

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

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BSIT 4-1

Project Overview:

The HandsMen Threads, a dynamic leader in the fashion industry was launching a Salesforce CRM (Customer Relationship Management) project that aim to transform its data management capabilities and enhancing customer engagement. The focus of this project is to build a comprehensive and scalable data model that captures all of the business information while ensuring data quality and integrity through an intuitive and controlled UI interactions.

Objectives:

- To create a robust salesforce data model to integrate all relevant customers, orders, and inventory information in a single accessible platform.
- To implement a UI-based controls and validation rules to maintain reliable and consistent data.
- To automate customer engagement processes by streamlining communication through automated ordering confirmations and loyalty program updates that will foster a stronger customer relationship.
- To optimized inventory management and enhance operational efficiency through proactive stock alerts and new workflow integration.

Phase 1: Requirement Analysis & Planning

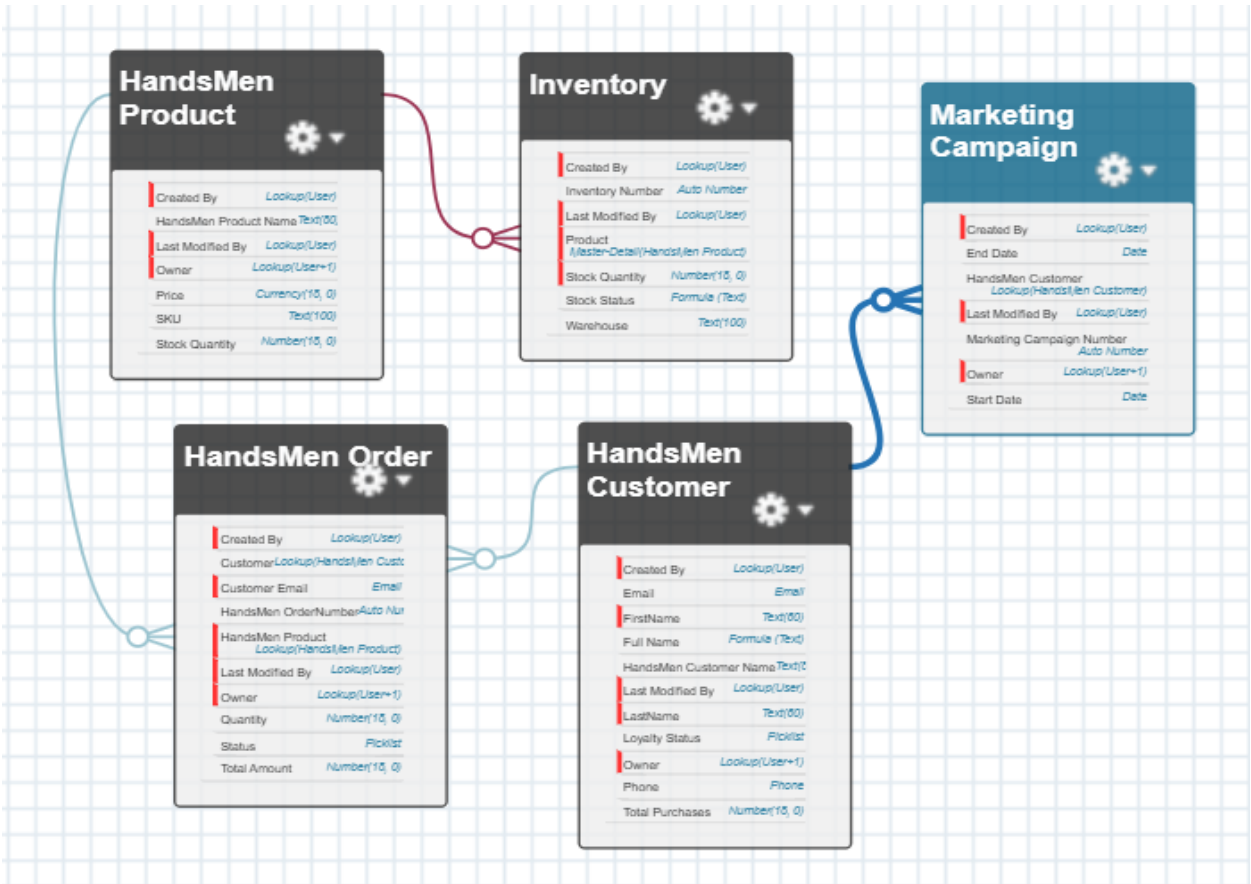
Understanding Business Requirements

- HandsMen Threads needs a centralized system to store customer information, order history, and loyalty program data. Current scattered data leads to inconsistent customer experiences.
- Customers currently lack on-time updates on orders. The Salesforce CRM will automate order confirmations through email to enhance engagement.
- The system will automatically alert the warehouse when stock drops below five units to prevent stockouts.
- Customer loyalty statuses need to update dynamically based on purchase history, enabling personalized rewards and repeat purchases.

Project Scope and Objectives

- Implement Salesforce CRM to cover customer information, orders, loyalty programs, inventory alerts, and bulk order updates.
- Integrate email automation for order confirmations and stock alerts.
- Ensure role-based access for staff (marketing, sales, inventory) with data security.
- Maintain data accuracy by using UI-based controls and validation rules.
- Automate key processes such as order confirmations, loyalty updates, stock alerts, bulk updates.
- Enhance operational efficiency and customer satisfaction.

Data Model (Custom Objects)



Security Model (Roles)



Stakeholders Mapping

Internal Stakeholders

- CEO
- Sales
- Inventory
- Marketing

External Stakeholders

- Customers

Phase 2: Salesforce Development – Backend & Configuration

Custom Objects and Fields (Screenshot)

HandsMen Customer

HandsMen Customer	
Created By	Lookup(User)
Email	Email
FirstName	Text(60)
Full Name	Formula (Text)
HandsMen Customer Name	Text(80)
Last Modified By	Lookup(User)
LastName	Text(60)
Loyalty Status	Picklist
Owner	Lookup(User+1)
Phone	Phone
Total Purchases	Number(18, 0)

HandsMen Product

HandsMen Product	
Created By	Lookup(User)
HandsMen Product Name	Text(80)
Last Modified By	Lookup(User)
Owner	Lookup(User+1)
Price	Currency(18, 0)
SKU	Text(100)
Stock Quantity	Number(18, 0)

HandsMen Order

HandsMen Order	
Created By	Lookup(User)
Customer	Lookup(HandsMen Customer)
Customer Email	Email
HandsMen OrderNumber	Auto Number
HandsMen Product	Lookup(HandsMen Product)
Last Modified By	Lookup(User)
Owner	Lookup(User+1)
Quantity	Number(18, 0)
Status	Picklist
Total Amount	Number(18, 0)

Inventory

Inventory	
Created By	Lookup(User)
Inventory Number	Auto Number
Last Modified By	Lookup(User)
Product	Master-Detail(HandsMen Product)
Stock Quantity	Number(18, 0)
Stock Status	Formula (Text)
Warehouse	Text(100)

Marketing Campaign

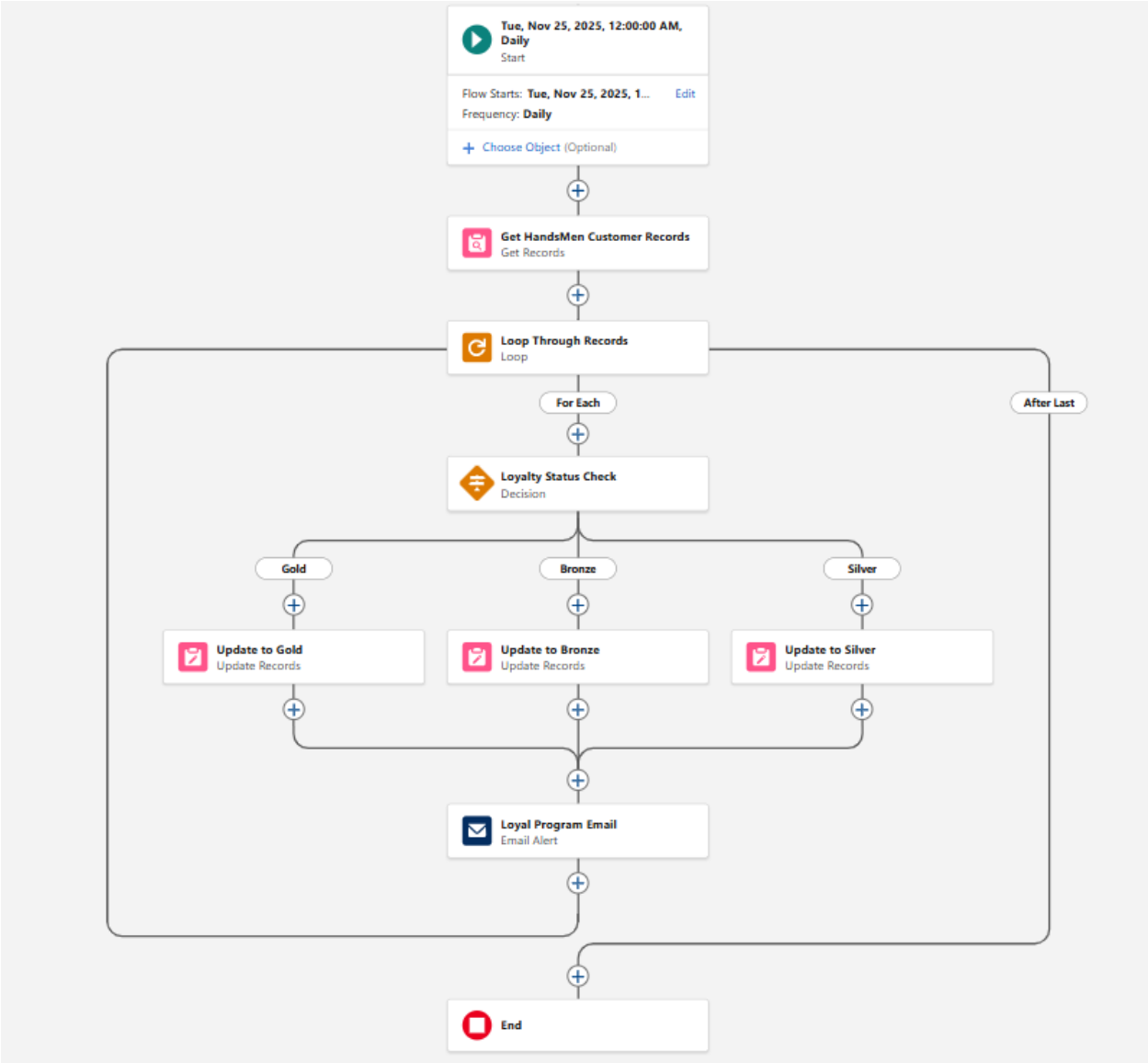
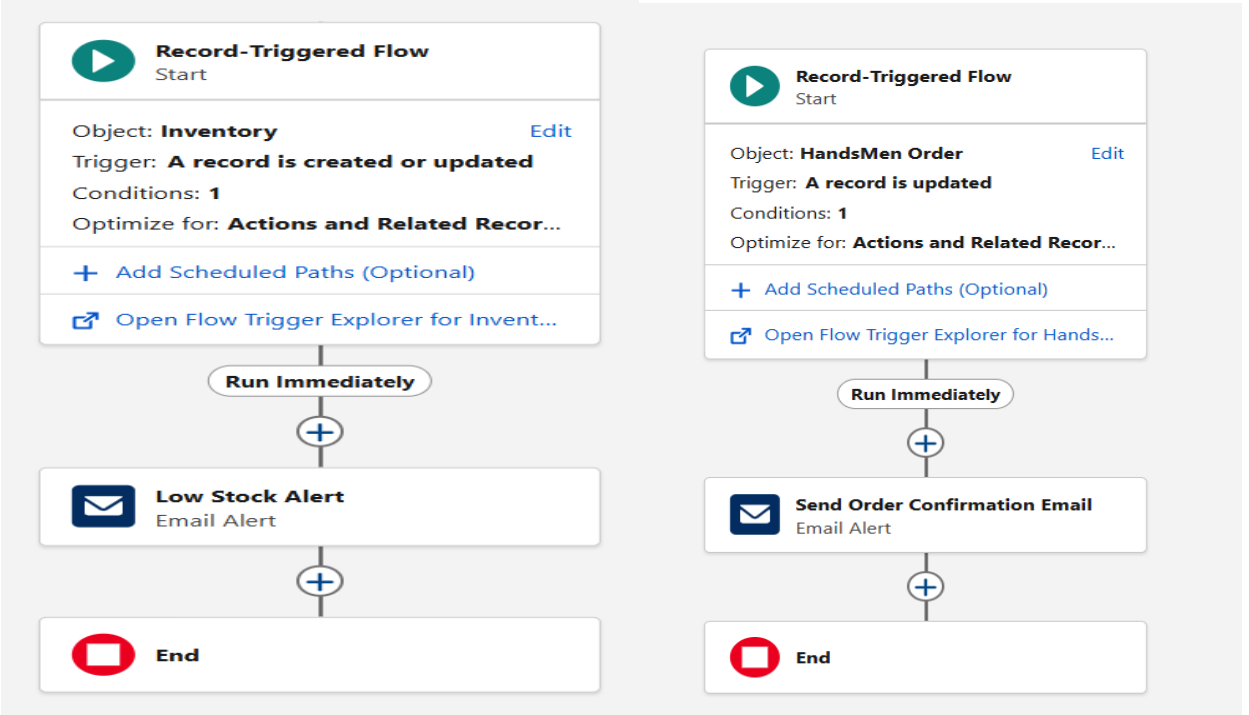
Marketing Campaign	
Created By	Lookup(User)
End Date	Date
HandsMen Customer	Lookup(HandsMen Customer)
Last Modified By	Lookup(User)
Marketing Campaign Number	Auto Number
Owner	Lookup(User+1)
Start Date	Date

Validation Rules

- **Total Amount** – checks if the total amount of the order is less than or equal to zero preventing users to input those values.
- **Stock Quantity** – checks if the stock is less than or equal to zero preventing users to input those values.
- **Email** – Validation rules that checks if the input is a valid email or not.

Flows

- **Order Confirmation Flow** – record-triggered flow that will alert the customers if their order is confirmed
- **Stock Alert Flow** – record-triggered flow that will alert if the stock is lower than five.
- **Loyalty Status Flow** – scheduled-trigger flow that will alert and update the customers when their status is updated.



Apex

OrderTotalTrigger – Trigger that updates and computes the total price of the order.

```
// Trigger that calculates the total_amount of the order
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) {
                order.Total_Amount__c = order.Quantity__c * product.Price__c;
            }
        }
    }
}
```

StockDeductionTrigger – Trigger that deduct stocks automatically.

```
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, Product__c
        FROM Inventory__c
        WHERE Product__c IN :productIds]
    );

    List<Inventory__c> inventoriesToUpdate = new List<Inventory__c>();

    for (HandsMen_Order__c order : Trigger.new) {
        if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
            for (Inventory__c inv : inventoryMap.values()) {
                if (inv.Product__c == order.HandsMen_Product__c) {
                    inv.Stock_Quantity__c -= order.Quantity__c;
                    inventoriesToUpdate.add(inv);
                    break;
                }
            }
        }
    }

    if (!inventoriesToUpdate.isEmpty()) {
        update inventoriesToUpdate;
    }
}
```

OrderTriggerHandler – Class that handles the order trigger.

```
public class OrderTriggerHandler {

    public static void validateOrderQuantity(List<HandsMen_Order__c> orderList) {

        for (HandsMen_Order__c order : orderList) {
            if (order.Status__c == 'Confirmed') {
                if (order.Quantity__c == null || order.Quantity__c <= 500) {
                    order.Quantity__c.addError('For Status "Confirmed", Quantity must be more than 500.');
```

OrderTrigger - Trigger that handles the order.

```
trigger OrderTrigger on HandsMen_Order__c (before insert, before update) {

    if (Trigger.isBefore && (Trigger.isInsert || Trigger.isUpdate)) {

        OrderTriggerHandler.validateOrderQuantity(Trigger.new);

    }
}
```

InventoryBatchJob – Class that handles the restock of the inventory and its scheduled using cron syntax.

```
global class InventoryBatchJob implements Database.Batchable<SObject>, Schedulable {

    global Database.QueryLocator start(Database.BatchableContext BC) {
        return Database.getQueryLocator(
            'SELECT Id, Stock_Quantity__c FROM Product__c WHERE Stock_Quantity__c < 10'
        );
    }

    global void execute(Database.BatchableContext BC, List<SObject> records) {
        List<HandsMen_Product__c> productsToUpdate = new List<HandsMen_Product__c>();

        // Cast SObject list to Product__c list
        for (SObject record : records) {

            HandsMen_Product__c product = (HandsMen_Product__c) record;

            product.Stock_Quantity__c += 50; // Restock logic

            productsToUpdate.add(product);

        }

        if (!productsToUpdate.isEmpty()) {

            try {

                update productsToUpdate;

            } catch (DmlException e) {
                System.debug('Error updating inventory: ' + e.getMessage());
            }
        }
    }

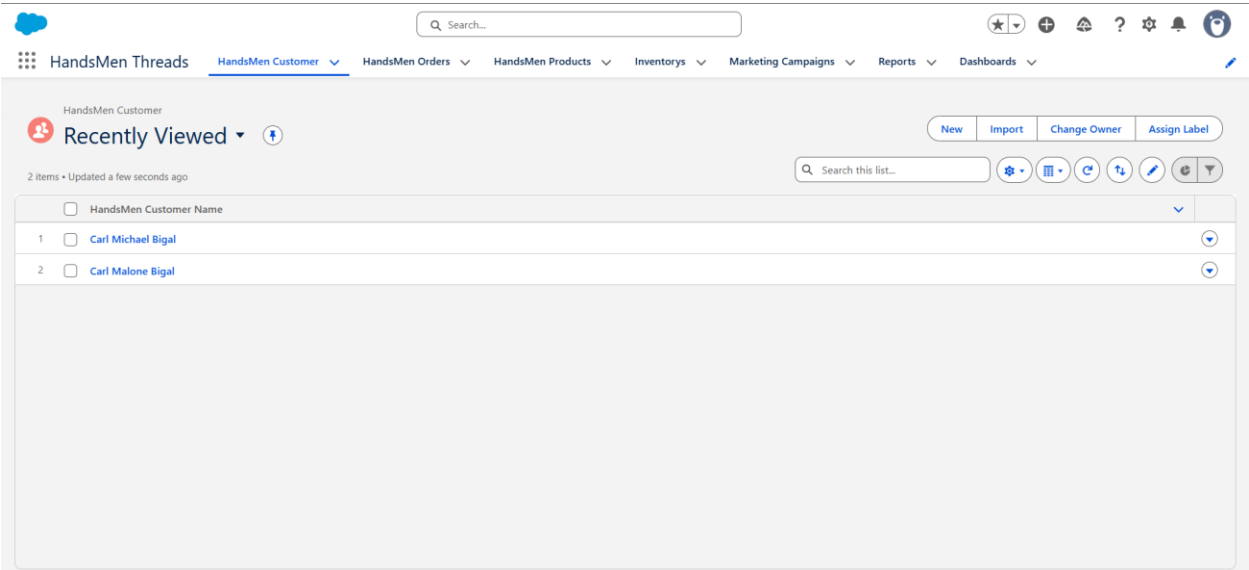
    global void finish(Database.BatchableContext BC) {
        System.debug('Inventory Sync Completed');
    }

    // Scheduler Method

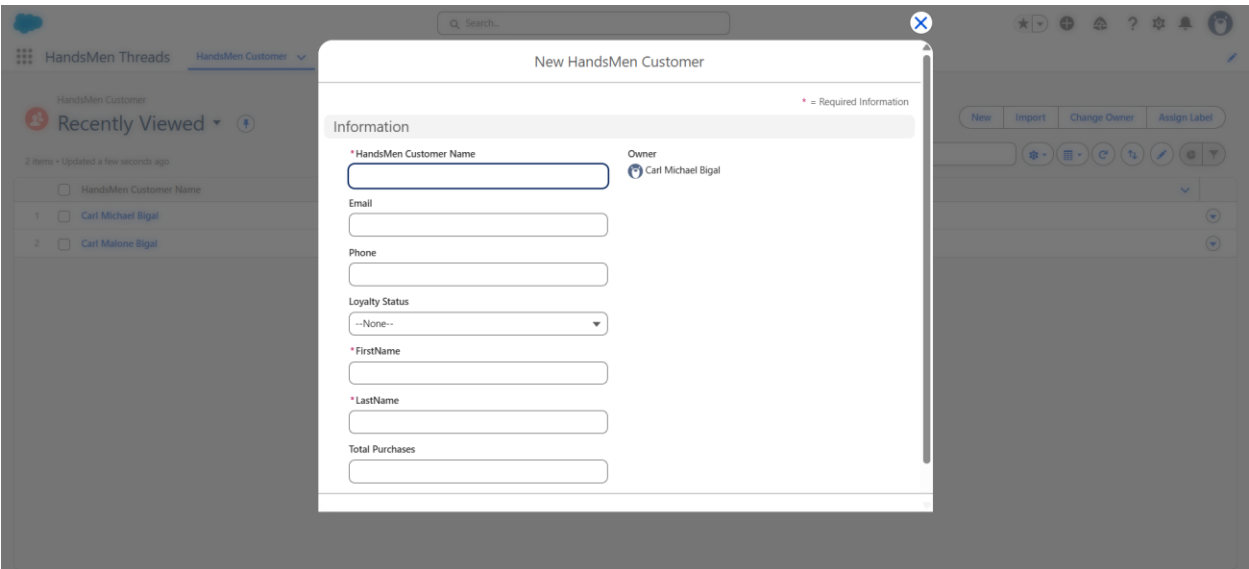
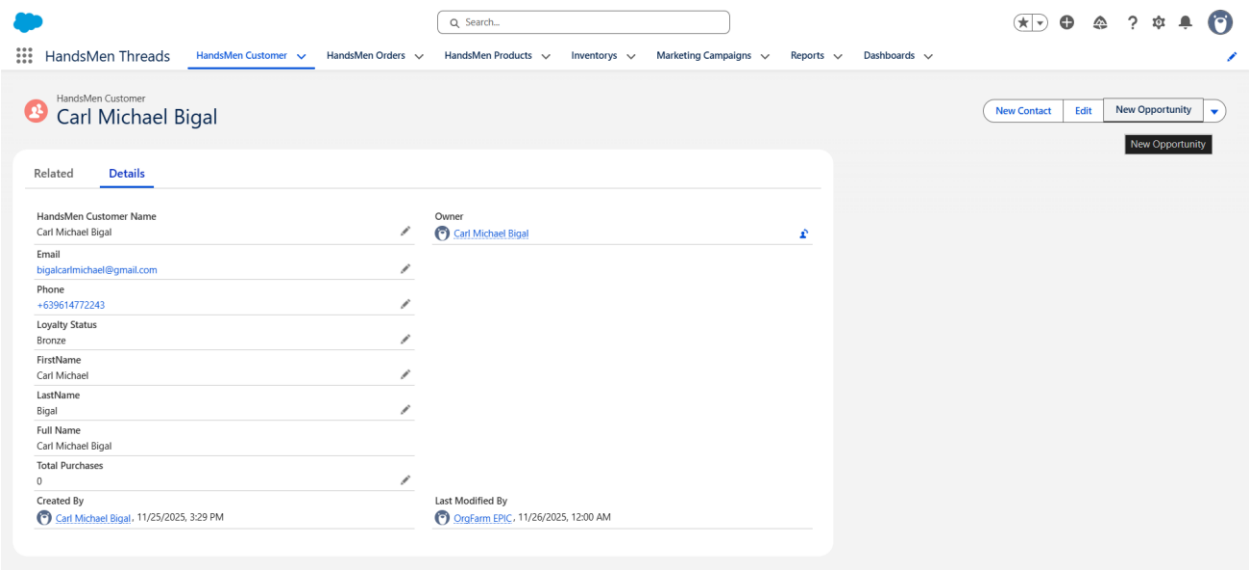
    global void execute(SchedulableContext SC) {
        InventoryBatchJob batchJob = new InventoryBatchJob();
        Database.executeBatch(batchJob, 200);
    }
}
```

Phase 3: UX/UI Development & Customization

Lightning App – HandsMen Threads App to manage Customers, Orders, Products, and Marketing Campaigns.



HandsMen Customer – For customer Information



HandsMen Order – Customer order transactions.

HandsMen Threads

HandsMen Customer

HandsMen Orders

Recently Viewed

9 items • Updated a few seconds ago

HandsMen OrderNumber

1

O-0010

2

O-0009

3

O-0008

4

O-0007

5

O-0005

6

O-0004

7

O-0003

8

O-0002

9

O-0001

New HandsMen Order

Information

HandsMen OrderNumber

Owner

Carl Michael Bigal

Customer

Search HandsMen Customer...

Status

--None--

Quantity

Total Amount

HandsMen Product

Search HandsMen Products...

Customer Email

Cancel

Save & New

Save

HandsMen Threads

HandsMen Customer

HandsMen Orders

HandsMen Products

Inventorys

Marketing Campaigns

Reports

Dashboards

HandsMen Order

O-0010

New Contact

Edit

New Opportunity

Related

Details

HandsMen OrderNumber

O-0010

Owner

Carl Michael Bigal

Customer

Carl Michael Bigal

Status

Confirmed

Quantity

1,000

Total Amount

3,000

HandsMen Product

T-shirt

Customer Email

bigalcarlmicahel2003@gmail.com

Created By

Carl Michael Bigal, 11/25/2025, 11:58 PM

Last Modified By

Carl Michael Bigal, 11/25/2025, 11:59 PM

HandsMen Product – Products that can be buy.

HandsMen Threads

HandsMen Customer

HandsMen Orders

HandsMen Products

Inventorys

Marketing Campaigns

Reports

Dashboards

HandsMen Products

Recently Viewed

2 items • Updated a few seconds ago

HandsMen Product Name

1

T-shirt

2

Shoes

New HandsMen Product

Information

HandsMen Product Name

Owner

Carl Michael Bigal

SKU

Price

Stock Quantity

Cancel

Save & New

Save

HandsMen Product

T-shirt

New Contact

Edit

New Opportunity

Related

Details

HandsMen Product Name

T-shirt

Owner

Carl Michael Bigal

SKU

Price

\$3

Stock Quantity

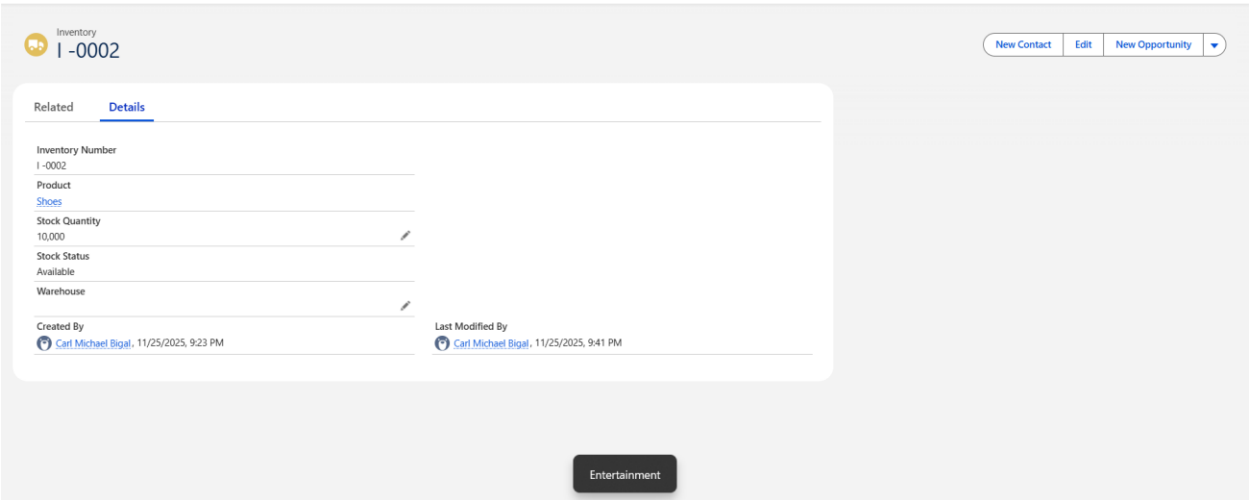
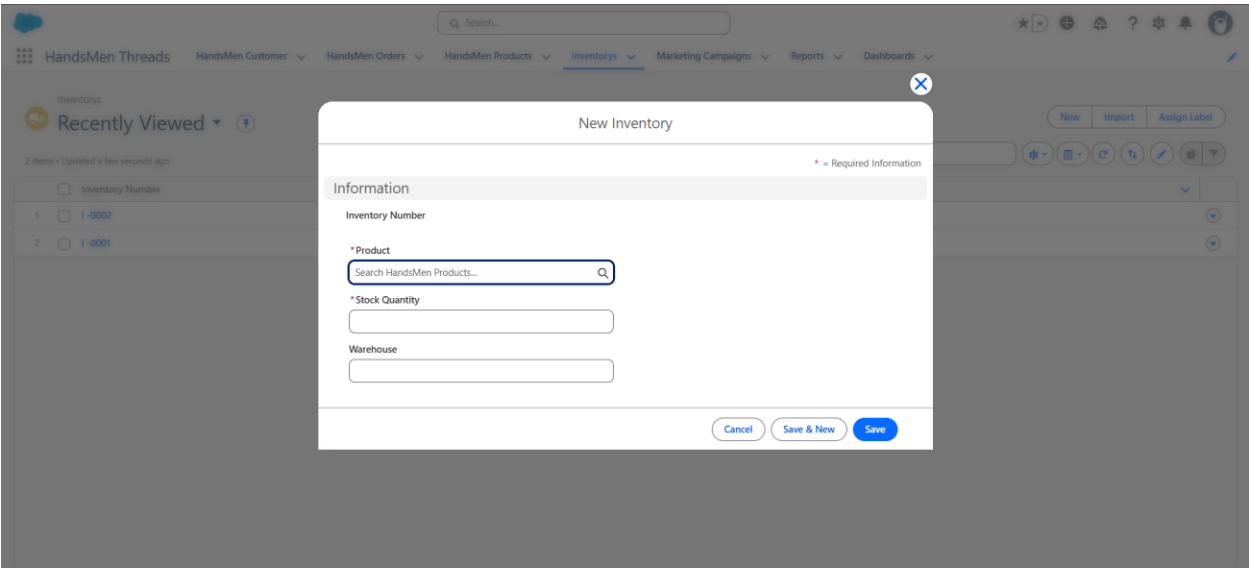
Created By

Carl Michael Bigal, 11/25/2025, 3:30 PM

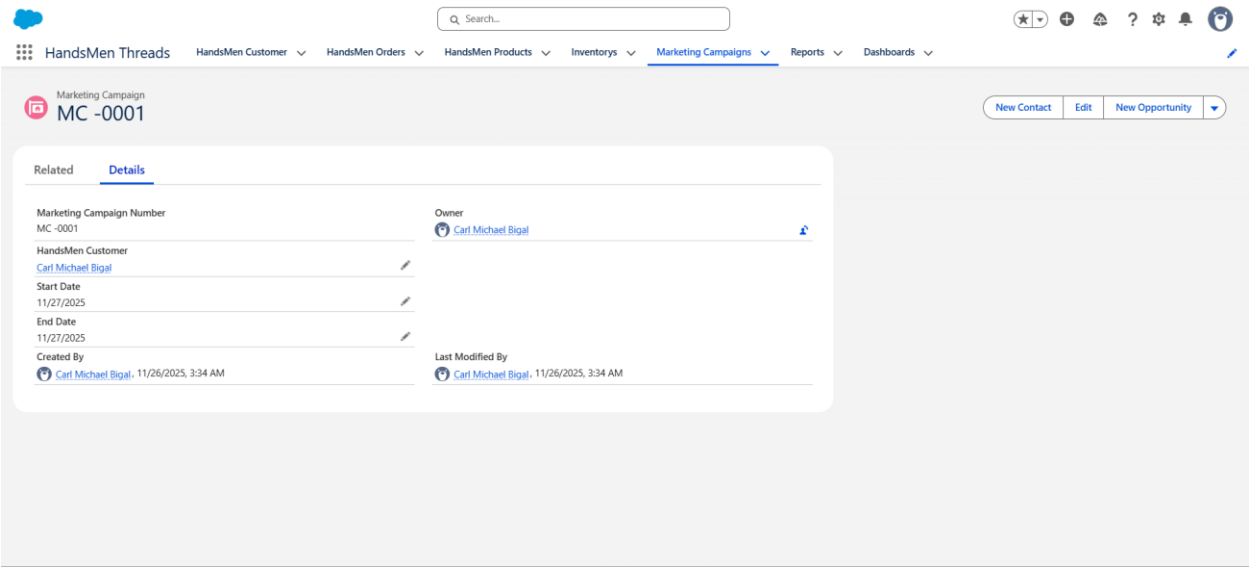
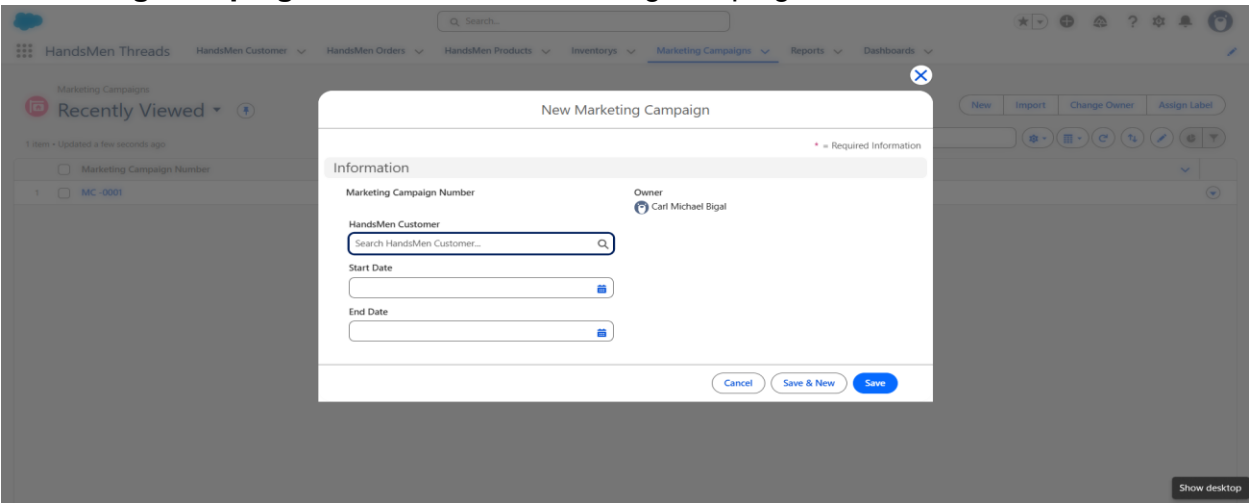
Last Modified By

Carl Michael Bigal, 11/25/2025, 8:56 PM

Inventories – Inventories of products



Marketing Campaigns – Details for marketing campaigns of the customers.



Phase 4: Data Migration, Testing & Security

Profiles

- Platform 1 – Clone the Standard User profile to create the Platform 1 Profile for the following roles: Sales, Inventory, and Marketing.

Profile

Platform 1

Help for this Page

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Login IP Ranges (0) | Enabled Apex Class Access (2) | Enabled Visualforce Page Access (0) | Enabled External Data Source Access (0) | Enabled Named Credential Access (0) | Enabled External Credential Principal Access (0) | Enabled Custom Metadata Type Access (0) | Enabled Custom Setting Definitions Access (0) | Enabled Flow Access (0) | Enabled Service Presence Status Access (0) | Enabled Custom Permissions (0)

Profile Detail

EditCloneDeleteView Users

Name	Platform 1	Custom Profile	✓
User License	Salesforce		
Description			
Created By	Carl Michael Bigal 11/25/2025, 3:27 PM	Modified By	Carl Michael Bigal 11/25/2025, 3:57 PM

Roles and Roles Hierarchy

- CEO – The highest role in the entire organization.
 - Sales – Works under the CEO and handles the sales of the organization
 - Inventory – Works under the CEO and handles the inventory tracking of products.
 - Marketing – Works under the CEO and handles the marketing campaigns of the organization.



Permission Set

Inventory Permission Set

Find Settings...

Clone

Edit Properties

Manage Assignments

View Summary

Permission Set Overview

Description	API Name	Inventory_Permission_Set
License	Namespace Prefix	
Session Activation Required	Created By	Carl Michael Bigal 11/25/2025, 5:31 PM
Permission Set Groups Added To	Last Modified By	Carl Michael Bigal 11/25/2025, 5:33 PM

Permission Set

Marketing Permission Set

Find Settings...

Clone

Edit Properties

Manage Assignments

View Summary

Permission Set Overview

Description	API Name	Marketing_Permission_Set
License	Namespace Prefix	
Session Activation Required	Created By	Carl Michael Bigal 11/25/2025, 5:34 PM
Permission Set Groups Added To	Last Modified By	Carl Michael Bigal 11/25/2025, 5:35 PM

User Interfaces (HandsMen Threads)

HandsMen Customer

Search...

New HandsMen Customer

* = Required Information

Information

* HandsMen Customer Name

Kenneth Bigal

Email

bigalcarlmichael@gmail.com

Phone

+639614772243

Loyalty Status

--None--

* FirstName

Kenneth

* LastName

Bigal

Total Purchases

Owner

Carl Michael Bigal

Cancel

Save & New

Save

HandsMen Customer

Kenneth Bigal

HandsMen Customer "Kenneth Bigal" was created.

Related

Details

HandsMen Customer Name

Kenneth Bigal

Email

bigalcarlmichael@gmail.com

Phone

+639614772243

Loyalty Status

FirstName

Kenneth

LastName

Bigal

Full Name

Kenneth Bigal

Total Purchases

Created By

Carl Michael Bigal , 11/26/2025, 5:02 AM

Owner

Carl Michael Bigal

Last Modified By

Carl Michael Bigal , 11/26/2025, 5:02 AM

HandsMen Order

ers HandsMen Products Inventorys Marketing Campaigns Reports Dashboards

New HandsMen Order

* = Required Information

Information

HandsMen OrderNumber

Owner

Carl Michael Bigal

Customer

Kenneth Bigal

Status

Pending

Quantity

201

Total Amount

* HandsMen Product

T-shirt

* Customer Email

bigalcarlmichael2003@gmail.com

Cancel

Save & New

Save

Save

HandsMen Order

O-0011

HandsMen Order "O-0011" was created.

RelatedDetails

HandsMen OrderNumber

O-0011

Customer

[Kenneth Bigal](#)

Status

Pending

Quantity

201

Total Amount

603

HandsMen Product

[T-shirt](#)

Customer Email

bigalcarlmichael2003@gmail.com

Created By

[Carl Michael Bigal](#), 11/26/2025, 5:03 AM

Owner

[Carl Michael Bigal](#)

Last Modified By

[Carl Michael Bigal](#), 11/26/2025, 5:03 AM

HandsMen Product

New HandsMen Product

* = Required Information

Information

* HandsMen Product Name

Watch

SKU

Price

\$100

Stock Quantity

1000

Owner

[Carl Michael Bigal](#)

Cancel

Save & New

Save

HandsMen Product

Watch

HandsMen Product "Watch" was created.

RelatedDetails

HandsMen Product Name

Watch

SKU

Price

\$100

Stock Quantity

1,000

Created By

[Carl Michael Bigal](#), 11/26/2025, 5:04 AM

Owner

[Carl Michael Bigal](#)

Last Modified By

[Carl Michael Bigal](#), 11/26/2025, 5:04 AM

Inventorys

New Inventory

* = Required Information

Information

Inventory Number

* Product

Watch

* Stock Quantity

1,000

Warehouse

Warehouse 1

Cancel

Save & New

Save

Inventory

I -0003

Inventory "I-0003" was created.

Related

Details

Inventory Number

I -0003

Product

[Watch](#)

Stock Quantity

1,000

Stock Status

Available

Warehouse

Warehouse 1

Created By

[Carl Michael Bigal](#), 11/26/2025, 5:05 AM

Last Modified By

[Carl Michael Bigal](#), 11/26/2025, 5:05 AM

Marketing Campaigns

New Marketing Campaign

* = Required Information

Information

Marketing Campaign Number

HandsMen Customer

Kenneth Bigal

Start Date

11/27/2025

End Date

11/28/2025

Owner

Carl Michael Bigal

Format: 12/31/2024

Cancel

Save & New

Save

Marketing Campaign

MC -0002

Marketing Campaign "MC -0002" was created.

Related

Details

Marketing Campaign Number

MC -0002

HandsMen Customer

[Kenneth Bigal](#)


Start Date

11/27/2025

End Date


11/28/2025

Created By


 [Carl Michael Bigal](#)

, 11/26/2025, 5:06 AM

Owner

 [Carl Michael Bigal](#)

Last Modified By

 [Carl Michael Bigal](#)

, 11/26/2025, 5:06 AM

Email Alerts (Trigger and Scheduled Flow outputs)

Loyalty Program



Congratulations! You are now a Bronze member and you are eligible for our Loyalty Rewards Program. Enjoy exclusive discounts, early access to offers, and special member benefits. Thank you for your continued Support.



Low Stock Alert

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

Order Confirmation Alert



Dear Kenneth Bigal,

Your order #O-0011 has been confirmed!

Thank you for shopping with us.

Best Regards,

Sales Team

Phase 5: Deployment, Documentation, and Maintenance

Deployment Strategy

- Configuration, automation workflows, validation rules, data model modifications, and email templates will all be moved from the Sandbox to Production using Change Sets.
- Complete all test cycles.
- Create backup key production data before final migration.

System Maintenance and Monitoring

- Review and updates of automation flows regularly to ensure that they remain aligned with operational changes.
- Use Salesforce Setup Audit Trail to track configuration changes.
- Utilize the error logs in Flow and Apex.
- Monthly system health checks.

Troubleshooting Documentation Steps

- Identify the Issues
- Check Logs and Error Messages
- Verify Data Conditions
- Apply Fixes
- Document Resolutions

Conclusion

In conclusion, the Salesforce CRM implementation for HandsMen Threads represents the strategic step toward modernizing their operations, strengthening customer relationships, and ensuring long-term business growth. This project is not just only to resolve the current operational challenges, but it also helps position the HandsMen Threads to adapt quickly to the evolving customer expectations and market demands. The implementation marks the significant advancement in the company's digital transformation journey, ensuring a more smoother workflow automation, more enhanced customer satisfaction, and more improved overall business performance.