

Requirement Analysis

Data Flow Diagram

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Project Name	HandsMen Threads – Elevating the Art of Sophistication in Men’s Fashion

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** is a structured graphical representation that illustrates how data flows through a system. It helps in understanding how **inputs are transformed into outputs** through various processes and how **data is stored and accessed** in the system.

In the context of the **HandsMen Threads CRM**, the DFD helps visualize how customer orders, inventory checks, campaign executions, and loyalty programs interact within the system using the Salesforce platform.

Level 0 DFD – Context Diagram:

Purpose:

To represent the **entire CRM system** as a single high-level process and show how it interacts with external entities.

Entities:

- **Customer** – places orders, checks loyalty status, gives feedback
- **Sales Staff** – enters orders, views customer history
- **Inventory Manager** – monitors product stock and reordering
- **Marketing Executive** – creates campaigns and tracks performance
- **System Admin** – manages roles, access, and reports

Main System:

- HandsMen Threads CRM

Data Flows:

- Orders sent to CRM
- Loyalty tier updates sent to customers
- Campaign data monitored by marketing team
- Inventory status viewed by staff
- Feedback and reports sent to admin

Level 1 DFD – Top-Level Subsystems:

Purpose:

This level breaks the system into **key functional modules**, each with its data flows and internal data stores.

Processes:

1. Customer Management
2. Order Management
3. Inventory Management
4. Campaign Management
5. Loyalty ProgramAutomation
6. Reporting & Analytics

Data Stores:

- D1 – Customer Database
- D2 – Order & Product Database
- D3 – Inventory Database
- D4 – Campaign Database
- D5 – Loyalty Tier History
- D6 – Reports & Dashboards

Level 2 DFD – Process Details:

Purpose:

This DFD drills deeper into the "Order Management" process

Sub-processes:

2.1: Record Order – Sales user logs new order in CRM (auto-numbered)

2.2: Validate Order – System checks mandatory fields using **Validation Rules**

2.3: Trigger Stock Update – Order quantity updates inventory level via a **Flow**

2.4: Send Email Confirmation – Flow sends email to customer with order details

Data Stores:

- Customer and Product from D1, D2
- Inventory level from D3

This DFD setup enables:

- **Clear Role Mapping** Each user type (Customer, Sales, Inventory, Marketing) is mapped to a process
- **Enhanced Automation** Uses Salesforce Flows and Apex Triggers to handle real-time tasks
- **Secure Data Flow** Profiles and Roles restrict unauthorized access

Data Flow Diagram:

