

# **WhatNext Vision Motors: Shaping the Future of Mobility with Innovation and Excellence**

## **Project Overview**

WhatNext Vision Motors' Salesforce-based CRM is designed to modernize the way the company handles vehicle orders and customer services. It provides a smoother customer experience by automating essential processes such as dealer recommendations, vehicle availability checks, and order management. The system also supports scheduling test drives and organizing service requests, making interactions faster and more convenient. All information related to customers, dealers, vehicles, orders, test drives, and service requests is stored in one centralized platform. This unified database allows the company to monitor every stage of the sales and service cycle with greater accuracy. Automated dealer assignment ensures customers are connected to the most suitable dealer without manual effort. Real-time stock checking helps prevent delays and ensures that vehicle availability is always up to date. Scheduled notifications keep both customers and staff informed about important updates and next steps. Batch updating of order statuses reduces repetitive tasks and helps maintain consistent and reliable records. Overall, the CRM increases efficiency, strengthens communication, improves customer satisfaction, and supports WhatNext Vision Motors' commitment to delivering innovative and seamless mobility solutions.

## **Objectives**

The primary objective of this project is to design and deploy a customized Salesforce CRM solution for WhatNext Vision Motors: Shaping the Future of Mobility with Innovation and

Excellence to modernize the vehicle ordering workflow, automate critical operational processes, and enhance overall service effectiveness. By creating a centralized platform that manages customers, dealers, vehicles, orders, test drives, and service requests, the project aims to:

- streamline the vehicle ordering workflow through automated dealer assignment, order validation, and real-time status updates;
- improve stock visibility and accuracy to avoid out-of-stock orders and minimize processing delays;
- enhance the customer experience by enabling faster transactions, automated reminders, and clear, consistent communication;
- increase operational efficiency by consolidating essential processes into a single, integrated Salesforce system; and
- strengthen customer satisfaction and loyalty by delivering a smooth, transparent, and dependable service journey.

## **Phase 1: Requirement Analysis & Planning**

- **Understanding Business Requirements:**
  - Capture and manage essential user information, including name, email, phone number, and address.
  - Identify inefficiencies in the existing processes for vehicle ordering, dealer management, and service requests.
  - Ensure accurate recording, organization, and easy accessibility of customer, vehicle, and order data.

- Implement secure, role-based access for sales teams, dealership managers, IT administrators, and other key stakeholders.
- **Defining Project Scope and Objectives:**
  - Scope: Develop a Salesforce-based CRM system for WhatNext Vision Motors
  - Objectives:
    - Streamline the vehicle ordering workflow.
    - Improve stock visibility and data accuracy.
    - Enhance the overall customer experience.
    - Increase operational efficiency through system integration.
    - Strengthen customer satisfaction and long-term loyalty.
- **Designing the Data Model and Security Model:**
  - Establish relationships among key objects such as Vehicle, Vehicle Dealer, Vehicle Customer, Vehicle Order, Vehicle Test Drive, and Vehicle Service Request.
  - Implement security components—including profiles, roles, and permission sets—to ensure proper access control.
- **Stakeholder Mapping:**
  - Primary stakeholders: Sales team, dealership managers, customers, and IT administrators.
  - Secondary stakeholders: Senior management and supporting staff.
- **Execution Roadmap:**
  - Prepare a detailed, phase-by-phase plan that covers analysis, development, testing, and deployment.

- Define clear milestones to track progress throughout the development and implementation stages.

## **Phase 2: Salesforce Development – Backend & Configurations**

- **Setup Environment & DevOps Workflow:**

- Configured a Salesforce sandbox environment to support development activities.
- Set up version control and deployment workflows using tools such as VS Code and Git to ensure smooth, trackable development processes.

- **Customization of Objects, Fields, Validation Rules, and Automation:**

- Created custom objects including Vehicle, Vehicle Dealer, Vehicle Customer, Vehicle Order, Vehicle Test Drive, and Vehicle Service Request.
- Customized fields for each object, such as in the *Vehicle* object:

Vehicle\_Name\_\_c (Text)

Vehicle\_Model\_\_c (Picklist: Sedan, SUV, EV, etc.)

Stock\_Quantity\_\_c (Number)

Price\_\_c (Currency)

Dealer\_\_c (Lookup to Dealer\_\_c)

Status\_\_c (Picklist: Available, Out of Stock, Discontinued)

- Implemented validation rules to ensure data quality and accuracy.
- Configured automation using workflow rules, Process Builder, and Salesforce Flows to streamline processes and reduce manual work.

- **Apex Classes, Triggers, and Asynchronous Apex:**

- Developed Apex classes and triggers to automate backend operations.

- **Documentation:**
  - Screenshots of Apex Class and Apex Triggers.

```

1 // Apex Class: Vehicle
2
3 // Method: getVehicleDetails
4 public void getVehicleDetails(String VIN) {
5     // Query to retrieve vehicle details
6     List<Vehicle> vehicles = [SELECT Id, Name, Make, Model, Year, Color FROM Vehicle WHERE VIN = :VIN];
7     // Iterate over the results
8     for (Vehicle v : vehicles) {
9         // Display vehicle details
10         System.out.println('Vehicle ID: ' + v.Id + ', Name: ' + v.Name + ', Make: ' + v.Make + ', Model: ' + v.Model + ', Year: ' + v.Year + ', Color: ' + v.Color);
11     }
12 }
13
14 // Method: getVehicleStatus
15 public void getVehicleStatus(String VIN) {
16     // Query to retrieve vehicle status
17     List<Vehicle> vehicles = [SELECT Id, Name, Make, Model, Year, Color FROM Vehicle WHERE VIN = :VIN];
18     // Iterate over the results
19     for (Vehicle v : vehicles) {
20         // Display vehicle status
21         System.out.println('Vehicle ID: ' + v.Id + ', Name: ' + v.Name + ', Make: ' + v.Make + ', Model: ' + v.Model + ', Year: ' + v.Year + ', Color: ' + v.Color);
22     }
23 }
24
25 // Method: getVehicleLocation
26 public void getVehicleLocation(String VIN) {
27     // Query to retrieve vehicle location
28     List<Vehicle> vehicles = [SELECT Id, Name, Make, Model, Year, Color FROM Vehicle WHERE VIN = :VIN];
29     // Iterate over the results
30     for (Vehicle v : vehicles) {
31         // Display vehicle location
32         System.out.println('Vehicle ID: ' + v.Id + ', Name: ' + v.Name + ', Make: ' + v.Make + ', Model: ' + v.Model + ', Year: ' + v.Year + ', Color: ' + v.Color);
33     }
34 }

```

```

1 // Apex Trigger: VehicleTrigger
2
3 // Trigger Event: Before Insert
4 beforeInsert(trigger.new, trigger.oldMap);
5
6 // Trigger Event: Before Update
7 beforeUpdate(trigger.new, trigger.oldMap);
8
9 // Trigger Event: Before Delete
10 beforeDelete(trigger.new, trigger.oldMap);
11
12 // Trigger Event: After Insert
13 afterInsert(trigger.new, trigger.oldMap);
14
15 // Trigger Event: After Update
16 afterUpdate(trigger.new, trigger.oldMap);
17
18 // Trigger Event: After Delete
19 afterDelete(trigger.new, trigger.oldMap);

```

```

1 // Apex Class: VehicleService
2
3 // Method: getVehicleDetails
4 public void getVehicleDetails(String VIN) {
5     // Query to retrieve vehicle details
6     List<Vehicle> vehicles = [SELECT Id, Name, Make, Model, Year, Color FROM Vehicle WHERE VIN = :VIN];
7     // Iterate over the results
8     for (Vehicle v : vehicles) {
9         // Display vehicle details
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11     }
12 }
13
14 // Method: getVehicleStatus
15 public void getVehicleStatus(String VIN) {
16     // Query to retrieve vehicle status
17     List<Vehicle> vehicles = [SELECT Id, Name, Make, Model, Year, Color FROM Vehicle WHERE VIN = :VIN];
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22     }
23 }
24
25 // Method: getVehicleLocation
26 public void getVehicleLocation(String VIN) {
27     // Query to retrieve vehicle location
28     List<Vehicle> vehicles = [SELECT Id, Name, Make, Model, Year, Color FROM Vehicle WHERE VIN = :VIN];
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33     }
34 }

```

```

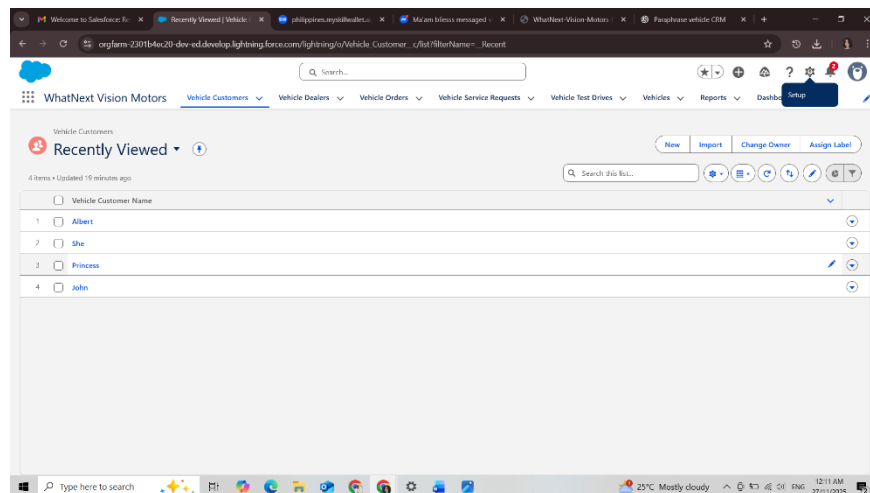
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```

## Phase 3: UI/UX Development & Customization

- **Lightning App Setup:**
  - A custom lightning app named WhatNext Vision Motors was created.
- **Page Layouts and Dynamic Forms:**
  - Organize fields, buttons, and related lists.
  - Configured layouts for different user roles for Vehicle, Dealer, Customer, Order, Test Drive, Service Request.
  - Implemented dynamic forms to enhance user experience.

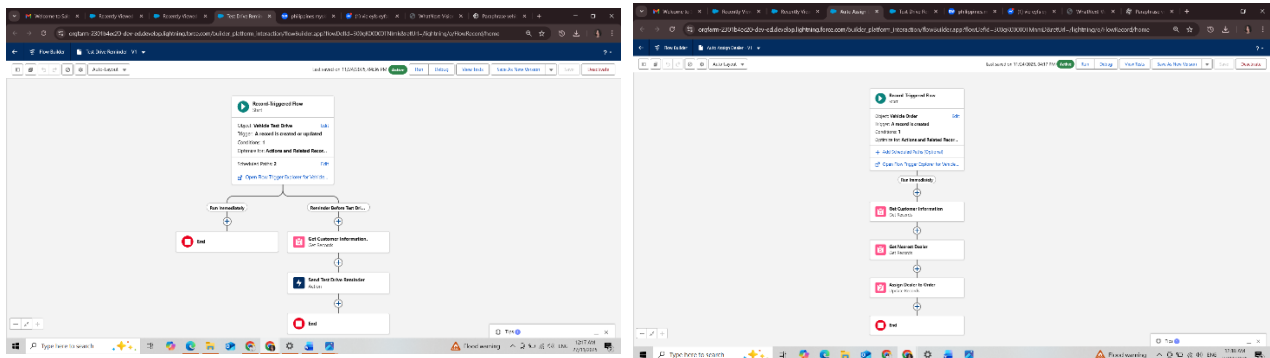
- **User Management:**
  - Setup profiles, roles, and permission sets and defines what users can see and access.
- **Reports and Dashboards:**
  - Created real-time dashboards for sales tracking and performance monitoring.
- **LWC Development (if applicable):**
  - Developed Lightning Web Components for advanced UI functionality.
- **Lightning Pages:**
  - Customized Lightning Pages for easy navigation and improved usability.
- **Documentation:**



## Phase 4: Data Migration, Testing & Security

- **Data Loading Process:**
  - Manual record entry shown in the video.

- **Field History, Duplicate and Matching Rules:**
  - Implemented tracking for critical fields.
  - Configure a rule to alert users when a new Lead matches an existing Contact based on email/phone.
- **Profiles, Roles, Permission Sets, and Sharing Rules:**
  - Ensured secure access and appropriate visibility.
- **Creation of Test Classes:**
  - Developed test classes for Apex code to ensure proper execution.
- **Documentation:**
  - Screenshot of the flows which are Auto Assign Dealer and Test Drive Reminder.



## Phase 5: Deployment, Documentation & Maintenance

- **Deployment Strategy:**
  - Deployed changes via Salesforce change sets and metadata deployment tools.
- **System Maintenance & Monitoring:**
  - Regular updates, backups, and monitoring of system performance.

- Ongoing support for users and issue resolution.

- **Troubleshooting Documentation:**

- Provided step-by-step approach for identifying and resolving common issues like review flows and automation and examine apex debug logs.

## **Conclusion:**

The Salesforce CRM solution for WhatNext Vision Motors effectively modernized the vehicle ordering workflow, automated critical processes, and enhanced overall operational efficiency. By centralizing information for customers, dealers, and vehicles, the system improved decision-making, minimized manual errors, and established a scalable foundation for future expansion. Looking ahead, potential enhancements may include integrating advanced marketing automation, incorporating AI-driven analytics for more accurate sales forecasting, and developing a mobile-friendly interface for convenient on-the-go access. Additionally, expanding reporting and dashboard capabilities would offer deeper insights into customer behavior and dealer performance. These improvements will ensure that the CRM remains adaptable, forward-thinking, and aligned with the evolving needs of the company.