UX Environmental Calculator For Monadd

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Abstract

In this problem centric design project, we mainly focus on the information design of the carbon footprint calculator of Monadd. It is expected that the carbon footprint can be calculated specifically for individual behavior, thereby enhancing environmental awareness and promoting green moving. More emphasis should be placed on where and how much information needs to be placed across the platform, so as to more effectively convey users with the sustainable and eco-friendly concept of Monadd. Narrative storytelling is a valuable UX method to evoke users' more positive emotional purchases, which would be explored to make it more suitable for applications in this project.
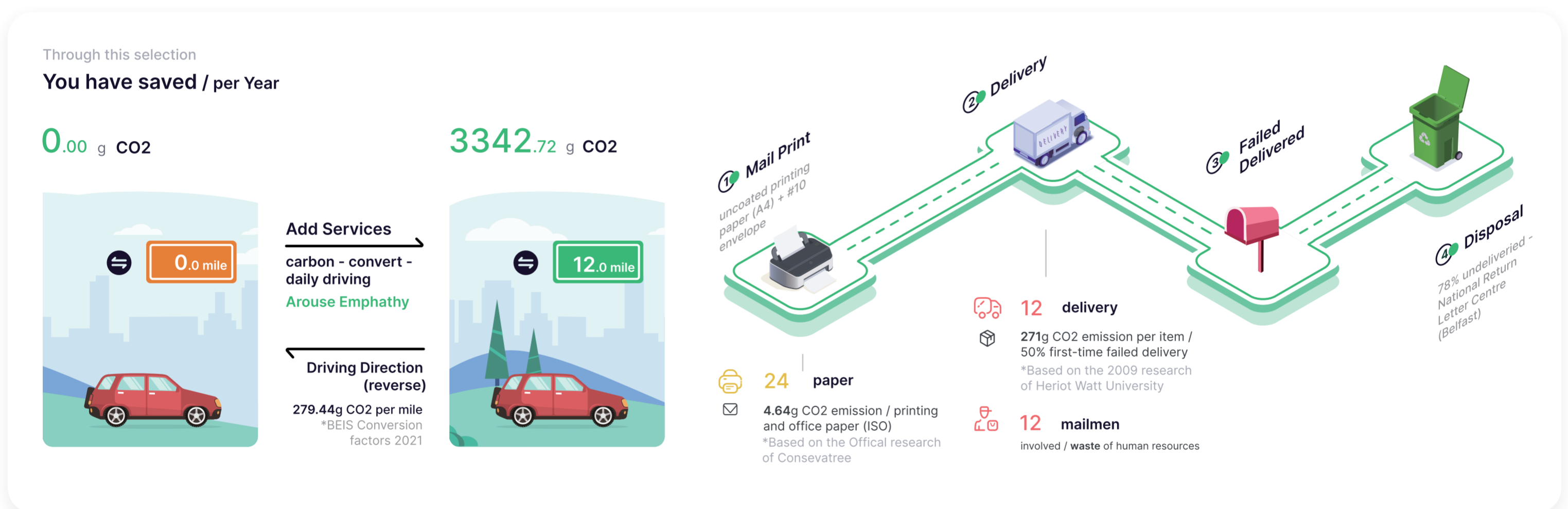
Introduction

Monadd is a platform that can help automatically update and manage users' addresses in utility providers through Google Discovery, thereby effectively mitigating the hassle of moving and misdelivered mails.

Research Question:

1. How much information can be surfaced to users without irritating them? Is it possible to expand the type of information to attract users' attention?
2. Where can we place such calculator features across the platform to better enhance users' environmental awareness and trust?
3. How to design information to guide users to better understand such environmental data? And which narrative method can be applied to arouse users more emotional resonance?

Design Diagram

1. Where. There could be three interfaces placed with such visual calculator, including *Impact* page, service selection page, and dashboard.
2. Calculation algorithm. Carbon emissions are calculated by two factors (year/units), including mail (paper and envelopes) and the delivery of each item, which means that one service usually represents 24 sheets of paper and 12 deliveries.
3. Storytelling. The carbon footprint can be converted into the emissions caused by daily driving (average car), making it easier to understand and empathize. When the user adds one service, the car will run in the reverse direction, indicating that the mileage is is decreasing in a positive sense..

Research Methodology

User interview is one of the most valuable UX research techniques, which can collect more quantitative feedback in a more intimate setting. Since it is very precious to perform each interview during Covid-19, it is necessary to more carefully consider each question consulted to avoid invalid responses.

During the implementation period, a series of semi-structured remote interviews were conducted with 6 representative participants via Google Meeting, to discover their pain points and expectations about the calculator concept of Monadd. In addition, it also needs to be considered whether they are willing to join the subsequent usability testings to better ensure the continuity of the entire design cycle.

Testing & Evaluation

A total of 2 rounds of remote usability testings were conducted with 8 users, involving UX experts and targeted audiences, so as to continuously verify whether the displayed information is increasingly accessible and acceptable to most users. In particular, as the focus of this project, the narrative and visual expression method require timely communication with users to find the best solutions.

A. Layout. It is expressed that the horizontal layout (a.) is more readable than the vertical layout (b.), allowing user to better view real-time data changes.
B. It is shown that the calculated data should be added with related official evidence to make the platform more credible and scientific.

Conclusion & Future Work

Overall, the project has built a validated and justified carbon footprint calculator information design, with working Hi-Fi prototypes and additional algorithms related to the carbon footprint. The narrative storytelling method has been integrated and applied with detail-oriented and user-friendly calculator features, making the calculator more engaging and credible, thereby increasing the user's loyalty and environmental awareness. Furthermore, future work can be focused on more validation of current solutions, as well as more narrative storytelling methods mining and updating, so as to continuously strengthen the promotion of monadd's sustainable development concept.