Phase 1: Problem Understanding & Industry Analysis

RePlastix Innovations

Salesforce-Based Plastic Waste Management & Recycling System

Problem Statement

Plastic waste is one of the most critical environmental challenges in India, with millions of tons generated each year. The lack of efficient collection systems, tracking mechanisms, and coordination between recyclers, waste collectors, and industries leads to inefficiencies and environmental pollution. Current waste management processes rely on manual operations and disconnected systems, resulting in poor transparency, data loss, and limited traceability of recycled materials.

To address these challenges, **RePlastix Innovations** proposes a Salesforce-based CRM solution that centralizes plastic waste data, connects collectors with recyclers, automates waste tracking, and enables sustainability reporting for industries.

Requirement Gathering

- Lack of centralized system to manage waste collection and recycling data.
- Manual coordination between collectors, recyclers, and industries.
- No real-time tracking of waste collection or recycling progress.
- Limited transparency in plastic waste transactions.
- Industries struggle to prove compliance with sustainability regulations.
- Collectors face difficulty connecting with certified recyclers.

Objectives

- Centralize all waste collection, recycling, and reporting data within Salesforce CRM.
- Provide a transparent marketplace connecting collectors and recyclers directly.
- Automate plastic waste tracking with approval workflows for recyclers.
- Offer an Experience Cloud portal for waste collectors and industries to log and monitor activities.
- Integrate IoT or barcode data for real-time waste tracking and recycling validation.
- Generate sustainability and compliance dashboards for government and industry officers.

Stakeholder Analysis

- **Collectors:** Need to register waste, track recycling progress, and receive payments.
- **Recyclers:** Require verified data on collected waste and compliance reports.
- **Industries:** Need sustainability reports and verified recycled plastic data.
- **Government Officers:** Monitor compliance and recycling statistics via dashboards.
- **Admins:** Manage Salesforce configurations, user roles, and integrations.

Business Process Mapping

Current Process:

- Collectors manually record waste data on paper.
- Recyclers contact collectors via phone or intermediaries.
- No digital verification or reporting system for recycled materials.
- Sustainability reports are created manually and often inaccurate.

Proposed Salesforce Process:

- Collectors register and log waste via Experience Cloud.
- Recyclers view available plastic waste listings and connect directly.
- Workflow automation routes recycling approvals to officers.
- Service Cloud handles support requests and issue resolutions.
- Dashboards show waste collection trends and recycling rates.

Industry-Specific Use Case Analysis

The waste management and recycling sector requires digitization to improve sustainability tracking and efficiency. RePlastix enables waste collectors and recyclers to collaborate in real time using Salesforce CRM. With Service Cloud, Experience Cloud, and Flow automation, the system enhances traceability and compliance reporting. Dashboards help industries and government bodies monitor recycling performance and environmental impact effectively.

AppExchange Exploration

- **RecycleSmart:** Helps track recycling data but lacks integration for collectors and industries.
- **EcoTrack:** Offers environmental tracking but not tailored for plastic waste.
- **Decision:** Develop a customized Salesforce solution (RePlastix Innovations) integrating collectors, recyclers, and industry compliance modules.

Conclusion

RePlastix Innovations provides a Salesforce-driven digital platform that connects collectors, recyclers, industries, and government officers within a unified ecosystem. By automating waste tracking, enabling transparency, and supporting sustainability reporting, this system eliminates inefficiencies and promotes a circular plastic economy. The platform empowers all stakeholders to collaborate efficiently and ensures India's plastic waste management goals are achieved through technology and innovation.