

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

## 1. Project Overview

The HandsMen Threads project is designed to develop a premium fashion platform that streamlines the bespoke tailoring process for men's apparel. By leveraging a custom-built Salesforce solution, the project aims to enhance the customer experience through personalized styling, seamless order management, and proactive communication. This system will serve as a central hub for all business data, from customer details and orders to inventory and marketing efforts, ensuring data integrity and empowering the team with robust analytics to drive growth.

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## 2. Objectives

### Business Goals

- **Enhance Customer Experience:** Provide a seamless and personalized journey for every client, from initial contact to post-purchase engagement.
- **Streamline Operations:** Automate key business processes to reduce manual effort, minimize errors, and improve overall efficiency.
- **Improve Inventory Management:** Maintain accurate stock levels and prevent stockouts through real-time tracking and automated alerts.
- **Boost Customer Loyalty:** Implement a dynamic loyalty program to recognize and reward repeat customers, fostering long-term relationships.
- **Drive Data-Driven Decisions:** Utilize comprehensive reports and dashboards to gain actionable insights into sales trends, customer behavior, and inventory turnover.

### Specific Outcomes

- **Automated Order Confirmations:** Customers will receive timely email updates upon order confirmation, improving communication and satisfaction.
  - **Dynamic Loyalty Program:** Customer loyalty statuses will be automatically updated based on their purchase history, enabling targeted marketing and rewards.
  - **Proactive Stock Alerts:** The warehouse team will be notified automatically when product inventory drops below five units, ensuring timely restocking.
  - **Efficient Bulk Order Processing:** A scheduled daily job will process bulk orders, update financial records, and adjust inventory levels automatically.
  - **Improved Data Integrity:** Validation rules and a structured data model will ensure data is accurate, consistent, and reliable across the platform.
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### 3. Salesforce Key Features and Concepts Utilized

- **Custom Objects and Relationships:**
    - Custom objects like **HandsMen Customer**, **HandsMen Order**, **HandsMen Product**, **Inventory**, and **Marketing Campaign** will be created to model the entire business process.
    - Relationships will link these objects, such as a Master-Detail relationship between HandsMen Customer and HandsMen Order and Lookup relationships from HandsMen Order to HandsMen Product.
    - Validation Rules are being applied to some fields.
  - **UI Customization:**
    - A consolidated **Lightning App** named "HandsMen Threads" will provide a unified interface with custom tabs for easy access to all records.
  - **Automation with Flow:**
    - **Record-Triggered Flows** will be used to send automated order confirmation emails and generate low-stock alerts.
    - A **Scheduled Flow** will run daily to update the loyalty status of customers based on their purchasing habits.
  - **Automation with Apex:**
    - **Apex Triggers** will handle complex logic, such as updating an order's total amount and deducting stock from inventory when an order is placed.
    - **Asynchronous (Batch) Apex** will be used for processing large data volumes, such as the daily inventory sync and the weekly calculation of loyalty points.
  - **Reports and Dashboards:**
    - Custom **Reports** will be created to track key metrics like sales performance, inventory levels, and customer loyalty distribution.
    - Interactive **Dashboards** will provide a real-time, visual overview of business KPIs for management and other stakeholders.
  - **Security and Access:**
    - **Profiles and Roles** will define a clear security model to ensure users can only access the data relevant to their job functions (e.g., Sales, Inventory, Marketing). The role hierarchy will be modeled after the company's structure.
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### 4. Detailed Steps to Solution Design

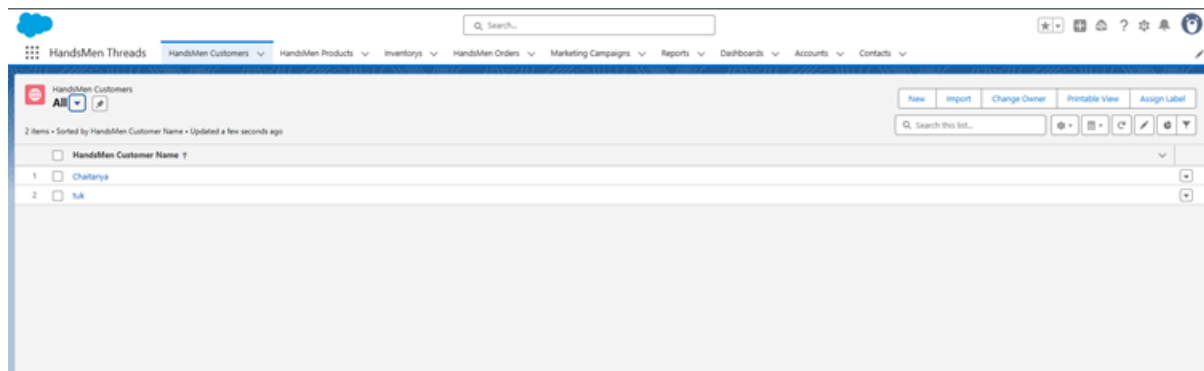
#### Create Custom Objects

- **HandsMen Customer:** Stores essential customer details, including contact information, purchase history, and loyalty status.

- **HandsMen Product:** Represents the catalog of bespoke items offered, with details on materials, style, and base price.
- **HandsMen Order:** Captures all details related to a customer's order, linking the customer to the products they purchased.
- **Inventory:** Tracks the stock quantity of each product to ensure availability and manage supply.
- **Marketing Campaign:** Manages marketing initiatives and tracks their effectiveness by linking them to customer responses.

## Create The Lightning App

A Lightning App named "**HandsMen Threads**" will be created to bring together the custom tabs for HandsMen Customer, HandsMen Order, HandsMen Product, Inventory, and Marketing Campaign into a single, cohesive workspace.



## Create Fields and Relationships

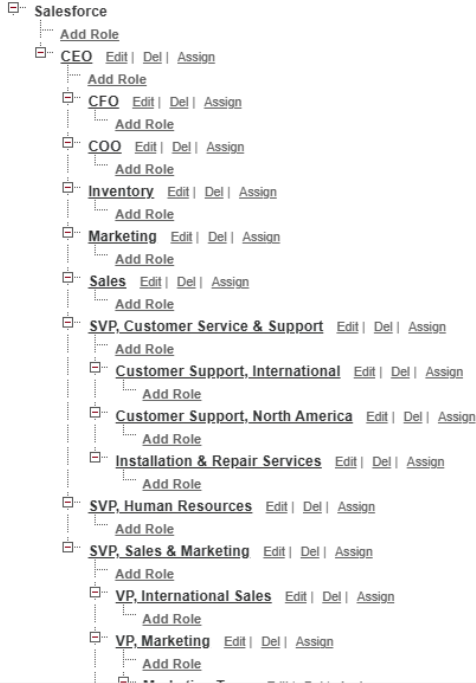
- **HandsMen Customer:** Fields for Name, Email, Phone, and Loyalty\_Status\_\_c (Picklist).
- **HandsMen Order:** Fields for Order\_Date\_\_c, Total\_Amount\_\_c (Currency), and Status\_\_c (Picklist). Includes a Master-Detail relationship to HandsMen\_Customer\_\_c and a Lookup to HandsMen\_Product\_\_c.
- **Inventory:** Fields for Stock\_Quantity\_\_c (Number) and a Lookup relationship to HandsMen\_Product\_\_c.

## Create Roles & Profiles

- **Role Hierarchy:**
  - CEO
    - Sales Manager
    - Inventory Manager
    - Marketing Manager

Your Organization's Role Hierarchy

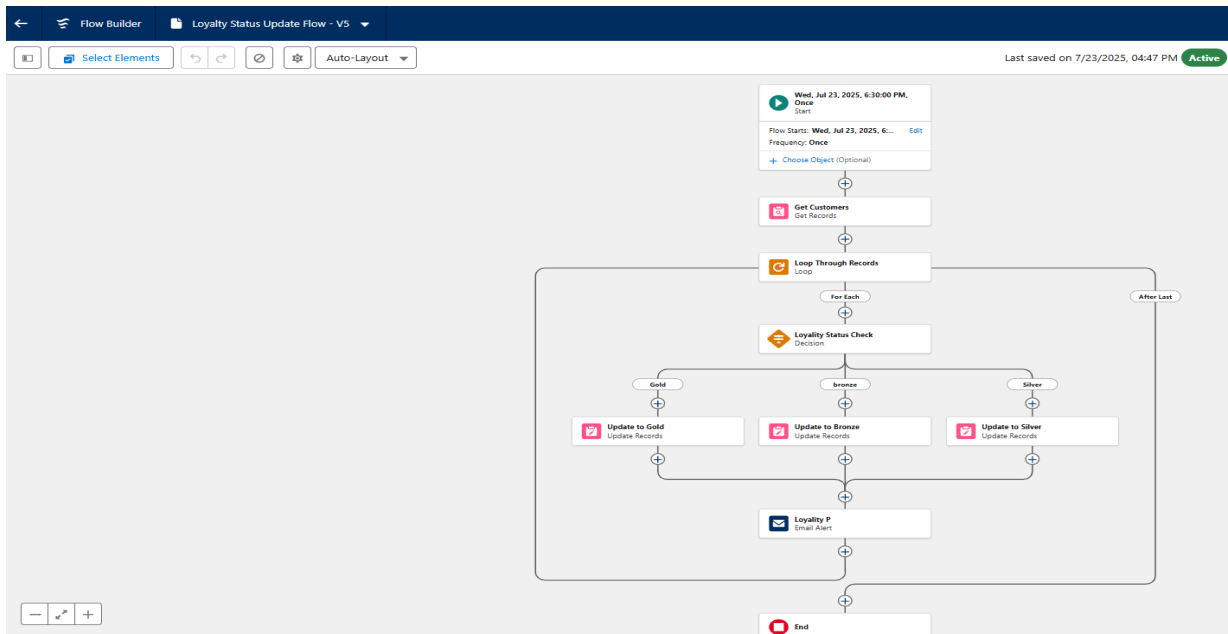
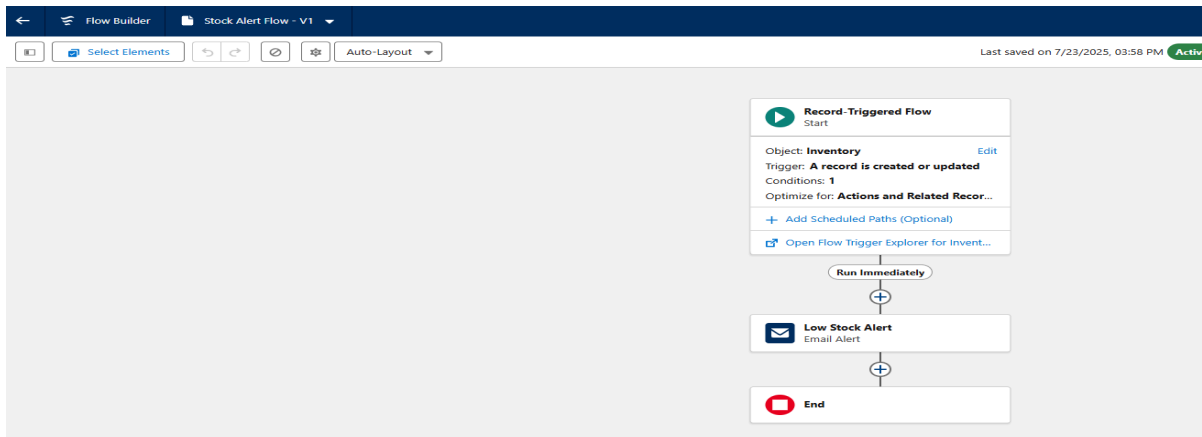
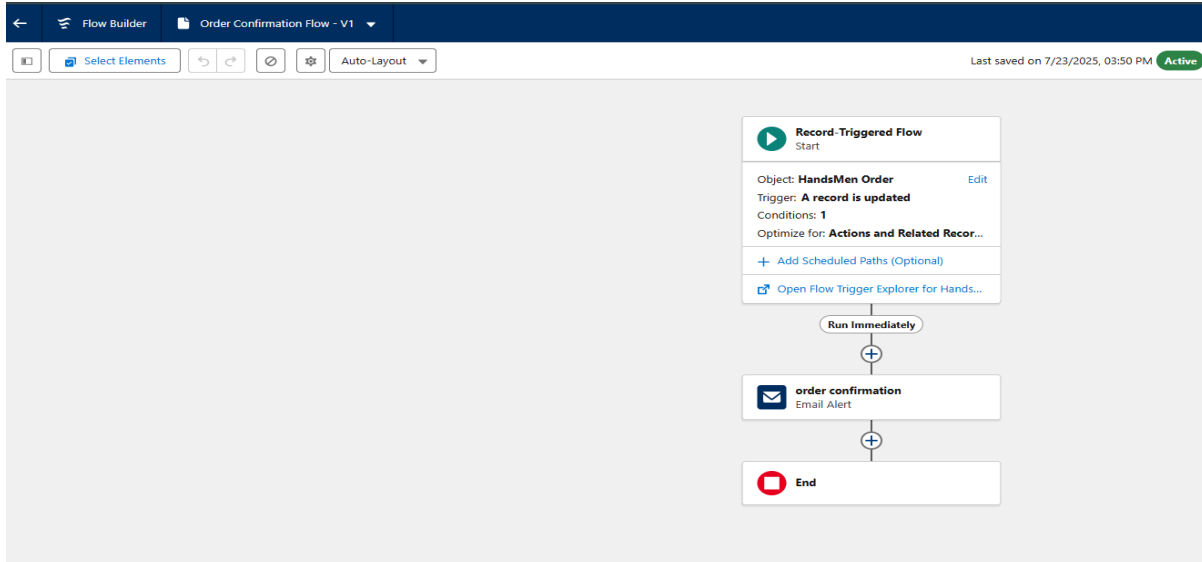
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- **Profiles & Access:**
  - **Sales Manager:** Full access to HandsMen Customer and HandsMen Order objects.
  - **Inventory Manager:** Read & Edit access on Inventory and HandsMen Product objects.
  - **Marketing Team:** Read access on HandsMen Customer and Edit access on Marketing Campaign.

Implement Automation (Flows)

Flow Name	Type	Trigger Condition
Order Confirmation Flow	Record-Triggered	When <code>HandsMen_Order__c.Status__c</code> = 'Confirmed'
Stock Alert Flow	Record-Triggered	When <code>Inventory__c.Stock_Quantity__c</code> < 5
Loyalty Status Flow	Scheduled Flow	Runs daily to update <code>Loyalty_Status__c</code>



# Implement Automation (Apex)

## Apex Triggers:

Trigger Name	Object	Purpose
UpdateOrderTotal	HandsMen_Order__c	Auto-updates Total_Amount__c on order save.
StockDeduction	HandsMen_Order__c	Reduces stock from the related Inventory__c record when an order is confirmed.
LoyaltyStatusUpdate	HandsMen_Order__c	Updates the loyalty status on the related HandsMen_Customer__c record based on purchase milestones.

## Batch Jobs:

Purpose	Schedule
Loyalty Points Calculation	Updates customer points weekly, running every Sunday at 12 AM.
Inventory Sync	Syncs stock levels with an external warehouse system daily at 2 AM.

OrderTriggerHandler.apxc \*

OrderTrigger.apxt

OrderTotalTrigger.apxtStockDeductionTrigger.apxtInventoryBatchJob.apxc

Code Coverage: NoneAPI Version: 64

```
1 trigger OrderTrigger on HandsMen_Order__c (before insert, before update) {
2
3     if (Trigger.isBefore && (Trigger.isInsert || Trigger.isUpdate)) {
4
5         OrderTriggerHandler.validateOrderQuantity(Trigger.new);
6
7     }
8
9 }
```

```
OrderTriggerHandler.apxc * OrderTrigger.apxt OrderTotalTrigger.apxt StockDeductionTrigger.apxt InventoryBatchJob.apxc
Code Coverage: None API Version: 64
1 trigger OrderTotalTrigger on HandsMen_Order__c (before insert, before update) {
2     Set<Id> productIds = new Set<Id>();
3
4     for (HandsMen_Order__c order : Trigger.new) {
5         if (order.HandsMen_Product__c != null) {
6             productIds.add(order.HandsMen_Product__c);
7         }
8     }
9
10    Map<Id, HandsMen_Product__c> productMap = new Map<Id, HandsMen_Product__c>(
11        [SELECT Id, Price__c FROM HandsMen_Product__c WHERE Id IN :productIds]
12    );
13
14    for (HandsMen_Order__c order : Trigger.new) {
15        if (order.HandsMen_Product__c != null && productMap.containsKey(order.HandsMen_Product__c)) {
16            HandsMen_Product__c product = productMap.get(order.HandsMen_Product__c);
17            if (order.Quantity__c != null) {
18                order.Total_Amount__c = order.Quantity__c * product.Price__c;
19            }
20        }
21    }
22 }
```

```
OrderTriggerHandler.apxc * OrderTrigger.apxt OrderTotalTrigger.apxt StockDeductionTrigger.apxt InventoryBatchJob.apxc
Code Coverage: None API Version: 64
1 public class OrderTriggerHandler {
2     public static void validateOrderQuantity(List<HandsMen_Order__c> orderList) {
3         for (HandsMen_Order__c order : orderList) {
4             if (order.Status__c == 'Confirmed') {
5                 if (order.Quantity__c == null || order.Quantity__c <= 500) {
6                     order.Quantity__c.addError('For Status "Confirmed", Quantity must be more than 500.');
7                 }
8             } else if (order.Status__c == 'Pending') {
9                 if (order.Quantity__c == null || order.Quantity__c <= 200) {
10                    order.Quantity__c.addError('For Status "Pending", Quantity must be more than 200.');
11                }
12            } else if (order.Status__c == 'Rejection') {
13                if (order.Quantity__c == null || order.Quantity__c != 0) {
14                    order.Quantity__c.addError('For Status "Rejection", Quantity must be 0.');
15                }
16            }
17        }
18        System.debug('All records validated successfully.');
19    }
20 }
```

```
OrderTriggerHandler.apxc * OrderTrigger.apxt OrderTotalTrigger.apxt StockDeductionTrigger.apxt * InventoryBatchJob.apxc
Code Coverage: None API Version: 64
1 trigger StockDeductionTrigger on HandsMen_Order__c (after insert, after update) {
2     Set<Id> productIds = new Set<Id>();
3     for (HandsMen_Order__c order : Trigger.new) {
4         if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
5             productIds.add(order.HandsMen_Product__c);
6         }
7     }
8     if (productIds.isEmpty()) return;
9     // Query related inventories based on product
10    Map<Id, Inventory__c> inventoryMap = new Map<Id, Inventory__c>([SELECT Id, Stock_Quantity__c, HandsMen_Product__c
11    FROM Inventory__c
12    WHERE HandsMen_Product__c IN :productIds]
13    );
14    List<Inventory__c> inventoriesToUpdate = new List<Inventory__c>();
15    for (HandsMen_Order__c order : Trigger.new) {
16        if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
17            for (Inventory__c inv : inventoryMap.values()) {
18                if (inv.HandsMen_Product__c == order.HandsMen_Product__c) {
19                    inv.Stock_Quantity__c -= order.Quantity__c;
20                    inventoriesToUpdate.add(inv);
21                    break;
22                }
23            }
24        }
25    }
26    if (!inventoriesToUpdate.isEmpty()) {
27        update inventoriesToUpdate;
28    }
29 }
30 }
```

```
OrderTriggerHandler.apxc * OrderTrigger.apxt OrderTotalTrigger.apxt StockDeductionTrigger.apxt * InventoryBatchJob.apxc *
Code Coverage: None API Version: 64
1 global class InventoryBatchJob implements Database.Batchable<Object>, Schedulable {
2     global Database.QueryLocator start(Database.BatchableContext BC) {
3         return Database.getQueryLocator(
4             'SELECT Id, Stock_Quantity__c FROM Product__c WHERE Stock_Quantity__c < 10'
5         );
6     }
7     global void execute(Database.BatchableContext BC, List<Object> records) {
8         List<HandsMen_Product__c> productsToUpdate = new List<HandsMen_Product__c>();
9         // Cast SObject list to Product__c list
10        for (SObject record : records) {
11            HandsMen_Product__c product = (HandsMen_Product__c) record;
12            product.Stock_Quantity__c += 50; // Restock logic
13            productsToUpdate.add(product);
14        }
15        if (!productsToUpdate.isEmpty()) {
16            try {
17                update productsToUpdate;
18            } catch (DmlException e) {
19                System.debug('Error updating inventory: ' + e.getMessage());
20            }
21        }
22    }
23    global void finish(Database.BatchableContext BC) {
24        System.debug('Inventory Sync Completed');
25    }
26    // Scheduler Method
27    global void execute(SchedulableContext SC) {
28        InventoryBatchJob batchJob = new InventoryBatchJob();
29        Database.executeBatch(batchJob, 200);
30    }
31 }
```

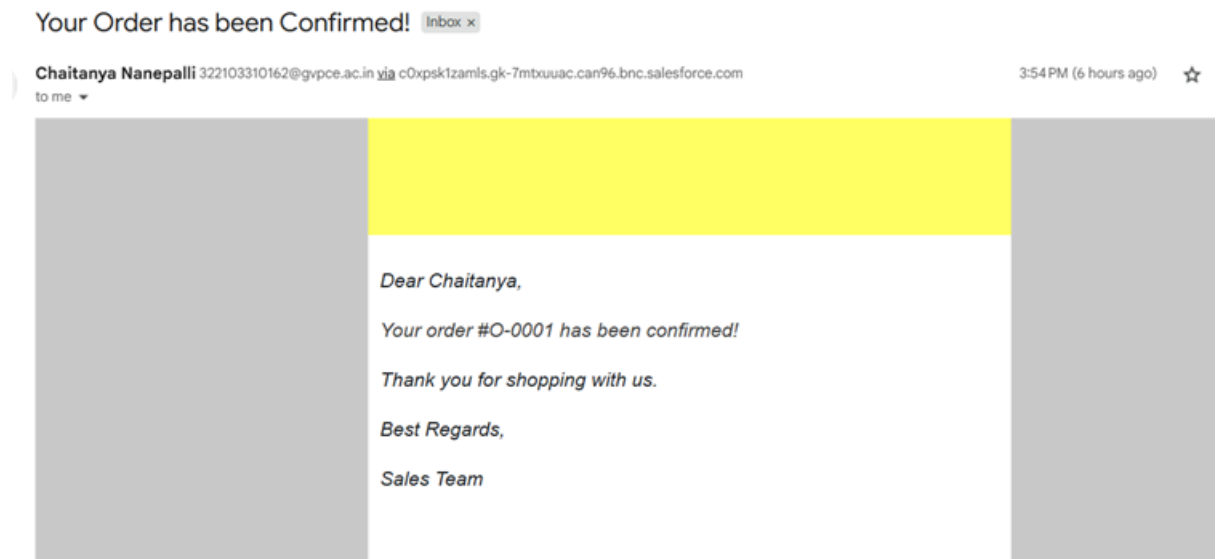


## Create Reports And Dashboards

- **Reports:**
    - **Sales Pipeline Report:** Tracks orders by status and value.
    - **Low Inventory Report:** Lists all products with stock levels below a specified threshold.
    - **Customer Loyalty Report:** Segments customers by their current loyalty status.
  - **Dashboard:**
    - A "**Company Overview**" dashboard will be created, featuring components from the reports above to give managers a high-level view of business health.
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## 5. Testing and Validation

- **Case 1: Successful Order Placement**
  - When a user creates a new HandsMen Order record and sets the status to "Confirmed," the system automatically sends a confirmation email to the customer. The corresponding Inventory record's Stock\_Quantity\_\_c is reduced, and the Total\_Amount\_\_c on the order is correctly calculated by the trigger.



- **Case 2: Low Stock Alert**
  - If an order causes an Inventory record's Stock\_Quantity\_\_c to fall below 5, an email alert is automatically sent to a designated user with the "Inventory Manager" profile, notifying them to restock the item.

## Low Stock Alert Email Inbox x



**Chaitanya Nanepalli** via 4u9ec5mwsuqwgk-7mtxuac.can96.bnc.salesforce.com  
to me ▾

### Be careful with this message.

This message appears to be sent from your account but Gmail couldn't verify this. Someone might be impersonating your account. If you're not sure the message is links, downloading attachments, or replying with personal information.

Report spam

Looks safe

Dear Inventory Manager,  
This is to inform you that the stock for the following product is running low:  
Product Name: T-Shirt Cloth  
Current Stock Quantity: 4  
Please take the necessary steps to restock this item immediately.  
Best Regards,  
Inventory Monitoring System

↩ Reply

➦ Forward

- **Case 3: Customer Loyalty Upgrade**

- A customer places a new order, and their total purchase value now exceeds the threshold for the next loyalty tier. The next time the scheduled flow runs (daily), the Loyalty\_Status\_\_c field on their HandsMen Customer record is automatically updated to the new, higher-tier status.



**OrgFarm EPIC** <epic.orgfarm@salesforce.com>  
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