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

1. Abstract

WhatNext Vision Motors is spearheading a strategic digital transformation through a Salesforce-powered CRM solution, tailored to redefine customer engagement and operational agility in the automotive sector. The project aims to automate critical business workflows such as vehicle ordering, stock management, dealer allocation, and test drive scheduling. By leveraging the Salesforce Lightning platform, this initiative introduces intelligent, low-code automation to streamline operations and elevate the end-user experience.

2. Project Objectives

- Streamline the end-to-end customer vehicle ordering process.
- Dynamically assign the nearest authorized dealer based on customer geolocation.
- Prevent order creation for vehicles that are currently out-of-stock.
- Automatically update order statuses based on real-time inventory data.
- Enable scheduled customer communications such as test drive reminders.
- Minimize manual interventions to improve productivity and operational efficiency.

3. Technology Stack & Implementation Framework

- Platform: Salesforce Lightning Experience
- Tools & Technologies:
  - Custom Objects and Schema Builder for Data Modeling
  - Record-Triggered and Scheduled Flows for Automation
  - Lightning App Builder for modular UI design
  - Apex Triggers and Batch Apex for business logic execution
  - Reports & Dashboards for real-time insights
- Project Complexity: Medium to High
- Estimated Duration: 25+ hours across multiple sprints

4. Implementation Phases

Phase 1: Requirement Gathering & Planning
- Business Analysis: Identified pain points in dealer assignment, stock validation, and test drive coordination.
- Scope Definition: Aligned CRM goals with business KPIs.
- Data & Security Modeling: Designed ER diagrams and defined access controls via profiles and permission sets.

Phase 2: Backend Configuration & Apex Development
- Custom Object Creation: Vehicle, Dealer, Order, Test Drive
- Field Customization: Implemented key fields such as Stock Quantity, Location, Availability Status
- Validation Rules: Enforced order restrictions based on inventory status
- Automation:
  - Flows: Assigned nearest dealer via record-triggered flow
  - Scheduled Flows: Periodically updated order statuses based on stock
  - Email Alerts: Automated reminder notifications for test drives
- Apex Programming:
  - Trigger Handler for modular dealer assignment and stock verification
  - Batch Apex to update stock levels and notify stakeholders
  - Scheduled Apex for periodic execution of business logic

Phase 3: UI/UX Customization
- Lightning App Configuration: Custom App named 'WhatNext CRM'
- Dynamic Forms: Implemented conditional visibility for fields on Vehicle and Order objects
- Page Layouts: Customized layouts based on user roles
- Reports & Dashboards:
  - Vehicle Inventory Overview
  - Dealer Assignment Logs
  - Customer Order Pipeline

Phase 4: Data Migration, Testing & Security Hardening
- Data Loading: Imported legacy data using Data Loader
- Data Integrity Measures: Duplicate Rules, Matching Rules, Field History Tracking
- Security Setup: Applied Role Hierarchies, Sharing Rules, and Field-Level Security
- Testing Protocols:
  - Developed unit test classes with >90% code coverage
  - Executed functional test cases for automation flows, triggers, and reporting components

Phase 5: Deployment Strategy & Post-Implementation Support
- Deployment: Executed via Change Sets and Post-Deployment Validation
- Maintenance & Monitoring:
  - Scheduled jobs monitored via Apex Job Dashboard
  - Debug Logs configured for proactive error tracking
- Documentation:
  - Metadata catalog of Flows, Triggers, Reports
  - Internal Wiki for future knowledge transfer

5. Real-World Use Case Demonstrations

Scenario: Customer in San Jose places an order
Expected Behavior: Nearest dealer in San Jose is automatically assigned

Scenario: Ordered vehicle is out of stock
Expected Behavior: System sets status to 'Pending' and blocks order submission

Scenario: Test drive scheduled for a customer
Expected Behavior: Reminder email dispatched 24 hours before appointment

Screen Shots :

orgfarm-7871cb15c2-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Order__c/list?filterName=__Recent

Home   Trailmix   slack   Skill wallet   Grep   Gmail   slack-

WhatNext Vision M...

Search...

Vehicle Customers | Vehicle Dealers | Vehicle Orders | Vehicle Test Drives | Vehicle_Service Requests | Vehicles | Reports | More

Vehicle Orders
Recently Viewed

3 items • Updated a few seconds ago

New | Import | Change Owner | Assign Label

Search this list...

		Vehicle Order Number	
1		O-0004	
2		O-0003	
3		O-0002	

https://orgfarm-7871cb15c2-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Order__c/home

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Vehicle Test Drives
Recently Viewed

2 items • Updated a few seconds ago

New | Import | Change Owner | Assign Label

Search this list...

		Vehicle Test Drive Name	
1		abcd	
2		xyz	

https://orgfarm-7871cb15c2-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Test_Drive__c/home

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Vehicles
Recently Viewed

New   Import   Change Owner   Assign Label

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Search this list...

		Vehicle Name
1	☐	Benz
2	☐	Discover
3	☐	Honda

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Search Setup

Setup   Home   Object Manager

SETUP
Object Manager

6 Items, Sorted by Label

vehicle   Schema Builder   Create

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED	
Vehicle	Vehicle__c	Custom Object		7/29/2025	✓	▼
Vehicle Customer	Vehicle_Customer__c	Custom Object		7/29/2025	✓	▼
Vehicle Dealer	Vehicle_Dealer__c	Custom Object		7/29/2025	✓	▼
Vehicle Order	Vehicle_Order__c	Custom Object		7/29/2025	✓	▼
Vehicle Service Request	Vehicle_Service_Request__c	Custom Object		7/29/2025	✓	▼
Vehicle Test Drive	Vehicle_Test_Drive__c	Custom Object		7/29/2025	✓	▼

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Vehicle

Fields & Relationships
9 Items, Sorted by Field Label

Quick Find | New | Deleted Fields | Field Dependencies | Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Price	Price__c	Currency(18, 0)		
Status	Status__c	Picklist		
Stock Quantity	Stock_Quantity__c	Number(18, 0)		
Vehicle Dealer	Vehicle_Dealer__c	Lookup(Vehicle Dealer)		✓
Vehicle Model	Vehicle_Model__c	Picklist		
Vehicle Name	Name	Text(80)		✓

Sidebar menu:
- Details
- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

Vehicle Customer

Fields & Relationships
8 Items, Sorted by Field Label

Quick Find | New | Deleted Fields | Field Dependencies | Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text(60)		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Prefered Vehicle Type	Prefered_Vehicle_Type__c	Picklist		
Vehicle Customer Name	Name	Text(80)		✓

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Fields & Relationships
8 Items, Sorted by Field Label

Quick Find | New | Deleted Fields | Field Dependencies | Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Dealer Code	Dealer_Code__c	Auto Number		
Dealer Location	Dealer_Location__c	Text(60)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Vehicle Dealer Name	Name	Text(80)		✓

Details
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Page Layouts
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Buttons, Links, and Actions
Compact Layouts
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Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout

Fields & Relationships
10 Items, Sorted by Field Label

Quick Find | New | Deleted Fields | Field Dependencies | Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Assigned Dealer	Assigned_Dealer__c	Lookup(Vehicle Dealer)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Order Date	Order_Date__c	Date		
Owner	OwnerId	Lookup(User,Group)		✓
Status	Status__c	Picklist		
Vehicle	Vehicle__c	Lookup(Vehicle)		✓
Vehicle Customer	Vehicle_Customer__c	Lookup(Vehicle Customer)		✓
Vehicle Order Name	Vehicle_Order_Name__c	Text(16)		
Vehicle Order Number	Name	Auto Number		✓

Details
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Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Object Access

Search Setup

Setup — Home — Object Manager

SETUP > OBJECT MANAGER
Vehicle Service Request

Fields & Relationships
9 Items, Sorted by Field Label

Quick Find — New — Deleted Fields — Field Dependencies — Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedById	Lookup(User)			
Issue Description	Issue_Description__c	Text(60)			▼
Last Modified By	LastModifiedById	Lookup(User)			
Owner	OwnerId	Lookup(User,Group)		✓	
Service Date	Service_Date__c	Date			▼
Status	Status__c	Picklist			▼
Vehicle	Vehicle__c	Lookup(Vehicle)		✓	▼
Vehicle Customer	Vehicle_Customer__c	Lookup(Vehicle Customer)		✓	▼
Vehicle Service Request Name	Name	Text(80)		✓	▼

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Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules

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Search Setup

Setup — Home — Object Manager

SETUP > OBJECT MANAGER
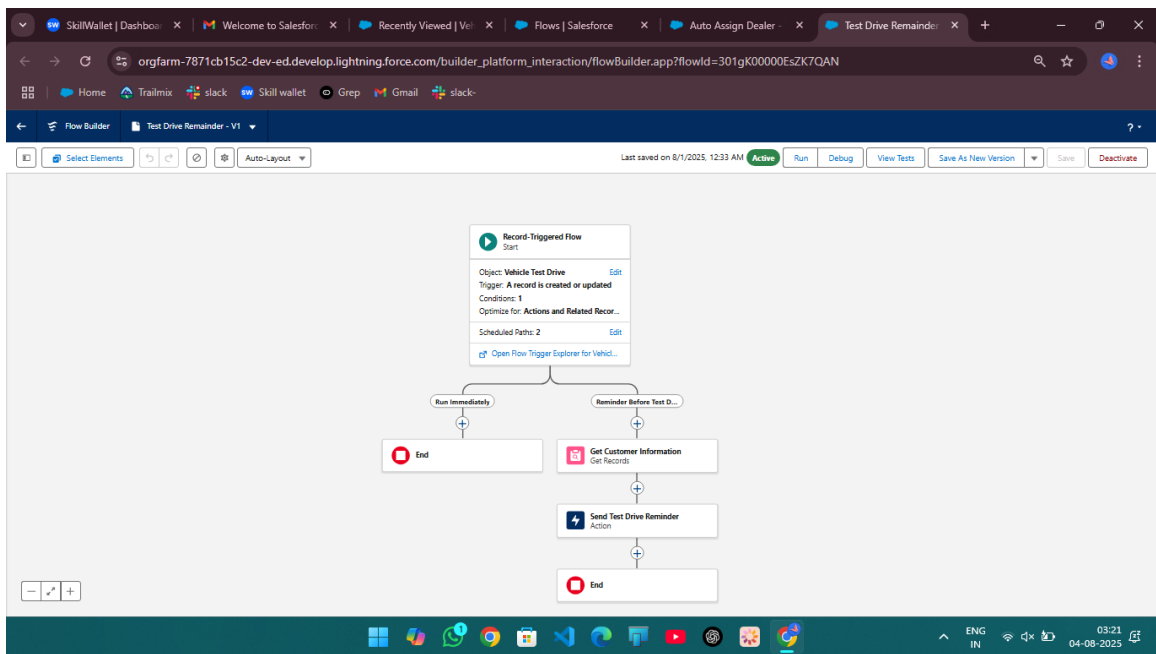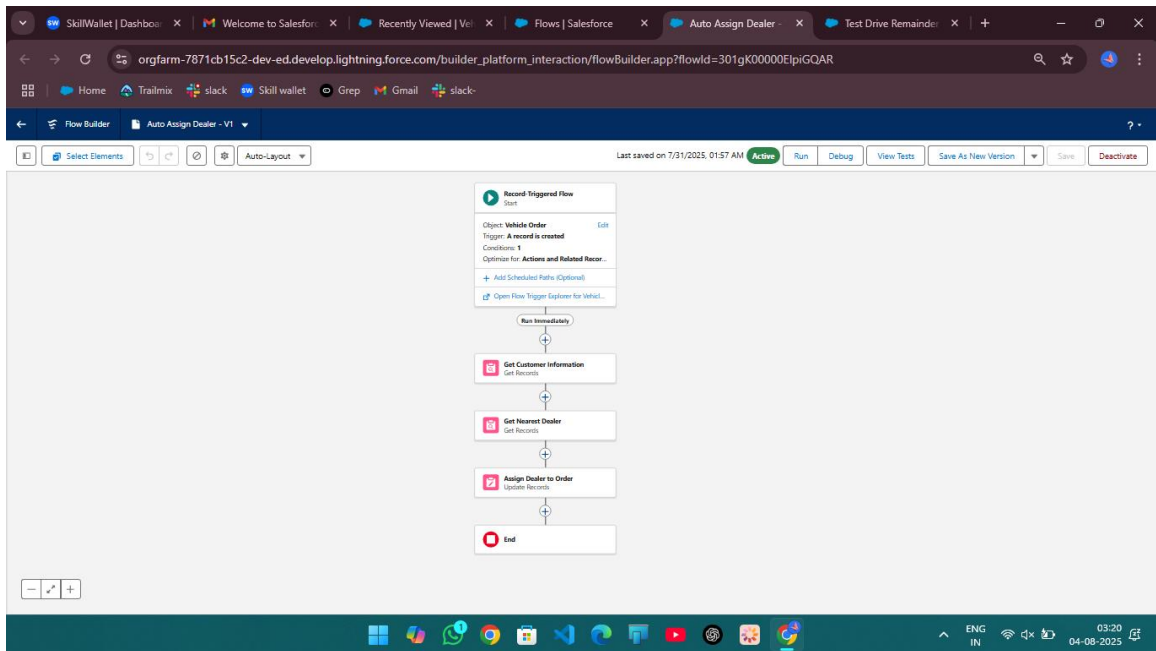**Vehicle Test Drive**

Fields & Relationships
8 Items, Sorted by Field Label

Quick Find — New — Deleted Fields — Field Dependencies — Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedById	Lookup(User)			
Last Modified By	LastModifiedById	Lookup(User)			
Owner	OwnerId	Lookup(User,Group)		✓	
Status	Status__c	Picklist			▼
Test Drive Date	Test_Drive_Date__c	Date			▼
Vehicle	Vehicle__c	Lookup(Vehicle)		✓	▼
Vehicle Customer	Vehicle_Customer__c	Lookup(Vehicle Customer)		✓	▼
Vehicle Test Drive Name	Name	Text(80)		✓	▼

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6. Future Roadmap

- AI-Driven Dealer and Vehicle Recommendations
- Salesforce Mobile App Integration for field agents
- Chatbot Enablement via Einstein Bots for customer queries

- Predictive Analytics for Inventory Forecasting
- Automated Feedback Capture and Sentiment Analysis

7. Conclusion

The Salesforce CRM deployment at WhatNext Vision Motors delivers a high-impact, scalable, and intelligent system that seamlessly integrates backend logic with a user-centric interface. This initiative not only enhances real-time operational transparency but also strengthens customer trust and business responsiveness. By embedding automation at the core of the order lifecycle, the solution positions the organization for long-term digital agility.