> We are living in an era with **the boom in both cosmetic market and its waste**. Still, we taking a series of problems that it takes as, such as **the environment pollution, resources waste and the rise of the counterfeit industry**.

BACKGROUND RESEARCH

1 Due to the consumption value of fashion, the cosmetics market is growing. At present, the value of the industry exceeds 500 billion dollars, and it is expected to grow to 820 billion dollars by 2023 [3].

2 The huge beauty market has also caused a huge waste of resources. Additional packaging makes products more expensive for manufacturers and consumers [5].

3 Every year, about 9 million tons of plastic waste eventually enter the ocean [1], the waste produced by cosmetics industry is one of the important factors [2], The beauty industry creates more than 120 billion packages every year [5]. The waste of cosmetics has caused great harm to the ecological environment and human health, see the analysis below:

Main waste of cosmetics [2]	To environment	To human beings[4]
Plastic	Non recyclable packaging leads to a large number of plastic waste products that cannot be degraded for decades to hundreds of years.	The living environment of human beings is deteriorating rapidly
Microbeads	As a grinding agent or a chamfer agent, plastic Microbeads are insoluble in water and are very small in size. They are easy to enter the drainage system and marine ecology, and their toxin absorption and biological amplification may lead to the increasing concentration of toxins in the water circulation system.	
Harmful chemicals	Harmful chemicals in cosmetics enter the soil and sea, which cause great damage to animal and Plant Ecology (such as the destruction of three chlorosis to biological population), and the chemical oxidation of benzophenone found in sunscreen products will seriously affect tropical water system, resulting in a sharp reduction in coral reefs and habitat destruction.	Health hazards caused by eating polluted water, animals and plants
Heavy-metal	Mixed into the water circulation system, harm the soil, vegetation, animals and plants.	Heavy metals such as lipsticks, nail polish and other products may accumulate toxins in human organs and cause cancer and other diseases.
Artificial hormone		Reproductive toxicity can result in miscarriages and developmental problems, possibly leading to a generation with increased health issues.

4

More and more cosmetic manufacturers have realized or implemented the recycling or reuse of product packaging [6], And millennial users are more inclined to use and buy more environmentally friendly cosmetics [3].

5 It is undeniable that the current production conditions, social policies and other conditions are not perfect, making cosmetics recycling very difficult.

- **Different policies** — Different waste classification and recycling policies.
- **Long distance** — Garbage disposal may take place in overseas countries.
- **Restriction consciousness** — Many people lack of the waste collection awareness.
- More...

REFERENCE

[1] National Geographic Headquarters. (Jan 2021). PLASTIC: SEA TO SOURCE. Retrieved from https://www.nationalgeographic.org/projects/plastic/?locale=en

[2] UKEssays. (Nov 2018). Impacts of Cosmetic Waste. Retrieved from https://www.ukessays.com/essays/environmental-studies/impacts-of-cosmetic-waste.php?vref=1

[3] Livemint. (Dec 2019). Unseen 2019: The ugly side of beauty waste. Retrieved from https://www.livemint.com/mint-lounge/features/unseen-2019-the-ugly-side-of-beauty-waste-11577446070730.html

[4] Commercialwaste. (Jun 2019). Sustainability How the beauty industry is feeding plastic to you and the planet. Retrieved from https://commercialwaste.trade/how-the-beauty-industry-is-feeding-plastic-to-you-and-the-planet/

[5] de Melo, E.D. et al., 2013. Toxicity identification evaluation of cosmetics industry wastewater. Journal of hazardous materials, 244-245, pp.329-334.

[6] Allure. (May 2020). Did It Take a Pandemic to Get Serious About Beauty Waste?. Retrieved from https://www.allure.com/story/beauty-industry-packaging-waste

MARKET RESEARCH

01 | The Maybellin Makeup recycling programme

HOW **Teame up with Terracycle**

WHERE **the United Kingdom**

WHY **Help fight plastic waste by recycling their used makeup**

Find your nearest recycling station!

Drop off those to one of the recycling stations.

'Terra Cycle' will come and collect the waste from store to be cleaned and recycled!

Pros

- Yes please & No thanks: accept most plastic packaging.
- Accept old make-up that might have some residue product left inside.

Can Do More

- Enhanced user participation
- Reduce labor costs in the link
- Ensure that no residue flows into other recyclables

02 | Lush Handmade Cosmetics & Vegetarian Cosmetic Company with 80% product vegan

HOW **Changing products from production**

WHERE **GLOBAL**

WHY **Brand value orientation "Original, environmentally"**

Pros

- Achieve cycling by changing production methods and brand value output.
- Provide transparent information for customers.

Can Do More

- Product type is restricted
- The audience is delineated
- High cost of ingredients and labor

03 | Others

Head & Shoulders

The packaging is made of marine plastic

In Europe, dark plastic bottles can be recycled; but in South America, recyclers do not accept dark plastic bottles.

All earth Mineral Cosmetics

100% biodegradable and recyclable refills

Decompose Recycle

100% recycled finishing nets beech wood sourced from UK forest

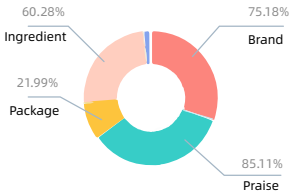
> People enjoy the purchase while they **can not find an appropriate way to deal with the waste**. **Consumerism**, on the other hand, find the excuse for the waste and makes it **normal** for most of the people.

QUESTIONNAIRE SURVEY

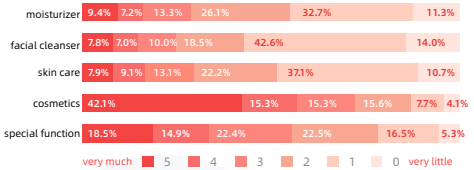
First of all, we want to know customers' attitude towards the use and recycling of cosmetics, so we conducted a questionnaire.

Form | **Online** Region | **UK, China** Effective quantity | **106**

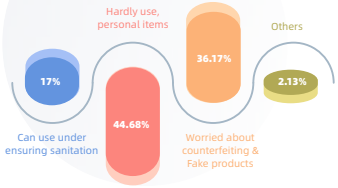
The factors that determine purchase of cosmetics



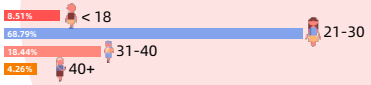
Facial products remaining



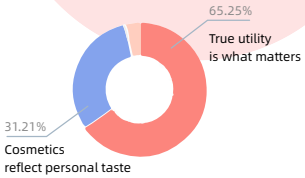
The attitude of green products in cosmetic



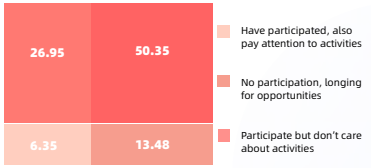
Age distribution (year)



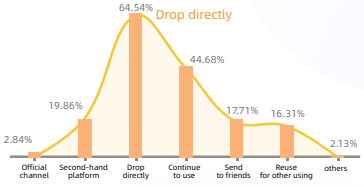
The impact of cosmetics on personal identity



Enthusiasm for participating in recycling activities



Disposal of empty bottles, expired, idle cosmetics



CONCLUSION

- Brand and Praise is the most important things in purchase decision
- The more frequently they buy, the less they support the idea of environmental protection
- The most wasted thing is cosmetics, the lest one is moisturizer
- Majority of consumers prefer to drop directly to disposal of empty bottles

INTERVIEW SURVEY

Next, We have divided the consumer groups into three categories and we selected five samples from the questionnaire form.

Form | **Online video & Face to face** Region | **UK** Effective interviewee | **5**

Spring
Beauty Influncer

19/01/2021 Tues

Features/problems
- High volumes of purchase
- Cannot finish using all the products

Challenge/expectation
- See the potential of skincare refills
- Size makeup

Interested in: **Recycle** **Package Design**

Jeremy
Male User

20/01/2021 Wed

Features/problems
- Only purchase cosmetic when he finishes
- Only throw away makeup when he finished using

Challenge/expectation
- Does not see the potential for cosmetics refills due to hygienic reasons

Interested in: **Recycle** **Service Support** (If the service is convenient and have reward system)

Ruru, Qinyu, Sarah
Female User

19/01/2021 Tues

Features/problems
- Cannot finish using all the products

Group contradiction
- High volumes of purchase
- Only wanna consume high quality cosmetics
- Prefer to experience new products
- Hardly purchase, take second hand from friends
- Actively choose more sustainable cosmetics
- Recycles cosmetics bottles whenever possible

Interested in: **Recycle** **Package Design** **Service Support** **New Products**

OPPORTUNITIES

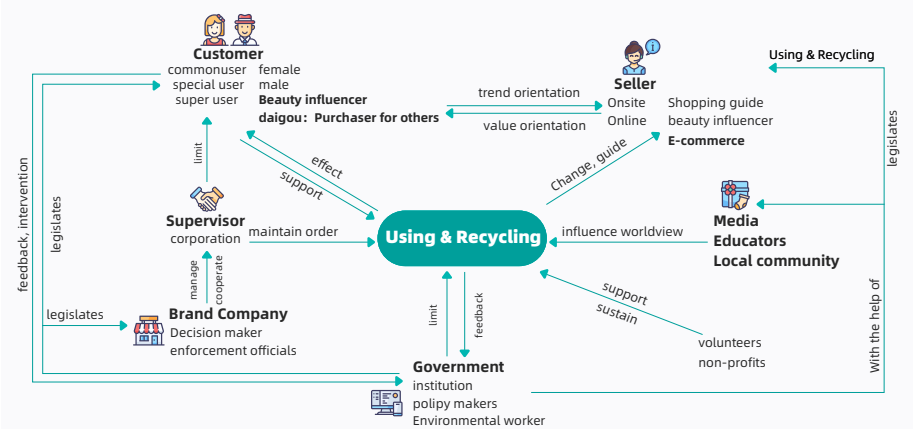
- Interested in **experiencing new samples** rathen than owning the product
- Motivated by the **rewards**
- **See over packaging problematic and wasteful**
- Interested in cosmetic refills only for **skincare products**
- Makeup refillables service are not encouraged due to **hygienic and packaging reasons**

Basic on the reverse logistic service, we expect to built up **a sustainable system or pattern** for cosmetics industry and formulate win-win situation. ”

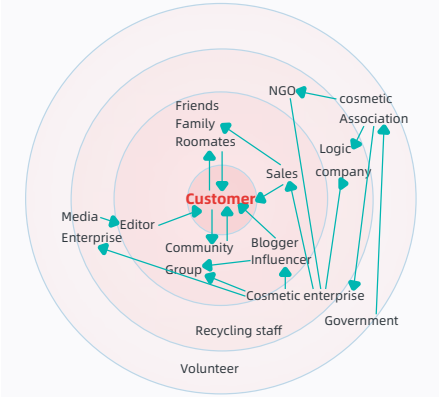
SYSTEM MAP

However, to solve the existing problems, it is not enough to study consumers alone. Finally, we thought from different angles, and drew some relevant maps to analyze, to determine the topic of our pursuit for the future service design of cosmetics.

Ecosystem map



Stakeholder map

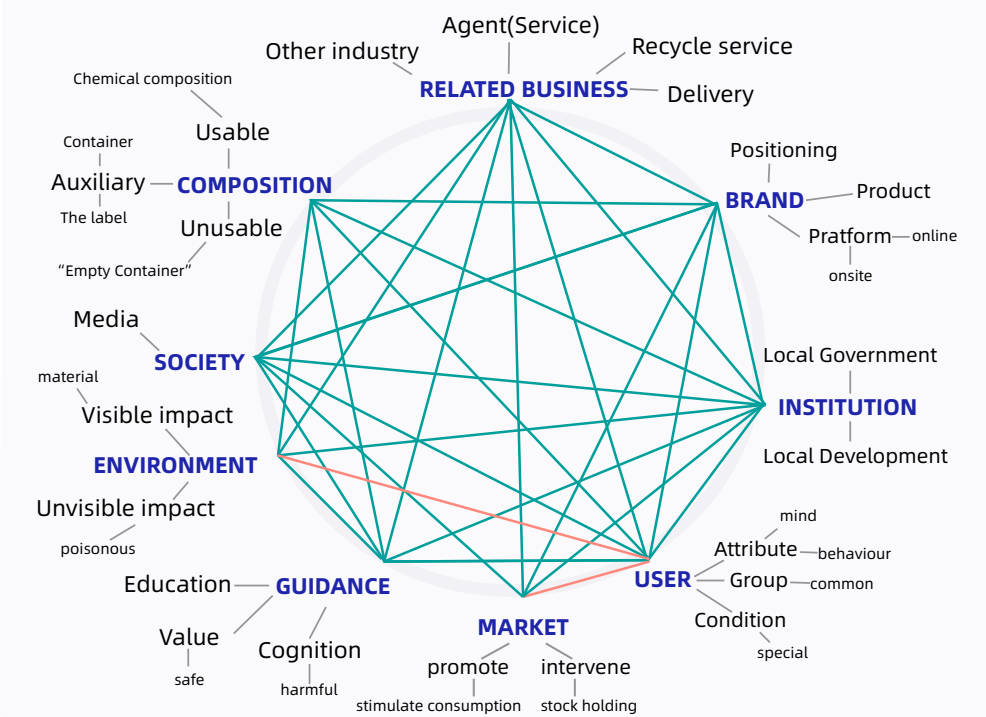


The stakeholder map can help us identify all the relevant factors in the whole service map and help us identify the core.

The importance of social media
Information has a very important guiding role, and information is manipulated by the media and facts.

Interconnected Circles Map

According to the most connected areas or entries in the "cluster", look for the restriction relationship.
Summarize multiple entries of the same type and look for the fundamental causality under the big module.



The useful ingredients of cosmetics act on users

Second-hand products are the embodiment of transmission of "useful part" among users

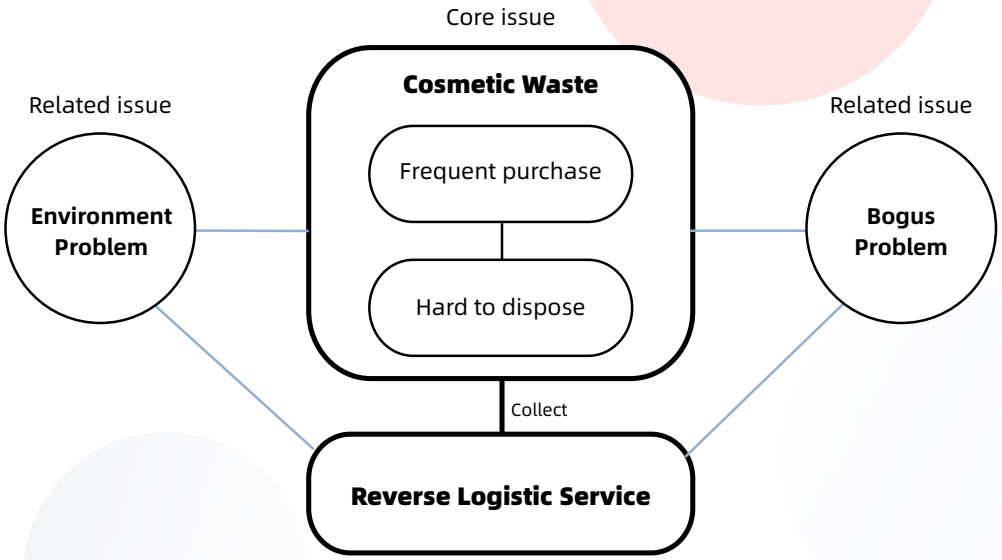
The definition of "useful" is based on the user's value orientation

Converting "useful" and "useless" to each other is one way to eliminate waste

Research proposal

Future service design of cosmetics Frame

FRAME STRUCTURE



PROBLEMS WE ARE FACING

Over-packaging, over-purchasing, and fashion trends changing cause a huge waste in cosmetic industry every year. The lack of recycling mechanisms not only troubles the customers but also causes a large number of toxic cosmetics to escape into the environment. In addition, illegal businesses make fake products by recycling surplus products, which leads a negative effect to the customer and cosmetic industry.

- We are living in an era with **the boom in both cosmetic market and its waste**.

  Still, we taking a series of problems that it takes as, such as **the environment pollution, resources waste and the rise of the counterfeit industry**.

- People enjoy the purchase while they **can not find an appropriate way to deal with the waste**.

  Consumerism, on the other hand, find the excuse for the waste and makes it **normal** for most of the people.

- Basic on the reverse logistic service, we expect to built up **a sustainable system or pattern** for cosmetics industry and formulate win-win situation.

OUR CHALLENGE

Short-term goal

Establish a recycling system in the beauty industry through reverse logistics to recover excess beauty ingredients and packaging.

reward
Strengthen awareness
guide

Package
Subscription
Channel

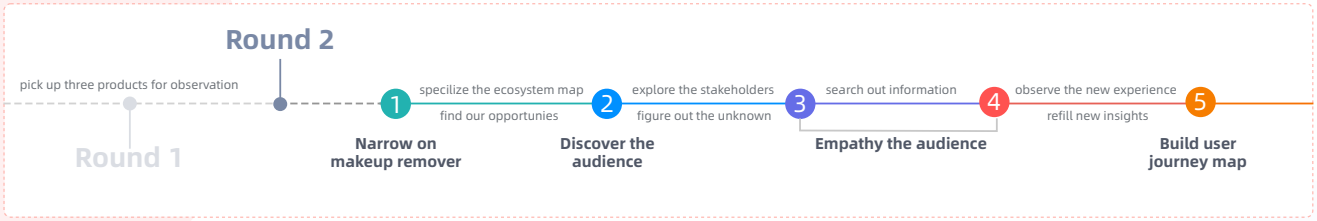
Promote
Experience
Behavior development
Convenience

Long-term goal

Create a sustainable development model and cultural concept while establishing and improving the recycling system of the beauty industry.

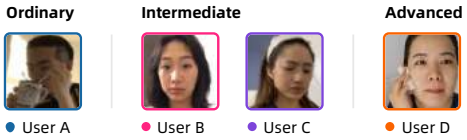
NARROW CONCERN ON MAKEUP REMOVER

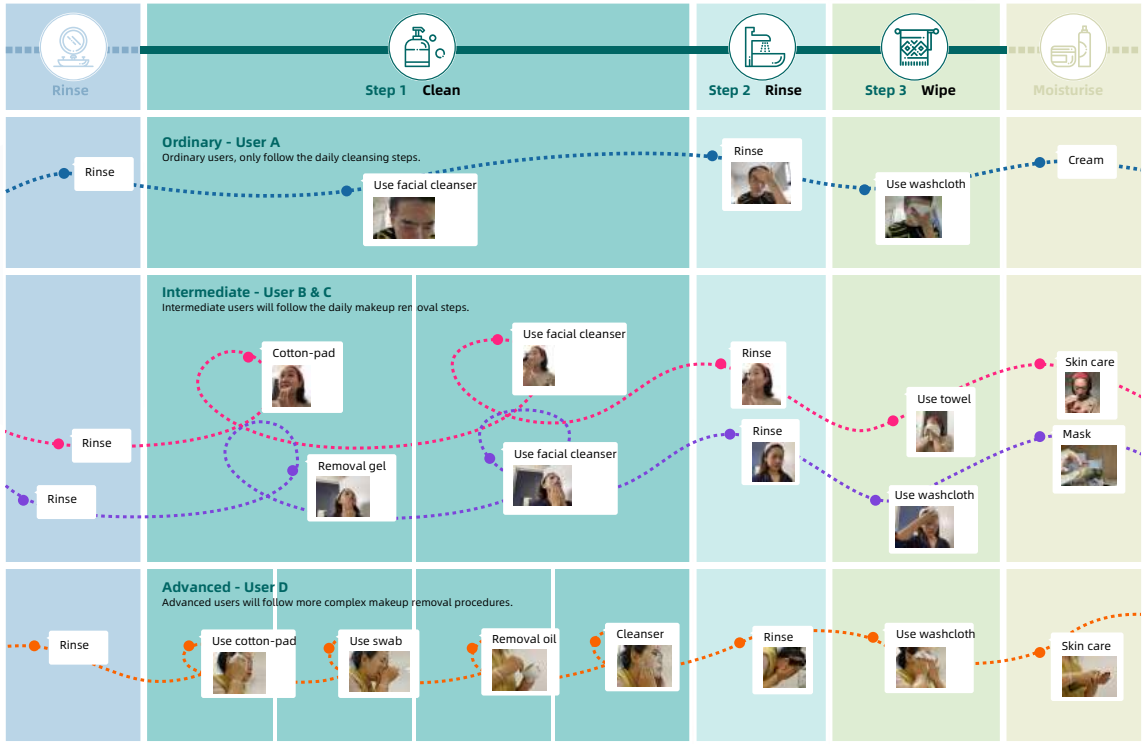
To start the analysis with relatively clear targets, we narrow our topic down to three specific products. Inquring advisor's suggestion and after several discussion, we finally concentrate on Makeup Remover. To begin with, we do ovservation and schedule our research plan.



1.1 Using Experience Observation

We invited some users and recorded their makeup removal and cleaning process. All users are mainly divided into 3 categories; Ordinary users(Simple cleaning); Intermediate users(simple makeup remover); Advanced users (complex makeup remover).





Why we narrow on makeup remover?

Digging into the omnichannel of makeup remover products is more than just about idle items exchange or material reuse.

- **An essential step**
- **Pure funtional but easy to ignore**
- **Usage combining with use of other products**
- **Multiple forms of waste existing**

What we can get from the observation?

What we still need to explore?

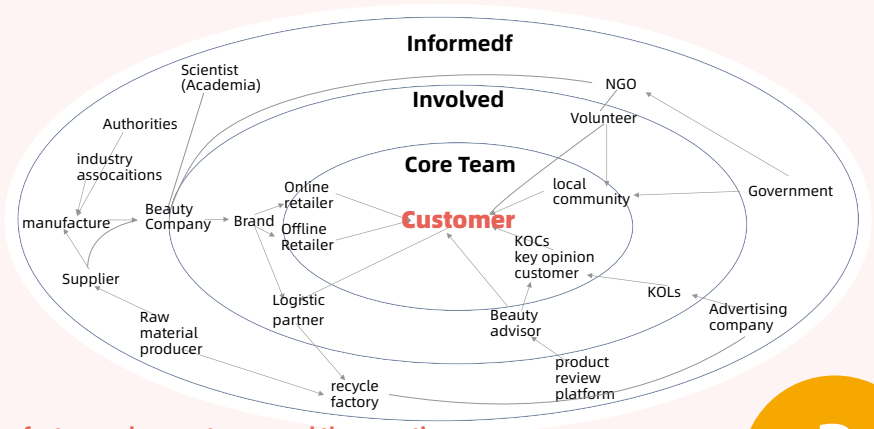
- **Where** does this waste **go**?
- **Who** takes care of it?
- Are there **other products** thats more sustinable?
- Who are **effected** by our choice of product?
- Who is guiding our **behavour**?

From production to the final return to the recycling of materials, who has participated in the interests? When it is limited to the location of London, and the situation of the current pandemic, is the cognition of the stakeholders still the same as our assumption?

DISCOVER STAKEHOLDER

Build and improve the ecosystem map for the narrow theme - makeup remover wasting, and continue to find information where we want to get. And from this, develop purposeful ethnographic research, and at the same time establish a stakeholder to structure research.

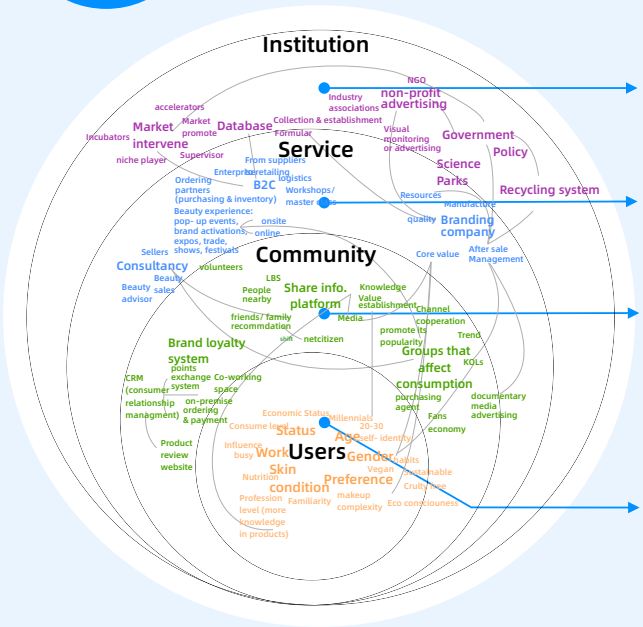
2.1 Ecosystem Map & Stakeholder Map



1 Discover — Where to get unknown information

2 Develop — Use the factors unknown to expand the questions as a guide for subsequent research

3 Practice — How to get unknown information



How does brands and self-media communicate?

How specifically do they benefit each other?

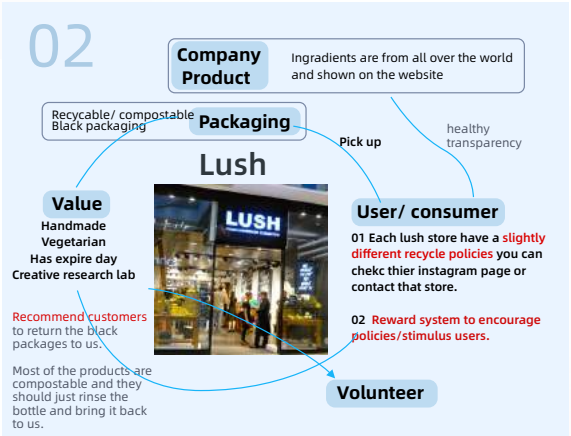
How self-media and brands create a lifestyle that attracts user?

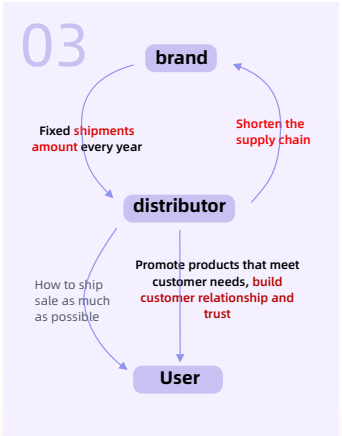
Can we use this to redirect user to reduce waste?

EMPATHY WITH STAKEHOLDER

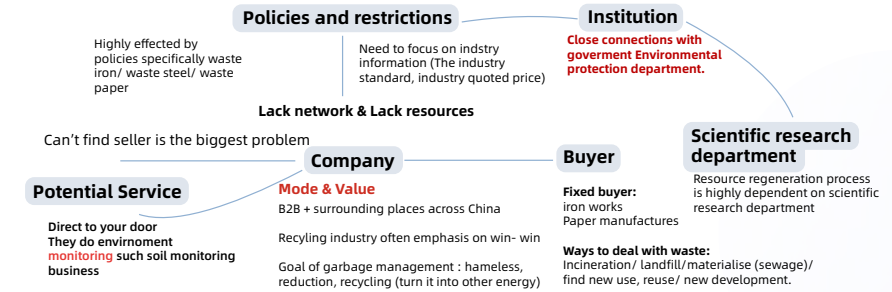
When conducting interviews in services and institutions, we select different types of stakeholder for research. In addition to obtaining information as much as possible, we also try to prepare for cross-culture appropriation to get innovative inspiration.

Brand	ZERO WASTE **Zero-waste Shop**	LUSH **Lush**	**Retailer**
Features	Environmental protection, no packaging, niche, high customer loyalty	Trend towards environmental protection, big brand, stimulating users to take action	The number is large, The main purpose is to obtain long-term benefits
Interview Forms	Field research	Phone interview	Text interview

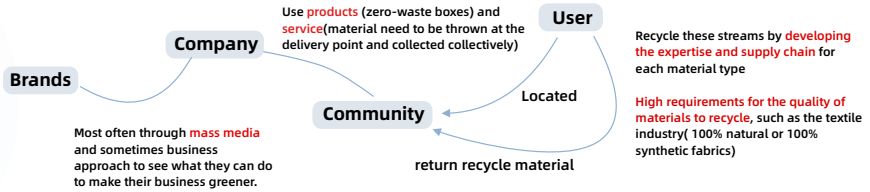




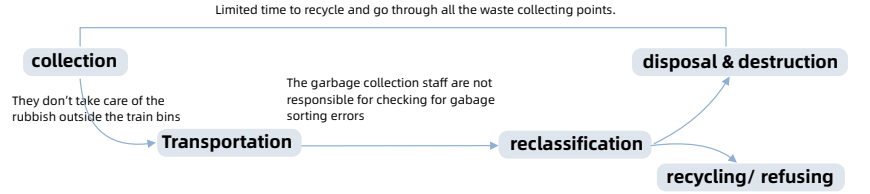
One environmental protection Company in China



Terracycle Rely on the free recycling plan with brands or individuals to expand the promotion, then sell the recycling model, zero-waste boxes, to achieve a virtuous circle. Unable to supervise user behavior, uniform and strict cleaning is required before re-extracting material.



Public recycling system Contracting companies vary from region to region, which makes recycling system very loack and flexible but very messy.



Opportunity

- **Social media** helps to advertise and **builts connection** with customer
- **Shorter supply chain** will benefit the brand and shopkeeper.
- Innovation in **business model** or product value helps the reuse.
- **High requirenment** are needed for those **materials** that need to recycle.
- Recycling pattern works well in **specific user group**.

DEFINE & EMPATHY WITH USER

The first and easiest to contact is users, and then research the people who influence the user's purchase or use process, here the most representative is a beauty blogger, then conduct analysis.

4.1 User-centered Research

Users age: 20 - 35
User gender: mainly female

Interview forms:
Focus groups, Personal interviews

Challenges	**How to make users believe that makeup has been removed clean instead of relying on the amount of cotton and makeup lotion**	How to get information about existing sustainable brands more easily ?	How to prevent fake product production when adopt recycle and reuse empty bottles?
Opportunities	Special application or channel can be used as a research engine by user.	The process and the value of recycling should be presented clearly.	Increase transparency for validating the end of product' lifecycle and the brands which claims their products are zero-waste.
Insights	**Good storytelling of sustainable brands will encourage users to purchase. (ex. show that their products are safe for wild animals)** Dermatologists / Skin doctors are also the influencer especially when users' skin is in a sensitive state.	Consumer with sensitive skin type need more time and samples to try and they usually cannot finish using these samples. **Family / friends' recomendation is the most trust worthy and effective channel, compared with social media and other online promotion.**	
Needs	Besides removing makeup at home, there are other special scenes, such as removing during traveling and working late at the compan	Small and flexible packagings enable users to carry around easily in these special situations.	**Accessibility and education around recycling the products is important.**
System(ic)	**Resilience** **Experiential and experimental**	**Transparency** **Trustworthy**	

4.2 Influencer

Information Reliability	Collaboration with brands	Opinions about Waste	Prevision

Channel	Feature	Audience
Bilibili	- Straightforward - Experience Sharing	Younger users, pursuing cost-effectiveness.
Litttle Red Book	- No filter,realistic - Review and recommendations on Niche cosmetics	Students, Workplace newcomer

Insights

Method
avoid users' inconvenience in using and recycling

Motivation
Product usability and efficiency and flexibility of material use

Attract users through the output of personal values and make them more united

Cooperation | Community
Kocs improves user credibility by showing their lifestyle to influence user behavior

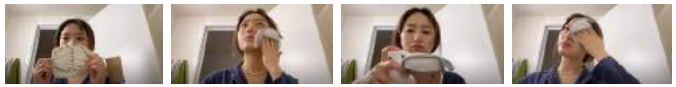
Koc needs to be responsible for the knowledge sharing, through authoritative knowledge or transparent process(Reaching out to manufactures)

Users have the potential to become koc

4.3 Observation

The first product
Reusable cotton pad made from babyclothes' offcut (Only one side of the pad can be used).
Remover without packaging only be brought in re-use bottle.

The second product
Face Hola
Makeup removal pad
(Both side of the pad can be used)



The Third product
Microfiber pads
(Only one side of the pad can be used)

New Feeling

- The feeling of use is **better than expected**, partly because of the understanding we had when doing research and the explanation of relevant reasons we saw when using it, which established the trust.
- It is also important **whether the packaging of reusable cotton sheets is recyclable** and **whether** the **product is protected from exposure** during an outbreak.
- For colloidal cosmetics such as mascara, it is troublesome for the cleaning of the recyclable makeup remover cotton.

BUILD USER EXPERIENCE FLOW

Base on the information we collected, we dived our user into several groups and create 4 personnas. We do user journey map base on our major personna to empathy our user.

Main Persona

Sarah
20 Years old

Demographic info
Ungraduate
London
live in dormitory
80 p/month on cosmetics

Activity
Party
Job Interview

Behavior & Value
-Always want to know more information of cosmetic
-Newbie on makeup
-Always try and explore new product

Decision influencer
Friends' recommendation
Social media

Secondary Persona

Van
25 Years old

Demographic info
Saleman
London
live with GF
150 p/month on cosmetics

Activity
Business meeting
Job Interview

Behavior & Value
-Stable sonsumptionbehavior
-Goal-oriented
-Buy for his Girl Friend

Decision influencer
Advertisement
cosmetics saleman
Girl Friends' recommendation

Xiaomei
26 Years old

Demographic information
4 years designer
London
room renter
150 p/month on cosmetics

Activity
Dating
Party and have fun with friends

Behavior & Value
-stock up cosmetics on sale
-value the healthy and qulity of the cosmetic products
-self-pleasure and less environmental conscious.

Decision influencer
Social media like Youtube
Friends' recommendation

Experience with getting and using products

How to deal with products

Give feedback to her intimate community

Due to online combination discounts
Like to buy multiple combinations or large capacity

Additional waste generated, such as packaging, and disposable cotton pads during removal of cosmetics.

Purchase motivation
Influencer, Friends

-got information from beauty influencer

-received recommendation from friends

Get the product
Online,Onsite

-Book remover online on the "Boots" and pick up offline

-Consult online customer service before purchasing;

- Check with shop assistant on other issues such as return

Use product
Try Products, Make Choices

-Unpack

-Remove cosmetic using newly bought makeup remover and cotton pads

Eliminating products
Set aside,Pass on

- Try to sell or give products which are not suitable in the combination to people nearby or on the internet

Failed

- it will be left unused until it expires and then discarded

Disposal of waste
Follow the apartment system

- Put paper packaging boxes into recyclable garbage sorting

Long time passed

- Dispose of expired removers and cotton pads directly into mixed garbage.

Easy to be encouraged to over-consume

Recommendation from others not be suitable for her

want to know more information, but can't get it from the clerk

Don't know how to deal with idle products

There is no way to guide where and how to recycled makeup removal products.

Julie
35 Years old

Demographic information
Manager
London
married
200 p/month on cosmetics

Activity
business trip
afternoon tea with friends

Behavior & Value
-sensitive skin
-stable comsumption behavior
-naturalist

Decision influencer
Friends' recommendation
familiar saleman recommendation

New ways for disposal waste

Due to the establishment of credibility and loyalty, the tolerance of the product becomes higher

Influences

Purchase motivation
Knowledge, Online searching

-learn about the brand "Zero Waste" accidentally at work

-conducted related searches on the Internet and interested in it

Get the product
Shop onsite

-free talk with the shop owner and have a whole picture of how to reduce waste from packaging, transportation.

-Purchased unpackaged makeup remover and recyclable pads made from baby's clothes

-Be surprised and novel about the business model, and decide to build a long-term purchase relationship with the store

Use product
Try Products, Change Habits

-Remove cosmetic and clean the pads

Driven by good using experience and environmental protection values

Disposal of waste
Contribute, New use

Long time passed

- Clean the remover bottle and prepare it to be used as a container for the next remover

- Collect other recyclable materials in life and contribute them to the "Zero Waste" shop for new-use or reuse.

Searching related recycled products

Surprised that there are better recyclable products

There are limited information resource about how to recycle certain materials.

Sometimes, the online information does not match the field (products, business hours, etc.)

Surprised by the business community built by the owner

Still need to buy other combined makeup remover products due to work need.

EXPORT FINAL INSIGHTS

Gathering all the information, we present our findings from a system perspective.

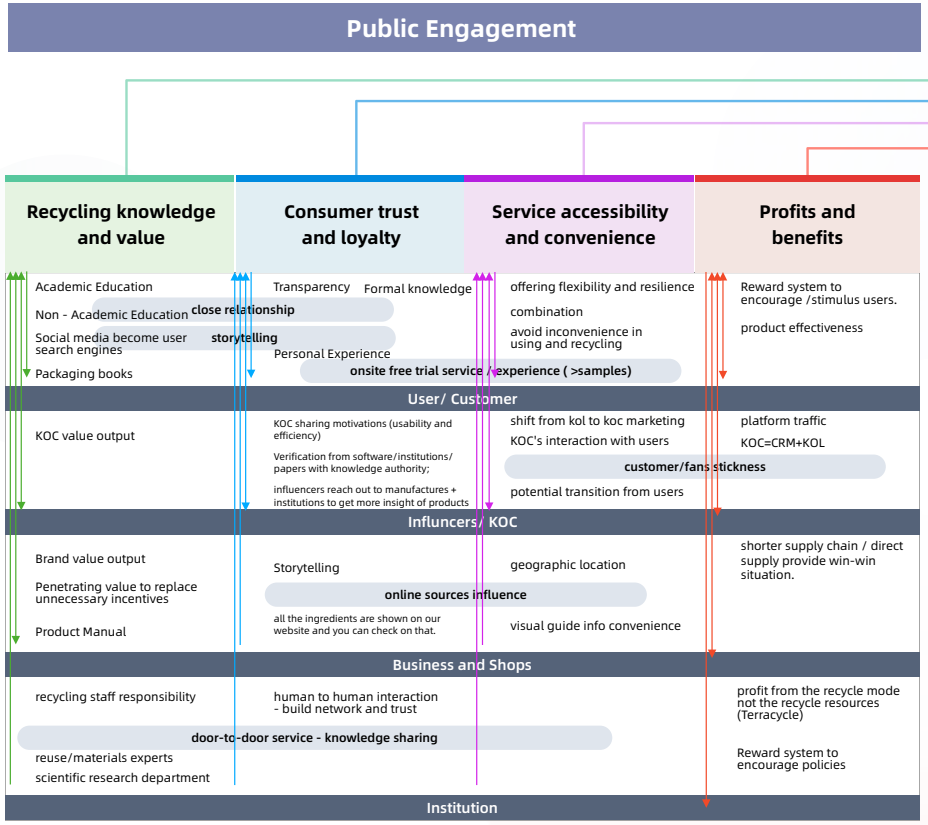
Output insights

sort out all information we get

6

rethink where we stand at the ecosystem map

Our main work in this round is to purposely obtain as much information as possible, using ethnographic tools to achieve qualitative research. Simultaneously, in the process, we always look for our position in the ecosystem map and have a dynamic update of understanding stakeholders. Combined with the information we have obtained and opportunities, we sorted out the insights, which provide our next round choices.



The improvement of public participation depends on the promotion of recycling values, the soluation of trust problems, the convenience and availability fo services, and the creation of more value.

The community model forms different combinations of users and KOC/ enterprise/ instituion through different supply chains and participation motivations.

Relying on **reward system** and **small prizes are not the key** in encouraging particaption. We encourage **value creation** and **value transfer**.

The users' understanding of recycling knowledge and promotion of recycling awareness come from **school education/training, social media sharing, guidance of recycling personnel,** values conveyed by product **instructions** and awareness penetration of **KOC**.

Although online disclosure of information can increase transparency, but **trust** in a company is based on **direct interaction between people**, whether it is between companies and institutions, KOC or users.

Intimate word-of-mouth based on **acquaintance experience** and **acquaintance recommendation mechanism** can increase brand trust.

In addition to trying out samples, allowing users to **experience product-related services** (such as recycling services/filling services) for free can also increase **user loyalty**.

Providing a **convenient channel** for KOC to verify environmental protection can allow users and enterprises to establish a more **solid trust system**.

Reducing the length of the supply chain (or implementing direct supply) allows all participants in the supply chain to have a better grasp of the entire process, thereby better conveying the brand story.

Users can **act as potential KOCs**, and KOCs can act as potential customer relationship managers (CRM) to create benefits.

Profiting from the **recycling business model** is more sustainable than profiting from recycled resources.

Need to provide **product elasticity/flexibility** (for example, provide mixed packaging, customization, small bottle packaging, etc. to adapt to different skin conditions and usage scenarios)

Recycling services need to **avoid inconvenient and troublesome processes** and operations.

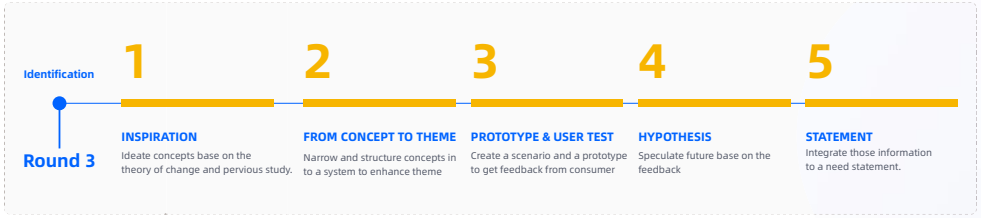
The transition from KOL to KOC marketing has allowed KOC to interact with users more frequently, and **fan stickiness** has become an important factor affecting availability and convenience.

Communities created by local shopkeepers are usually affected by **geographic factors**, resulting in **limited radiation coverage**. But it has **a strong role in shaping consumer behavior** (for example, you need to bring your own bottles to purchase).

SUSTAINABLE COSMETICS DEVELOPMENT

Based on the previous interviews, we got many inspiring stories, which really provide us the resource to conduct cross appropriation.

Starting from various insights and focusing on solving problems that are reflected in the user experience flow, we narrowed our concepts by thinking about their effects and possibilities. Moreover, we developed our themes and conducted a quick paper prototype to carry out user tests, which helped us to jump out of our designer views to go down our main theme. Finally, we found a clear path to construct our system and put forward our Needs Statements.



1 INSPIRATION

BRAINSTORM RESULTS

MANUFACTURE

- New products or feature measuring thorough makeup removing
- Recycling instructional label system / manual / service toolkit
- Express Packaging Optimisation
- Direct selling marketing mode based on Brand and circular products
- KOC-driven transparency system support entire consumers' experience
- Brand propagandize itself and provoke public through onsite/online community
- "0" Waste Experience Store
- Shorter and focused supply-chain
- Onsite community host activities about reusing to engage residents

REUSE

From → To

FLITERING

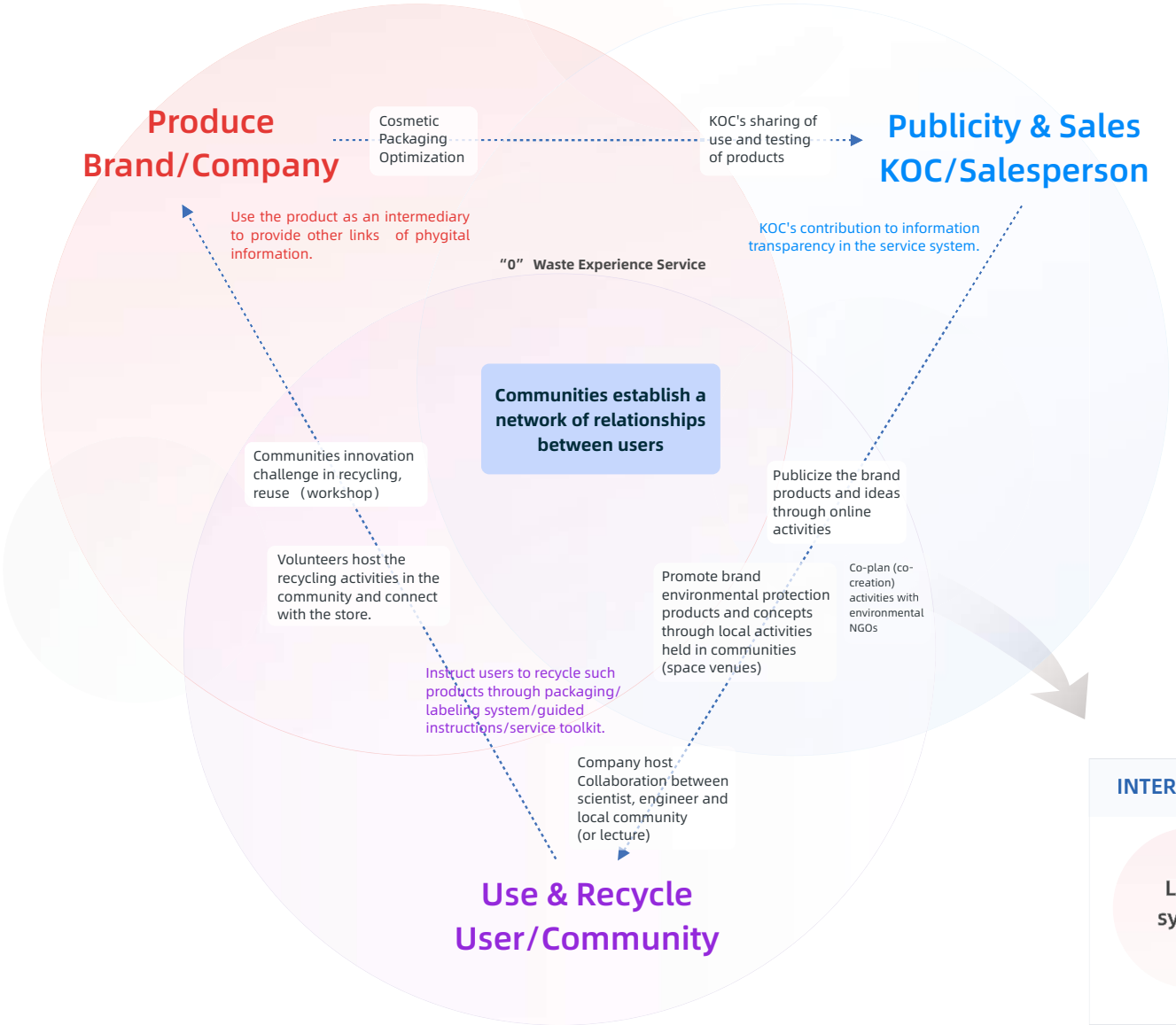
From	To
Users worry about the effectiveness and safety when accepting new removing products.	Users can know their removing situation clearly.
User feel ignorant in tackling with recycle business.	Users can easily understand and participate in recyclable behaviors through online and onsite channels.
User feel difficult to get in touch with recycling relevant to brand and to products.	All/most of the touchpoints will be tagged that help user identify the brand and know about eco-friendly product information.
The brand only sells products to users, making it easy for users to buy unsuitable products.	The brand provides services or assistance to enable users to find suitable products.
Multiple intermediaries engage in sales chain that obstruct the recycling process.	Brand corporation get in touch with their consumers directly by logistic service.
The system providers lead users to only participate in the use and then just discard.	The system providers lead users to participate in the reverse logistic process and connect to the next stage easily.

MAIN CONCEPTS

- **Recycling instructional label system / manual / service toolkit**
- **"0" Waste experience service**
- **KOC-driven transparency system support entire consumers' experience**
- **Onsite community host activities about reusing to engage residents**
- **Brand propagandize itself and provoke public through onsite /online community**

2 FROM CONCEPT TO THEME

Develop the five concepts deeper and further, at the same time, we divided product life cycle of makeup remover into three stages to help us analyze the work range of our concepts to locate the key themes to improve the situation.

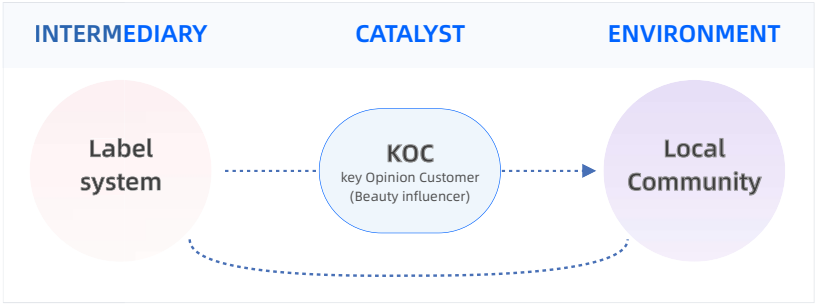


By clustering those concepts, we selected three main concepts and reconstructed them into a system to enhance the theme.

INTERMEDIARY » CATALYST » ENVIRONMENT

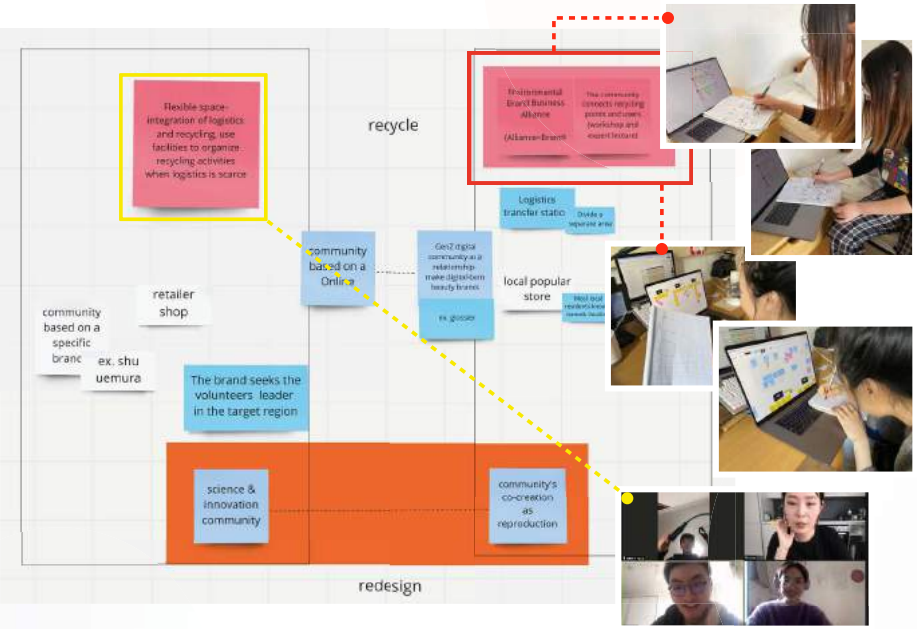
- **Label system becomes a intermediary to let user entry into our service more easily.**
- **KOC becomes a catalyst to enable our service to have a wider range of impact.**
- **Local community becomes the environment to support the running of our service.**

Local Community is trying to achieve - Creating a community - based recycling workshop that help our audience to involve into recycling system and decrease the package waste of the cosmetics product.



3 PROTOTYPE & USER TEST

Based on the concept we wanted to work on, we developed scenarios of how will these events work out. We did prototype to test and collect users' feedback.



We developed the concept of brand alliance and evolved it into a workshop, while for the other two bright concepts, users and designers were worried about the lack of professional knowledge and execution of pick-up.

By analyzing the information, we can find:

Cheers

- High participation
- Workshop benefits our everyday living
- Improve brands credibility

Challenges

- Improve the truthfulness of information
- Simplified registration process
- Very concerned about the brand of the initiator of the event
- The transfer of products in multiple roles challenges the establishment of brand credit

4 HYPOTHESIS

Multi-role participation provides channels for stakeholders to participate.

The label system provides an entry point for entering the system

WORKSHOP

Brand alliances of makeup removers increase the influence

Individual roles in the system rely on the contacts in the label system to contribute to system updates

The audiences can choose roles.
They will get guidance to fulfill the roles.
They establish connections with other roles

CONTRIBUTOR

PROCESSOR

SPECULATE

SUPERVISORY EXPERT

PURCHASER

CIRCULAR SYSTEM

5 NEEDS STATEMENTS

Cosmetics users need a way to Conveniently and time-savingly transform beauty products waste with co-power in their community , so they can engage in sustainable actions.

Our aim is trying to achieve a recycling system that help our audience to involve into recycling system and decrease the package waste of the cosmetics product.

AIM

AUDIENCE

Our main audiences are **consumers** aged 20-35 living in **London** area.

AUDIENCE

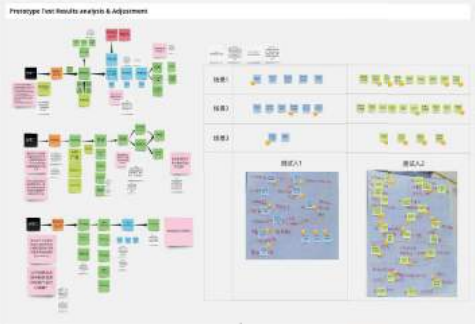
TARGET CATEGORY

Our target category is makeup remover, the remover process contains multiple stages and create various types of waste.

TARGET CATEGORY

SOLUTION

We satisfy their needs by organizing a community that provide channel to recycle those wastes, **spread sustainable notions** to our audience and **designing a new label system** that help them to identify different kinds of wastes.



SUMMARY

The problems of the cosmetics waste are complex which caused by various factors. In order to define our theme better, we did some advance ideation and prototypes in Round 3. Moreover, we decided to choose package recycling as our main scope and provide an integrated structure that solve this problem from three aspects: behavior guiding, habits cultivating and sustainable notion spreading. There are three rough touchpoints generated in response to those aspects.

In Round 4, we would like to develop further ideation and generate more details base on onsite community and package remanufacturing.

CIRCEAUTY IDEATION

In the previous three rounds of work, we set our sights on a community, using everyone's co-power to recycle makeup remover product waste.

In the final concept, we develop the service based on London and plan to cooperate with TerraCycle to promote the service to brands and customers. In realizing that users can sustainably perform recycling behaviors, it will also significantly influence society.

NECESSARY BACKGROUND OF THE SERVICE

BASED ON LONDON

Research on intersection points of high-density places, use them as centers to delimit the community and facilitate the generation of the physical facilities we serve.

Lewisham Shopping Center
London SE13 7HB

Vauxhall Bus Station
London SW8 1SJ

Hyde Park Corner
London SW1X 7XS

COOPERATED WITH TERRACYCLE

TerraCycle is unlike traditional municipal recyclers as they focus on a wide range of waste streams that are not typically recyclable locally. Leading companies to work with them to take hard-to-recycle materials from their programs, such as ocean plastic, and turn them into new products.

We developed TerraCycle's existing methods of recycling waste in collaboration with different brands. Among them, we mainly developed the drop-off method and created a service that can be easily operated by recycling personnel and improves users' recycling awareness.

Reference Terracycle. (May 2021) How we recycle. Retrieved from: https://www.terracycle.com/en-US/about-terracycle/how_we_solve

FOR WHOM

COSMETIC USERS

Our main consumer is makeup remover user group aged between 20-35 living in London area.

Pictures from: https://thesmartlocal.com/read/how-to-remove-makeup/
https://www.shutterstock.com/zh/image-photo/dirty-cotton-pads-make-426915538

- They **feel ignorant** in tackling with **recycle business**.
- They feel difficult to **get in touch** with **sustainable relevant brands and products**.

COSMETIC BRANDS

Another consumer group is various beauty brands that has collaborated with TerraCycle.

Unilever
GARNIER
MAYBELLINE NEW YORK
REN CLEAN SKINCARE
Beiersdorf

- Users need to rely on **loyalty** to perform recycling behavior.
- Brands can output good **storytelling** and **transparent channels** to attract users to **build loyalty and expand publicity** at the same time.

FINAL CONCEPT ON WHAT / WHY / HOW

Based on our limitations and our goals, we clearly produced our design concepts.

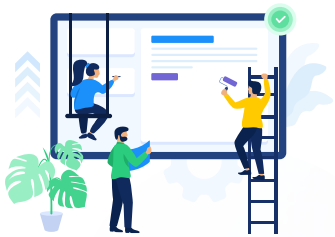
> “Deliver Beauty Simply by Recycling”

FINAL CONCECPT DESCRIPTION

WHAT we create

Circeauty is an activity dedicated to raising awareness of environmental protection by engaging people in a transparent recycling system.

Circeauty also focuses on reducing cosmetics pollution by providing users pre-processing instruction and recycle points through our app and physical collecting wall.



OUR MOTIVATION

WHY we create this service

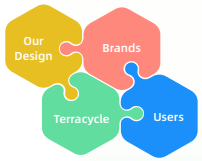
Committing to the recycling of cosmetic products requires behavioral changes, as well as awareness-raising and innovative business collaboration. The lack of channels and related recycling information for users makes the recycling process difficult.

The high reverse logistics fee and short interest stimulus also make the existing recycle system challenging to maintain. In addition, the opaque and low exposure of recycled systems further reduce users' recycling willingness.

OUR MODEL

HOW to ahieve this service

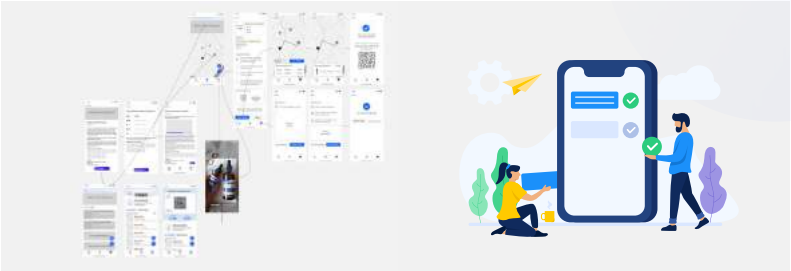
Collaborate with Terracycle, be sponsored by cosmetics brands, serve users.



OUR TECHNIQUE HOW to engage in this service

APP - An information hub that bridge the stakeholder and different touchpoints

- Location + navigation + reminding service: Help user to find the collecting points off-line.
- Scanning function: Scan the package or QR code on the product or wall to interact and received related information.
- Mailing address generation: Base on user's location, help user to mail the used product to nearby recycle points.
- Credit system: provides motivation and reward
- Activity push: provide further information and spread sustainable knowledge



WALL - Physical touchpoint that increases the infrastructure accessibility and stimulus public.

- Provide classification and storage place
- Scan and identify the products catalog
- Sustainable information push (by the screen on the wall): provide further information and spread sustainable knowledge

DESIGN SCENARIOS

THE TREND CONTEXT

Econnomy

The global economy has stricter carbon emission control. With people's reflection on consumerism, many wonder a sustainable model to drive economic development.

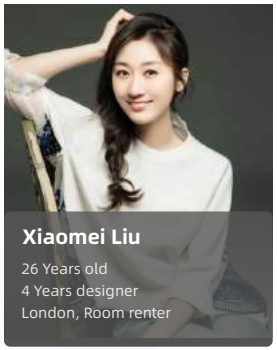
-- we reduce recycling costs through innovative business collaboration.

Environment

More and more abnormal climate phenomena and natural disasters around the world in recent years alerted people and aroused people's awareness of environmental protection.

-- We adopt relevant pushes and create physical recycle walls to arouses environmental protection awareness of the community.

PERSONA



Xiaomei Liu

26 Years old
4 Years designer
London, Room renter

> I recognize my huge waste on beauty products and try to contribute to reduce it, but I need some channel and guidance...

Bio

Xiaomei always stocks up cosmetics on sale, but she also attaches great importance to health and quality, so she will not use some cosmetics that have not been used for a long time. At the same time going out shopping with friends is her leisure activity.

Goals

Find an easy channel to deal with used cosmetic products in a meaningful way.

Tech

Social Media
Mobile Apps
Online Shopping

Favorite Brands

GARNIER
MAYBELLINE NEW YORK

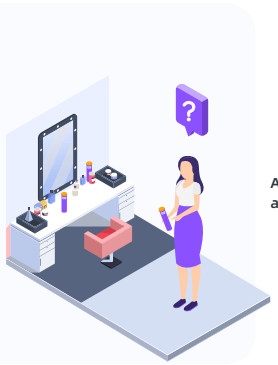
Frustrations

Don't know how to get cosmetics into the recycling system.

Tired of searching for information about interesting brands and products.

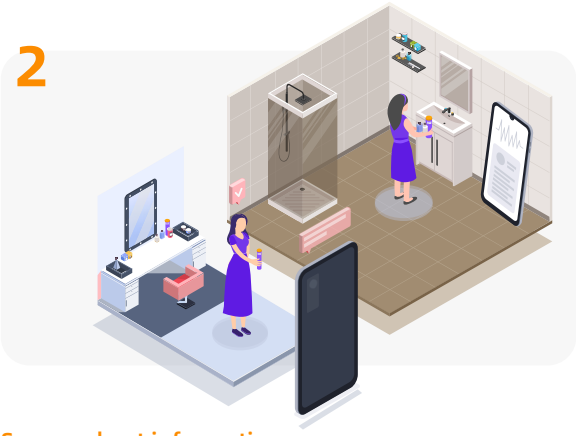
STORYTELLING

1



After knowing about Circeauty

2



Don't know how to do

Xiaomei has lots of used cosmetic products and she doesn't know where and how to deal with those cosmetic bottles.

Scan and get information

Xiaomei scans the bottle by using app and gets product information.

The application also provides instruction of pre-processing method. Xiaomei can know how to clean those bottle in a environment friendly way.

3

Deliver the bottles following the daily route.

Xiaomei finds that there is a collecting points on her way to work. She sets an alert to remind herself to bring the bottles to the Circeauty wall on her way to work.

At the collecting wall, she drops the bottle to corresponding categorize base on the information on the wall and app.

4

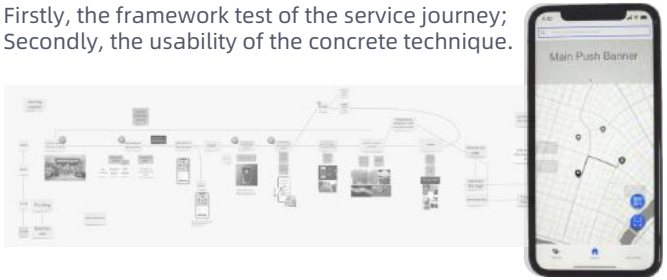
Unified transportation & maintance

With more and more bottles collected in the wall. TerraCycle will recycle the bottles stored in the wall to the factory. They will take further recycle process and using those material to remanufacture new walls and products!

USER TEST

In order to jump out of designer's mind and listen to audience's thoughts, we searched for 8 cosmetic target users to conduct our different phase of user test:

Firstly, the framework test of the service journey;
Secondly, the usability of the concrete technique.



ROUGH PROPOTYPE

Harriet

I like how I can see all the information about the product there, it's very helpful. And I am also interested to know the connections between these companies.

I think in the future you can provide a toolbox or something for the customer to use the tools to clean things in the right way?

Heyin

Zoey

I like the concept of wall very much. Obviously it is very cool. Participating in it will make me feel fulfilled. I think, maybe you can let beauty influencer do the planning for the pre-publicity?

ROSE

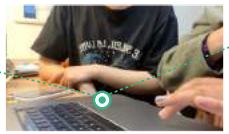
Things get better recycled through our service.

BUD

We are still on the way to further explore the transparent channels, and how to allow users to be guided to conveniently implement recycling behaviors.

TECHNIQUE PROPOTYPE

5 people reflect on the main problem:
Jump logic is a little messy to the recycling page

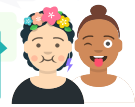


3 people reflect on the main problem:
There are too much information and steps

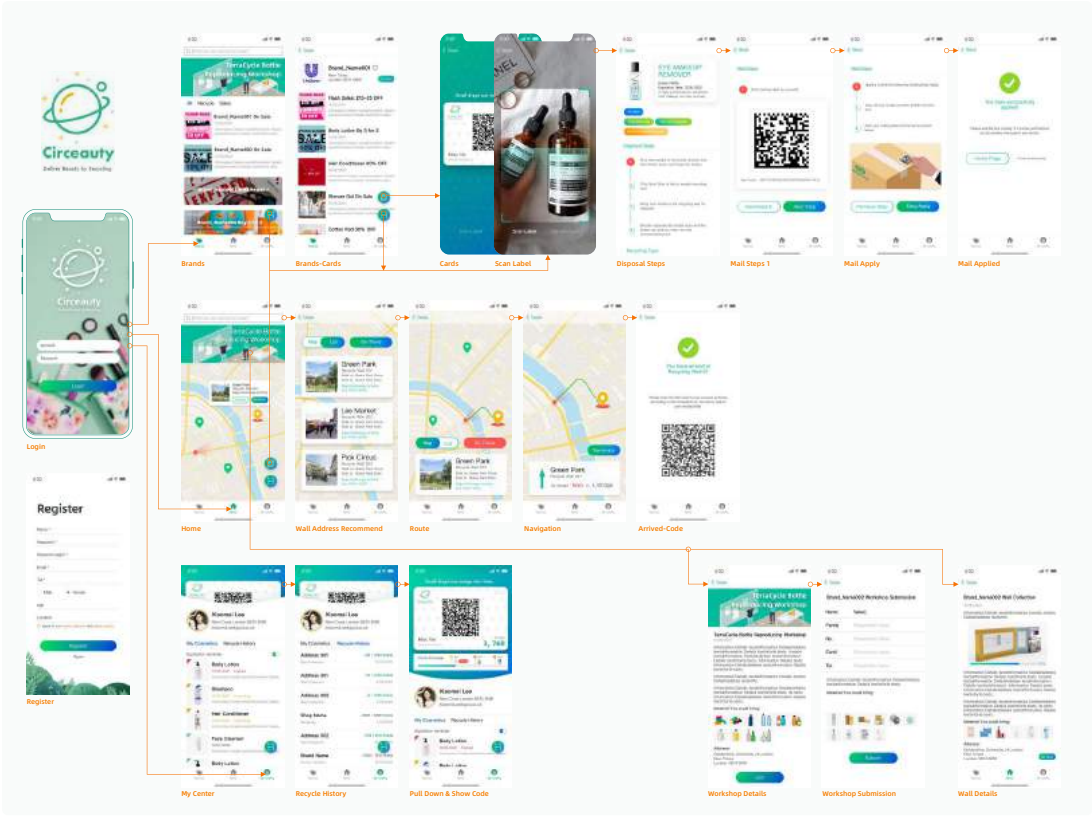
2 people reflect on the main problem:
Image should reduce confusion

How can the delivery behavior be combine with the daily conduct of the user?

How to emphasis the recycling in the app to avoid users getting lost?



The app can provide multi-entry to allow users to be guided to achieve delivery and recycling behavior. At the same time, rich product information can be collapsed to customize personal needs.



CIRCEAUTY- Business Model Canvas

Customer Brands Terracycle

PARTNERS

TerraCycle

Third-party geo data plateforms

NGO

Logistic companies

Government

KOL

PROBLEMS

Hard to know related information

Limited channels to recieve related information

Do not clear the skin type resulting in waste when shopping

High cost for collecting from user's house

High identifying and classifying cost

Less social influence

Vague cosmetic brands image/ Identity based on their recyclable products.

SOLUTION

Transparent wall as an accessible and visible collecting point

Application serve as an information hub and connector of recycle behavior and daily routine

Repurposing recycling materials as a reused bag

KEY METRICS

Financial Performance
(Revenue, ROI, Profit Margin)

Service Performance
(Customer reviews, Satisfaction)

App Performance
(Daily Active User, Conversion rate, Retention Rate, Traffic Flow)

VALUE PROPOSITION

Providing information and infrastructure to a sustainable lifestyle

-Participatory process

-Visible and transparent process

-Reduce wastes from inappropriate purchase.

A new way to popularize and rise reputation

-Increase the accessibility of recycling infrastruture

Helping brands build their sustainabe culture to raise consumer loyalty

-Higher exposure

-More engagement at store, home and wall

-Good storytelling at different channels

-Rich data for developing new product

UNFAIR ADVANTAGE

Self-driven & Participatory service
Brand recycle information
routine navigation service

Participatory service enhances brand loyalty
Product purchase recommendation

Recycling transparency increase entending recycle values by updating repurposing outcome to users

CHANNEL

App

Collecting Wall

Brand Retail Store

Digital Media

Customer Relationship Management

CUSTOMER SEGMENTS

Consumer

Subjective awareness driven

Incentive driven

Potential user

Cosmetic Brands

Unilever, Garnier, Maybelline New York, REN Clean Skincare, Beiersdorf

Recycling Companies

TERRACYCLE

RESOURCE

Geographic data

Brand related information(site and brochure)

Recycle category and method information

Financial support

Label system: Bar code on the package, account QR code and mailling code

COST STRUCTURE

Manufacturing the infrastructure wall

App design & develop fee

Reward for users

Mantaince fee

Fee for staff & Volunteer

Fee for obtaining data from the thord-party platforms

Publicity and marketing

REVENUE STREAMS

Brand sponsor
Financial support form government and NGO
Sale of recyclable products targeted for this recycle program
Advertise revenue on app and wall
Data value

Revenue Model :

Data monitorization-based model

Advertisement based model

Model for day-to-day cosmetic brands sign up for the services to raise consumer loyalty

Future vision:

Wall as a popular tourists' attraction

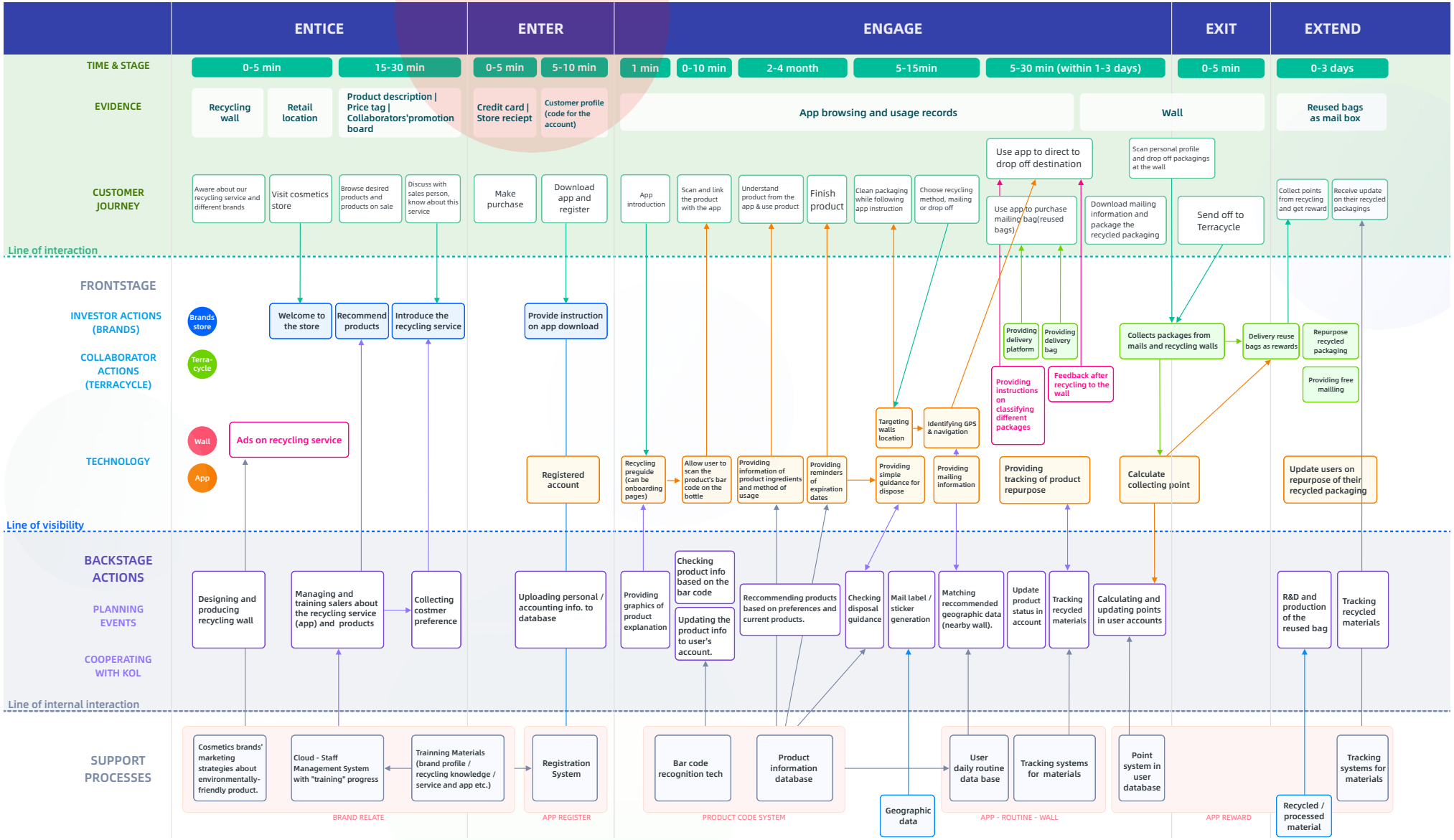
SUSTAINABILITY

Social Inclusive
Encourage a sustainable life
Brand partnership

COVID:

Low density route
Protection method
Decrease the physical contacts

WITH TERRACYCLE

This business model canvas mainly involves consumers, cosmetic brands and TerraCycle. Different from the engagements between cosmetic brands and us, which are sponsorship, wall-renting and advertising, TerraCycle is not only our downstream partner, but also our potential client. For one thing, it implements the classification and reuse of recycled remover bottles, for another, it supports the production, installation and maintenance of the wall together with us to increase its scale and influence.

CIRCEAUTY- Service Blueprint