Community Forklift - Material Donation Journey Mapping

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I. Abstract

Community Forklift is a nonprofit reuse center that diverts home improvement supplies from landfills and redistributes them affordably to the community. Their mission is to reduce waste, promote sustainability, and make building materials accessible to everyone. Their operations include receiving, processing, and distributing donations while managing donor interactions and scheduling pickups.

Our team aimed to improve their operations by creating a donor journey map that identified pain points and opportunities for improvement. We started by researching their processes and tools, including ThriftCart, Podio, and EveryAction, and how these systems interact. We conducted interviews and observed the work environment. Martina and Trey, the logistics coordinators, gave us a warehouse tour, answered all our questions, and provided feedback throughout the project.

We developed a donor lifecycle journey map that shows the complete donor experience starting from their first interaction until they finish their donation process and after they donate. The map highlighted several pain points, including duplicate records and manual tasks, such as entering donor names into a newsletter list. It also helped us visualize the coordinators' daily responsibilities and better understand the challenges they face.

The project evolved as we collected data, including an Excel sheet of pickup requests. We performed data analysis and developed actionable recommendations for the client. In the end, we delivered two outputs: the journey map and graphs from the data analysis.

II. Method

Our team initially focused on developing a comprehensive donor and material journey map to understand how donations move through Community Forklift's system. We visited Community Forklift on October 2nd, 2025 and spoke directly with staff to learn about daily operations, including accepted materials, truck scheduling, and storage limitations. In mid-October, Community Forklift shared an Excel file with approximately 2,000 pick-up requests from 2024. We analyzed this data to identify donor frequency and common donation

patterns. Through this, we grouped repeat donors where possible and flagged incomplete records with missing dates or contact information.

We also received a public Community Forklift survey containing donor demographics and satisfaction data, but due to time constraints, we were unable to fully code and analyze it. With more time, this survey data would be integrated into the journey map to better connect donor feedback with pain points.

Using Miro, we created a colorful donor and material journey map. This was our first time using Miro for a long-term project, as most of us had only used it for short-term assignments and were unsure whether our access would last. To guide our design, we researched other journey maps and used a color-coded approach to distinguish acquisition steps on the donor side from coordination steps on Community Forklift's internal side.

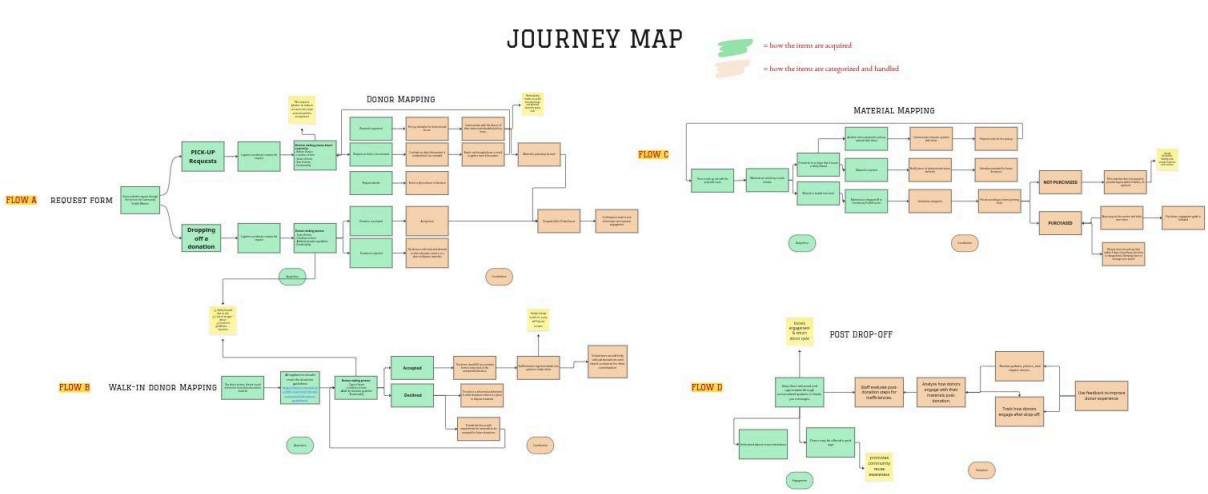
Podio functions more as an event management tool than a true CRM. During conversations with Martina, she shared that one of their biggest challenges is the lack of donor history, since each donation is submitted as a new entry in Podio. Because solving this would require significant technical and financial investment, it was out of scope for our project. As an alternative approach, we presented data graphs and summaries in our final Google Slides presentation in December. The presentation included trends such as donor frequency and rejection rates. At the end of our presentation, we proposed several actionable steps, such as adding a one-click newsletter subscription. Martina gave us some great insights, for example she said the pick up requests have high rejection rates because donors do not follow posted requirements.

Community Forklift shared that they found the journey map extremely helpful and appreciated how clearly organized it was, noting that it gave them a new perspective on processes they carry out every day.

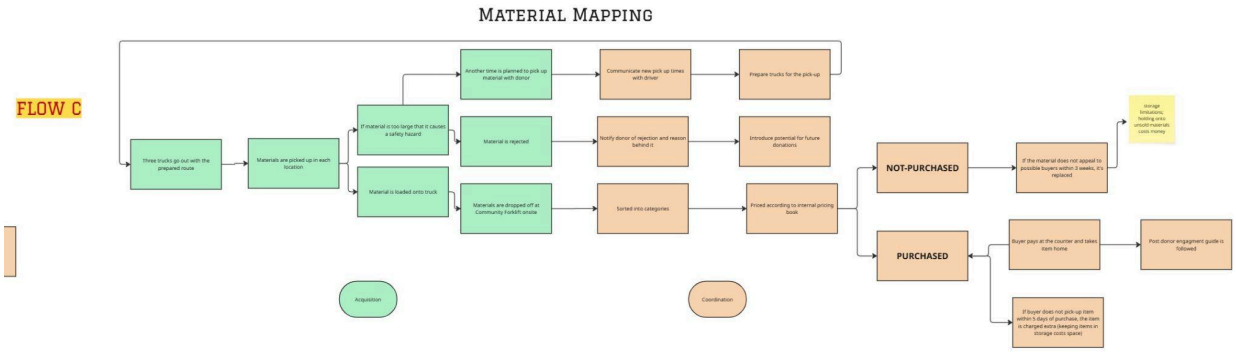
III. Description of Deliverables

A. Journey Map

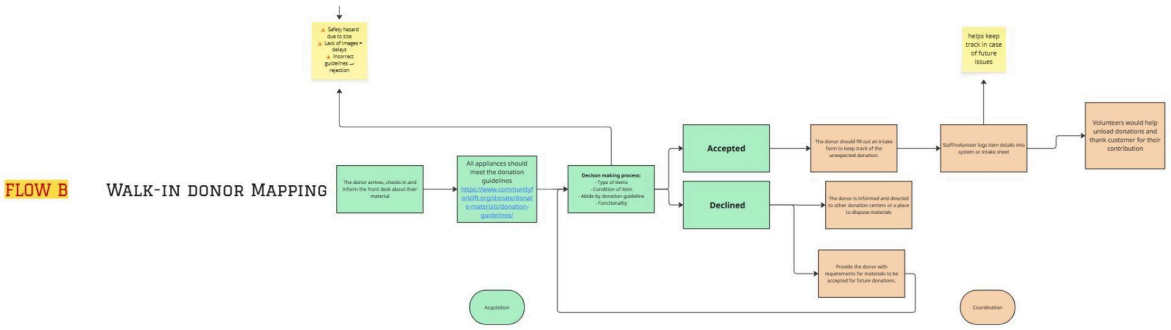
The **Journey Mapping deliverable** focuses on donor and material mapping and demonstrates different flows and processes, showing how items should move through Community Forklift systems for efficient functionality when dealing with the materials lifecycle.



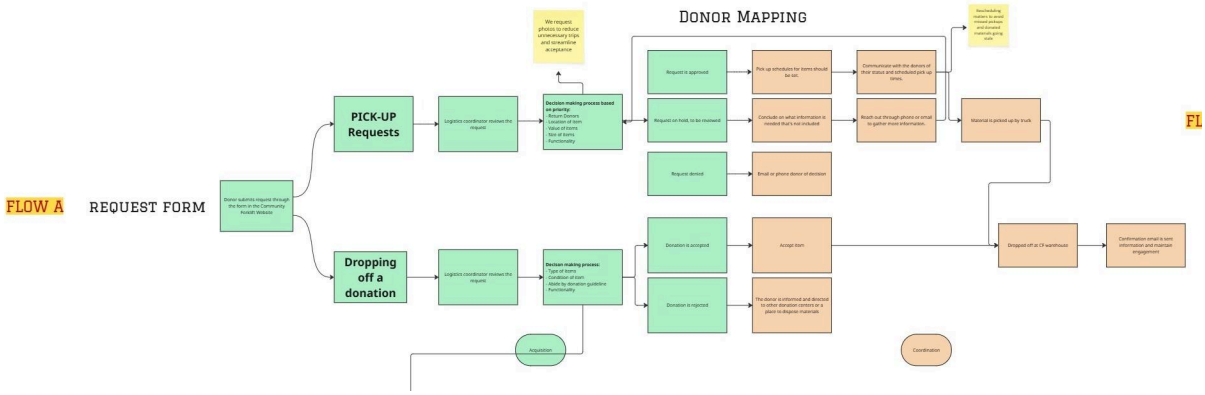
As far as **material mapping** is concerned, there are different demographics that need to be taken into consideration, as they will be addressed differently. One category is online pickup requests, where the donor fills out a form online to the best of their ability with information pertaining to the material. Another category is drop-off walk-ins, which occur when a donor comes to the warehouse in person and drops off the item. Even after identifying these categories, there is still the decision of whether the material will be accepted or not. The journey mapping deliverable goes in depth on the steps that are taken in the decision-making process for each mapping category.



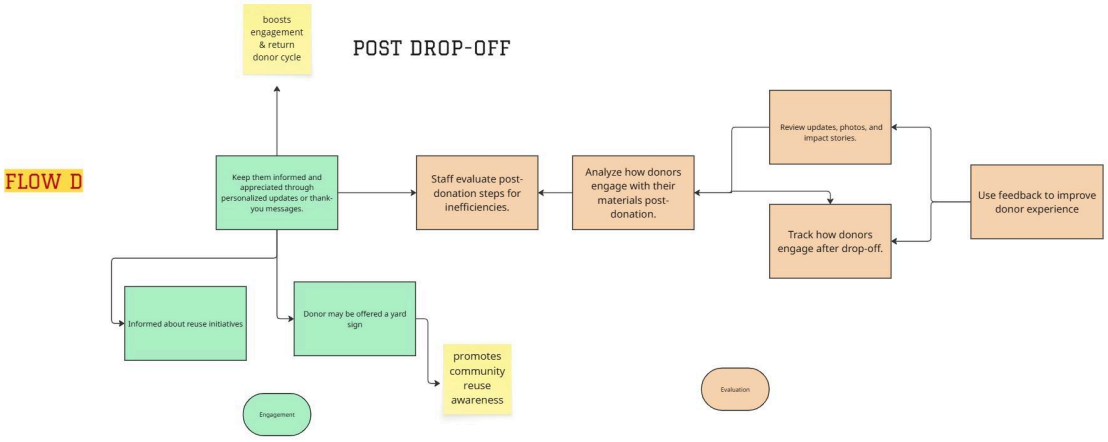
The **walk-in donor mapping** shows the steps a donor goes through when they arrive at the warehouse without submitting any form beforehand. It helps the organization understand what information is usually missing, where delays happen, and what staff need in order to make faster acceptance decisions. This mapping is useful because it highlights opportunities to improve communication, streamline check-in, and make the donation process smoother for both donors and staff.



The **donor mapping** focuses on specific demographics, including returning customers and whether the donor is an individual or a business. Community Forklift is more likely to be lenient with pickup requests for returning customers due to their continued loyalty to the warehouse. Identifying whether a donor is an individual or connected to a business helps keep the database more organized by tracking what, when, and how much a specific donor or donor group has contributed to the organization.



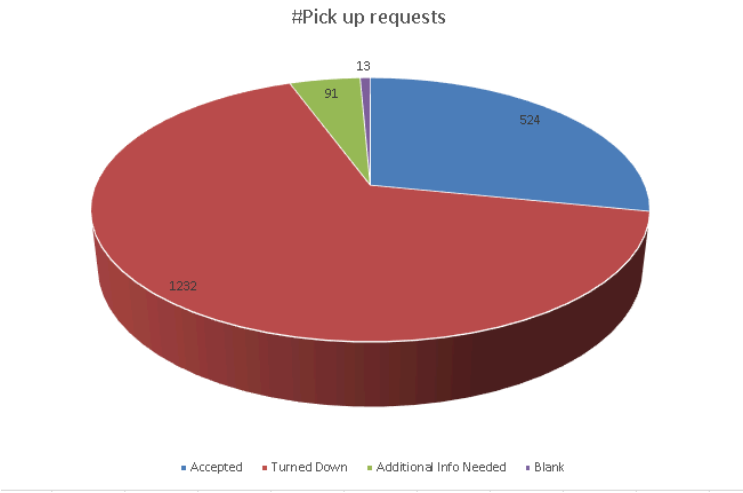
The **post drop-off mapping** is more focused on donor engagement. Usually, after a transaction is made, there is no further communication with the donor, which could sever ties between Community Forklift and the donor. This mapping keeps donors informed about what the warehouse has to offer and any updates they need to be aware of. The purpose of this deliverable is to provide a ground-level view of the steps within the material journey, which Community Forklift expressed they do not currently possess inside the building.



B. Data Analysis

The Data Analysis deliverable consists of seven tabs in the final Excel sheet, which together make up the data analysis portion of the project's deliverables.

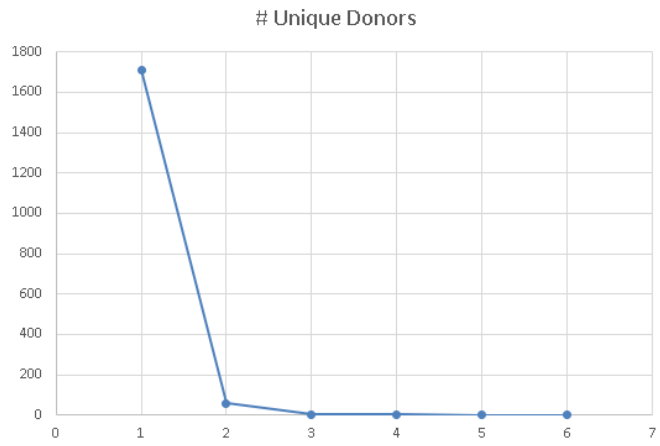
The **Pick-up Requests Truncated** tab represents the first step in preparing the dataset for analysis. The original file contained close to 1,860 rows and 50 columns. Columns with empty information, repeated fields, or details that did not contribute to understanding donor activity were truncated to create a cleaner and more usable dataset.



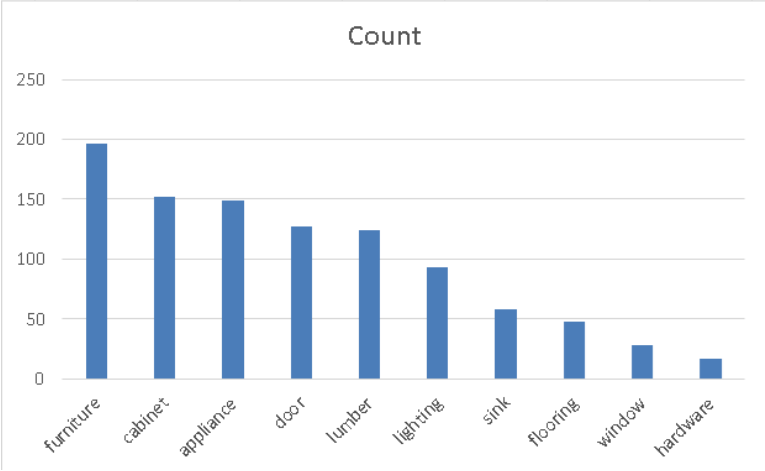
The **Accepted Donations** tab builds on the Pick-up Requests Truncated data by removing all rows that were not accepted. Filtering for accepted donations allows Community Forklift to compare what typically gets approved, identify trends in items or neighborhoods with high acceptance rates, and better understand which types of materials are most valuable or most frequently reusable.

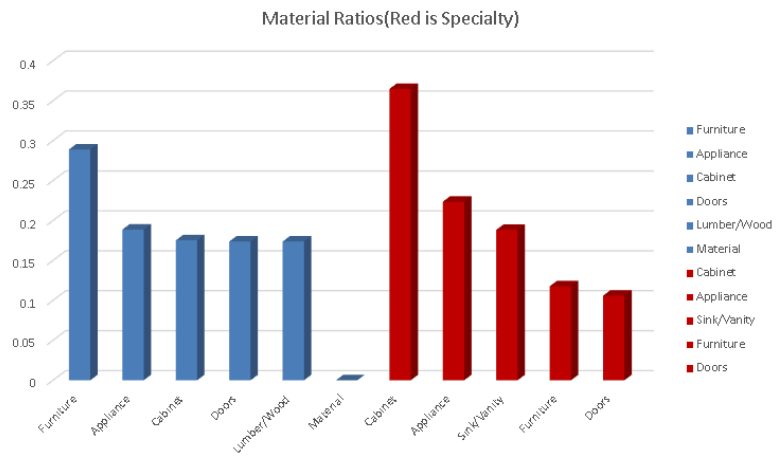
The **Pickup Outcomes** tab shows the outcomes of pickup requests by counting the total number of requests submitted within the year and providing a numerical overview of how many pickups were accepted, rejected, canceled, or left incomplete. Viewing the distribution of these outcomes helps reveal where communication issues or form-submission problems may be causing incomplete or unprocessable requests.

The **Repeat Donors** tab focuses on understanding how many donors give once versus how many return to donate multiple times. This deliverable uses a summary table and a visual chart to compare the number of donations given with the number of unique donors in each category. Repeat donor data is important because it shows how Community Forklift's donor base behaves over time and helps inform future outreach strategies, relationship building with loyal supporters, and opportunities to increase donor retention.



The **Top Materials Total** tab shows the categories of materials most frequently requested for pickup, regardless of whether those materials were accepted or rejected. All incoming requests are organized into major categories and counted by frequency. This information helps Community Forklift understand which material types require the most storage space, staff attention, and processing time, and it can guide future planning, warehouse organization, staffing needs, and outreach for materials that may need improved turnover.





The **Normal vs. Specialty Materials** tab compares normal pickup requests to specialty pickup requests by showing the ratios of materials requested for each pickup type. The combined chart uses blue bars for normal ratios and red bars for specialty ratios, highlighting how certain materials shift between normal and specialty pickups. Materials with higher specialty ratios often appear in bulk donations, indicating areas where more staff support, larger trucks, or additional time per pickup may be required. Understanding these ratios helps Community Forklift plan scheduling, improve pickup routines, and better prepare for high-volume donation days.

The **Referral Sources** tab shows the different ways donors learned about Community Forklift's pickup service. The purpose of this deliverable is to identify which outreach channels are most effective in generating donation requests. This data highlights that word of mouth and online search account for the majority of requests, emphasizing the importance of reputation and online visibility, while lower numbers from social media, events, and traditional media suggest areas where future outreach efforts could be expanded.

Source	Count
Word of mouth (friends, family, neighbor, contractor, Forklift staff, ...)	577
Through a web search	448
Other (provide details below)	228
Referral from another organization (Goodwill, A Wider Circle, etc.)	215
From https://reuse.dc.gov/	109
From Social Media (Listserv, Facebook, Instagram...)	81
In-person event	52
Other media (newspaper, radio, TV...) (please let us know where!)	31
Saw the pickup team or the Forklift truck around town	10

IV. Recommendations

If we had another semester, the next step would be to make this journey map more detailed by separating different types of donors and clearly showing the pain points. As of now, the material donors are grouped together, but individual donors and financial donors have very different needs. We would add separate flows for financial donors and repeat donors to capture how they discover Community Forklift, donate, receive receipts, and are encouraged to return. We would also talk directly with the sales team to understand which donated materials actually sell and which sit in storage. This would allow us to connect donation intake decisions to real sales outcomes and reduce wasted effort. In addition, we would label which tools and systems are used at each step (ex. paper forms, spreadsheets) to identify where data is lost.

With more time, we would move beyond mapping steps and focus on improving the overall donor experience using data. Community Forklift shared a public survey with us that included information on customer satisfaction, donor demographics, and general feedback, but we did not have enough time in the semester to fully analyze it. The next step would be to code and analyze that survey data to identify patterns, such as which donor groups feel most confused or dissatisfied and where expectations do not match the current process. These changes would help Community Forklift make the donation experience more transparent and efficient.

V. Conclusion

This capstone project gave our team valuable insight into the operations of Community Forklift, a nonprofit that diverts waste and makes reusable materials accessible to the community. Our goal was to improve donor operations by creating a donor journey map that identified pain points and opportunities for improvement. Through interviews, observations, and data analysis, we gained a better understanding of how donations move through the organization and the challenges coordinators face daily.

The journey map and data analysis of pickup requests provided additional insights into donor behavior, including repeat donations and common trends in accepted and rejected requests. Combining these outputs, we delivered a visually coherent donor journey map and actionable recommendations for process improvement. This project taught us the importance of listening to clients and translating observations into practical solutions. It also reinforced the value of visualizing complex processes to identify inefficiencies.

VI. Deliverables

The journey map, data analysis, presentations, and reports can be found in this drive as well as the public Github.
https://drive.google.com/drive/u/2/folders/195ZWdFChR6D6IFENYZpS12mowN5il-RY
https://github.com/kavya316/Community-Forklift---Donor-Journey-Map

VII. Acknowledgements

We are grateful to Martina and Trey at Community Forklift, for answering all our questions and offering valuable feedback throughout the project. Their openness and support made this project meaningful and impactful. We would also like to thank our professor, Mary Ann Francis, and teaching assistant, Pooja Upadhyay, for introducing us to this project and for their immense support.

For more information on this project, please contact the team leader, Kavya Ganesan (ganesankavya2@gmail.com) or reach out to iConsultancy (iconsultancy@umd.edu).

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