VEHICLE VAULT APP

Loaner Vehicle and Inventory Management Project

ServiceNow Application Proposal

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Executive Summary

Current Challenges

- Manual vehicle request process causing delays
- No centralized inventory tracking system
- Inefficient paper-based approval workflows
- Limited visibility into vehicle availability
- No standardized maintenance tracking

Proposed Solution

- Automated ServiceNow application
- Digital vehicle request workflow
- Centralized inventory management
- Automated approval processes
- Maintenance tracking system
- Service portal integration

Key Benefits

Efficiency

Reduce request fulfillment time by 70%

Visibility

100% real-time fleet status transparency

Compliance

Standardized maintenance documentation

Business Challenge

Contractors require timely access to loaner vehicles to perform their day-to-day activities. The current manual process creates significant operational challenges:

Process Delays
Manual request processing takes 2-3 days, creating work stoppages and contractor idle time

Inventory Challenges
No centralized inventory system leads to 30% of vehicles being unaccounted for at any time

Approval Bottlenecks
Paper- based approvals frequently get lost or delayed in transit between departments

Maintenance Tracking
Vehicle maintenance history is inconsistently tracked, creating safety and compliance risks.

Business Impact
These process inefficiencies result in an estimated $350,000 annual productivity loss and decreased customer satisfaction across contractor teams.

Solution Overview

A comprehensive ServiceNow application that automates and streamlines the entire loaner vehicle lifecycle from request to return.

Phase 1

Application Foundation

- Vehicle inventory database
- Request workflow automation
- Service portal integration
- Approval processes
- Vehicle tracker system

Phase 2

Return Process

- Vehicle return workflow
- Condition assessment
- Automated status updates
- Repair process integration
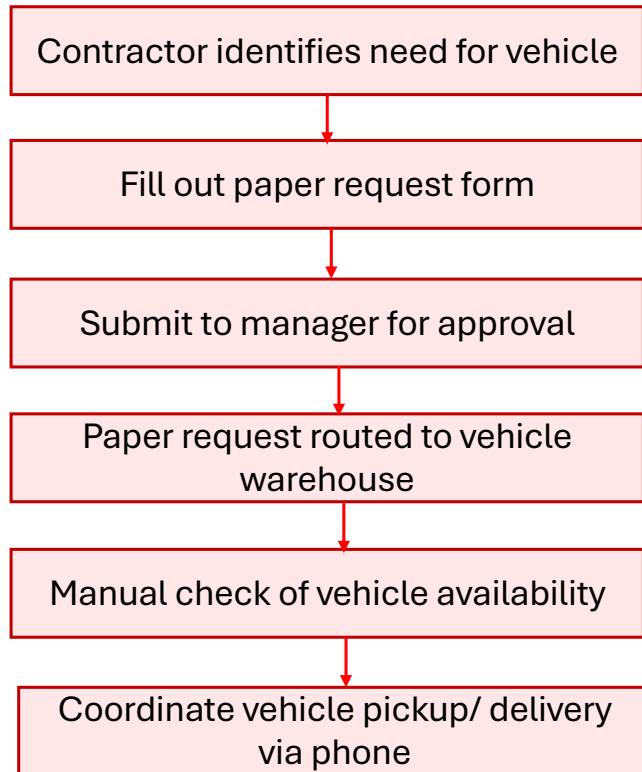- Email notifications

Phase 3

Maintenance Process

- Servicing records
- Maintenance workflow
- Issue documentation
- Status tracking
- Decision automation

Key Outcomes

- ☑ Reduced request processing time by 70%
- ☑ 100% vehicle inventory visibility
- ☑ Standardized approval procedures
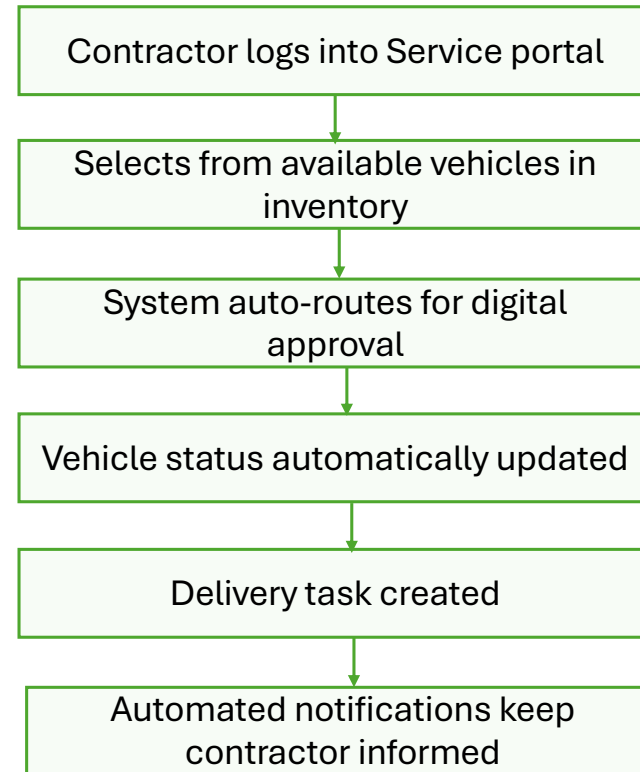- ☑ Comprehensive maintenance records

Process Flow: Current vs. Future

Current Process

Contractor identifies need for vehicle

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Fill out paper request form

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Submit to manager for approval

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Paper request routed to vehicle warehouse

↓

Manual check of vehicle availability

↓

Coordinate vehicle pickup/ delivery via phone

Average completion time 2-3 days

Future Process

Contractor logs into Service portal

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Selects from available vehicles in inventory

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System auto-routes for digital approval

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Vehicle status automatically updated

↓

Delivery task created
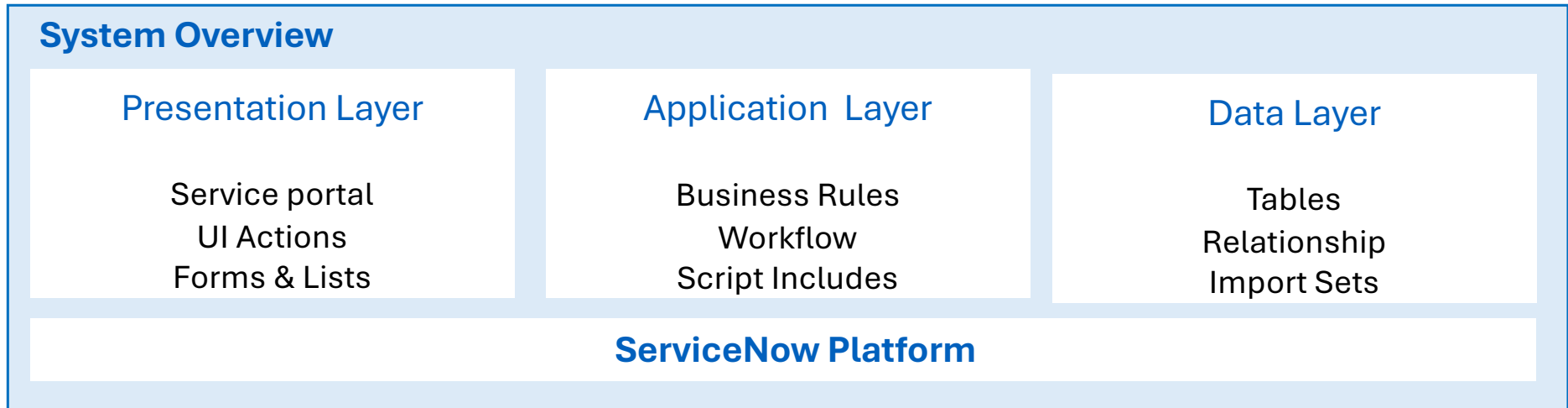
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Automated notifications keep contractor informed

Average completion time 4-6 hours

Key Improvements

☑ Reduced processing time from days to hours

☑ Automated availability time

☑ Eliminated paper-based processes

☑ Streamlined approval workflows

Data Model

System Overview

Presentation Layer

Service portal
UI Actions
Forms & Lists

Application Layer

Business Rules
Workflow
Script Includes

Data Layer

Tables
Relationship
Import Sets

ServiceNow Platform
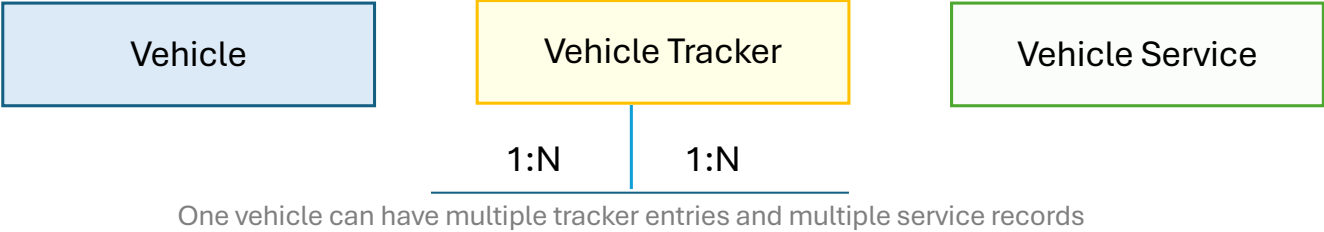
ServiceNow Components

Component	Purpose
Flow Designer	Automated workflows for request, approval and return processes
Service Portal	User-friendly interface for vehicle requests and inventory management
Service Catalog	Catalog items for vehicle requests with variables
Notifications	Email and mobile notifications for status updates
Access Control	Role-based access for different user types

Technical Architecture

Core Tables & Relationships

Vehicle [x_vehicle]

sys_id	GUID (Primary Key)
vehicle_number	String (Unique)
make	String
model	String
year	Integer
status	Choice (Available, Unavailable, Maintenance)
location	Reference (cmn_location)

Vehicle Tracker [x_vehicle_tracker]

sys_id	GUID (Primary Key)
vehicle	Reference (x_vehicle)
requestor	Reference (sys_user)
start_date	Date
end_date	Date
location	Reference (cmn_location)
request	Reference (sc_request)

Vehicle Service [x_vehicle_service]

sys_id	GUID (Primary Key)
vehicle	Reference (x_vehicle)
issue	String
service_date	Date
resolution	String
status	Choice (Open, In Progress, Complete)

Catalog Item [sc_cat_item]

sys_id	GUID (Primary Key)
name	Vehicle Request
variables	Vehicle, Dates, Location, Delivery Info
workflow	Reference (wf_workflow)

Entity Relationship Diagram

Vehicle	Vehicle Tracker	Vehicle Service

1:N   1:N

One vehicle can have multiple tracker entries and multiple service records

Project Timeline

Development Schedule

Month 1	Month 2	Month 3

Phase 1: MVP

Sprint 1 (Weeks 1-2)
- Application scope
- Update set
- Table creation
- Import set

Sprint 2 (Weeks 3-4)
- Application menu
- Related lists
- UI policy & action
- Catalog item

Phase 2: Return Process

Sprint 3 (Weeks 5-6)
- Process automation
- Client scripts
- Script includes

Sprint 4 (Weeks 7-8)
- Access Control Rules
- Email notifications
- Testing & feedback

Phase 3: Maintenance

Sprint 5 (Weeks 9-10)
- Business rules
- Service portal
- User acceptance

Key Milestones

Phase 1 Complete

Foundation & Request Process

Phase 2 Complete

Return Process & Automation

Phase 3 Complete

Maintenance & Final Delivery

Key Performance Metrics

Request Processing Time

Current: | 2-3 days
Target: | 4-6 hours

Reduce request processing time by 70%

Inventory Visibility

Current: | 30%
Target: | 100%

Track 100% of fleet in real-time

User Satisfaction

Current: | 45%
Target: | 85%+

Improve user satisfaction to 85%+

Maintenance Compliance

Current: | 40%
Target: | 100%

Ensure 100% maintenance record compliance

Success Factors & ROI

Critical Success Factors

Phase 1

Application Foundation

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ROI & Business Value

Efficiency

Reduce request fulfillment time by 70%

Visibility

100% real-time fleet status transparency

Compliance

Standardized maintenance documentation

Additional Benefits: Improved contractor satisfaction, reduced administrative overhead, enhanced compliance with maintenance requirements, and better asset utilization.

UI/UX Mockups
Service Portal - Vehicle Request Form & Inventory

Request Loaner Vehicle

Request Loaner Vehicle

Requested by

Kanyinsola Saheed

* Requested for

Abel Tuter

* Select the Vehicle

Colorado Crew Cab

* Date Needed

09/04/2025

Date to return

17/04/2025

Office Location

Select an option

* Delivery Information

Leave at the front of the yard

Additional Comments

Quantity: 1

Delivery Time: 0 Days

| Add to Cart |
| Save as Draft |
| Order Now |

Vehicle Inventory

🔍 Filter   Export

Total Vehicles	Available	In Use	Maintenance
42	26	12	4

VEHICLE	NUMBER	TYPE	LOCATION	STATUS	ACTIONS
Ford F-150 (2023)	V-10023	Truck	Main Warehouse	Available	View
Toyota RAV4 (2023)	V-10045	SUV	Field Office - West	In Use	View
Honda Civic (2022)	V-10067	Sedan	Main Warehouse	Maintenance	View

ServiceNow Agile Development 2.0

This project leverages ServiceNow's Agile Development 2.0 to manage the entire development lifecycle efficiently.

Core Features Used

- ✓ Scrum Workspaces
- ✓ Sprint Planning & Management
- ✓ Story Point Estimation
- ✓ Burndown Charts
- ✓ Agile Boards
- ✓ Release Management
- ✓ Team Workload Management

Benefits

- ✓ Automated Story tracking
- ✓ Real-time progress visibility
- ✓ Integrated with SDLC
- ✓ Resource allocation optimization
- ✓ Sprint velocity tracking
- ✓ Dependency management

Process Integration

Planning

Story creation, sprint planning, and backlog management

Execution

Task assignment, progress tracking and daily scrums

Delivery

Release management, deployments and retrospectives

Next Steps & Questions

🚀 Next Steps

1. **Stakeholder Approval-** Secure final approval from executive sponsor

2. **Resource Allocation-** Confirm ServiceNow developer assignments

3. **Sprint Planning-** Finalize detailed sprint plans and backlog

4. **Kickoff Meeting-** Schedule project kickoff with all stakeholders

📅 Key Dates

✓ Project Approval	May 5, 2025
✓ Development Kickoff	May 12, 2025
✓ Phase 1 Delivery	June 9, 2025
✓ Full Deployment	August 18, 2025

❓ Questions

Q: How will users request vehicles if they don't have ServiceNow access?
A: A dedicated Service Portal will be available to all contractors without requiring full ServiceNow licenses.

Q: What happens if a vehicle requires emergency maintenance while in use?
A: An emergency maintenance workflow will be included in Phase 2 to handle unexpected repairs.

Q: How will the system handle peak demand periods?
A: The reservation system includes advanced planning capabilities to manage vehicle availability during high-demand periods.

Q: Will the system integrate with our existing CMDB?
A: Yes, vehicles will be added as configuration items in the CMDB for consistent asset management.

👥 Team & Support

Project Team
- Kanyinsola Saheed – Product Owner
- Kanyinsola Saheed – Business Analyst
- Kanyinsola Saheed – Lead Developer

Support Plan
- Dedicated support during launch
- Knowledge transfer sessions
- Self-service knowledge articles
- Ongoing maintenance planer

Ready to Transform Vehicle Management?

Let's move forward with Vehicle Vault to streamline operations and boost productivity.

Request Approval

Schedule Discussion