

# Life cycle model ORGANISATION

understand

ideate

product

service

circular strategy



30-40 min  
per phase



teams of 2-4  
people



canvas  
sticky notes in  
different colours

Asking the right question is the first step towards change!  
The canvas reveals important questions around each phase of the life cycle and indicate many possibilities to increase positive impact or circularity.

## Description

Discuss various opportunities in the group with the help of the questions and circular opportunities/needs relating to the life cycle stage.

The questions are for your inspiration and they may generate new questions, feel free to write down your questions, too. They might be the most important to answer.

Please remember that this is the stage where all ideas can fly, so don't be shy with your ideas.

Write down one idea per sticky note; use one colour for company's operations and another for circular service needs.

After having collected all ideas, discuss or vote which are the most interesting ideas for further development.

## For Facilitators

Note! Depending of the total amount of workshop participants the team should be split into groups - each group focussing one or two phases. Collect all ideas and vote which are the most interesting ideas for further development.

It may be helpful to guide the group here and pay attention to the questions that come up, as they can reveal hidden aspects to the challenge.

Also, make sure teams do not get lost over one specific question and remind of the overall objective from time to time.

# LIFE CYCLE MODELL ORGANISATION

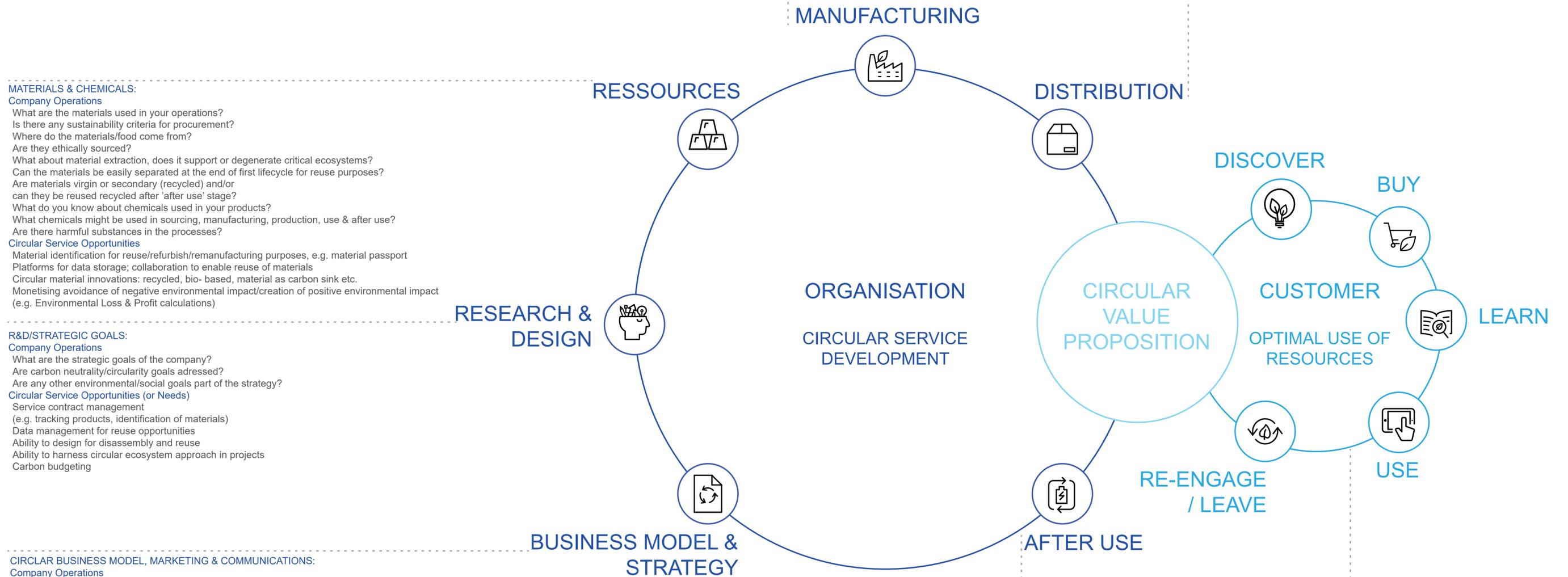
**MANUFACTURING:**  
**Company Operations**  
 Does production generate waste and what happens to it in the company and outside the company?  
 Is manufacturing energy efficient and with 100% renewable energy?  
 Could the manufacturer get the materials back and reuse them?  
**Circular Service Need / Opportunity**  
 Organising reverse logistics  
 Material identification for remanufacturing purposes

**MATERIALS & CHEMICALS:**  
**Company Operations**  
 What are the materials used in your operations?  
 Is there any sustainability criteria for procurement?  
 Where do the materials/food come from?  
 Are they ethically sourced?  
 What about material extraction, does it support or degenerate critical ecosystems?  
 Can the materials be easily separated at the end of first lifecycle for reuse purposes?  
 Are materials virgin or secondary (recycled) and/or can they be reused recycled after 'after use' stage?  
 What do you know about chemicals used in your products?  
 What chemicals might be used in sourcing, manufacturing, production, use & after use?  
 Are there harmful substances in the processes?  
**Circular Service Opportunities**  
 Material identification for reuse/refurbish/remanufacturing purposes, e.g. material passport  
 Platforms for data storage; collaboration to enable reuse of materials  
 Circular material innovations: recycled, bio- based, material as carbon sink etc.  
 Monetising avoidance of negative environmental impact/creation of positive environmental impact (e.g. Environmental Loss & Profit calculations)

**R&D/STRATEGIC GOALS:**  
**Company Operations**  
 What are the strategic goals of the company?  
 Are carbon neutrality/circularity goals addressed?  
 Are any other environmental/social goals part of the strategy?  
**Circular Service Opportunities (or Needs)**  
 Service contract management (e.g. tracking products, identification of materials)  
 Data management for reuse opportunities  
 Ability to design for disassembly and reuse  
 Ability to harness circular ecosystem approach in projects  
 Carbon budgeting

**CIRCLAR BUSINESS MODEL, MARKETING & COMMUNICATIONS:**  
**Company Operations**  
 How could the business model help creating growth while using less raw materials and resource?  
 Could the product be provided as a service/leased/rented?  
 How could the product return to the retailer/third party for the next life cycle?  
 How could marketing and communications help in creating multiple lifecycles?  
**Circular Service Need / Opportunity**  
 Creating circular customer relationship  
 Enabling circular behaviour (e.g. lease, maintenance, return of the product)

**LOGISTICS:**  
**Company Operations**  
 Are the logistics optimised with regards to efficiency & the environment?  
 Can the reverse logistics be organised with the help of partnerships?  
 Are packaging solutions optimised for logistics?  
 Is logistics fossil fuel-free?  
**Circular Service Need / Opportunity**  
 Organising reverse logistics  
 IoT solutions for traceability



**USE & AFTER USE:**  
**Company Operations**  
 Is the product easy to maintain;  
 can the user prolong the lifespan of the product?  
 Are there any repair/reuse/recycling opportunities for the product?  
 What type of communications & other services would support circular behaviour?  
**Circular Service Need / Opportunity**  
 IoT solutions (e.g. blockchain), digital applications improving customer experience, prolonging use phase and enabling return/reuse

**PRODUCT DESIGN:**  
**Company Operations**  
 Is the product designed for multiple lifecycles?  
 Could the product be improved through one/some of the following: ease of maintenance & ease of repair, ease of assembly & disassembly, modularity, upgradability and compatibility  
 What is the packaging solutions? Can packaging be reused or recycled?  
**Circular Service Need / Opportunity**  
 IoT solutions for getting products back, predictive maintenance etc.  
 Product as service business models: service development, e.g. long/short term leasing, subscription, maintenance services etc.

# Life cycle model CUSTOMER

understand

ideate

product

service

circular strategy



60 min



1-3 people per team



canvas  
sticky notes

Customer perspective is the subjective response customers have to any direct or indirect contact with a company.

The customer journey therefore can only be considered as one whole where the individual phases add to the picture.

In this exercise the goal is to look at the service from the customer's side and focus on the interactions between customer and your service idea.

## Description

Individually or in small teams read through the customer activities and circular service needs and discuss how these are reflected in the company's organisation.

Spot opportunities for improving the circularity of the company's services based on the questions.

Add opportunities on post-its next to the different stages.

If there are new questions coming up, write them down, too in a different colour.

## For Facilitators

Depending on the team size and the experience with user centricity this task should be done individually or in smaller teams.

Recap together the spotted opportunities and evaluate their relevance for the company and their clients.

Cluster and sort where necessary.

A vote for the most potential opportunities will help to focus for the further development.

# LIFE CYCLE MODEL CUSTOMER

