

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

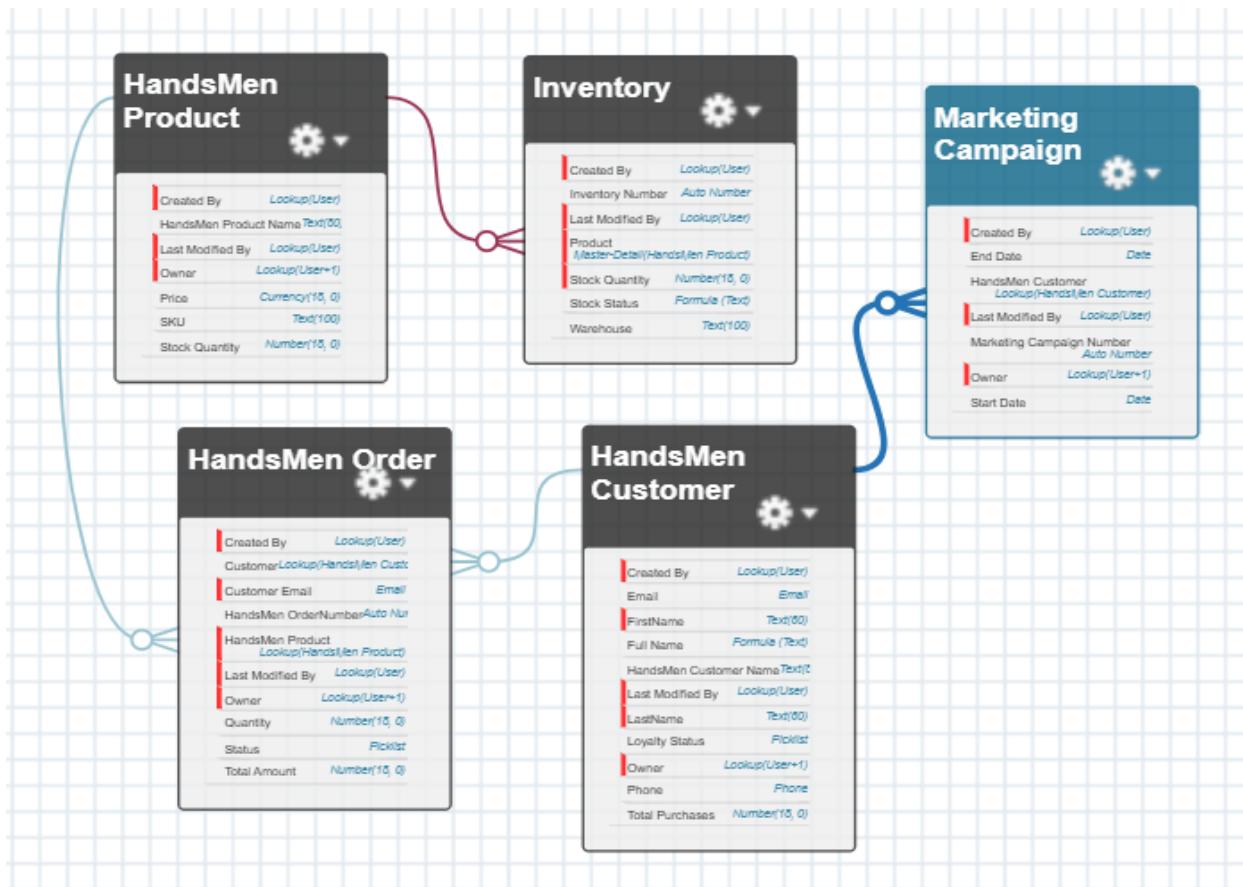
Understanding Business Requirements

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

Marketing Campaign

Marketing Campaign

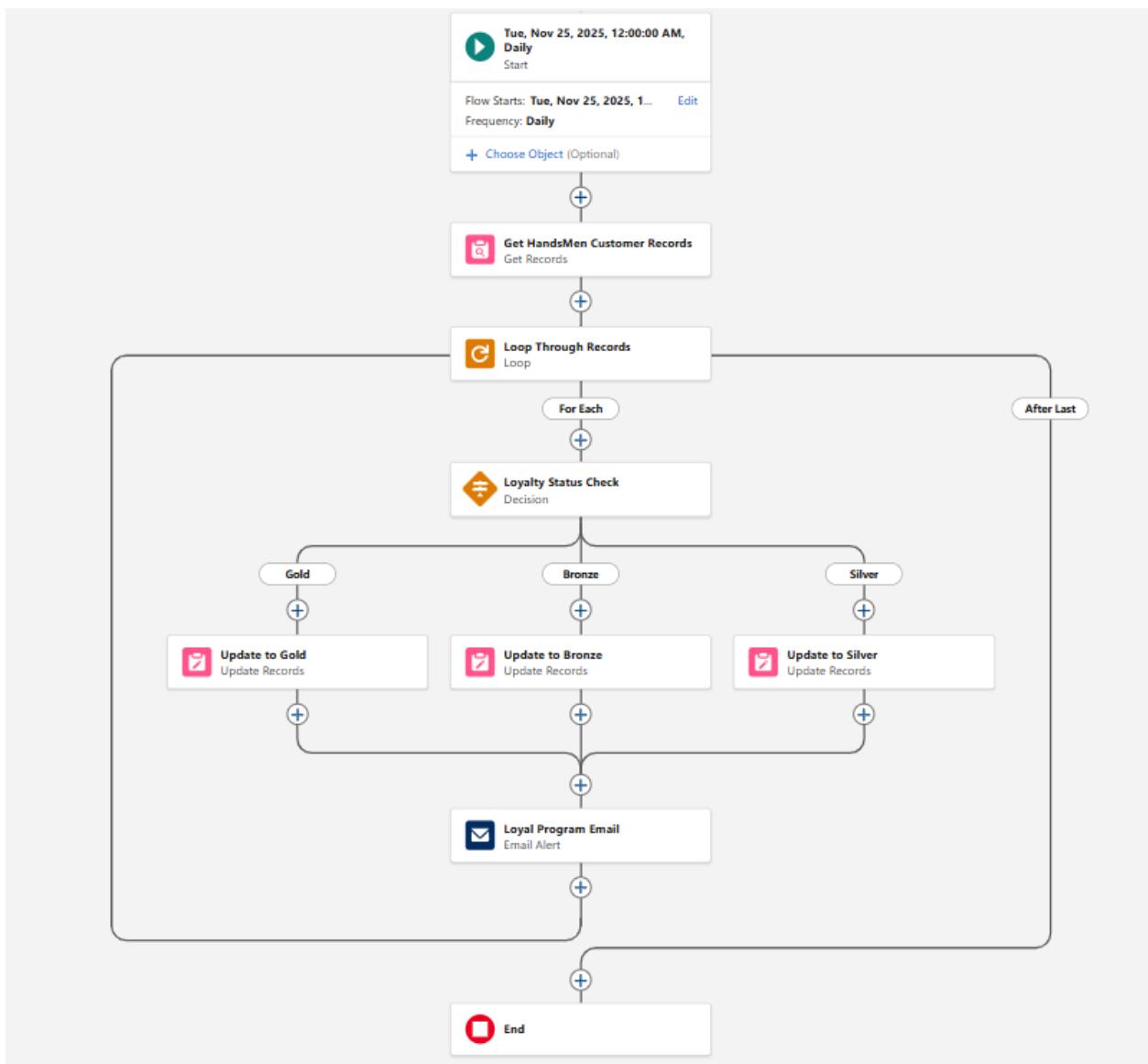
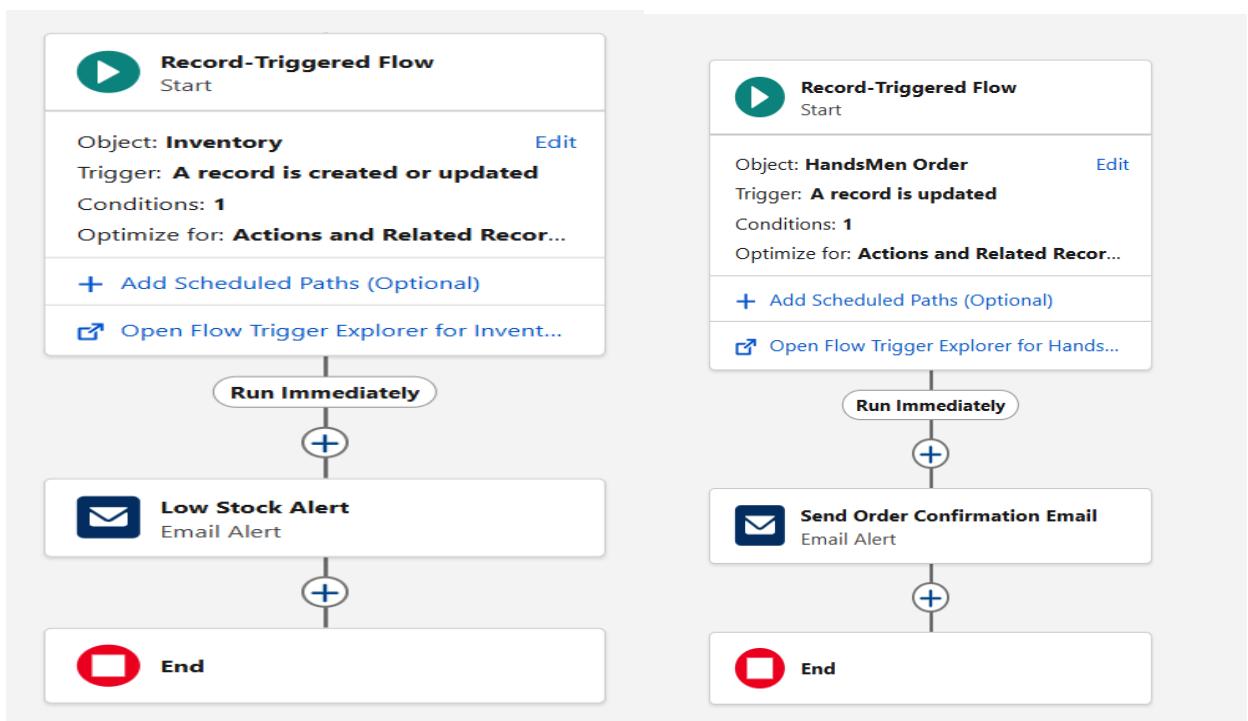
Created By	<i>Lookup(User)</i>
End Date	<i>Date</i>
HandsMen Customer	<i>Lookup(HandsMen Customer)</i>
Last Modified By	<i>Lookup(User)</i>
Marketing Campaign Number	<i>Auto Number</i>
Owner	<i>Lookup(User+1)</i>
Start Date	<i>Date</i>

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__caddError('For Status "Confirmed", Quantity must be more than 500.');//  
                }  
            } else if (order.Status__c == 'Pending') {  
                if (order.Quantity__c == null || order.Quantity__c <= 200) {  
                    order.Quantity__caddError('For Status "Pending", Quantity must be more than 200.');//  
                }  
            } else if (order.Status__c == 'Rejection') {  
                if (order.Quantity__c == null || order.Quantity__c != 0) {  
                    order.Quantity__caddError('For Status "Rejection", Quantity must be 0.');//  
                }  
            }  
        }  
        System.debug('All records validated successfully.');//  
    }  
}
```

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.

This screenshot shows the 'HandsMen Customer' list view. At the top, there's a search bar and a toolbar with icons for New, Import, Change Owner, and Assign Label. Below the toolbar, a section titled 'Recently Viewed' lists two items: 'Carl Michael Bigal' and 'Carl Malone Bigal'. There are also buttons for creating a new contact and viewing details.

HandsMen Customer – For customer Information

This screenshot shows the 'Details' tab for the customer 'Carl Michael Bigal'. The page includes fields for HandsMen Customer Name, Email, Phone, Loyalty Status, FirstName, LastName, Full Name, Total Purchases, and Created By. It also shows the last modified by information and a timestamp. A toolbar at the top right includes buttons for New Contact, Edit, and New Opportunity.

This screenshot shows a modal window titled 'New HandsMen Customer' for creating a new customer. The form has a section labeled 'Information' with fields for HandsMen Customer Name, Email, Phone, Loyalty Status (set to 'None'), FirstName, LastName, and Total Purchases. A note indicates that the 'HandsMen Customer Name' field is required. The background shows the 'Recently Viewed' list from the previous screen.

HandsMen Order – Customer order transactions.

New HandsMen Order

Information

Owner: Carl Michael Bigal

* = Required Information

HandsMen OrderNumber:

Customer: Search HandsMen Customer...

Status: --None--

Quantity:

Total Amount:

*HandsMen Product: Search HandsMen Products...

*Customer Email:

Buttons: Cancel, Save & New, Save

HandsMen Order O-0010

Related Details

Owner: Carl Michael Bigal

HandsMen OrderNumber: O-0010

Customer: Carl Michael Bigal

Status: Confirmed

Quantity: 1.000

Total Amount: 3.000

HandsMen Product: T-shirt

Customer Email: bigalcarlmichael2003@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 bought.

New HandsMen Product

Information

Owner: Carl Michael Bigal

*HandsMen Product Name:

SKU:

Price:

Stock Quantity:

Buttons: Cancel, Save & New, Save

HandsMen Product T-shirt

Related Details

Owner: Carl Michael Bigal

HandsMen Product Name: T-shirt

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

New Inventory

Information

*Product
Search HandsMen Products...

*Stock Quantity

Warehouse

Cancel Save & New Save

Inventory I -0002

Related Details

Inventory Number
I-0002

Product
Shoes

Stock Quantity
10,000

Stock Status
Available

Warehouse

Created By
Carl Michael Bigal, 11/25/2025, 9:23 PM

Last Modified By
Carl Michael Bigal, 11/25/2025, 9:41 PM

Entertainment

Marketing Campaigns – Details for marketing campaigns of the customers.

New Marketing Campaign

Information

*Marketing Campaign Number

Owner
Carl Michael Bigal

HandsMen Customer
Search HandsMen Customer...

Start Date

End Date

Cancel Save & New Save

Marketing Campaign MC -0001

Related Details

Marketing Campaign Number
MC -0001

Owner
Carl Michael Bigal

HandsMen Customer
Carl Michael Bigal

Start Date
11/27/2025

End Date
11/27/2025

Created By
Carl Michael Bigal, 11/26/2025, 3:34 AM

Last Modified By
Carl Michael Bigal, 11/26/2025, 3:34 AM

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.

The screenshot shows the 'Profile Detail' page for 'Platform 1'. At the top, there are links for 'Edit', 'Clone', 'Delete', and 'View Users'. Below this, the profile details are listed: Name (Platform 1), User License (Salesforce), Description (none), Created By (Carl Michael Bigal, 11/25/2025, 3:27 PM), Modified By (Carl Michael Bigal, 11/25/2025, 3:57 PM), and a 'Custom Profile' checkbox which is checked. At the bottom, there are links for 'Login IP Ranges', 'Enabled Apex Class Access', 'Enabled Visualforce Pages Access', 'Enabled External Data Source Access', 'Enabled Named Credential Access', 'Enabled External Credential Principal Access', 'Enabled Custom Metadata Type Access', 'Enabled Custom Setting Definitions Access', 'Enabled Flow Access', 'Enabled Service Presence Status Access', and 'Enabled Custom Permissions'.

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 Sets

- **Sales Permission Set** – Sales Manager has full access to customers and orders
- **Inventory Permission Set** – Inventory Manager can read and edit on inventory and products.
- **Marketing Permission Set** – Marketing Manager can read on customers and edit on marketing campaigns.

The screenshot shows the 'Permission Set Overview' page for 'Sales Permission Set'. At the top, there are links for 'Find Settings...', 'Clone', 'Edit Properties', 'Manage Assignments', and 'View Summary'. Below this, the 'Permission Set Overview' section displays the following information:

Description	API Name
License	Sales_Permission_Set
Namespace Prefix	
Session Activation Required	<input type="checkbox"/>
Created By	Carl Michael Bigal, 11/25/2025, 4:44 PM
Last Modified By	Carl Michael Bigal, 11/25/2025, 5:29 PM
Permission Set Groups Added To	0

Permission Set Inventory Permission Set

[Video Tutorial](#) | [Help for this Page](#)

Find Settings... | [Clone](#) [Edit Properties](#) [Manage Assignments](#) [View Summary](#)

Permission Set Overview

Description	API Name	Inventory_Permission_Set
License	Namespace Prefix	
Session Activation Required <input type="checkbox"/>	Created By	Carl Michael Bigal , 11/25/2025, 5:31 PM
Permission Set Groups Added To 0	Last Modified By	Carl Michael Bigal , 11/25/2025, 5:33 PM

Permission Set Marketing Permission Set

[Video Tutorial](#) | [Help for this Page](#)

Find Settings... | [Clone](#) [Edit Properties](#) [Manage Assignments](#) [View Summary](#)

Permission Set Overview

Description	API Name	Marketing_Permission_Set
License	Namespace Prefix	
Session Activation Required <input type="checkbox"/>	Created By	Carl Michael Bigal , 11/25/2025, 5:34 PM
Permission Set Groups Added To 0	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	Owner
* HandsMen Customer Name <input type="text" value="Kenneth Bigal"/>	Carl Michael Bigal
Email <input type="text" value="bigalcarlmichael@gmail.com"/>	
Phone <input type="text" value="+639614772243"/>	
Loyalty Status <input type="text" value="--None--"/>	
* FirstName <input type="text" value="Kenneth"/>	
* LastName <input type="text" value="Bigal"/>	
Total Purchases <input type="text"/>	

[Cancel](#) [Save & New](#) [Save](#)

HandsMen Customer
Kenneth Bigal

Details

HandsMen Customer Name Kenneth Bigal	Owner Carl Michael 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	Last Modified By Carl Michael Bigal , 11/26/2025, 5:02 AM

HandsMen Order

HandsMen Products > Inventory > 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](#)

HandsMen Order
O-0011

Related **Details**

HandsMen OrderNumber	O-0011	Owner	Carl Michael Bigal
Customer	Kenneth Bigal		
Status	Pending		
Quantity	201		
Total Amount	603		
HandsMen Product	T-shirt		
Customer Email	bigalcarlmichael2003@gmail.com		
Created By	Carl Michael Bigal	Last Modified By	Carl Michael Bigal
	11/26/2025, 5:03 AM		11/26/2025, 5:03 AM

HandsMen Product

New HandsMen Product

* = Required Information

Information

* HandsMen Product Name	Watch	Owner	Carl Michael Bigal
SKU			
Price	\$100		
Stock Quantity	1000		

Buttons: Cancel, Save & New, Save

HandsMen Product
Watch

Related **Details**

HandsMen Product Name	Watch	Owner	Carl Michael Bigal
SKU			
Price	\$100		
Stock Quantity	1,000		
Created By	Carl Michael Bigal	Last Modified By	Carl Michael Bigal
	11/26/2025, 5:04 AM		11/26/2025, 5:04 AM

Inventories

New Inventory

* = Required Information

Information

Inventory Number

* Product
Watch

* Stock Quantity
1,000

Warehouse
Warehouse 1

[Cancel](#) [Save & New](#) [Save](#)

Inventory | -0003

[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

 Inventory "I -0003" was created.

Marketing Campaigns

New Marketing Campaign

* = Required Information

Information

Marketing Campaign Number

Owner
 Carl Michael Bigal

HandsMen Customer
Kenneth Bigal

Start Date
11/27/2025

End Date
11/28/2025

Format: 12/31/2024

[Cancel](#) [Save & New](#) [Save](#)

The screenshot shows a Marketing Campaign record for "MC -0002". The top navigation bar includes a back arrow, a search bar, and tabs for "Marketing Campaign" and "Marketing Campaigns". A green success message bubble at the top right states "Marketing Campaign "MC -0002" was created." Below the message are tabs for "Related" and "Details", with "Details" being active. The "Details" section contains the following fields:

Field	Value
Marketing Campaign Number	MC -0002
Owner	Carl Michael Bigal
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
Last Modified By	Carl Michael Bigal, 11/26/2025, 5:06 AM

Email Alerts (Trigger and Scheduled Flow outputs)

Loyalty Program

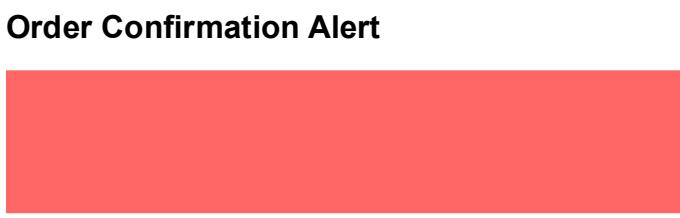


Congratulations! You are now a Bronze member and you are eligible for our Loyalty Rewards Program.
Enjoy exclusive discounts, early access to offers, and special member benefits.
Thank you for your continued Support.



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



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.