

---

## Project Overview

Project Title: Smart Retail Loyalty & Feedback System

---

### Project Overview

- **Industry:** Retail / E-Commerce
- **Project Type:** Salesforce CRM Application using Marketing Cloud, Experience Cloud, and custom development (Admin + Developer)
- **Target Users:**
  - Retail store managers
  - Marketing teams
  - Customer service representatives
  - End customers (via Experience Cloud portal)
- **Problem Statement:** Retail businesses often struggle to retain customers due to generic loyalty programs and disconnected feedback systems. Traditional approaches fail to personalize engagement or convert feedback into actionable insights, resulting in missed opportunities for customer satisfaction and repeat business.
- **Use Cases:**
  1. Customer Loyalty Tracking: Assign loyalty tiers and track points based on purchase history.
  2. Personalized Offers: Automatically generate and send offers tailored to customer behavior.
  3. Feedback Collection: Prompt customers to submit feedback after purchases via Experience Cloud.
  4. Campaign Performance Dashboard: Visualize offer redemption rates, feedback trends, and customer satisfaction.
  5. Automation Flows: Trigger loyalty updates and feedback requests using Salesforce Flows.
  6. Role-Based Access: Ensure managers, marketers, and service reps have appropriate access to data and tools.

## Phase 1: Problem Understanding & Industry Analysis

- **Requirement Gathering**

Retail businesses need better ways to retain customers and collect useful feedback. Key requirements include tracking purchases, rewarding loyalty points, and automating personalized offers. Managers need dashboards, while customers should access rewards and submit feedback through a portal.

- **Stakeholder Analysis**

Understanding the roles and expectations of each stakeholder helped shape the solution:

Stakeholder	Role	Expectations
Retail Manager	Oversees operations and customer engagement	Real-time insights, loyalty tracking
Marketing Team	Designs campaigns and offers	Customer segmentation, offer automation
Customer Service Rep	Handles feedback and queries	Easy access to feedback records
End Customer	Uses the portal to interact with the brand	Seamless experience, personalized rewards
Salesforce Admin/Developer	Builds and maintains the system	Scalable, secure, and automated solution

- **Business Process Mapping**

Manual retail processes limit personalization; Salesforce automates loyalty, feedback, and offer delivery.

- **AppExchange Exploration**

Explored AppExchange tools to fast-track development, reuse components, and support scalable integration.

## Phase 2: Org Setup & Configuration

- **Salesforce Edition:** Salesforce Enterprise Edition for advanced customization and automation.
- **User Setup:** Profiles for managers, marketers, service reps, customers; role hierarchy and permission sets defined.
- **Security:** Field-level and object-level access, sharing rules, and two-factor authentication via My Domain.
- **Data Model:** Custom objects like Customer, Purchase, LoyaltyPoints, Feedback, and Offers with defined relationships.

- **Automation:** Flows for loyalty, feedback, and offers; validation rules and dashboards for insights.
  - **Experience Cloud:** Customer portal for viewing rewards, submitting feedback, and redeeming offers.
- 

### Phase 3: Data Modeling & Relationships

- **Custom Objects Created:** Customer, Purchase, Loyalty Points, Feedback, Offers.
  - **Relationships Defined:**
    - Customer → Purchase (*Lookup*)
    - Purchase → LoyaltyPoints (*Lookup*)
    - Customer → Feedback (*Master-Detail*)
    - Offers → Customer (*Lookup*)
  - **Purpose:**
    - Enables automation of loyalty and feedback workflows
    - Supports customer segmentation and personalized offers
    - Facilitates real-time reporting and dashboard insights
- 

### Phase 4: Process Automation(Admin)

- **Flows:**
    - Loyalty Point Calculation Flow
    - Feedback Trigger Flow after purchase
    - Offer Assignment Flow based on loyalty tier
  - **Process Builder:**
    - Auto-update customer tier on point thresholds
    - Notify marketing team when feedback is negative
  - **Validation Rules:**
    - Prevent duplicate feedback entries
    - Ensure minimum purchase amount for loyalty eligibility
  - **Approval Processes:**
    - Approve high-value offers before sending
    - Escalate unresolved negative feedback to managers
    - Email Alerts & Notifications:
      - Send personalized offers to customers
      - Alert service reps for new feedback submissions
-

### Phase 5: Apex Programming (Developer)

- **Loyalty Points Calculation:** Apex triggers and classes calculate points based on purchase amount and update customer tiers.
- **Offer Eligibility Logic:** Apex methods determine which customers qualify for specific offers based on behavior and loyalty status.
- **Feedback Analysis:** Apex batch jobs process feedback data to identify trends and flag negative responses for escalation.
- **Custom Controllers:** Used in Lightning components to fetch and display loyalty and feedback data dynamically.
- **Scheduled Jobs:** Automate periodic tasks like sending reminders, updating loyalty tiers, and syncing external purchase data.

---

### Phase 6: User Interface Development

- **Lightning Pages:** Custom record pages for Customer, Feedback, and Offers with dynamic components.
- **Experience Cloud Portal:** Branded interface for customers to view loyalty points, submit feedback, and redeem offers.
- **Navigation & Layouts:** Intuitive tabs, quick actions, and responsive design for both desktop and mobile users.
- **Dynamic Forms:** Streamlined data entry with conditional visibility and field grouping.
- **Dashboards:** Embedded charts for loyalty trends, feedback sentiment, and offer performance.

---

### Phase 7: Integration & External Access

- **External System Integration**
  - Integrated with POS and e-commerce platforms to sync purchase data in real time.
  - Used REST APIs and Named Credentials for secure data exchange.
  - Enabled external feedback tools (e.g., SurveyMonkey) for seamless survey collection.
- **External Access Configuration**
  - Configured Experience Cloud for customer access to loyalty and feedback features.
  - Set up OAuth 2.0 for third-party authentication and SSO.

- Applied IP restrictions and login policies to secure external access.
  - **Data Flow & Sync**
    - Scheduled Apex jobs to fetch and update external purchase records.
    - Ensured bidirectional sync between Salesforce and external systems for loyalty updates and feedback capture.
- 

## Phase 8: Data Management & Deployment

- **Data Management**
    - Data Migration: Imported customer and purchase history using Data Loader and CSV templates.
    - Data Quality: Applied validation rules and duplicate management to ensure clean, reliable records.
    - Backup Strategy: Scheduled weekly exports and enabled field history tracking for audit purposes.
  - **Deployment Strategy**
    - Change Sets: Used for moving metadata from sandbox to production.
    - Pre-Deployment Testing: Conducted unit tests and UAT to ensure stability.
    - Post-Deployment Checklist:
      - i. Verified user access and permissions
      - ii. Activated Flows and scheduled jobs
      - iii. Monitored performance and error logs
- 

## Phase 9: Reporting, Dashboards & Security Review

- **Reporting & Dashboards**
    - Retail KPIs: Dashboards for loyalty tier distribution, offer redemption rates, and feedback sentiment.
    - Custom Reports: Built for customer engagement, purchase trends, and feedback analysis.
    - Dynamic Dashboards: Role-based visibility for managers, marketers, and service reps.
  - **Security Review**
    - Profile & Permission Audit: Verified access levels for all user roles.
    - Field-Level Security: Sensitive data like contact info and feedback scores restricted by role.
    - Login & Session Settings: Enforced two-factor authentication and session timeouts.
    - Sharing Rules: Ensured proper record visibility across teams and portal users.
-

## Phase 10: Final Presentation & Demo Day

### ➤ **Presentation Highlights**

- Walkthrough of all 9 phases: from org setup to automation, integration, and dashboards.
- Showcased key features: loyalty tracking, feedback collection, personalized offers, and customer portal.
- Shared impact metrics: reduced manual effort, improved engagement, and scalable architecture.

### ➤ **Live Demo**

- Demonstrated customer journey: purchase → loyalty points → feedback → offer redemption.
- Showed admin view: dashboards, automation flows, and data insights.
- Highlighted Experience Cloud portal with branded UI and real-time data.

### ➤ **Outcome**

- Received stakeholder feedback and sign-off.
- Ready for production rollout and future enhancements.