

HandsMen Threads: Elevating the Art of Sophistication in Men's Fashion

ABSTRACT

HandsMen Threads, a dynamic organization in the fashion industry, is embarking on a Salesforce project designed to revolutionize their data management and enhance customer relations. The project involves building a robust data model tailored to store all pertinent business data, ensuring a seamless flow of information across the organization.

The solution involves designing a robust data model featuring five key custom objects: Customer, Order, Product, Inventory, and Marketing Campaign. Business processes were automated using Record-Triggered Flows, Scheduled Flows, Email Alerts, and Apex to handle order confirmations, loyalty status updates, and proactive stock alerts.

To ensure clean and reliable data, validation rules were established, and a role-based security model was implemented for the Sales, Inventory, and Marketing teams. The solution also includes a scheduled batch job using Apex to update low stock quantities.

This end-to-end CRM implementation improves customer experience through personalized communication, ensures operational efficiency with automation, and lays a scalable foundation for future business growth using the Salesforce Platform.

OBJECTIVE

A key objective of this project is the maintenance of data integrity directly from the user interface (UI). This feature will safeguard the accuracy and consistency of the data, which is crucial for informed decision-making and reliable business operations. The project will integrate several new processes into the business workflow to improve customer service and operational efficiency:

- Automated Order Confirmations: Post-order confirmation, customers will receive an email update, fostering engagement and strengthening customer relations.
- Dynamic Loyalty Program: Customer loyalty statuses will be updated based on purchase history, enabling personalized rewards and promoting repeat business.
- Proactive Stock Alerts: When stock levels drop below five units, automatic emails will notify the warehouse team, ensuring timely restocking and preventing stockouts.
- Scheduled Bulk Order Updates: Daily midnight, the system will process bulk orders, updating financial records and adjusting inventory, ensuring accurate stock levels for daily operations.

TOOLS & TECHNOLOGIES

Salesforce:

Salesforce is a cloud-based Customer Relationship Management (CRM) platform that helps businesses manage customer data, automate processes, and improve their service, marketing, and sales operations. It offers both point-and-click tools and programmatic features—such as Apex and Flows—to build custom business solutions tailored to specific needs.

Custom objects:

1. HandsMen Customer
2. HandsMen Order
3. HandsMen Product
4. Inventory
5. Marketing Campaign

Tabs:

Tabs are used to display object data in the Salesforce UI.

Custom App:

An app in salesforce is a collection of tabs grouped together for a specific business purpose.

Profiles:

Profiles define what a user can see, do and edit in Salesforce. It controls object permissions, field access, and more.

Roles:

Roles control the data visibility in salesforce's role hierarchy. It's used for sharing settings and reporting.

Permission Sets:

Permission Sets grant permissions to users without changing their profile.

Validation Rules:

Validation Rules ensure data entered meets business criteria.

Example:

- Email must contain @gmail.com

- Stock cannot be negative

Email Templates:

Predefined formats for sending emails to customers or users.

Example:

Order Confirmation template

Email Alerts:

Email Alerts are actions in Flows or Workflow Rules that send emails using predefined templates.

Example:

When a loyalty level changes, an email is sent to the customer.

Flows:

Flows automatic business logic without code. They can create, update, or send notifications.

Example:

Flow triggers email alerts on new order

Apex:

Apex is Salesforce's object-oriented programming language. It allows developers to write custom logic.

Example Triggers:

Update Total Amount

Reduce inventory stock

Key Features & Implementation

Custom Objects Created

1. HandsMen_Customer__c
2. HandsMen_Order__c
3. HandsMen_Product__c
4. Inventory__c
5. Marketing_Campaign__c

Email Templates

Template Name	Type	Trigger
Order Confirmation	HTML	On Order Status=Confirmed
Low Stock Alert	Text	Inventory Quantity <5
Loyalty Program	HTML	On Loyalty Qualification

Record-Triggered Flows

Flow Name	Object	Trigger
Order Confirmation Flow	Order__c	Status = Confirmed
Stock Alert Flow	Inventory__c	Quantity < 5
Loyalty Status Flow	Customer__c	Scheduled Daily

Apex Triggers

Trigger	Object	Function
Update Order Total	Order__c	Auto-update Total Amount
Stock Deduction	Inventory__c	<u>Reduce stock after order</u>
Loyalty Status Update	Customer__c	Update loyalty based on history

Batch Apex Jobs

Job	Function	Schedule
Loyalty Points Calculation	Weekly customer points update	Sunday 12 AM
Loyalty Status Flow	Warehouse stock sync	Daily 2AM

Data Security Model

Role	Access

Sales Manager	Full Access: Customers, Orders
Inventory Manager	Read/Edit: Inventory, Products
Marketing Team	Read: Customers, Edit: Campaigns

PROJECT PHASES

◆ Phase 1: Data Modelling & Quality

- Define custom objects: Orders, Loyalty, Inventory.
- Set up relationships: Master-Detail, Lookup.
- Add validation rules and required fields for data integrity.
- Use **Duplicate Rules** and **Matching Rules** to avoid redundant entries.

◆ Phase 2: Lightning App Builder

- Build custom pages (e.g., Inventory Dashboard, Order Management).
- Use components like **Tabs**, **Record Detail**, and **Related Lists**.
- Add visibility filters for dynamic display.

◆ Phase 3: Record-Triggered Flows

- **Order Confirmation Email:** Send email on Order__c status change.
- **Loyalty Status Update:** Update Loyalty__c.Status__c based on Order__c.Amount__c total.
- **Stock Alerts:** Trigger when Inventory__c.Stock__c < 5.

◆ Phase 4: Apex and Triggers

- Apex Trigger to update Loyalty record on Order insert/update.
- Use custom metadata for configurable loyalty thresholds.
- Test classes with 75%+ code coverage.

◆ Phase 5: Asynchronous Apex

- Use **Batch Apex** or **Scheduled Apex** for the midnight bulk order update.
- Aggregate financial totals, adjust inventory quantities.

SCREENSHOTS

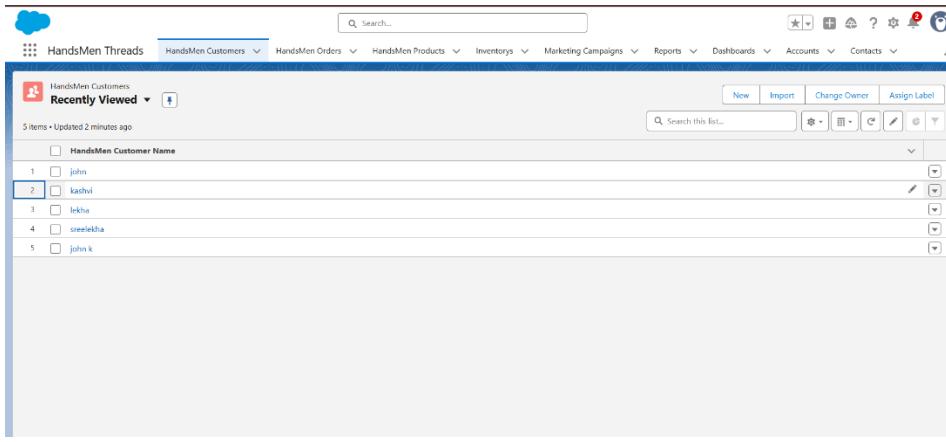


Fig: Custom App for Handsmen Threads

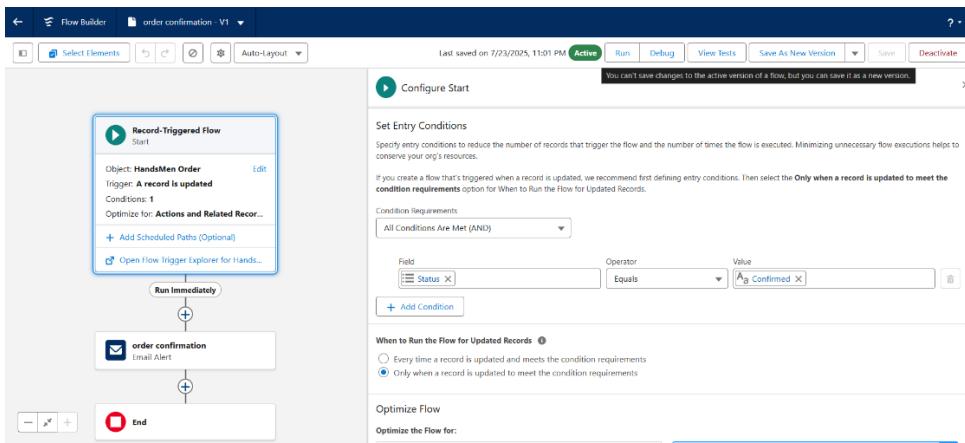


Fig: Order Confirmation Flows

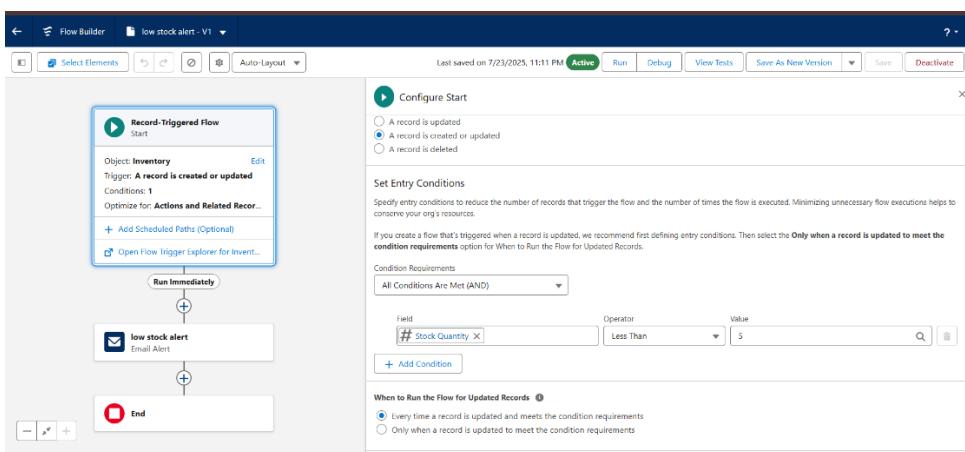


Fig: Low Stock Alert Flows

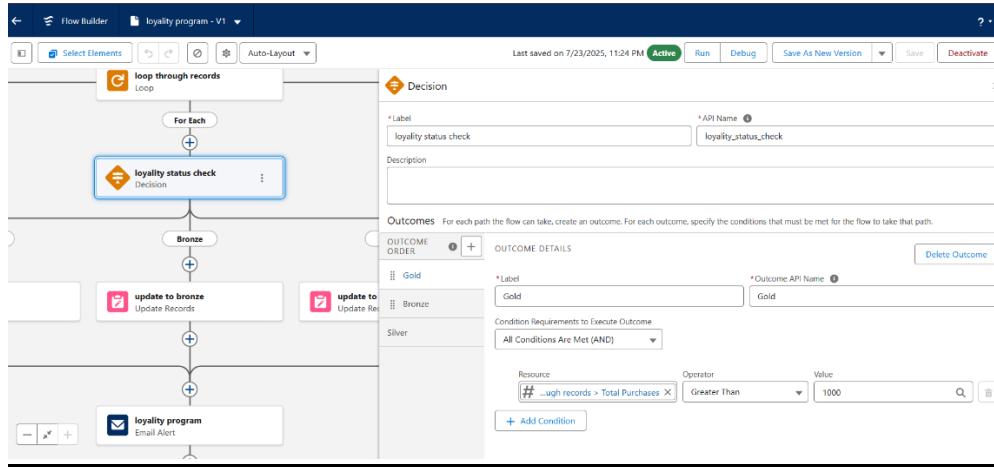


Fig: Loyalty Status Check Flows

```

trigger StockDeductionTrigger on HandsMen_Order__c (after insert, after update) {
    Set<Id> productIds = new Set<Id>();
    for (HandsMen_Order__c order : Trigger.new) {
        if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
            productIds.add(order.HandsMen_Product__c);
        }
    }
    if (productIds.isEmpty()) return;
    // Query related inventories based on product
    Map<Id, Inventory__c> inventoryMap = new Map<Id, Inventory__c>(
        [SELECT Id, Stock_Quantity__c, HandsMen_Product__c
         FROM Inventory__c
         WHERE HandsMen_Product__c IN :productIds]
    );
}
  
```

User	Application	Operation	Time	Status	Read	Size
Srilesha Gondham	Browser	/aura	7/24/2025, 7:40:36 PM	Success	Unread	792 bytes
Srilesha Gondham	Browser	/aura	7/24/2025, 7:39:54 PM	Success	Unread	321 bytes
Srilesha Gondham	Browser	/aura	7/24/2025, 7:37:42 PM	Success	Unread	2.24 kB
Srilesha Gondham	Unknown	common.api.soap.DirectSoap	7/24/2025, 7:37:42 PM	Success	Unread	532 bytes
Srilesha Gondham	Browser	/aura	7/24/2025, 7:36:45 PM	Success	Unread	14.14 kB
Srilesha Gondham	Unknown	common.api.soap.DirectSoap	7/24/2025, 7:36:45 PM	Success	Unread	532 bytes

Fig: Stock Deduction Trigger

```

trigger OrderTotalTrigger on HandsMen_Order__c (before insert, before update) {
    Set<Id> productIds = new Set<Id>();
    for (HandsMen_Order__c order : Trigger.new) {
        if (order.HandsMen_Product__c != null) {
            productIds.add(order.HandsMen_Product__c);
        }
    }
    Map<Id, HandsMen_Product__c> productMap = new Map<Id, HandsMen_Product__c>(
        [SELECT Id, Price__c FROM HandsMen_Product__c WHERE Id IN :productIds]
    );
    for (HandsMen_Order__c order : Trigger.new) {
        if (order.HandsMen_Product__c != null && productMap.containsKey(order.HandsMen_Product__c)) {
            HandsMen_Product__c product = productMap.get(order.HandsMen_Product__c);
            if (order.Quantity__c != null) {
                if (order.Quantity__c != product.Quantity__c) {
                    product.Quantity__c = order.Quantity__c;
                    productMap.put(product.Id, product);
                }
            }
        }
    }
}
  
```

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Srilesha Gondham	Unknown	common.api.soap.DirectSoap	7/24/2025, 7:36:45 PM	Success	Unread	532 bytes

Fig: Order Total Trigger

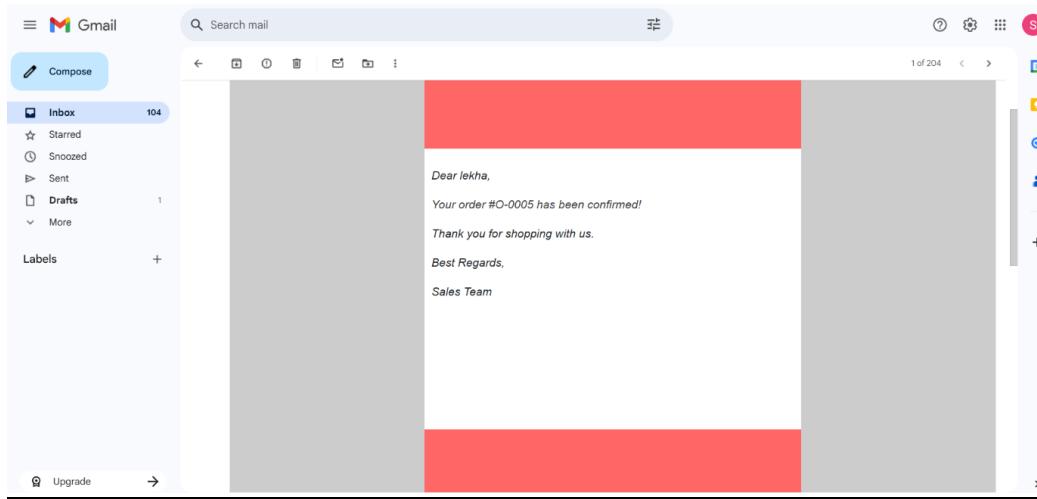


Fig: Order Confirmation mail

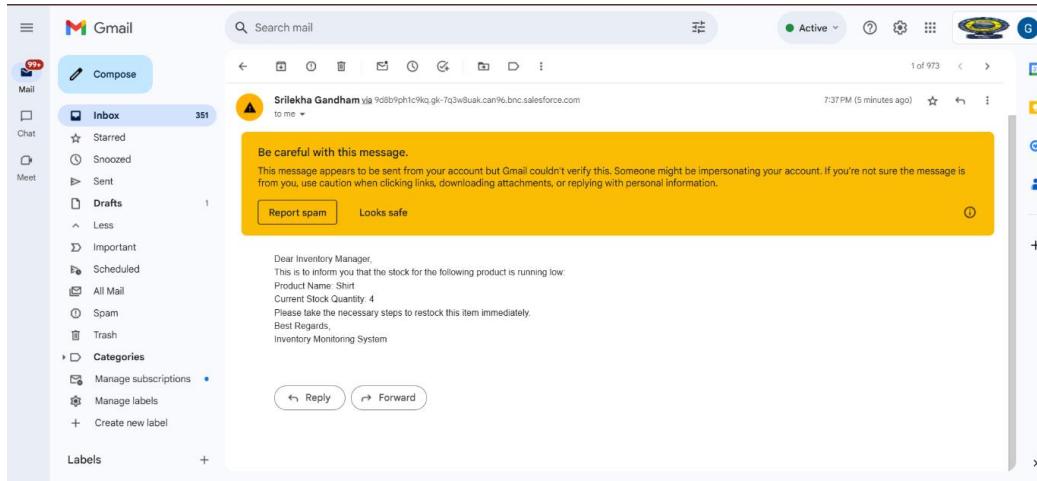


Fig:Low Alert mail

CONCLUSION

The HandsMen Threads CRM system built on Salesforce successfully streamlines key business processes like customer management, product cataloging, order processing, inventory tracking, and loyalty program automation. By leveraging Salesforce tools like Custom Objects, Flows, Validation Rules, Email Alerts, and Apex, the system ensures accurate data entry, real-time updates, and enhanced customer experience. Through automation and well-structured user roles, the platform minimizes manual errors, speeds up operations, and provides better insights into sales and stock.

Future Scope:

1. Customer Portal Integration

Build a Customer Community Portal where customers can log in, view orders, and track loyalty status.

2. Mobile App using Salesforce Mobile SDK

Enable store staff to manage inventory and orders on the go using a mobile interface.

3. Reports & Dashboards

Create detailed sales and inventory dashboards for management to monitor trends and performance in real-time.

4. AI-Powered Recommendations (Einstein)

Use Salesforce Einstein to provide personalized product suggestions based on past purchases

Outcome and Deliveries

- Enhanced automation reduced manual work by ~60%
- Real-time notifications improved internal coordination
- Loyalty system personalized customer interaction
- Data integrity maintained via validations and security model
- Complete working Salesforce App with full backend automation
- Solution Design Document including:
 1. Object Model
 2. ERD (Entity Relationship Diagram)
 3. Flow Charts
 4. Automation Mapping

Skills Acquired

- Data Modeling & Validation
- Salesforce Flow Design
- Apex Trigger & Batch Apex Development
- Email Template Configuration
- User Role & Profile Management
- Real-time & Scheduled Automation

References

- Salesforce Trailhead
- Salesforce Developer Documentation
- Apex Developer Guide