

PROJECT DOCUMENTATION

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

PROJECT OVERVIEW

HandsMen Threads is a men's fashion brand that focuses on premium products and tailoring services. As the business grows, the company needs a centralized system that can manage customer data, orders, products, inventory, and marketing activities in an integrated and consistent manner.

This project aims to build and implement Salesforce CRM as the primary solution for data management and business process automation. This CRM system is designed to improve customer service quality, maintain data integrity, and support real-time data-driven decision making. Key features developed include customer management, order management, stock monitoring, loyalty programs, and automated email notifications.

OBJECTIVES

The main objective of developing Salesforce CRM at HandsMen Threads is to create an efficient, integrated, and scalable system to support business operational needs. Specifically, this project aims to improve customer relationship management, automate core business processes, and minimize manual errors in data management.

The implementation of this CRM is also expected to provide business value in the form of increased customer satisfaction through more personalized communication, optimized inventory management to prevent stockouts, and increased efficiency for the sales, inventory, and marketing teams.

PHASE 1: REQUIREMENT ANALYSIS & PLANNING

Understanding Business Requirements

HandsMen Threads requires a system that is capable of:

- Storing customer data centrally and consistently
- Managing orders and calculating transaction totals automatically
- Monitoring stock availability in real time
- Sending automatic notifications regarding orders, stock, and customer loyalty
- Managing user access rights based on job roles

Defining Project Scope and Objectives

The scope of the project includes the development of Salesforce CRM, ranging from data model design, security configuration, business process automation, to testing and deployment. The project does not include external system integration in the initial stage.

Data Model & Security Model Design

The data model is designed using several main custom objects:

- HandsMen Customer

- HandsMen Product
- HandsMen Order
- Inventory
- Marketing Campaign

The figure consists of three vertically stacked screenshots of the Salesforce Object Manager interface.

Screenshot 1: HandsMen Product Objects

The search bar at the top contains "handsmen". The table shows three custom objects:

| Label | API Name | Type | Description | Last Modified | Deployed |
|-------------------|---------------------|---------------|-------------|---------------|----------|
| HandsMen Customer | HandsMen_Customer_c | Custom Object | | 12/15/2025 | ✓ |
| HandsMen Order | HandsMen_Order_c | Custom Object | | 12/15/2025 | ✓ |
| HandsMen Product | HandsMen_Product_c | Custom Object | | 12/15/2025 | ✓ |

Screenshot 2: Inventory Objects

The search bar at the top contains "inventory". The table shows four objects:

| Label | API Name | Type | Description | Last Modified | Deployed |
|----------------------------|--------------------------|-----------------|-------------|---------------|----------|
| Inventory | Inventory_c | Custom Object | | 12/15/2025 | ✓ |
| Inventory Item Reservation | InventoryItemReservation | Standard Object | | | |
| Inventory Reservation | InventoryReservation | Standard Object | | | |
| Web Store Inventory Source | WebStoreInventorySource | Standard Object | | | |

Screenshot 3: Marketing Campaign Objects

The search bar at the top contains "marketing campaign". The table shows one object:

| Label | API Name | Type | Description | Last Modified | Deployed |
|--------------------|----------------------|---------------|-------------|---------------|----------|
| Marketing Campaign | Marketing_Campaign_c | Custom Object | | 12/15/2025 | ✓ |

Figure 1. Custom Objects HandsMen Threads in the Salesforce Object Manager.

The security model is designed using Profiles, Roles, Permission Sets, and Sharing Rules to ensure data access is in line with user responsibilities.

Stakeholders Mapping

The main stakeholders in this project include:

- Sales Team
- Inventory Team
- Marketing Team

The screenshot shows the Salesforce Setup interface with the 'Roles' page selected. The left sidebar shows navigation categories like 'Users' and 'Roles'. The main content area displays a hierarchical list of roles under 'salesforce'. The hierarchy includes: CEO, CFO, COO, INVENTORY, MARKETING, SALES, SVP_Customer Service & Support, Customer Support_International, Customer Support_North America, and Installation & Repair Services. Each role entry has 'Edit | Del | Assign' options and an 'Add Role' link.

Figure 2. Role hierarchy in the Salesforce CRM HandsMen Threads.

Execution Roadmap

The project is implemented in stages: needs analysis, development, testing, deployment, and maintenance.

PHASE 2: SALESFORCE DEVELOPMENT – BACKEND & CONFIGURATIONS

Environment Setup & DevOps Workflow

Development is carried out using Salesforce Developer Org as a testing and development environment prior to deployment to production.

Custom Objects, Fields & Validation Rules

Several custom objects were created to support business needs, including Customer, Product, Order, Inventory, and Marketing Campaign. Validation rules were implemented to maintain data quality, such as:

- The total order amount cannot be zero or negative.
- Inventory stock cannot be less than zero.
- Customer email addresses must use a valid format.

The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Customer' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main area is titled 'Fields & Relationships' and displays a table of fields:

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------------|------------------|----------------|-------------------|---------|
| Created By | CreatedById | Lookup(User) | | |
| Email | Email__c | Email | | |
| FirstName | FirstName__c | Text(60) | | |
| FullName | FullName__c | Formula (Text) | | |
| HandsMen Customer Name | Name | Text(80) | | ✓ |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| LastName | LastName__c | Text(60) | | |

The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Order' object. The left sidebar lists various setup options. The main area is titled 'Fields & Relationships' and displays a table of fields:

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|-----------------------|-------------------|---------------------------|-------------------|---------|
| Created By | CreatedById | Lookup(User) | | |
| Customer | Customer__c | Lookup(HandsMen Customer) | ✓ | |
| Customer Email | Customer_Email__c | Email | | |
| HandsMen Order Number | Name | Auto Number | | ✓ |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | ✓ | |
| Quantity | Quantity__c | Number(18, 0) | | |

Figure 3. Field configuration on HandsMen Order and Handsmen Customer

The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Order' object. The left sidebar lists various setup options. The main area is titled 'Validation Rules' and displays a table of validation rules:

| RULE NAME | ERROR LOCATION | ERROR MESSAGE | ACTIVE | MODIFIED BY |
|--------------|----------------|-----------------------------|--------|--|
| Total_Amount | Total Amount | Please Enter Correct Amount | ✓ | Muhammad Rifai Sipayung, 12/15/2025, 1:37 AM |

Figure 4. Validation rule for the total amount on the handsmen order.

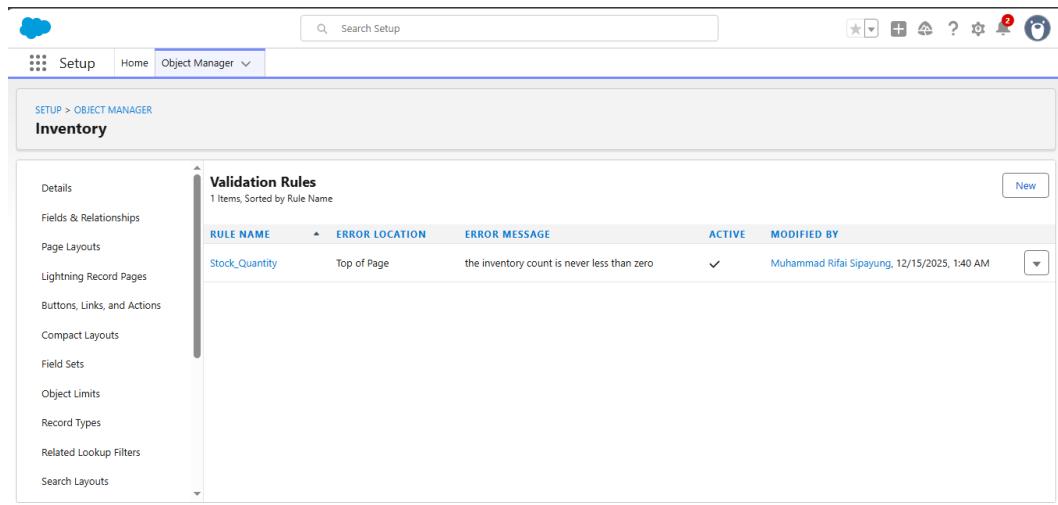


Figure 5. Validation rule for the stock quantity on the inventory.

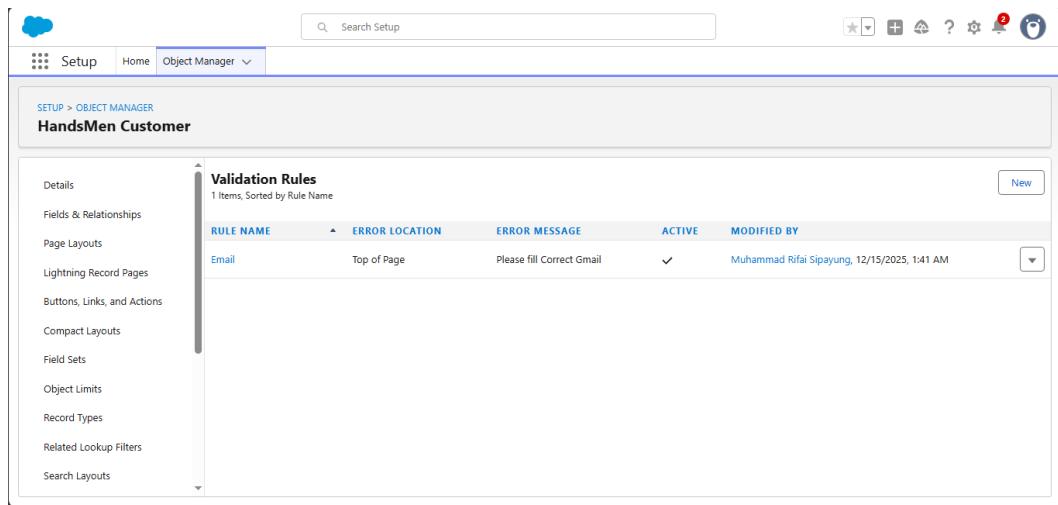
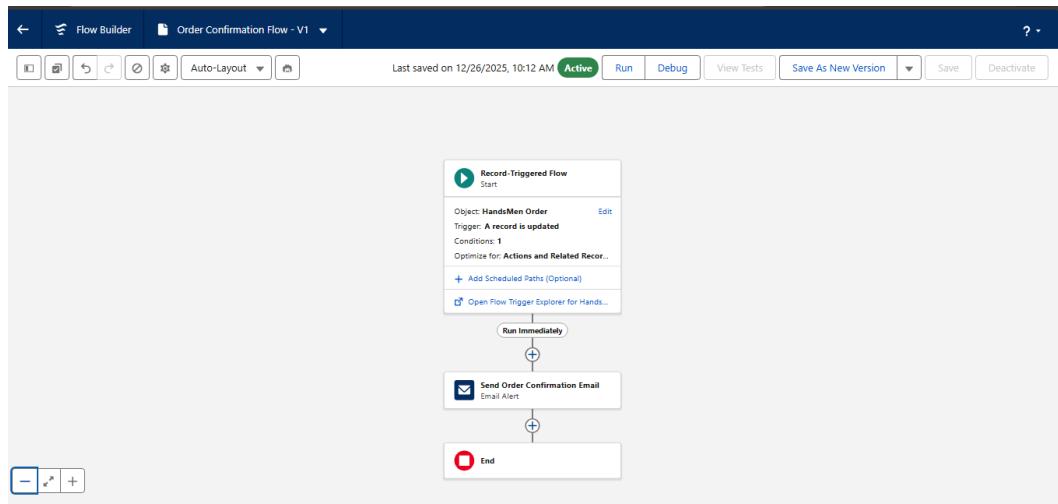


Figure 6. Validation rule for the email on the handsmen customer.

Automation

Business process automation is implemented using:

- Record-Triggered Flow for order confirmation and low stock alerts
- Scheduled Flow for customer loyalty status updates



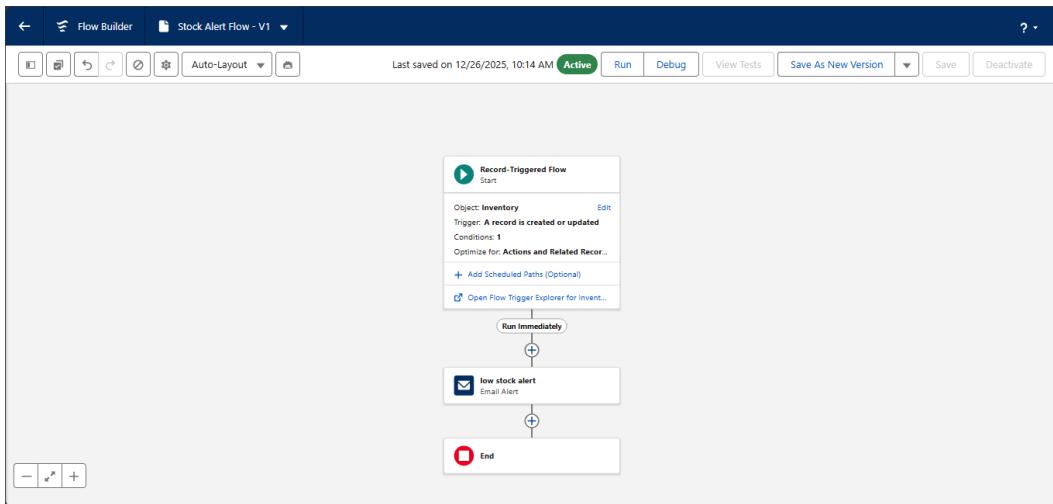


Figure 7. Record-triggered flow order confirmation and stock alert

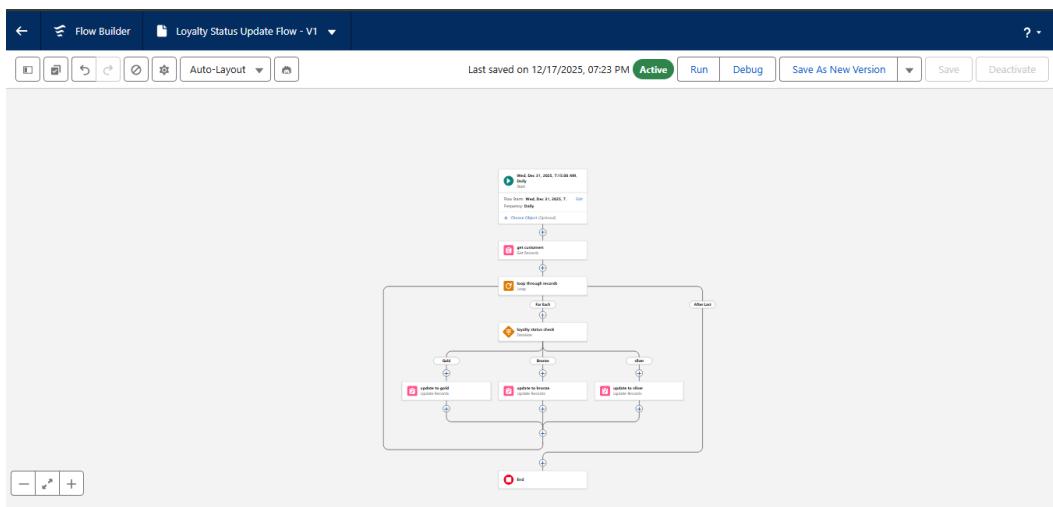


Figure 8. Scheduled flow for loyalty status updates.

Apex Classes & Triggers

Apex is used for complex business logic, including:

- Calculation of total order price
- Automatic stock reduction
- Customer loyalty status updates
- Apex batch for stock synchronization and scheduled data updates.

```

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             }
10        }
11    }
12 }
  
```

The screenshot shows the Apex code editor with the following details:

- File Name:** OrderTriggerHandler.apxc
- Code Coverage:** None
- API Version:** 65
- Buttons:** Go To, Logs, Tests, Checkpoints, Query Editor, View State, Progress, Problems

The screenshot shows the Salesforce IDE interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for OrderTriggerHandler.apxc and OrderTrigger.apxt. Below the tabs, there's a dropdown for Code Coverage: None and API Version: 65. The main code editor contains the following Apex code:

```

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

```

Below the code editor is a toolbar with tabs: Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. A status bar at the bottom shows User, Application, Operation, Time, Status, Read, and Size.

Figure 9. Apex class OrderTriggerHandler and Apex trigger OrderTrigger

The screenshot shows the Salesforce IDE interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for OrderTriggerHandler.apxc, OrderTrigger.apxt, and InventoryBatchJob.apxc. Below the tabs, there's a dropdown for Code Coverage: None and API Version: 65. The main code editor contains the following Apex code:

```

1 global class InventoryBatchJob implements Database.Batchable<SObject>, Schedulable {
2
3     global Database.QueryLocator start(Database.BatchableContext BC) {
4         return Database.getQueryLocator(
5             'SELECT Id, Stock_Quantity__c FROM Product__c WHERE Stock_Quantity__c < 10'
6         );
7     }
8
9     global void execute(Database.BatchableContext BC, List<SObject> records) {
10        List<HandsMen_Product__c> productsToUpdate = new List<HandsMen_Product__c>();
11    }
12 }

```

Below the code editor is a toolbar with tabs: Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. A status bar at the bottom shows User, Application, Operation, Time, Status, Read, and Size.

Figure 10. Batch Apex Inventory Sync

PHASE 3: UI/UX DEVELOPMENT & CUSTOMIZATION

Lightning App Setup

The Lightning application named HandsMen Threads was created through App Manager as a central point of access for users to all CRM features.

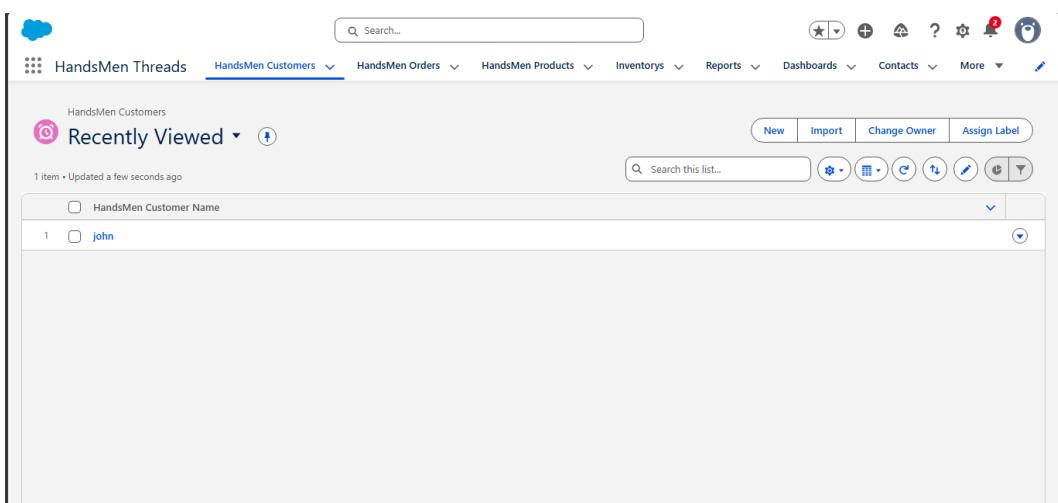


Figure 11. Lightning App Hands-On Threads in the App Manager.

Page Layouts & Dynamic Forms

Page layouts are customized based on the needs of each object so that users can easily access important fields.

The image contains two screenshots of the HandsMen app interface, demonstrating customized page layouts for different objects.

Screenshot 1: HandsMen Customer Page Layout

- Header:** Shows the navigation bar with 'HandsMen Threads' selected, followed by 'HandsMen Customers', 'HandsMen Orders', 'HandsMen Products', 'Inventorys', 'Reports', 'Dashboards', 'Contacts', and 'More'.
- Section:** 'HandsMen Customer' with the name 'john'.
- Details:** A table showing customer details with edit icons next to each field:

| | | | |
|------------------------|------------|-------|-------------------------|
| HandsMen Customer Name | john | Owner | Muhammad Rifai Sipayung |
| Email | | | |
| Phone | | | |
| Loyalty Status | | | |
| FirstName | john | | |
| LastName | grace | | |
| FullName | john grace | | |
| Total Purchases | | | |

Screenshot 2: HandsMen Order Page Layout

- Header:** Shows the navigation bar with 'HandsMen Threads' selected, followed by 'HandsMen Customers', 'HandsMen Orders', 'HandsMen Products', 'Inventorys', 'Reports', 'Dashboards', 'Contacts', and 'More'.
- Section:** 'HandsMen Order' with the number 'O-0007'.
- Message:** A green notification bar at the top right says 'HandsMen Order "O-0007" was created.'
- Details:** A table showing order details with edit icons next to each field:

| | | | |
|-----------------------|--|------------------|--|
| HandsMen Order Number | O-0007 | Owner | Muhammad Rifai Sipayung |
| HandsMen Product | t shirt M | | |
| Customer | john | | |
| Status | Confirmed | | |
| Quantity | 550 | | |
| Total Amount | 5 | | |
| Customer Email | mrifai2a2@gmail.com | | |
| Created By | Muhammad Rifai Sipayung, 12/26/2025, 3:45 AM | Last Modified By | Muhammad Rifai Sipayung, 12/26/2025, 3:45 AM |

Figure 12. Page layout of the HandsMen customer and Handsmen orders,etc.

User Management

Users are created and classified based on roles such as Sales, Inventory, and Marketing to ensure proper access control.

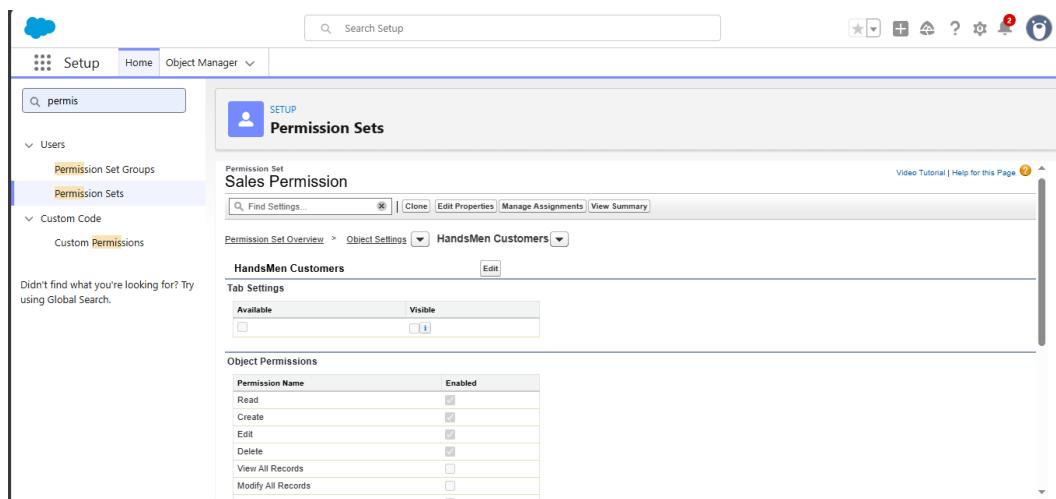


Figure 13. User configuration and permission set.

Reports & Dashboards

Reports and dashboards are developed to monitor sales, inventory, and customer activity in real-time.

| Report Name | Description | Folder | Created By | Created On | Subscribed |
|---|---|---|-------------------|----------------------|------------|
| Exercise Completion by Days to Complete | Analyze an exercise's completion status based on average days to complete. | Enablement Dashboard Reports Summer '24 | Automated Process | 12/10/2025, 11:23 PM | |
| Exercise Completion by Days to Complete | Analyze an exercise's completion status based on average days to complete. | Enablement Dashboard Reports Spring '24 | Automated Process | 12/10/2025, 11:23 PM | |
| Exercise Completion by User | Analyze how long users are spending on an exercise and the amount of progress they're making. | Enablement Dashboard Reports Summer '24 | Automated Process | 12/10/2025, 11:23 PM | |
| Exercise Completion by User | Analyze how long users are spending on an exercise and the amount of progress they're making. | Enablement Dashboard Reports Spring '24 | Automated Process | 12/10/2025, 11:23 PM | |
| Exercise Completion Status | Analyze how long users take to complete an exercise and their completion percentage. | Enablement Dashboard Reports Spring '24 | Automated Process | 12/10/2025, 11:23 PM | |

| Dashboard Name | Description | Folder | Created By | Created On | Subscribed |
|----------------------|---|---------------------------------|-------------------|----------------------|------------|
| Enablement Dashboard | View data on how Enablement helps drive your business outcomes. This is your main dashboard for all Enablement analytics. Don't delete it, if you want to make changes to this dashboard, duplicate it. | Enablement Dashboard Spring '24 | Automated Process | 12/10/2025, 11:23 PM | |
| Enablement Dashboard | View data on how Enablement helps drive your business outcomes. This is your main dashboard for all Enablement analytics. Don't delete it, if you want to make changes to this dashboard, duplicate it. | Enablement Dashboard Summer '24 | Automated Process | 12/10/2025, 11:23 PM | |

Figure 14. HandsMen Threads sales Reports and dashboard

PHASE 4: DATA MIGRATION, TESTING & SECURITY

Data Migration

The data loading process is performed using the Data Import Wizard and Data Loader according to data volume requirements.

Data Quality & Security

- Field History Tracking is used to monitor important data changes.
- Duplicate Rules and Matching Rules are applied to prevent data duplication.
- Profiles, Roles, Permission Sets, and Sharing Rules are configured for system security.

Testing Approach

- Testing is performed through:
- Unit testing on Apex Classes and Triggers
- End-to-end testing on flows, email alerts, and validation
- Business scenario testing such as order creation, stock updates, and loyalty changes

The screenshots illustrate the HandsMen Threads sales reports and dashboard interface. The top screenshot shows a modal dialog titled 'Information' for creating a new contact. The form includes fields for HandsMen Customer Name (set to 'user'), Email (mhdriai2a2@gmail.com), Phone, Loyalty Status (set to 'Gold'), FirstName (set to 'grace'), and LastName (set to 'grace m'). The bottom screenshot shows the 'Details' tab of the contact record for 'user', displaying the same information: HandsMen Customer Name (user), Email (mhdriai2a2@gmail.com), Phone, Loyalty Status (Gold), FirstName (grace), LastName (grace m), and FullName (grace grace m). The contact also has a 'Total Purchases' field set to 4 and 'Created By' and 'Last Modified By' fields.

New Inventory

* = Required Information

| Information | |
|------------------|-----------|
| Inventory Number | |
| *Product | t shirt M |
| Stock_Quantity | 4 |
| Warehouse | 5 |

Buttons: Cancel, Save & New, Save

Inventory | -0008

Details

| | |
|------------------|--|
| Inventory Number | I-0008 |
| Product | t shirt M |
| Stock_Quantity | 4 |
| Stock Status | Low Stock |
| Warehouse | 5 |
| Created By | Muhammad Rifai Sipayung, 12/26/2025, 3:42 AM |
| Last Modified By | Muhammad Rifai Sipayung, 12/26/2025, 3:42 AM |

HandsMen Order Number

Owner: Muhammad Rifai Sipayung

| | |
|------------------|-----------------------|
| Customer | john |
| Status | Confirmed |
| Quantity | 550 |
| Total Amount | 5 |
| Customer Email | mhdrifai2a2@gmail.com |
| HandsMen Product | t shirt M |

Buttons: Cancel, Save & New, Save

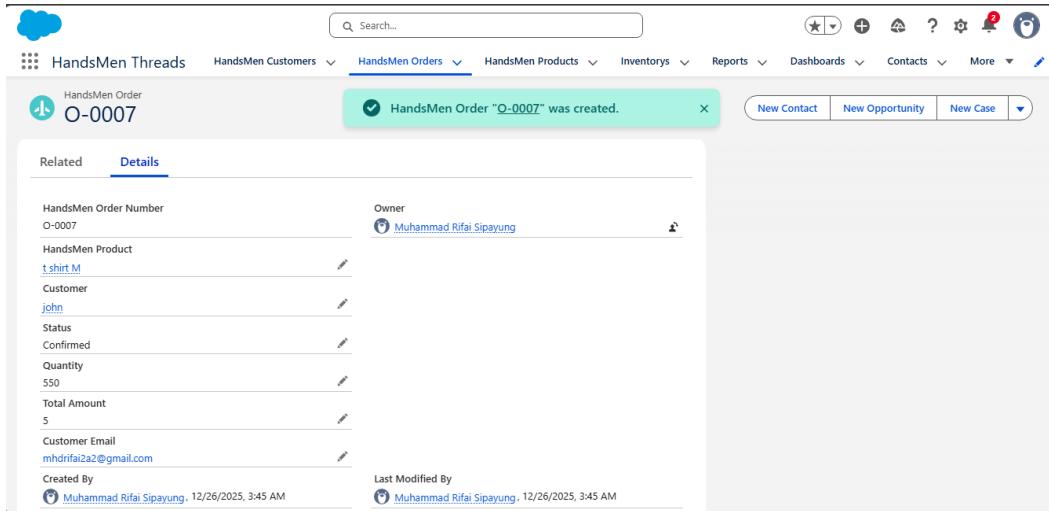


Figure 15. Input and Output Customers, Orders and Inventories

PHASE 5: DEPLOYMENT, DOCUMENTATION & MAINTENANCE

Deployment Strategy

Deployment is performed using Change Sets to ensure that configurations and code can be safely transferred to the production environment.

Maintenance & Monitoring

The system is monitored regularly to ensure optimal performance, including checking error logs, scheduled jobs, and email alerts.

Troubleshooting Approach

The troubleshooting approach is carried out by analyzing debug logs, error messages, and making configuration or code adjustments if necessary.

CONCLUSION

The implementation of Salesforce CRM at HandsMen Threads has successfully provided an integrated system to support customer, order, inventory, and marketing management. By utilizing Salesforce features such as custom objects, automation, validation rules, and Apex, this system is able to improve operational efficiency, maintain data quality, and provide a better customer experience.

FUTURE ENHANCEMENTS

- Some developments that can be made in the future include:
- Customer portal integration
- Mobile application development
- Advanced analytics dashboard
- AI integration for product recommendations
- WhatsApp or SMS integration for customer notifications