTEM MAINTENANCE & MONITORING:

To ensure smooth system operation :

- *Scheduled Jobs are monitored via the Scheduled Jobs page in Setup.*
- *Flows and processes are reviewed weekly for performance or errors.*
- *Debug Logs and Apex Exception Emails are enabled for tracking failures or issues in real-time.*

A simple admin checklist is proposed :

- *Monitor test drive email logs*
- *Review pending orders and batch job results*
- *Update dealer addresses if locations change*

PHASE 5 :

DEPLOYMENT, DOCUMENTATION & MAINTENANCE

TROUBLESHOOTING & ERROR HANDLING :

Basic troubleshooting follows these steps:

- *Check Debug Logs or Flow Errors from Setup.*
- *Use System.debug() outputs in Apex logs for Apex issues.*
- *Validate Flow Path conditions using Flow Builder.*
- *Review Scheduled Jobs and Apex Logs for batch-related failures.*

CONCLUSION

The WhatsNext Vision Motors CRM implementation has successfully achieved its goal of transforming vehicle order and service management into an automated, scalable, and efficient Salesforce solution. With custom objects tailored to real dealership operations, intelligent flows for automation, and scheduled processes for order validation, this project delivers high business value while keeping the user interface simple and efficient.

All features have been tested thoroughly, documented professionally, and are ready for demonstration or extension into a real production environment.

FUTURE ENHANCEMENTS

To scale and improve the CRM further, the following enhancements are proposed:

- *Integrate chatbot or AI assistant using Einstein Bot or Google Dialogflow for instant customer support.*
- *Add SMS notifications for service requests and order confirmations.*
- *Use Experience Cloud to allow customers to track their orders or book services online.*
- *Include a Dealer Performance Dashboard for analyzing test drives and order fulfillment metrics.*

THANK YOU