



Rennueva

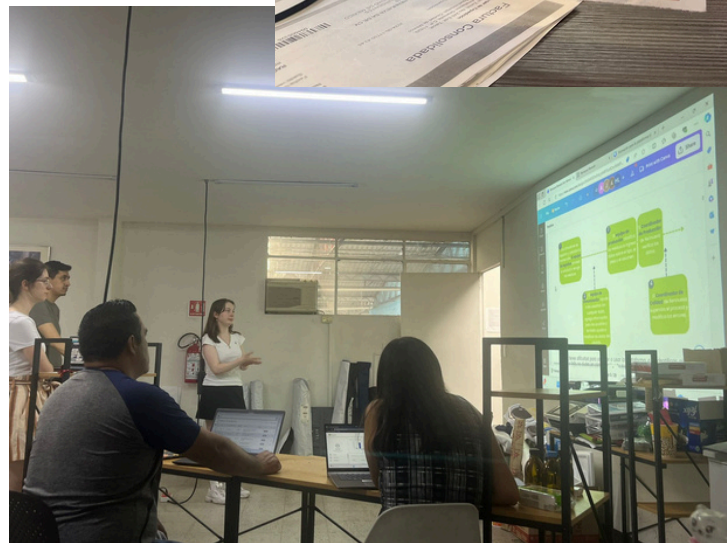
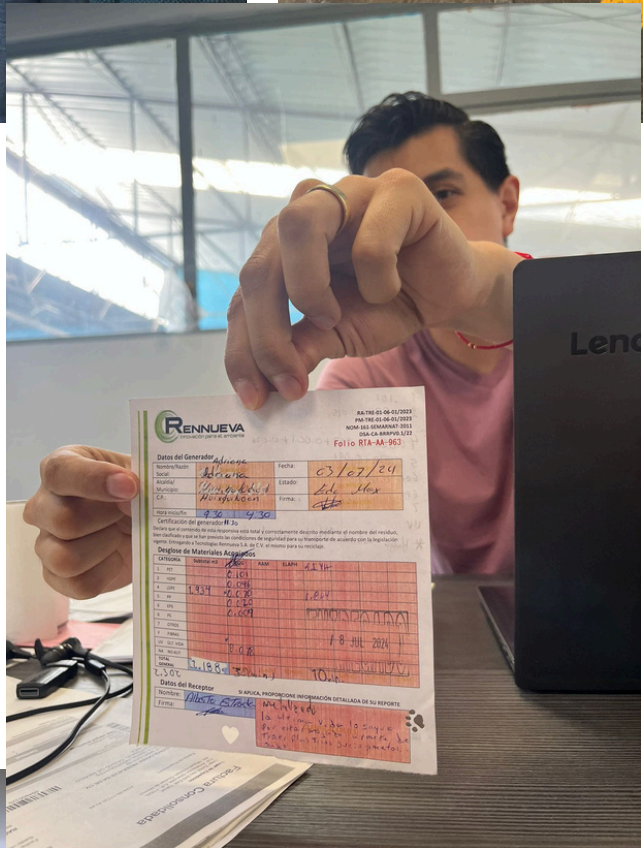
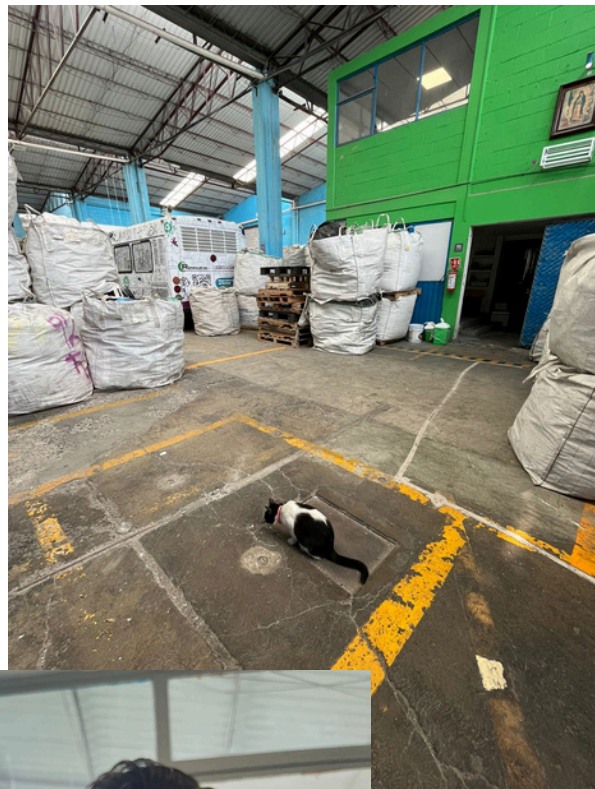
Showcase

August 12, 2024

Jiayi Guo (jg2252@cornell.edu)

Hannah Lawless (hannah.l.lawless@durham.ac.uk)

Alice O'Neill (bs22aon@leeds.ac.uk)



The Team

Rennueva

Enrique Estrella

CFO and Business Manager at Rennueva

Make Sense

Triana Gil

Re_action Program Coordinator
<https://www.linkedin.com/in/triana-gil-medina-1ab0ab159/>

Nuria Soistata

Re_action program Coordinator
<https://www.linkedin.com/in/nuria-soistata/>

Laidlaw



Alice O'Neill

bs22aon@leeds.ac.uk
www.linkedin.com/in/alice-o-neill-30046a250



Hannah Lawless

hannah.l.lawless@durham.ac.uk
<https://www.linkedin.com/in/hannah-lawless/>



Jiayi Guo

jg2252@cornell.edu
<https://www.linkedin.com/in/jiayi-guo-designyourlife/>

Volunteers



Andi
Arturo
Isabel
Yadira
Kenya
Ximena
Angie
Mariel
Humberto

Our Volunteers

Skills



A word cloud of skills and interests in shades of green. The most prominent words are 'creative', 'technical', 'sustainability', 'design', 'English', 'partnerships', 'Advanced', 'community', 'management', 'tools', 'skills', 'knowledge', 'analysis', 'product', 'Building', 'organizations', 'digital', 'Photography', 'Partnership', 'process', 'understanding', 'planning', 'themes', 'Event', 'project', 'Certified', 'waste', 'action', 'companies', 'Data', 'issues', 'graphic', 'documentation', 'Research', and 'creating'.

Careers



A word cloud of career paths in shades of green. The most prominent words are 'Waste management', 'Engineer', 'Consultant', 'Systems', 'Science', 'energy', 'student', 'Business Data', 'Project', 'Client', 'Earth', 'Renewable', 'Supervisor', 'Analyst', 'Informatics', 'sustainable', 'Environmental', 'Specialist', 'mechanical', 'Development', 'Studied', and 'Earth'.

Project Context

**Environmental Problems in Mexico
City and the role of Rennueva**

Plastic in Mexico City



Plastic is the **2nd** most disposed product after organic waste

Only 6% of plastic waste in Mexico City gets recycled and **123 tonnes** is produced in CDMX daily



The lack of waste management **infrastructure and regulation** is a major problem for supporting recycling initiatives

About Rennueva



- Start up recycling plant specialised in **polystyrene and plastic**

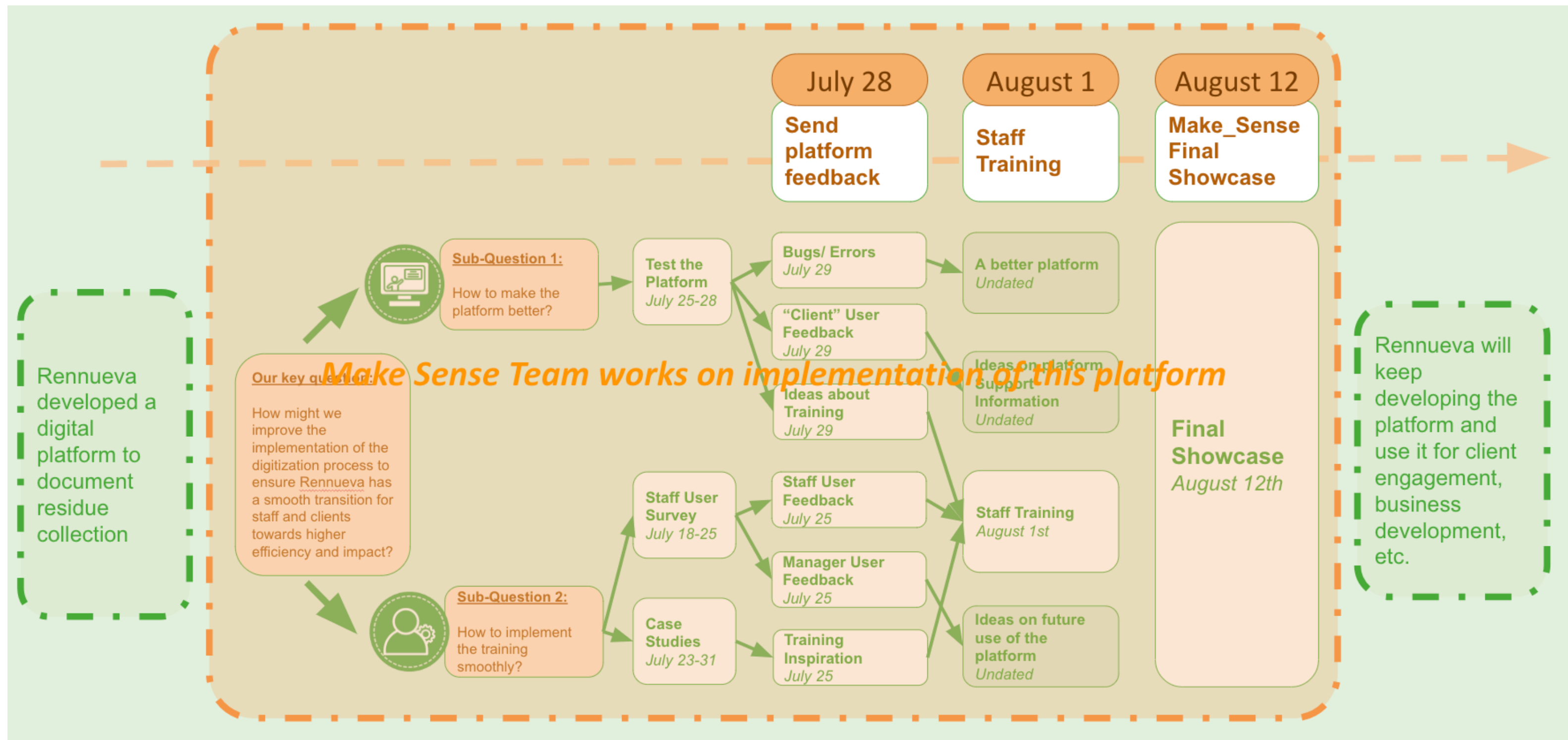


- Offers **policy consulting** to aid smaller plants to understand Mexican waste management laws.



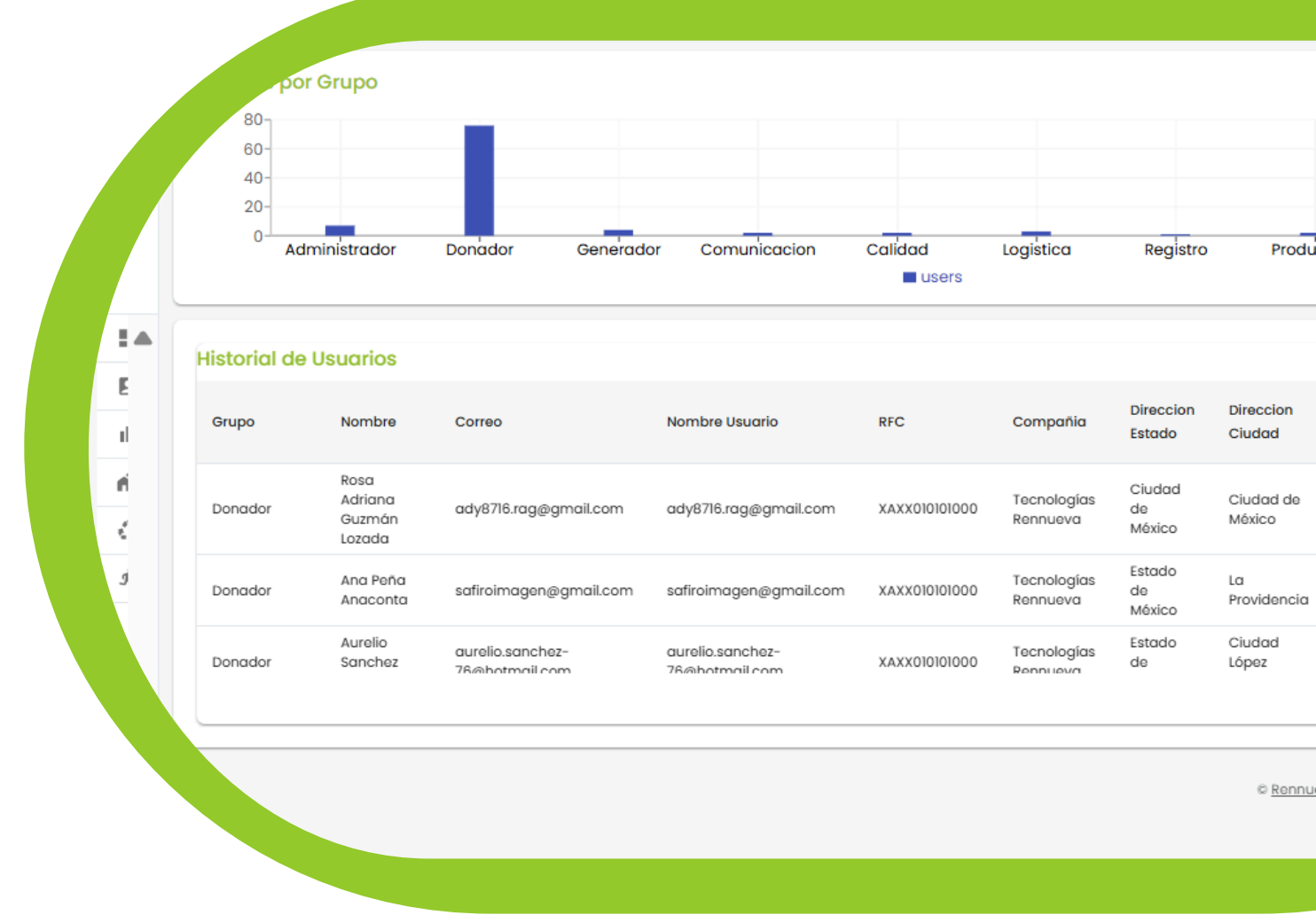
- Developed a patented technology to **process polystyrene** into profitable raw material chips

Our Project



What were our Tasks?

Rennueva designed a new platform for tracking donated materials and donor information



- Creating a **training session** for each team to teach their role on the platform
- Design a manual** to allow staff to refer to during their workflow
- Help to streamline the platform by **ideating** new functions and designs

Journey to the Solution

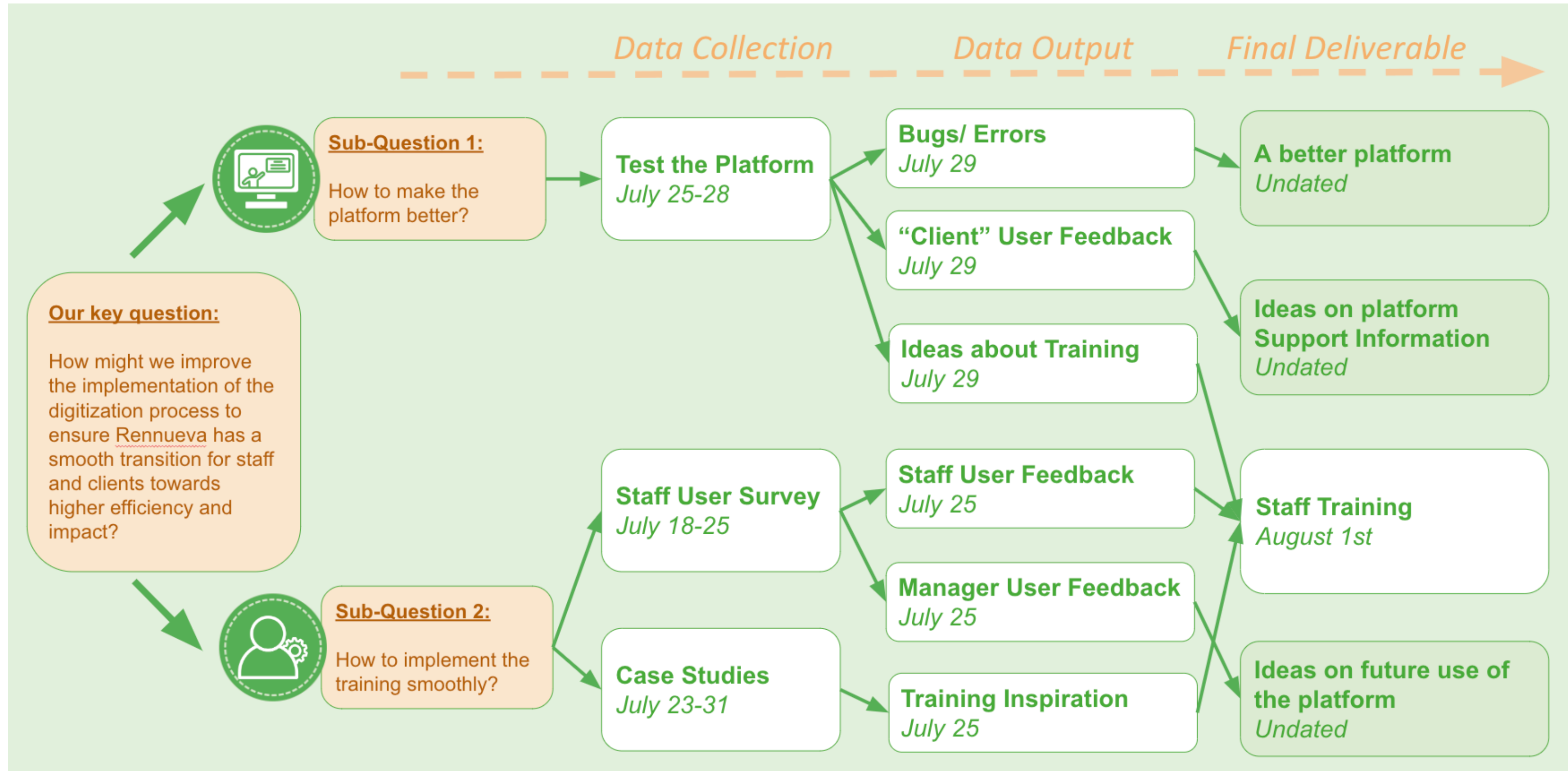
**Using design thinking to support
the digital transition**

How Might We...

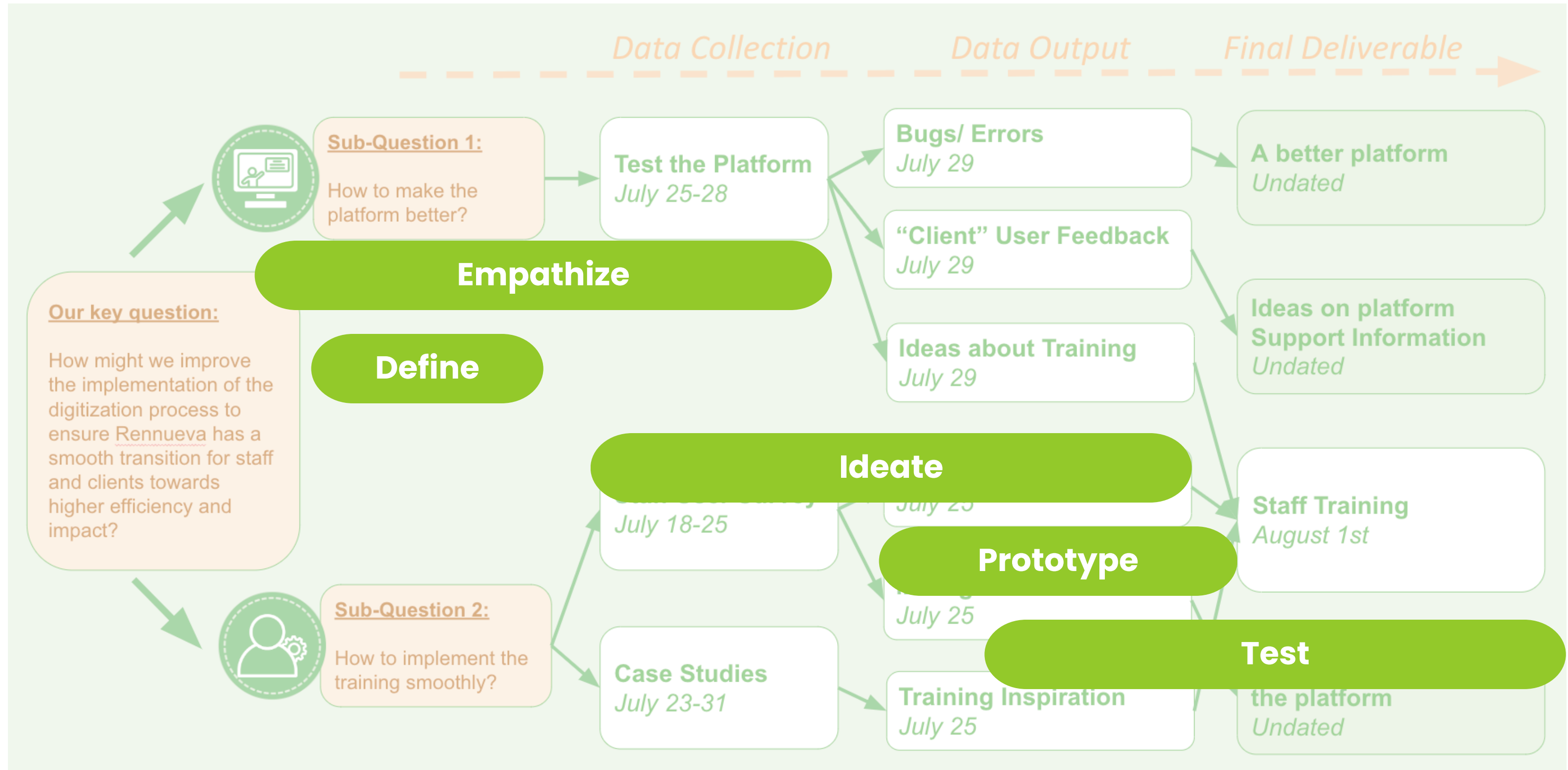
...improve the implementation of the **digitization process** to ensure Rennueva has a **smooth transition** for clients and staff towards higher efficiency and impact?



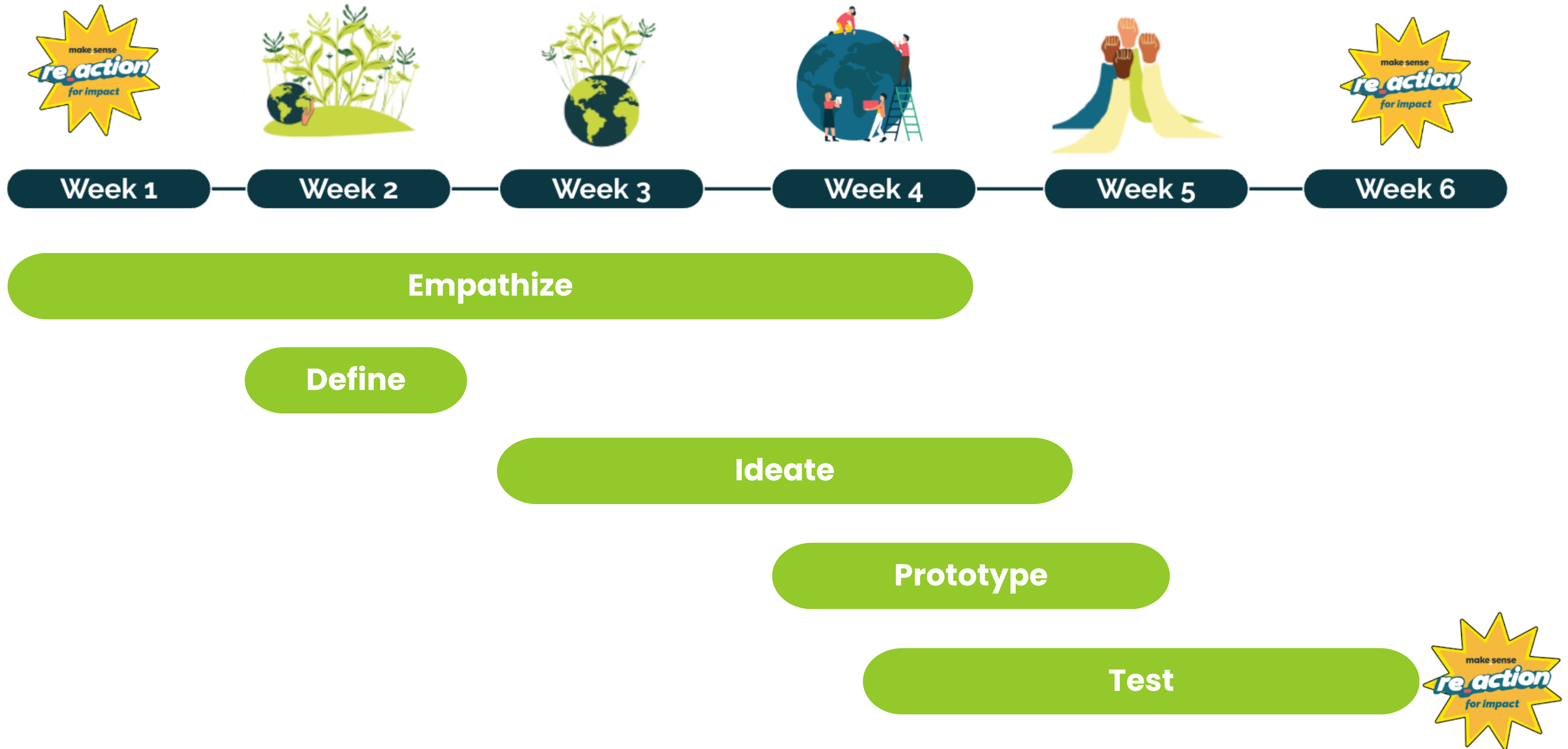
Task Breakdown



Task Breakdown x Design Thinking



Design Thinking Timeline

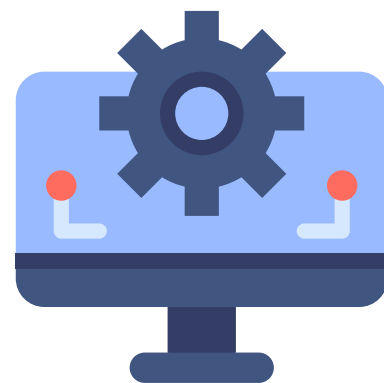


Our Visits to Rennueva

Learnt about the **processing of materials** and how it will be impacted by the new platform



Invited our **volunteers** along for help with translations and feedback on presentations



Asked A LOT of questions about the **new platform** and how it functions



Working with our Volunteers

We luckily had many volunteers with professional experience in **waste management, consulting and digital products**

Our volunteers helped us with trialling the training and platform so that we could **prototype our ideas** before testing on the staff

Most volunteers work remotely with us, so we held weekly-meetings and assigned clear tasks and deadlines to facilitate efficient collaboration

We held **1:1 meetings** with our volunteers to allow them to share more ideas and get to know their skills better



User Research (Empathise)

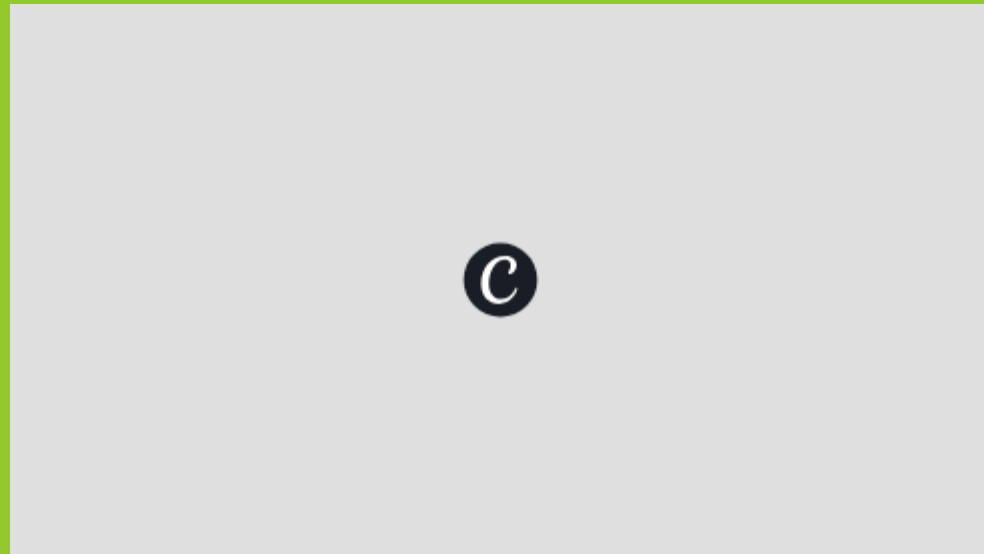
Do you use digital platforms a lot such as apps on a mobile phone?	Could you show me/ tell me how the paper data sheet is currently used?	Have you experienced any difficulties using it?	Have you made any mistakes using the paper forms?	If Rennueva now gave you a digital platform that you can use on a laptop, phone, or hand-held machine, what do you think? How could it be better than the paper version?	Do you think there would be any difficulties?	
¿Usas mucho las plataformas digitales, como las aplicaciones en un teléfono móvil?	¿Podrías contarme cómo se utiliza actualmente la hoja de información de materiales (bitacora)?	¿Has experimentado alguna dificultad al usarla?	¿Has cometido algún error al usar los formularios en papel?	Si Rennueva ahora te	¿Crees que habría alguna dificultad con la versión digital?	
Not at work but yes for personal use	As co-ordinator uses paper to track what is happening within the company, is the one who oversees the information between teams and what has been inputted. Each role has a different colour responsible for filling it out. Makes sure that the team have captured what they need to	YEAH. Many. Last year the document wasn't used and they used a different documents. If the paper gets lost or wet then all the information is lost	Lots of mistakes easily made in different boxes or have to correct it so that it isn't clear	Is difficult to take some devices with them such as small devices as need them to be connected/charged. He prefers bigger devices where he can type in information rather than write on it manually. Smaller device in the work stations but for co-ordinating a bigger device would be better e.g. a tablet.	Having enough space to see all the information, being able to use the platform for all the roles. When he captures information on one platform, being able to pair the different platforms. Difficulties having to share on a digital platform and pair all the information from each aspect of the process.	He would go through it and then when he makes mistakes video would be useful and manual.
Yes, to take photos and videos and show pictures of bad quality materials or wrong	She reviews the information and the materials, she validates that the materials have been put in correctly	Yeah, sometimes the information is not correct or the materials have been contaminated and not recorded	Sometimes the perforation in the form is wrong and it can't be undone, this is done to confirm its okay. Often other people put information in the wrong column or the information doesn't match the total received and separated materials.	Likes having any device for example phone, tablet or laptop. Prefers cell phone as it is portable and she can also take photos of where there has been contamination.	Going through the	

Carried out **expert interview** with Enrique top understand Rennueva, the platform and how digitisation will benefit the company

Created **user experience survey** for Rennueva Staff to understand their roles within the company, their current workflow, and how the app will improve the ease and efficiency

Created **profiles** on the volunteers to understand more about the skills they could contribute to the project as well as **1:1 meetings** to get to learn about their aims

User Research (Empathise and Prototype)



Volunteers used the Desdelivery Platform as a donor and gave **feedback** on their user experience in a survey

We had an **immersion meeting** with the communication team to understand their capabilities and define the scope of our project, allowing the project to move forward after we leave

The outputs from the volunteer testings and comms team helped to guide our production of the manual and training resources

Volunteer Experience of Desdelivery (Client donation platform)

Dear Volunteers :) We have asked you to try using the Desdelivery platform from the perspective of a donor. This platform is currently used by clients to request donation collections. Please let us know how you found the experience.

Estimados Voluntarios :) Les hemos pedido que intenten utilizar la plataforma Desdelivery desde la perspectiva de un donante. Esta plataforma es utilizada actualmente por los clientes para solicitar colecciones de donaciones. Por favor, déjanos saber cómo encontró la experiencia.

hettielou02@hotmail.co.uk [Switch account](#)

The name, email, and photo associated with your Google account will be recorded when you upload files and submit this form

Name/Nombre

Your answer

How did you find the process of registering on the platform? How could this have been made easier?

¿Cómo fue el proceso de registro en la plataforma? ¿Cómo se podría haber hecho esto más fácil?

Volunteer Experience of Rewards System (staff tracking platform)

Dear Volunteers :) We have asked you to try using the Rewards System which Rennueva staff use to view client collection requests and record data of donations (alternative to the paper folios). This system will also be used to generate client engagement feedback. It is currently only used by staff, but a goal is to merge this platform with Desdelivery so that the engagement information is visible for clients.

We would like to hear about your experience using the rewards platform from the perspective of a staff member, as well as your suggestions for making this platform available to clients.

At the end of this survey, we have a place for you to upload photos.

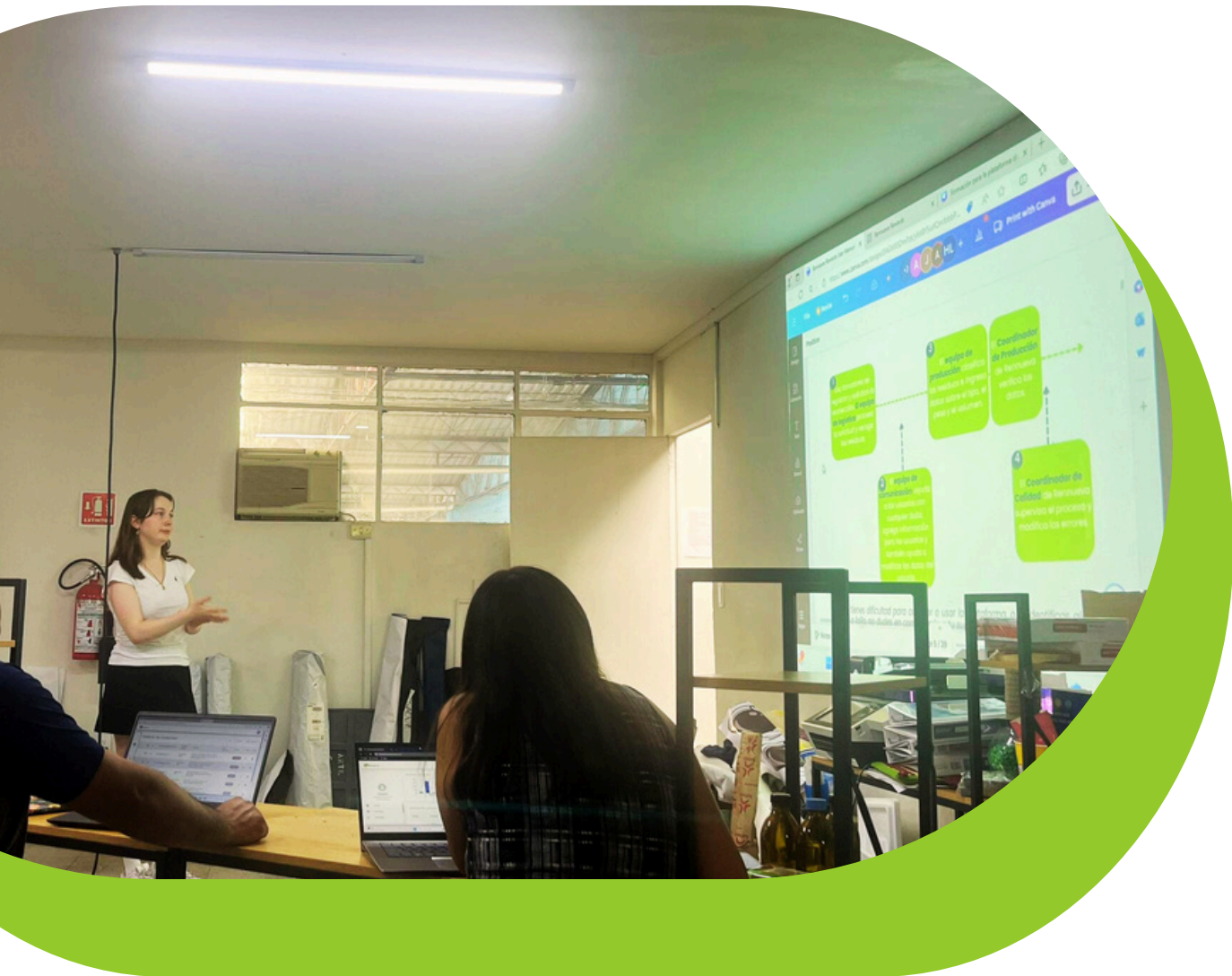
.....

Estimados voluntarios :) Le hemos pedido que pruebe el sistema de recompensas que utiliza el personal de Rennueva para ver las solicitudes de recolección de clientes y registrar los datos de las donaciones (alternativa a los folios de papel). Este sistema también se utilizará para generar retroalimentación de participación del cliente. Actualmente solo es utilizado por el personal, pero un objetivo es fusionar esta plataforma con Desdelivery para que la información de participación sea visible para los clientes.

Nos gustaría conocer su experiencia usando la plataforma de recompensas desde la perspectiva de un miembro del personal, así como sus sugerencias para hacer esta plataforma disponible para los clientes.

Al final de esta encuesta, tenemos un lugar para que subas fotos.

User Manual & Training (Testing)



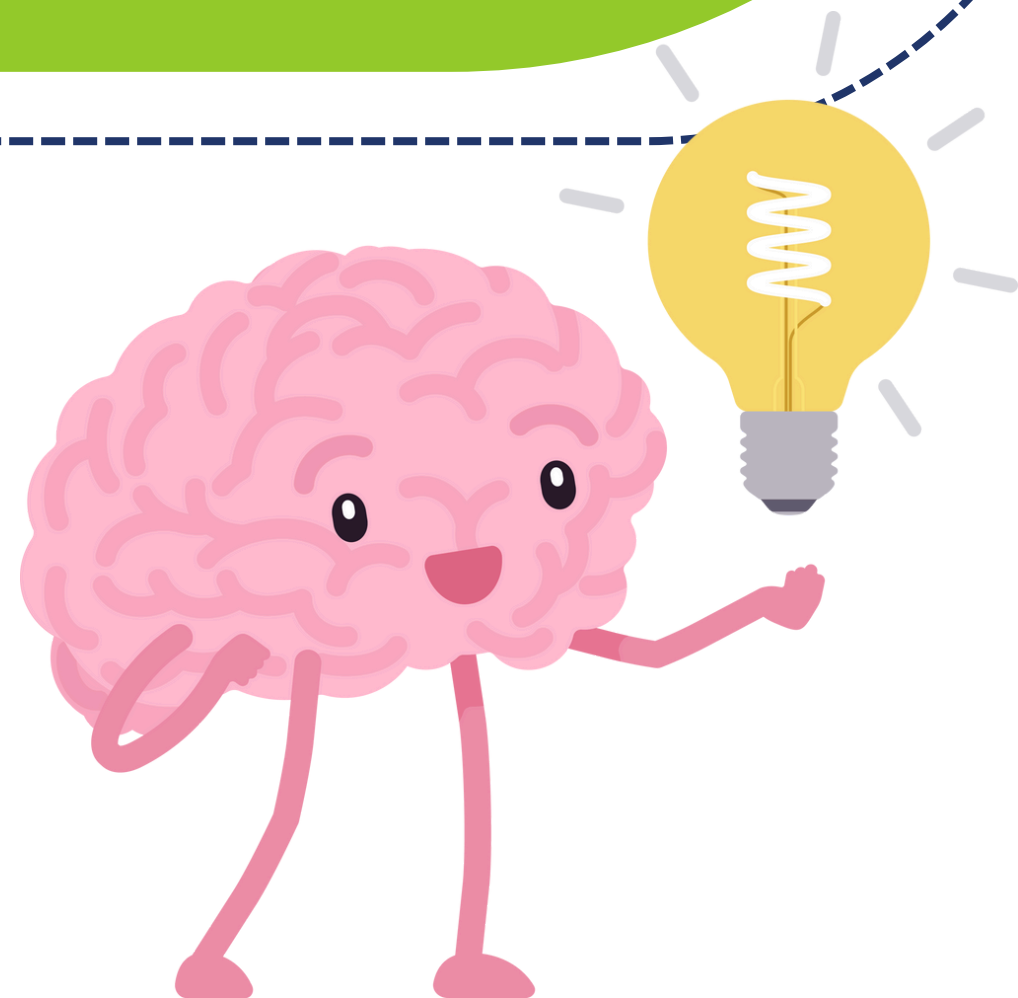
- 1 Designed a visual **manual** with steps for how each team can use it for their process
- 2 Created a **presentation** on the reasons for digitisation and how to access support
- 3 **Conducted in-person walk through** of the platform with each team to allow them to follow along and ask questions



Results

**Our training programme
outcomes & future prospects**

Key Numbers

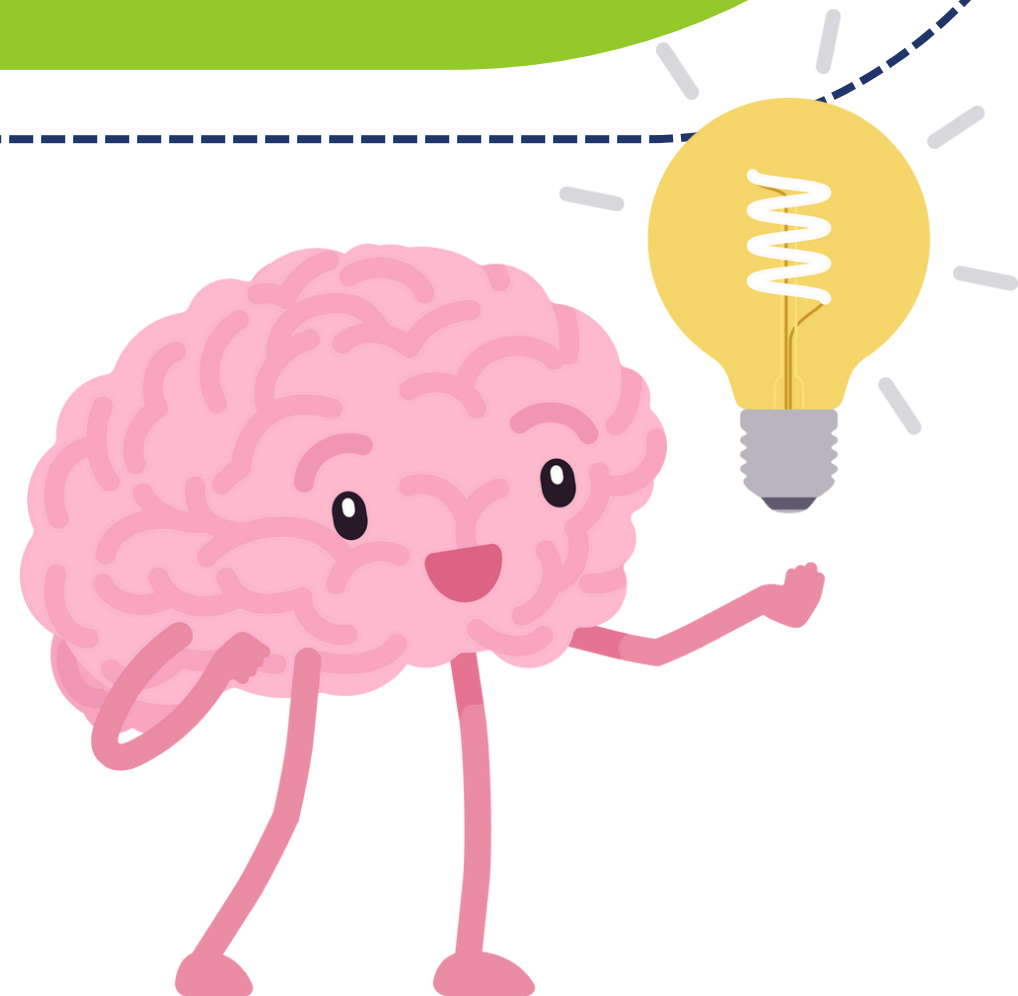


We had **9 active volunteers** who contributed ideas to the platform, training and manual!

We held **6 training sessions** for almost every team who will use the platform

We created **2 versions of manuals** (a draft and a final version) of **47 pages**, translated to Spanish

Results of our Training



70% of staff surveyed said they **understood the platform** well after training

100% said the manual provided them with the information needed to **use the platform confidently**

85% of respondents said the **manual was clear** and easy to understand

A quick look at our manual



An **introduction** section to present the platform and **how it will help** the staff at Rennueva

Sections for **every team** with screenshots and arrows to talk them through each page and function

Information about who to go to for help or what to do if they make a mistake

The communications team will make the manual into a **video**



Future Applications

The feedback we gathered from our volunteers will help to **improve the platform**

The surveys from the staff will help to tailor the platform to them and **train new staff** better in the future



Lessons Learned

How have we developed during
the project?

Mindsets

The current socio-environmental problematics are:

Complex Problems

They have various causes and need various factors to be solved.

Finally, we need to have

Critical hope,

To attend the problems, hope is key, but this hope must be active, curious and reflective to avoid falling into simplistic solutions.

In order to attend these problems from the root, we must do it through a **Systemic Vision**, analyzing each problematic as part of a system.

In order to contemplate our intersectional sensibility about socio-environmental problems and create responsible, empathetic and deconstructed content, we must always be conscious of our **Positionality**

Soft Skills

Project Management

Active Listening

Communication

Adaptability

Leadership

Self Motivation

Organisation

Delegation

Attention to Detail

Problem Solving

Time Management

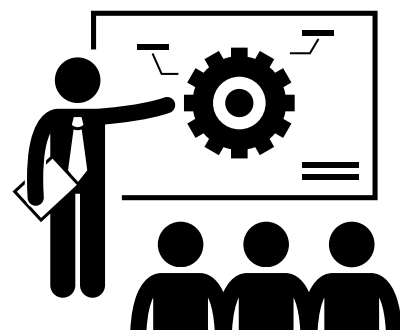
Cultural Awareness

Project Specific Skills

Role of Government Policy
in Companies

Digital Transistion

Sustainability Consulting

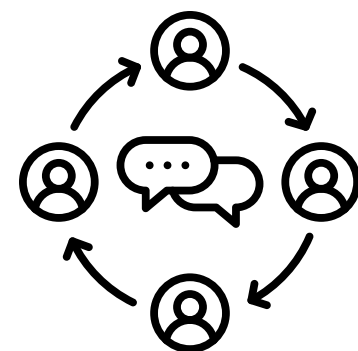


Staff Training

Presentation Skills

User Reasearch

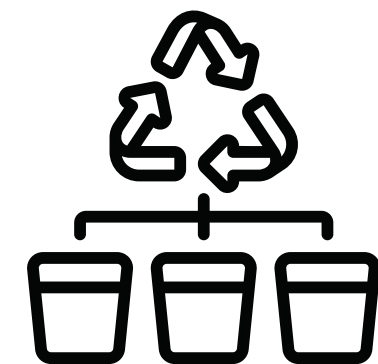
Community Mobilisation



Creating Visual Manuals

Knowledge on Environmental
Issues (Waste Management)

Survey Design

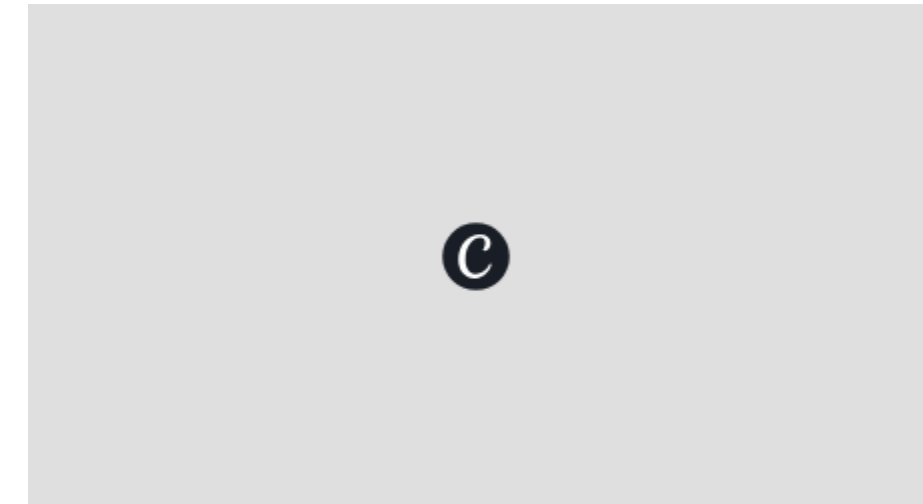
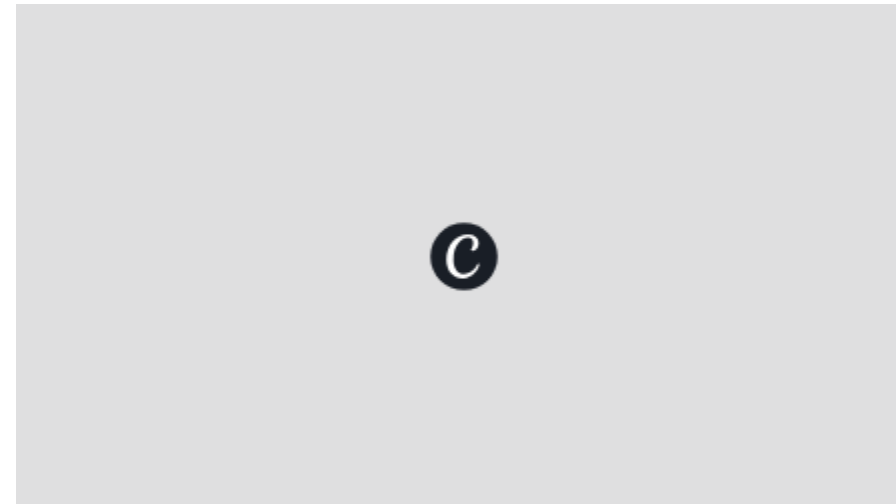
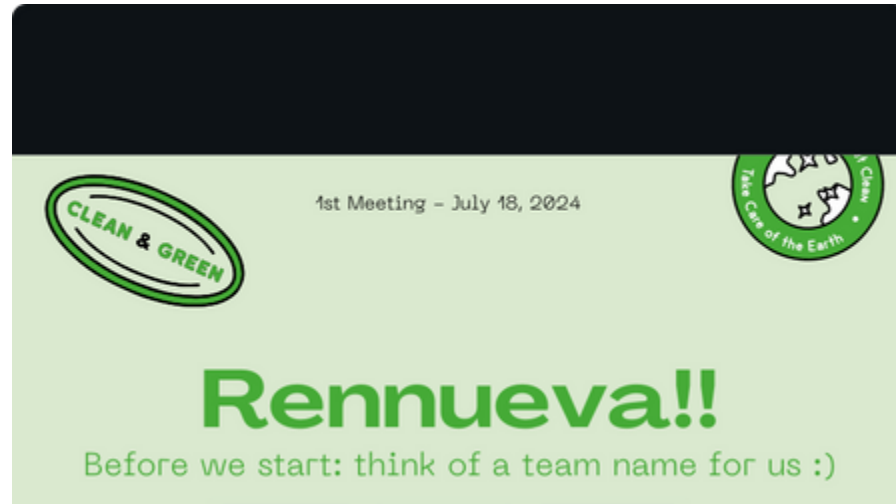


Appendices

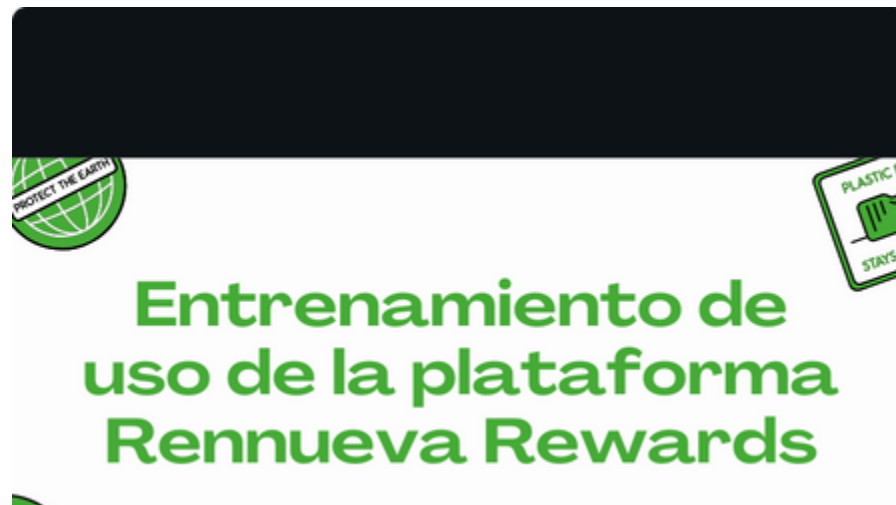
Subtitle

Work Documents

Volunteer Meetings



Staff Trainings and work documents



Rennueva Project Home

Summer 2024
Group Name: Recycling Queens
Group Members: Jiayi, Hannah, Alice

Pinned Documents

- [Rennueva Team Research](#)
- [Rennueva Meeting Planning](#)
- [Rennueva Action Plan](#)
- Rewards Platform user manual
<https://www.canva.com/design/DAGMXXDmPdk/y5eiBY5sfQmJlbbpTEW6w6/dl>

Meeting Notes

Information to Add to the Manual

- Information about where to store the handheld devices
- Who is responsible for handheld devices if they break or need replacing
- In the appendix, we have put down some notes on use of the handheld but it is not complete- we recommend reviewing and adding some more if needed

Additional Training Steps

- Making a follow along video to accompany the manual that has captions and shows the steps of using the platform for the teams that need it

Monitoring the Use of the Platform

- Gathering data on the use of the platform to compare staff efficiency and ability to reach targets e.g. number of bags sorted
- Monitor page use for donors compared to before and if they find the service more efficient now that staff have a platform to access their information/are able to use the platform to have digital folios, arrange deliveries more quickly, gather information about their impact over time



Thank you for coming to our showcase!

Any questions about our project?

Authors:

Jiayi Guo (jg2252@cornell.edu)

Hannah Lawless (hannah.l.lawless@durham.ac.uk)

Alice O'Neill (bs22aon@leeds.ac.uk)

Volunteers: Andi, Arturo, Isabel, Yadira, Kenya, Ximena, Angie, Mariel, Humberto