

Phase 1 Report: Problem Understanding & Industry Analysis

1. Problem Statement

A small community initiative, "NeighborNet," aims to foster a local, non-monetary, barter-based economy for skills and goods. Currently, their operations rely on a chaotic social media group and word-of-mouth, which leads to several significant challenges:

- **Disorganization and Inefficiency:** Offers and requests are lost in cluttered social media feeds, making it difficult for members to find what they need.
- **Difficulty in Matching:** There is no systematic way to match members who have a skill with those who need it, resulting in missed connections and unfulfilled requests.
- **Lack of Tracking and Recognition:** Successful exchanges are not tracked, providing no way to recognize active members or understand the value being created within the community.
- **Poor Communication:** Direct communication is often delayed or missed, leading to confusion about the status of an offer or request.
- **Absence of a Central Skill Directory:** There is no central repository of member skills, making it impossible for the community coordinator or members to proactively identify potential matches.

There is a clear need for a centralized, automated, and user-friendly platform to manage member profiles, facilitate "offer" and "request" listings, track successful "exchanges," and help members find compatible matches.

2. Objectives

The primary objectives of the NeighborNet Barter & Skill-Share Management System are to:

- **Create a Member Hub:** Establish a centralized database of community members and their skills.
- **Manage Listings:** Provide a structured way for members to post, view, and manage their service "Offers" and "Requests."
- **Facilitate Matching:** Implement functionality to help match member offers with corresponding requests based on skills.

- **Track Exchanges:** Record and track the lifecycle of a barter "Exchange" from proposal and acceptance to completion.
- **Automate Notifications:** Send automated notifications to members when a potential match is found or when the status of their exchange changes.
- **Provide Insights:** Generate reports and dashboards on community activity, such as the most offered skills, most requested skills, and the total number of completed exchanges.
- **Ensure Data Privacy:** Maintain the privacy and security of member data through role-based access.

3. Tools & Features (Planned)

The system will be built on the Salesforce Developer Edition platform. Key features planned include:

- **Standard Objects:** Utilize the Contact object to manage community member profiles.
- **Custom Objects:** Skill__c, Member_Skill__c (Junction), Offer__c, Request__c, and Exchange__c to model the core components of the barter network.
- **Profiles & Roles:** Define access for "NeighborNet Admin" (full access for community coordinators) and "Community Member" (limited access, potentially for a future portal).
- **Flows & Email Alerts:** Automate processes such as updating the status of an Offer when an Exchange is completed and notifying members about proposed exchanges.
- **Reports & Dashboards:** Create reports to show trends in skills, active offers/requests, and completed exchanges, visualized on an admin dashboard.
- **Data Security:** Configure Org-Wide Defaults (OWD) to Private for sensitive objects like Exchange__c and use sharing rules to control visibility.
- **User Interface:** Customize Lightning Record Pages for a clear view of related offers, requests, and exchanges for a given member.

4. Expected Outcomes

- **For Community Members:** A clear and easy-to-use platform to list their skills/offers, find help, and connect with neighbors for mutually beneficial exchanges.
- **For NeighborNet Admins:** An efficient tool to manage the network, oversee activity, help facilitate matches, and track the overall health and engagement of the community.

- **Increased Community Engagement:** A structured system is expected to lead to more successful exchanges and stronger community bonds.
- **Reduced Administrative Overhead:** Automation will significantly reduce the manual effort required by coordinators to manage the network.
- **Data-Driven Insights:** The ability to report on activity will help coordinators understand community needs and plan future initiatives.

5. Advantages / Benefits

- **Centralized & Organized:** Replaces chaotic social media feeds with a structured, searchable database.
- **Efficient Matching:** Systematically connects "haves" with "needs," increasing the number of successful exchanges.
- **Enhanced Transparency:** Members can track the status of their offers, requests, and ongoing exchanges.
- **Community Building:** Fosters a sense of community and mutual support by making it easier for neighbors to help each other.
- **Scalability:** The platform can grow with the community, potentially adding new features like event management or group projects.
- **Secure:** Leverages Salesforce's robust security model to protect member information.

6. Conclusion

The Hyper-Local 'Barter & Skill-Share' Network Management System, built on Salesforce, will transform the "NeighborNet" initiative from a disorganized social media group into a dynamic and efficient community hub. By centralizing data, automating matching and communication, and providing valuable insights, the system will empower community members to connect and share skills effectively, fostering a stronger and more collaborative neighborhood.