

Proposed Solution

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Team ID	LTVIP2025TMID30494
Project Name	Medical Inventory Management

1. Problem Statement

Hospitals and healthcare facilities struggle with fragmented, manual inventory tracking systems that lead to expired stock usage, inaccurate stock levels, delayed reorders, and poor supplier visibility. Critical information is often stored across disconnected spreadsheets and emails, creating inefficiencies, safety risks, and delays in care delivery.

2. Idea / Solution Description

Develop a centralized Medical Inventory Management System using Salesforce. The platform will manage medicine stocks, suppliers, purchase orders, and transactions end-to-end. Key capabilities will include expiry tracking, automated reordering, supplier performance insights, and role-based access for Inventory and Purchase Managers—all driven by Flows, Apex logic, and dashboards native to Salesforce.

3. Novelty / Uniqueness

This solution uniquely leverages Salesforce's no-code/low-code capabilities, Apex logic, and native automation (Flow & Scheduled Flows). Unlike traditional ERP add-ons or manual spreadsheets, it integrates expiry alerts, barcode scanning, and real-time stock visibility—all configurable and scalable within the Salesforce ecosystem. Users benefit from role-specific dashboards, mobile access, and historical tracking.

4. Social Impact / Customer Satisfaction

- **Operational Impact:** Reduces expired stock usage and manual processing errors
- **Employee Empowerment:** Empowers non-technical staff with real-time inventory data
- **Compliance & Safety:** Helps ensure drugs are administered safely, reducing liability
- **Decision Support:** Dashboards aid in timely, data-informed procurement

5. Business Model

This Salesforce-based app can be provided as a **SaaS** offering to mid-sized hospitals, clinics, and pharma distributors. The business can monetize through:

- Licensing (per org or per user)
- Implementation and customization packages
- Support, monitoring, and analytics upgrade tiers

6. Scalability of the Solution

Built entirely on the Salesforce platform, the solution supports:

- Expansion across multiple hospital branches
- Integration with 3rd-party procurement or barcode systems
- Addition of modules like **return orders, supplier quality scoring, and asset maintenance**
- Seamless updates with new Salesforce releases

Solution Overview

- Custom Salesforce Objects: Product__c, Purchase_Order__c, Order_Item__c, Inventory_Transaction__c, Supplier__c
- Automation: Apex Triggers, Record-Triggered Flows, Scheduled Flows
- Reporting: Supplier summary, full PO history, expiry alert lists
- User Roles: Inventory Manager and Purchase Manager profiles
- Integration Options: Barcode scanning, CSV import/export, email alerts
- Mobile: Accessible via Salesforce Mobile App for on-floor inventory control

Technology Stack

Layer	Tools / Technologies
Frontend/UI	Salesforce Lightning Experience, Record Pages
Backend	Apex, SOQL, Salesforce Data Model
Database	Salesforce Objects with lookups, M-D relationships, Roll-Ups
Automation	Flow Builder, Validation Rules, Scheduled Flows, Apex Triggers
Cloud & Infra	Salesforce Cloud
Reporting	Salesforce Dashboards and Reports