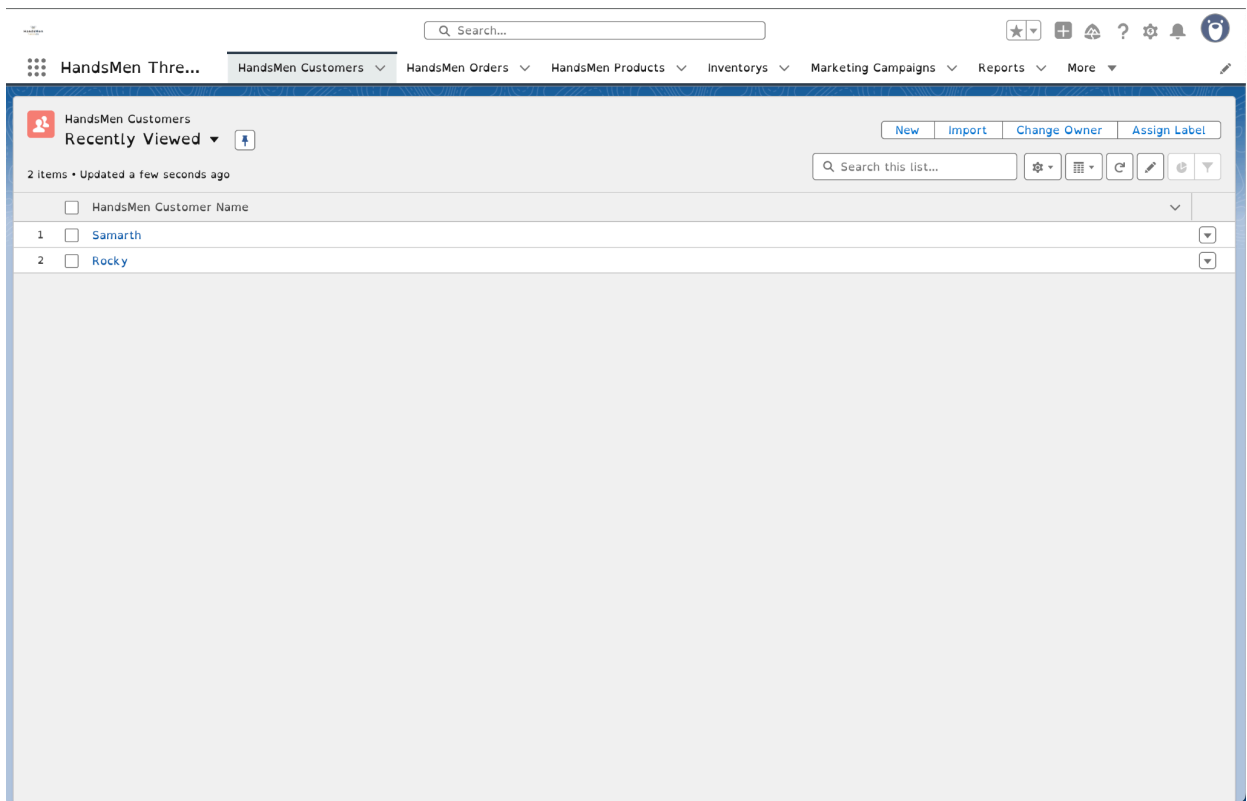


# HandsMen Threads Salesforce CRM Project Report

This report details the comprehensive development and implementation of the Salesforce CRM solution for HandsMen Threads, a premium men's fashion and tailoring brand. The project's core objective was to revolutionize data management and enhance customer relations by streamlining business operations, ensuring data integrity, and improving customer engagement.

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## Project Objectives

The main objectives driving the HandsMen Threads Salesforce CRM project included:

- Automating and optimizing business processes, significantly reducing manual effort and speeding up operations.

- Ensuring accurate and consistent data entry and maintaining data integrity through various mechanisms.
- Enabling real-time visibility of inventory levels and customer interactions.
- Improving internal team coordination through a robust role-based access control system.
- Delivering personalized customer experiences via targeted communication and loyalty programs.
- Laying a scalable foundation for future business growth.

## Project Scope

The project scope included the following key areas:

- **Sales Cloud Implementation:** Customization and configuration of Salesforce Sales Cloud to manage leads, opportunities, accounts, and contacts.
- **Service Cloud Integration:** Implementation of Salesforce Service Cloud for efficient customer support and case management.
- **Data Migration:** Migration of existing customer data from legacy systems into Salesforce.
- **User Training:** Comprehensive training sessions for all relevant employees on using the new Salesforce CRM system.
- **Reporting and Analytics:** Development of custom reports and dashboards to provide actionable insights into sales and customer service performance.

## Key Achievements

The project achieved several significant milestones:

- Successful deployment of Salesforce Sales Cloud and Service Cloud within the projected timeline.
- Seamless migration of historical customer data, ensuring data integrity and accessibility.
- High user adoption rate among sales and customer service teams due to effective training programs.
- Development of critical sales and service dashboards providing real-time performance metrics.

# Challenges and Solutions

Challenge	Solution
Data Quality Issues	Implemented data cleansing procedures and established strict data entry guidelines.
User Resistance to Change	Conducted frequent communication sessions and highlighted the benefits of the new system.
Integration with Existing Systems	Utilized Salesforce APIs and custom connectors to ensure smooth data flow.

## Technology Description: Salesforce Fundamentals

The solution leveraged Salesforce, a cloud-based Customer Relationship Management (CRM) platform that aids businesses in managing customer data, automating processes, and enhancing service, marketing, and sales operations. It offers both point-and-click tools and programmatic capabilities like Apex and Flows. Key Salesforce components utilized in this project include:

- **Custom Objects:** Act like database tables to store specific data. Five key custom objects were designed: Customer\_\_c, Order\_\_c, Product\_\_c, Inventory\_\_c, and Marketing\_Campaign\_\_c.
- **Tabs:** Used to display custom object data within the Salesforce user interface, allowing users to easily view and manage records.
- **Custom App:** A collection of tabs grouped for a specific business purpose. The "HandsMen Threads" Lightning App was created to centralize relevant tabs.
- **Profiles:** Define what a user can see, do, and edit in Salesforce, controlling object and field access.
- **Roles:** Control data visibility within Salesforce's role hierarchy, essential for sharing settings and reporting.

- **Permission Sets:** Grant additional permissions to users without altering their assigned profile.
- **Validation Rules:** Ensure that data entered into the system meets predefined business criteria, enforcing data quality.
- **Email Templates:** Predefined formats for sending automated emails.
- **Email Alerts:** Actions within Flows or Workflow Rules that send emails using the predefined templates.
- **Flows:** A powerful automation tool that allows business logic to be automated without writing code. They can create, update records, or send notifications.
- **Apex:** Salesforce's object-oriented programming language, used for writing complex custom logic and triggers.
- **Asynchronous Apex (Batch Jobs):** Used for processing large sets of records or complex calculations that can run in the background, like scheduled loyalty updates or inventory synchronization.

## Data Model

A robust data model featuring five key custom objects was designed to store all business-critical information:

- **HandsMen\_Customer\_\_c:** Stores customer information, including name, phone, email, and loyalty status. A validation rule ensures the email contains "@gmail.com".
- **HandsMen\_Product\_\_c:** Contains product catalog details such as SKU, price, and stock quantity.
- **HandsMen\_Order\_\_c:** Records orders placed by customers, including quantity, status, and an auto-calculated total amount. A validation rule prevents saving orders if the total amount is zero or negative.
- **Inventory\_\_c:** Tracks stock quantities and warehouse locations. A validation rule ensures stock never drops below zero.
- **Marketing\_Campaign\_\_c:** Stores details of promotional campaigns and their scheduling.

## Key Features and Automation

The solution implemented extensive automation to enhance operational efficiency and customer engagement:

- **Data Quality and Validation Rules:**
  - Validation rules were applied to ensure accurate and consistent data entry.
  - For the Order Object, a rule prevents saving if Total\_Amount\_\_c is less than or equal to 0, displaying the error "Please Enter Correct Amount".
  - For the Customer Object, a rule validates that the email contains "@gmail.com", with the error "Please fill Correct Gmail".
  - A rule also ensures that inventory stock never goes below 0.
- **Automated Email Notifications:**
  - Three email templates were created: "Order Confirmation," "Low Stock Alert," and "Loyalty Program Email".
  - Corresponding Email Alerts were linked to automation flows.
  - These enable personalized communication and keep both customers and internal teams informed.
- **Flow Implementations (Declarative Automation):**
  - Order Confirmation Flow: Triggered when an order's status is updated to "Confirmed," this flow automatically sends an "Order Confirmation" email to the customer.
  - Stock Alert Flow: Triggered when Inventory stock drops below 5 units, it sends a "Low Stock Alert" email to the Inventory Manager.
  - Scheduled Flow: Loyalty Update: Runs daily at midnight, looping through customers to update their Loyalty Status (Bronze, Silver, Gold) based on their total purchases.
- **Apex Triggers (Programmatic Automation):**
  - Order Total Trigger: Automatically calculates the Total\_Amount\_\_c on an order based on quantity and unit price.
  - Stock Deduction Trigger: Reduces the stock quantity in the Inventory object as soon as an order is placed.
  - Loyalty Status Trigger: Updates a customer's Loyalty Status dynamically based on their cumulative total purchases.
  - A scheduled batch job using Apex also updates low stock quantities.

## Security and Access Control

A role-based security model was implemented to ensure proper data access and process control across departments like Sales, Inventory, and Marketing.

- The Standard User profile was cloned to a new profile named "Platform 1" and granted access to necessary custom objects.
- Roles were created for different departments: Sales Manager, Inventory Manager, and Marketing Team.
- Users were created and assigned appropriate roles and profiles to reflect their responsibilities, such as Niklaus Mikaelson assigned to a Sales role and Kol Mikaelson assigned to an Inventory role.

## Apex code used for Automation

### Update Order Total

```
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;
            }
        }
    }
}
```

## Stock Deduction Trigger

```
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]
    );

    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.HandsMen_Product__c == order.HandsMen_Product__c) {
                    inv.Stock_Quantity__c -= order.Quantity__c;
                    inventoriesToUpdate.add(inv);
                    break;
                }
            }
        }
    }

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

```
}
```

### Execute anonymous window code

```
System.schedule('Daily Inventory Sync', '0 0 0 * * ?', new InventoryBatchJob());
```

## Project Execution and Phases

The project followed a structured approach across five phases:

1. **Architecture & Planning:** Defining custom objects, relationships, validation rules, automation flows, Apex triggers, batch jobs, and email templates.
2. **Development:** Creation of all custom objects and fields, implementation of flows, Apex classes/triggers (e.g., OrderTriggerHandler, OrderTrigger), and batch Apex jobs (e.g., LoyaltyPointsBatch, InventorySyncBatch), configuration of data security, and creation of email templates.
3. **Testing & QA:** Comprehensive testing, including unit tests, end-to-end testing with test records for orders, products, and customers, performance testing, and validation of security controls.
4. **Deployment & Training:** Deployment of the solution to production using Salesforce CLI, setting up the Salesforce Lightning App, training users on system usage, and providing post-go-live support.
5. **Documentation, Maintenance & Version Control:** The project is structured in SFDX format and managed in a GitHub repository for proper version control and collaboration. Documentation and screenshots are included for reference.

## Real-World Customer Interaction Example

Let's illustrate how the CRM system functions through a typical customer interaction:

1. **Customer Registration:** A customer, such as Elijah Mikaelson, visits the store or website. A record is created in the Customer\_\_c object. A validation rule ensures the email is valid (e.g., must contain @gmail.com).
2. **Product Setup:** The administrator adds products like "Shirts" or "Jeans" to the Product\_\_c object, including their prices and initial inventory levels.



3. **Order Placement:** Elijah decides to purchase 2 shirts at R500 each. A new Order\_\_c record is created. An Apex Trigger automatically calculates the Total\_Amount\_\_c to R1000 (2 x R500).
4. **Inventory Update:** Immediately after the order is placed, an Apex Trigger on Inventory\_\_c reduces the shirt stock by 2 units. A Validation Rule ensures stock never goes below 0.
5. **Loyalty Program:** Based on Elijah's total purchases (now R1000), an Apex Trigger on Customer\_\_c updates his loyalty status. Since R1000 falls within the R500-R1000 tier, Elijah becomes a Silver member (tiers: <R500 Bronze, R500-R1000 Silver, >R1000 Gold).
6. **Email Notifications:** A Flow and Email Alert are triggered. Elijah receives an email confirming his purchase and informing him of his updated loyalty status, stating: "Thanks for your purchase! Your loyalty status is now Silver."
7. **User Roles:** Internal staff like Niklaus Mikaelson (Sales Role) and Kol Mikaelson (Inventory Role) access the system with permissions tailored to their responsibilities, ensuring proper data access and process control.

## Conclusion

The HandsMen Threads CRM system, built on the Salesforce Platform, successfully delivers a comprehensive solution that significantly enhances the brand's operational efficiency, data management, and customer engagement. By leveraging Salesforce tools such as Custom Objects, Flows, Validation Rules, Email Alerts, and Apex, the system ensures accurate data entry, real-time updates, and an enhanced customer experience. This robust, scalable, and secure platform minimizes manual errors, speeds up operations, provides better insights into sales and stock, and lays the groundwork for future technological advancements.

## Future Scope

The project's design provides a scalable foundation for future enhancements, including:

- **Customer Portal Integration:** Building a Customer Community Portal for customers to log in, view orders, and track loyalty status.

- **Mobile App using Salesforce Mobile SDK:** Enabling store staff to manage inventory and orders on the go.
- **Reports & Dashboards:** Creating detailed sales and inventory dashboards for management to monitor trends and performance in real-time.
- **AI-Powered Recommendations (Salesforce Einstein):** Utilizing Salesforce Einstein to provide personalized product suggestions based on past purchases.
- **WhatsApp/SMS Integration:** Notifying customers via WhatsApp or SMS about order confirmations and loyalty updates.

## Snapshots

The screenshot displays the Salesforce interface for a product record. The top navigation bar includes a search bar and various utility icons. The main navigation tabs are: HandsMen Thre..., HandsMen Customers, HandsMen Orders, HandsMen Products (selected), Inventory, Marketing Campaigns, Reports, and More. The product record for 'HandsMen Product T-shirt' is shown, with a sub-header 'HandsMen Product T-shirt' and buttons for 'New Contact', 'Edit', and 'New Opportunity'. The record details are organized into two columns: 'Related' and 'Details'. The 'Details' column lists the following information:

Related	Details
HandsMen Product Name	T-shirt
SKU	1137
Price	\$1,400
Stock Quantity	30
Created By	priyesh raj, 7/26/2025, 4:36 AM
Owner	priyesh raj
Last Modified By	priyesh raj, 7/26/2025, 4:36 AM

HandsMen Thre...

HandsMen Customers

HandsMen Orders

HandsMen Products

Inventories

Marketing Campaigns

Reports

More

HandsMen Order

O-0003

New Contact

Edit

New Opportunity

Related

Details

HandsMen OrderNumber

O-0003

Owner

priyesh raj

HandsMen Product

[Shirt](#)

HandsMen Customer

[Rocky](#)

Status

Confirmed

Quantity

5

Total Amount

7,495

Customer Email

[psrroyal908@gmail.com](mailto:psrroyal908@gmail.com)

Created By

priyesh raj

, 7/26/2025, 7:10 AM

Last Modified By

priyesh raj

, 7/26/2025, 7:10 AM

HandsMen Thre...

HandsMen Customers

HandsMen Orders

HandsMen Products

Inventories

Inventory

I -0001

Related

Details

Inventory Name

I -0001

HandsMen Product

[T-shirt](#)

Stock Quantity

40

Stock Status

Available

Warehouse

Created By

priyesh raj

, 7/26/2025, 4:36 AM

Last Modified By

priyesh raj

, 7/28/2025, 7:11 AM



Report: HandsMen Customers  
**Initial customers**



Total Records  
**2**

HandsMen Customer: ID ▾	FirstName → ▾	Rocky	Samarth	Total
<input type="checkbox"/> a00gK00000BgWMv	Record Count	1	0	1
<input type="checkbox"/> a00gK00000BgwfZ	Record Count	0	1	1
<b>Total</b>	Record Count	1	1	<b>2</b>

**Details (2 Rows)** ⓘ Click an intersection in the table above to filter details.

	HandsMen Customer: HandsMen Customer Name ▾
1	Rocky
2	Samarth
3	



## low stock alert email Inbox x

◆ Summarize this email



priyesh raj via inn6dw8bauj2.gk-7vlwzuag.can96.bnc.salesforce.com  
to me ▾

Sat, Jul 26, 7:03 PM (2 days ago)

Dear Inventory Manager,  
This is to inform you that the stock for the following product is running low:  
Product Name: T-shirt  
Current Stock Quantity: 9  
Please take the necessary steps to restock this item immediately.  
Best Regards,  
Inventory Monitoring System

↩ Reply

➡ Forward



## Loyalty Program Email Inbox x



◆ Summarize this email



OrgFarm EPIC <epic.orgfarm@salesforce.com>  
to me ▾

Sat, Jul 26, 7:26 PM (2 days ago) ☆ 😊 ↩ ⋮

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.

## Your Order has been Confirmed!

Inbox x



Summarize this email



priyesh raj via ad9llpyea8dmdm.gk-7v1wzuag.can96.bnc.salesforce.com  
to me ▾

Sat, Jul 26, 7:44 PM (2 days ago)



Dear Rocky,

Great Choice! Your Order is Confirmed.

Thank you for your recent purchase from HandsMen Threads.  
We've received your order #O-0003 and our team is already  
preparing it for shipment.

Thanks again for choosing us.

Stay Stylish,

**The HandsMen Threads Team**