

# Sustainable business model innovation

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Service Design College, March 2021





# Let's talk sustainable business model innovation

Agenda:

1. Why we need it:  
**Innovation must happen at a systemic scale**

2. What it is:  
**Designing circular and co-creative businesses for people+profit+planet**

Q&A

3. How to do it:  
**Understand the system, use proven strategies, experiment**

4. How to get started:  
**Begin guerrilla style, prove value, then scale**

Q&A



# Q&A

Questions for you:

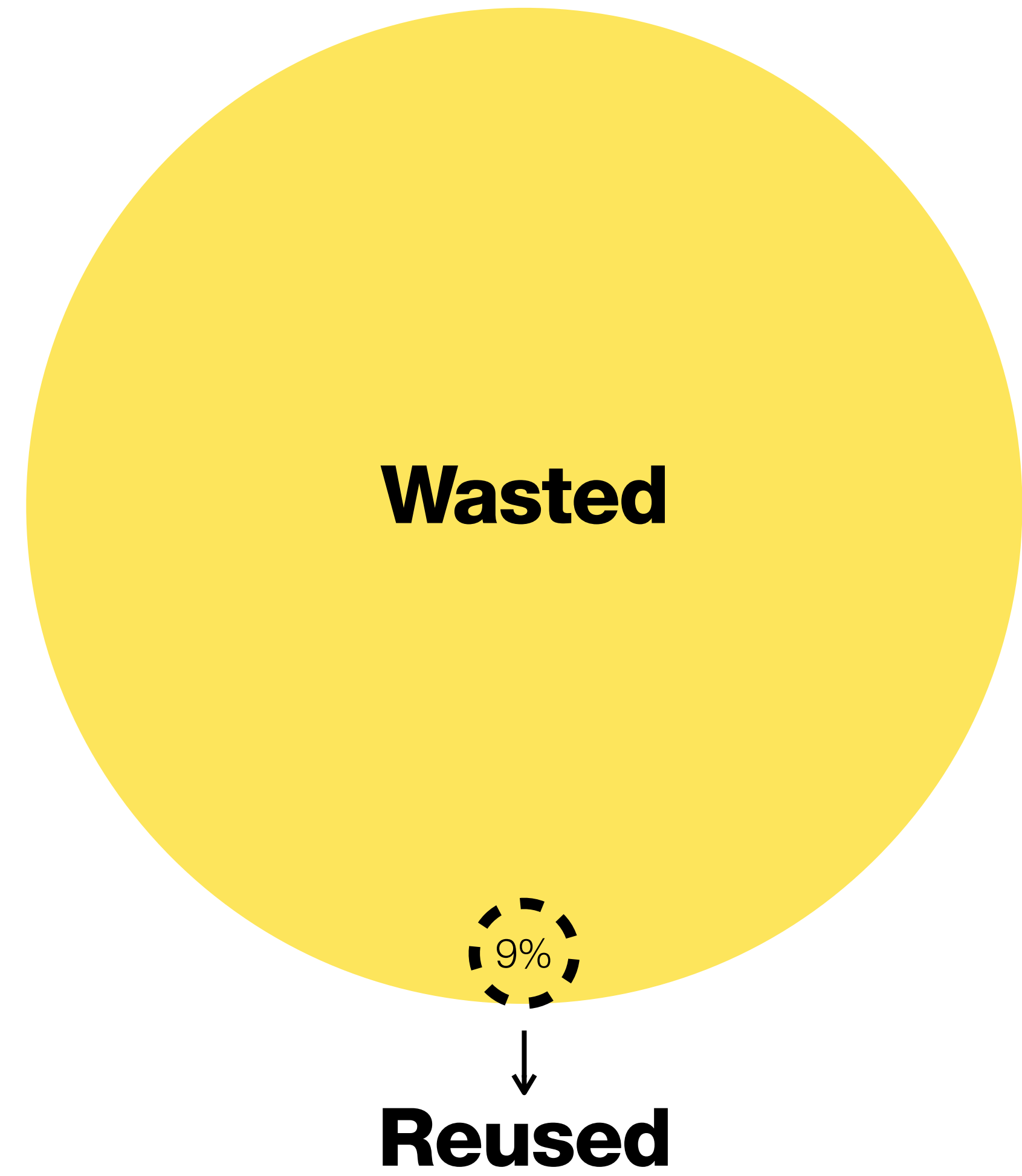
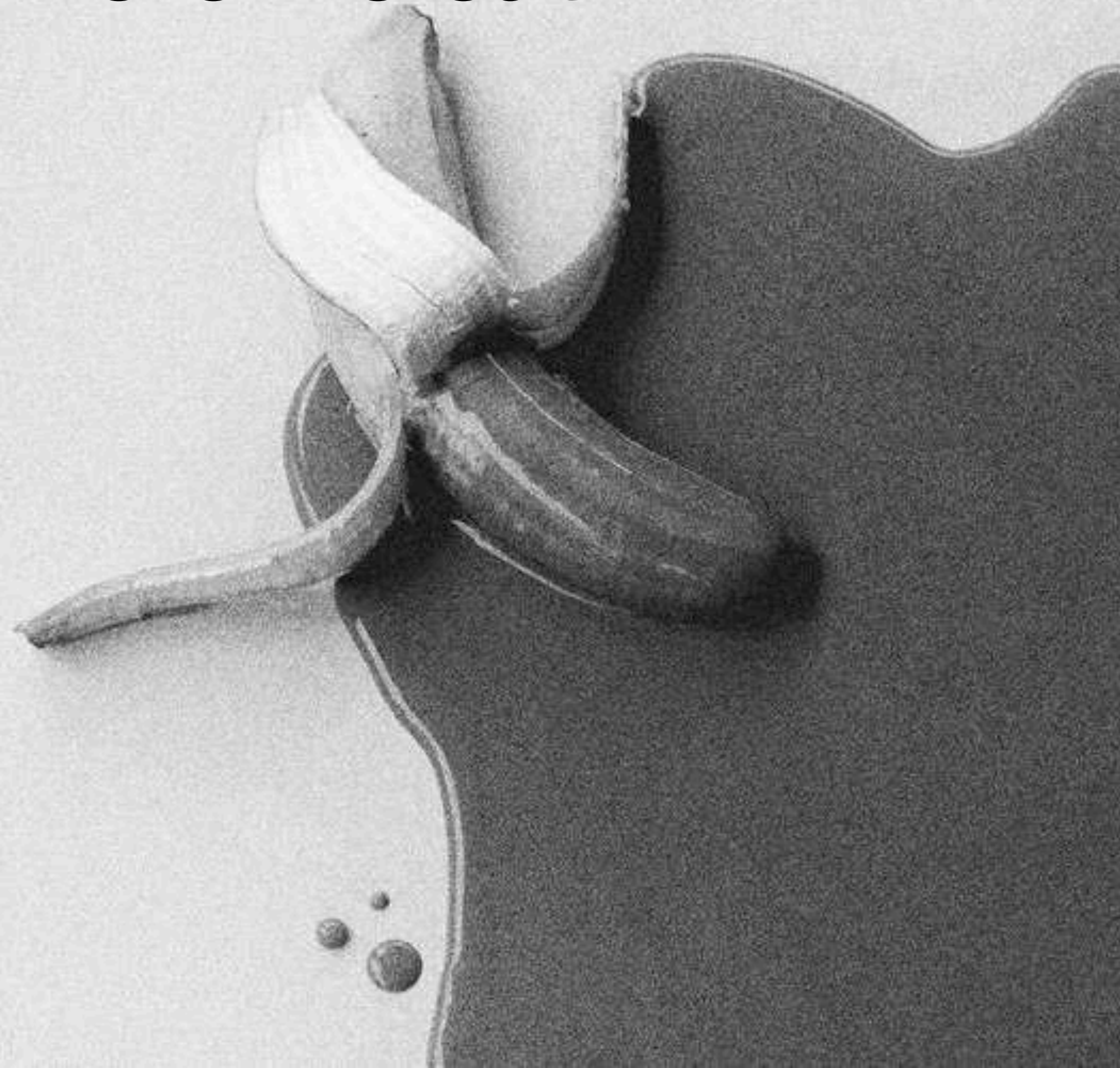
- **What do you think sustainable business model innovation is really about?**
- **In your experience, what is the most important success factor?**



Why we need it:  
**Innovation must  
happen at a  
systemic scale**



# We've been shitting where we eat



Why we need it

# Pioneers in sustainability are outperforming their peers financially

A ton of research has made it clear that front runners in environment, social and good governance policies are financially outperforming their less sustainable peers.

**Accenture: «The circular economy is a 4.5 trillion dollar market opportunity».**



## SUSTAINABILITY PAYS

Studies That Prove the Business Case for Sustainability



Source: Natcap Solutions, HBR

**Sustainable innovation**

**An historic  
responsibility**

**&**

**A big business  
opportunity**

But gets only **4%** of  
innovation investment.





Why we need it

# We've been a part of the problem – let's turn that on its head

Design is sorely needed for sustainable innovation because of our human-centric, creative and experimental approach. We need this applied at a greater scale.



**“Human-centred design is the innovation that is changing the most lives in the developing world.”**

- Melinda Gates



Why we need it

# **Systemic innovation of business models for the wide-reaching sustainable impact we need**

**Value chains &  
ecosystems**

**Business models  
& organisations**

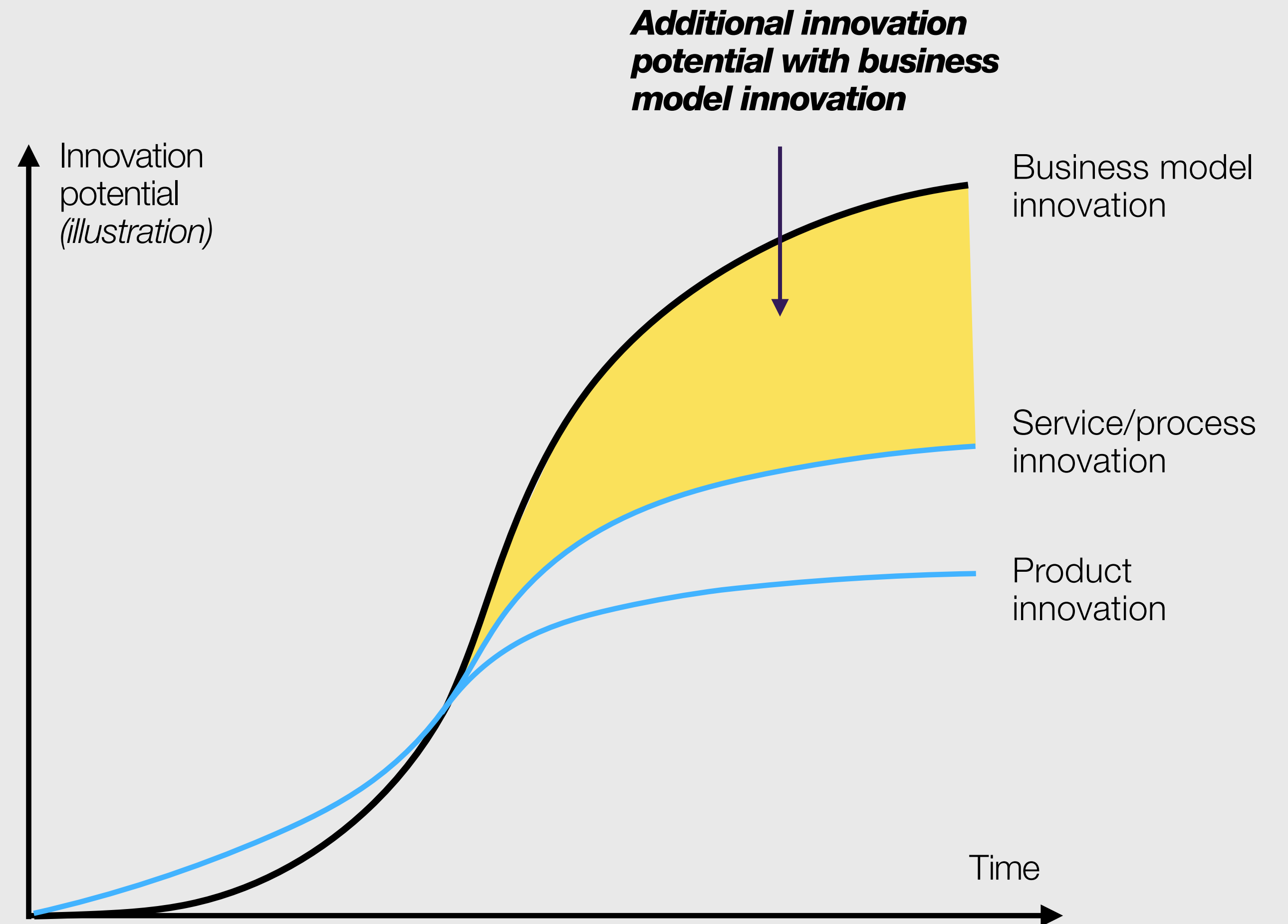
**Experience  
strategy**

**UX, journeys  
& services**

**Touchpoints  
& products**

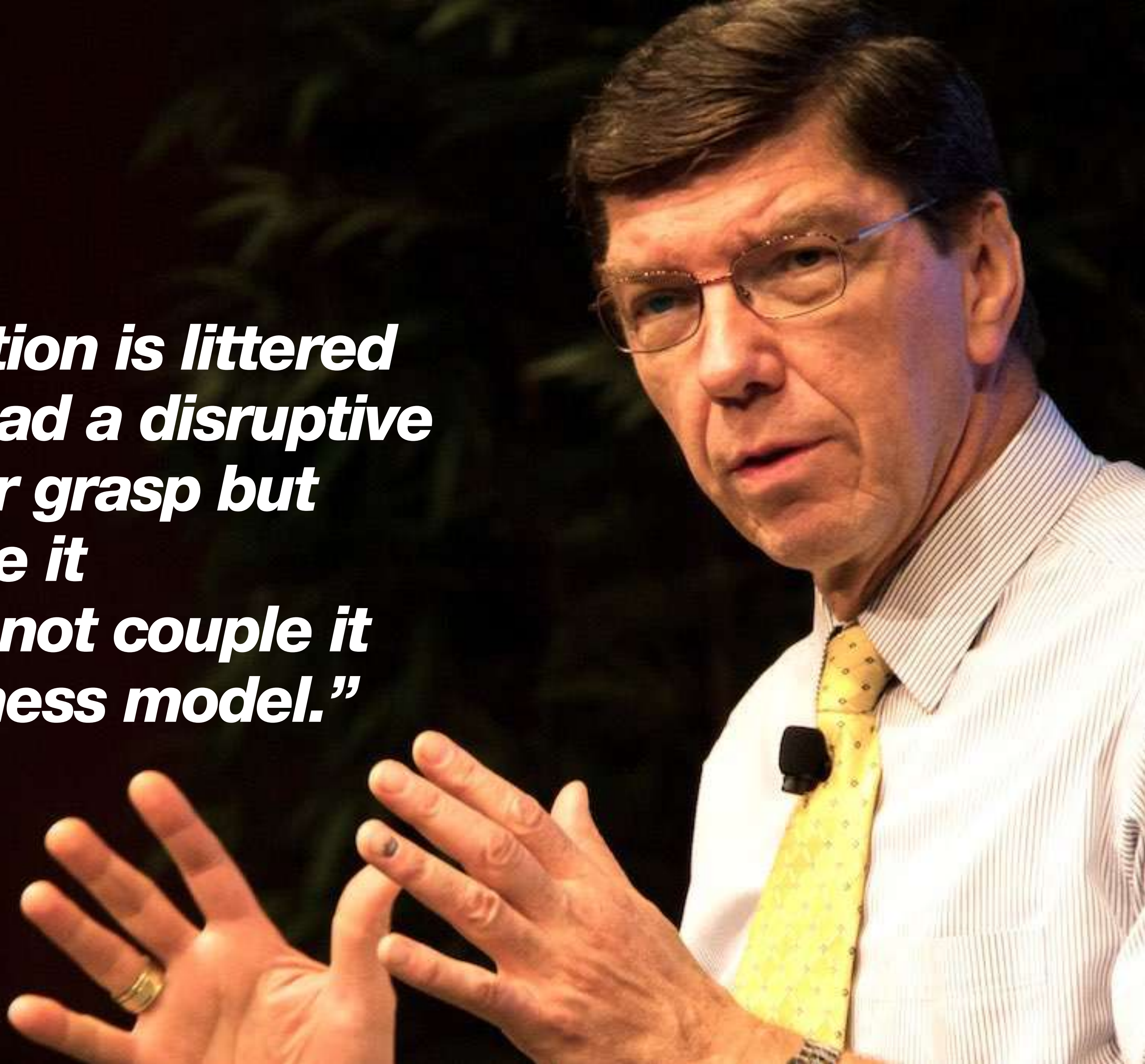


# The impact of business model innovation is greater



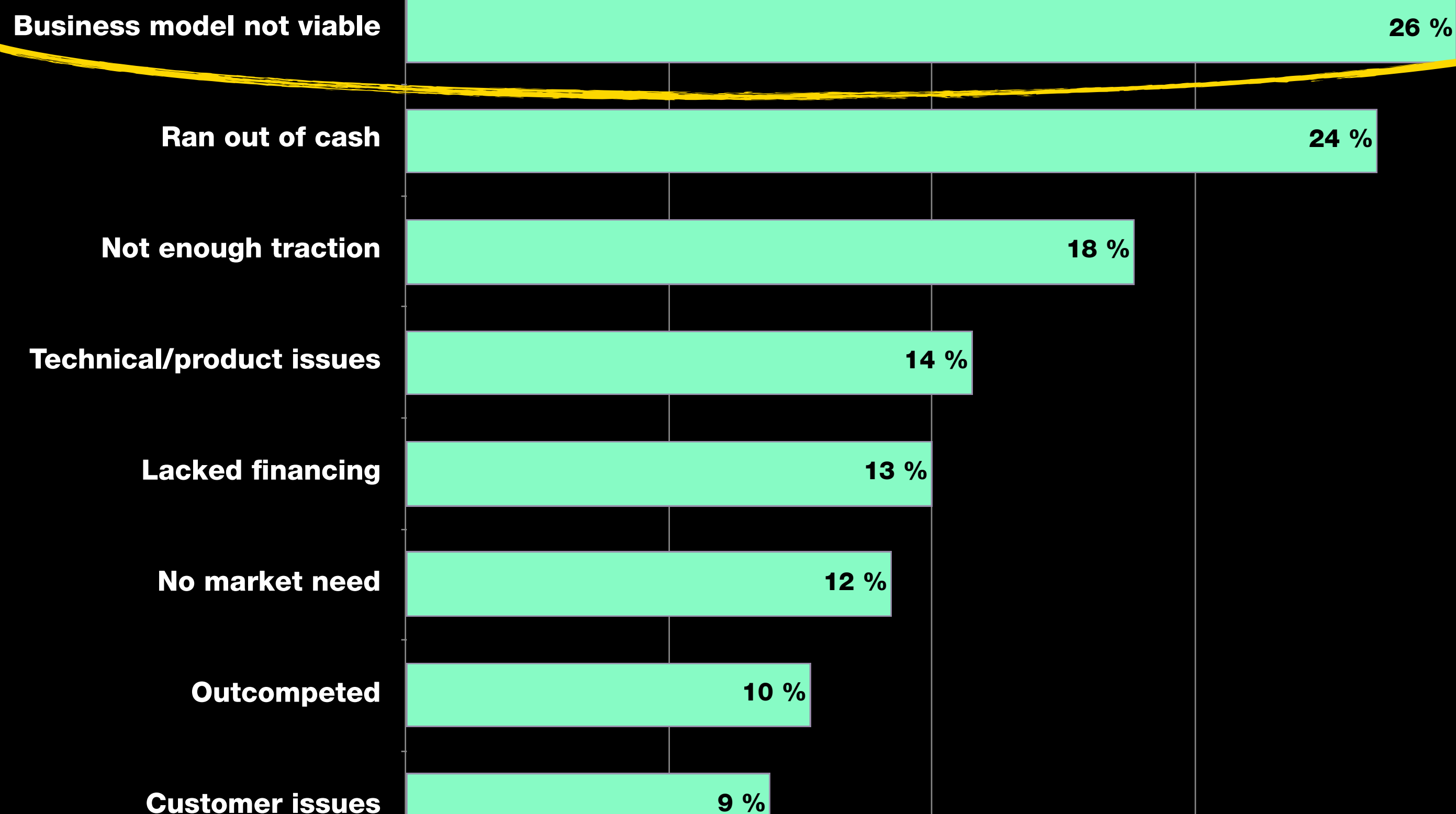
***“The history of innovation is littered with companies that had a disruptive technology within their grasp but failed to commercialise it successfully. They did not couple it with a disruptive business model.”***

- Clayton Christensen



# A bad business model is the top reason for innovation failure

Reasons for startup failure →



Why we need it

# The most successful disruptors of our time have innovated their **business models**

**And their product/service less so.**

They are doing it by challenging their industry's long-standing beliefs.



Owens no vehicles



Owens no content



Owens no inventory



Owens no real estate



Owens no rental shops



Owens no infrastructure



What it is:

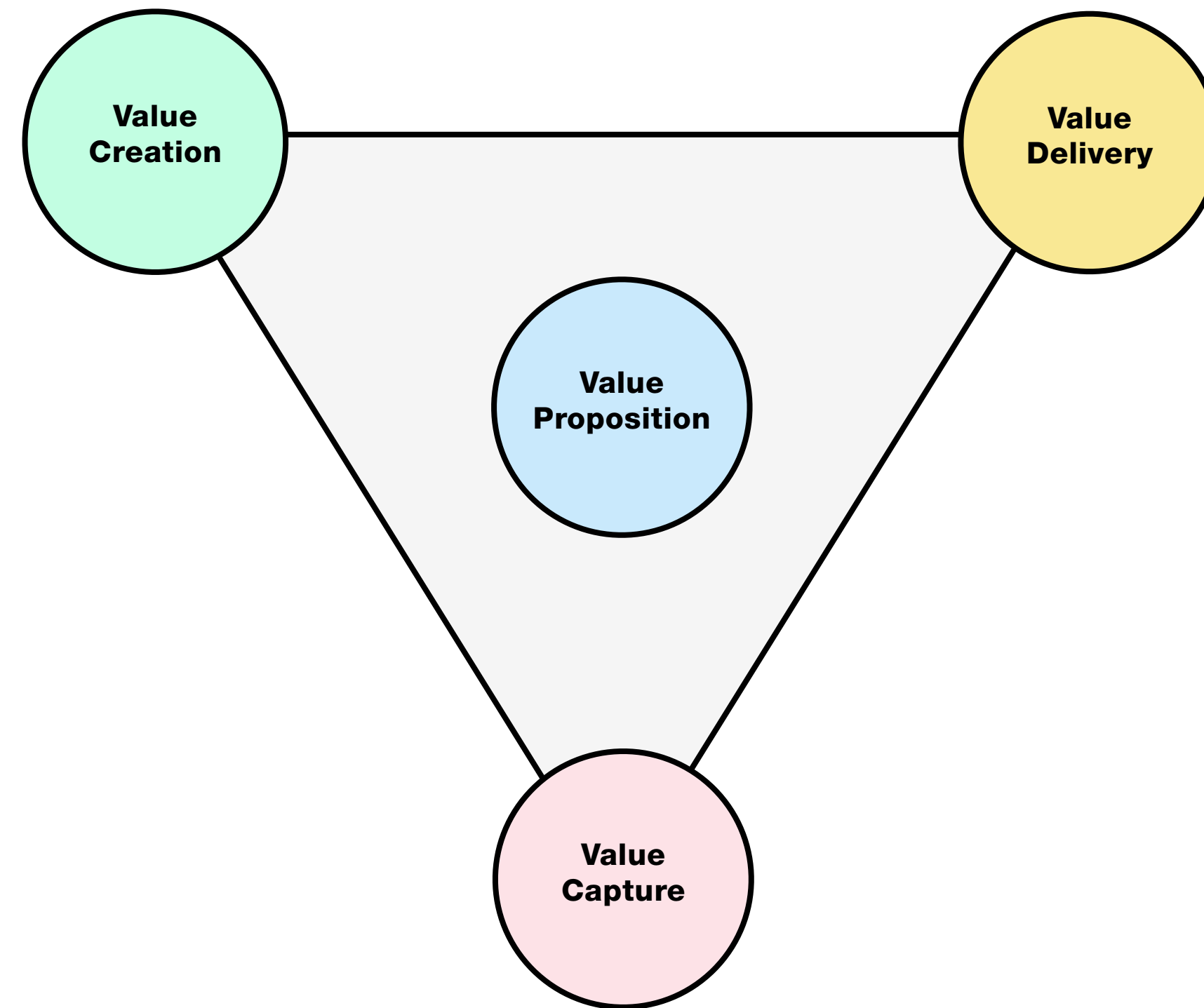
**Designing circular and  
co-creative businesses  
for people+profit+planet**





# A business model is how an organisation...

creates  
delivers  
captures  
value

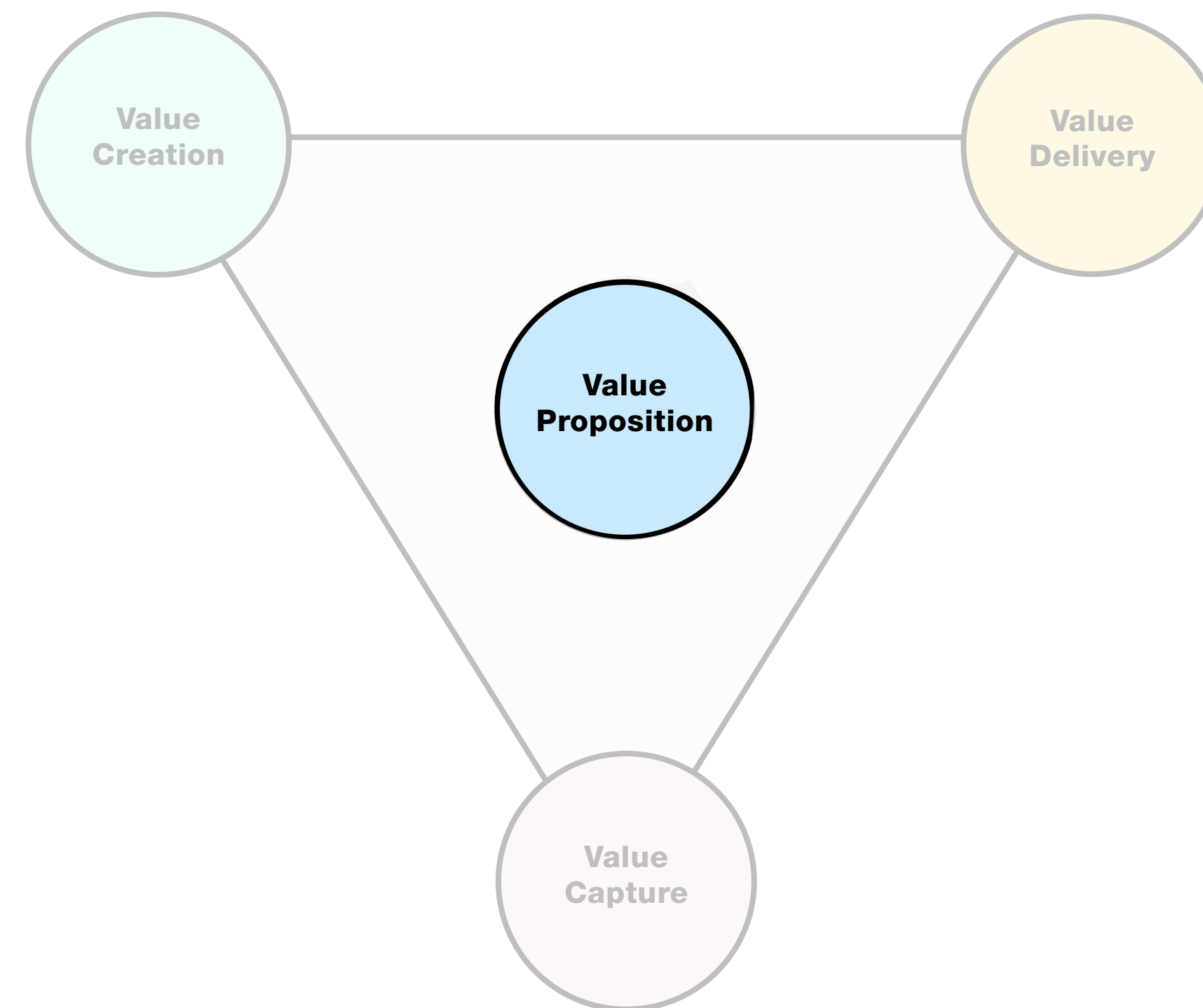


## Business model innovation

# value

**What products, services or outcomes do people need?**

**How can we improve user/ stakeholder experiences to increase value?**



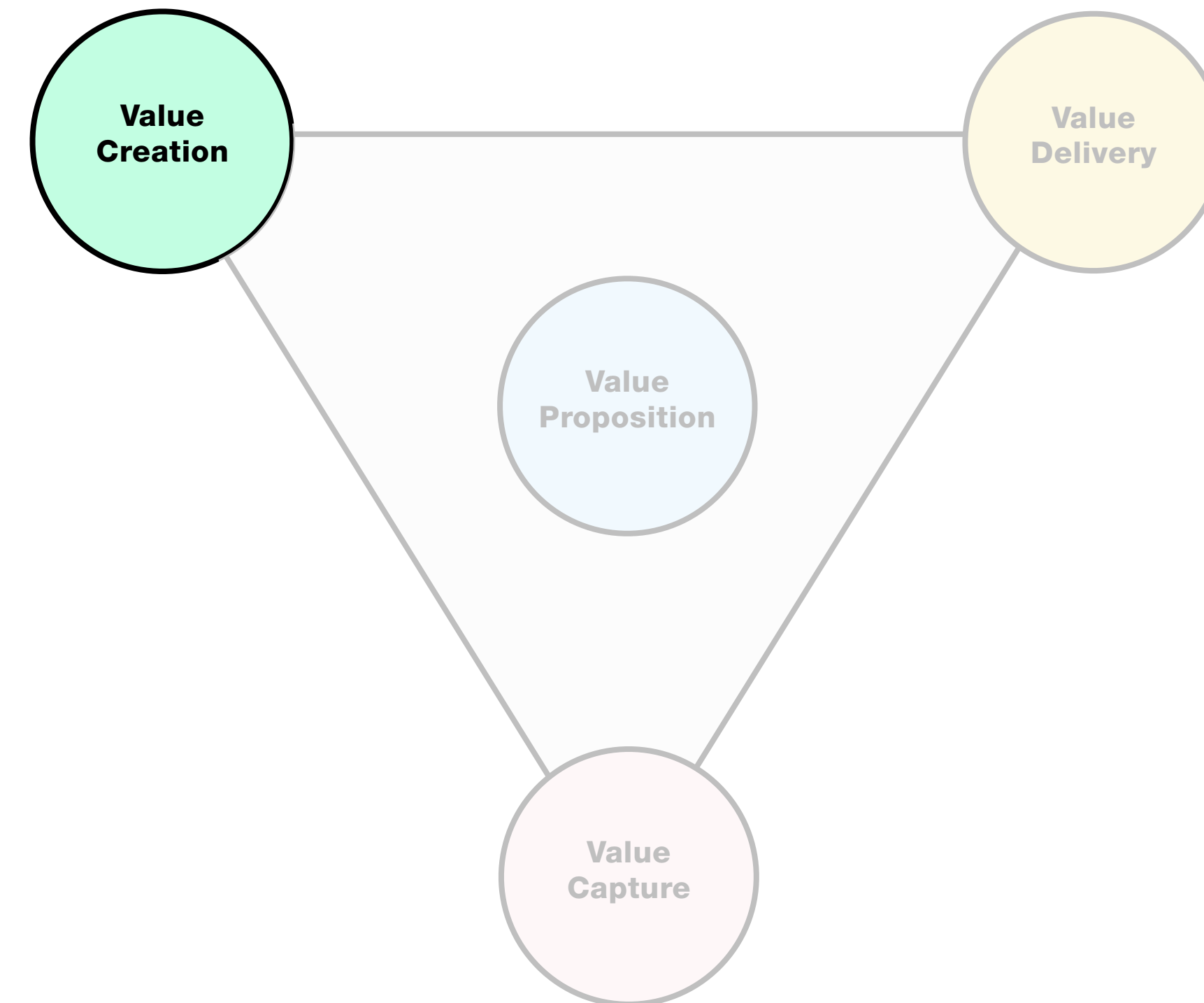
## Business model innovation

# create

**How can we improve our processes?**

**Can we partner up with someone?**

**Can we make better use of our unique capabilities?**



90%

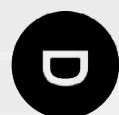
reduced waiting time  
before diagnosis



Example

## **Redesigned process and patient journey for breast cancer patients**

Designit helped reduce waiting time before diagnosis, a traumatic part of the current journey, with 90% by redesigning how hospital staff was organised.



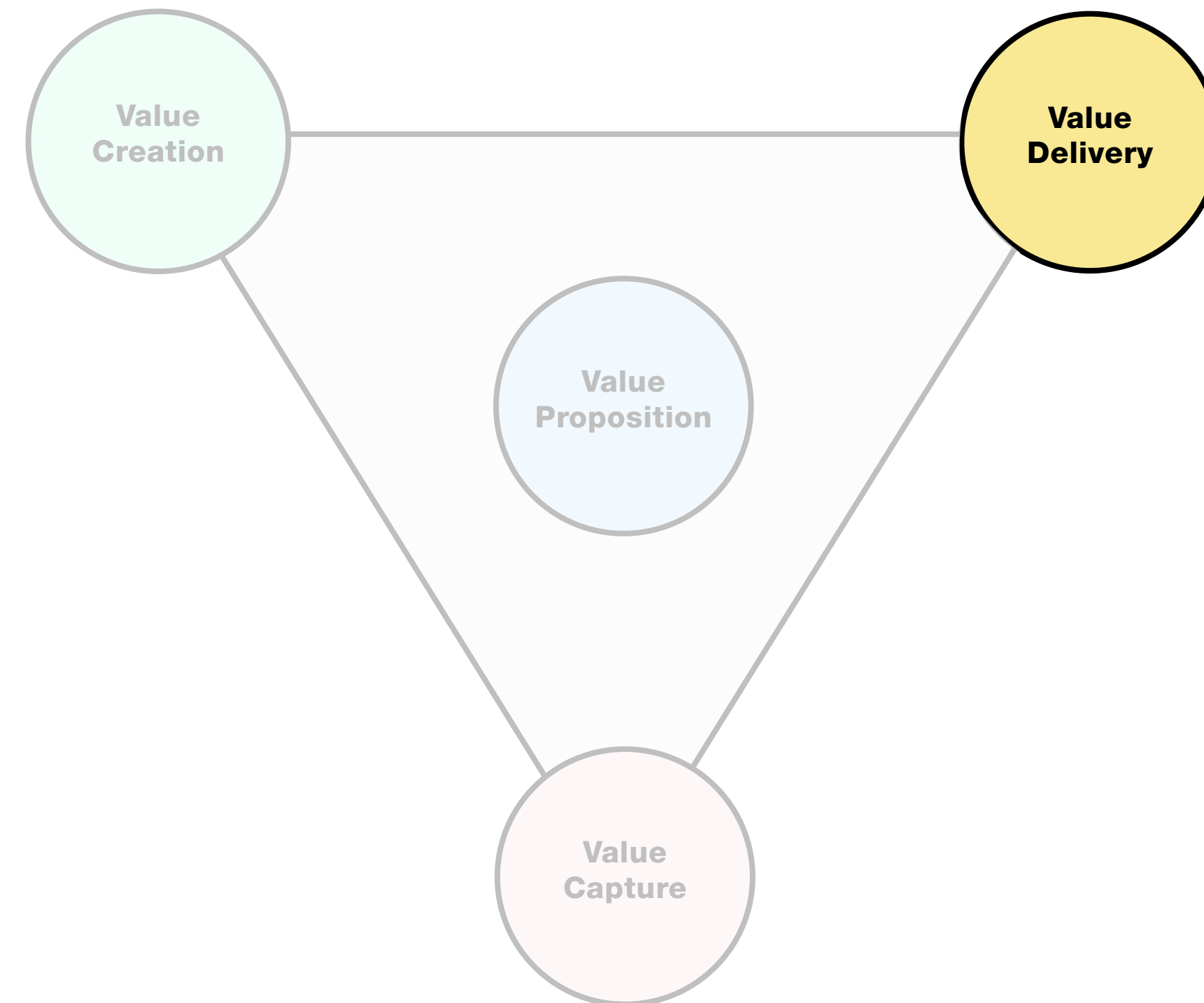
## Business model innovation

# deliver

**Can we target a different segment?**

**Can we change our relationship with our customers?**

**Can we use different channels for distribution or marketing?**



Example

## **A new direct-to-customer business model for Flokk**

One of Europe's largest manufacturers of office furniture only sold their wares through dealers. Designit helped craft a new business model to reach small companies directly through a new e-commerce channel.

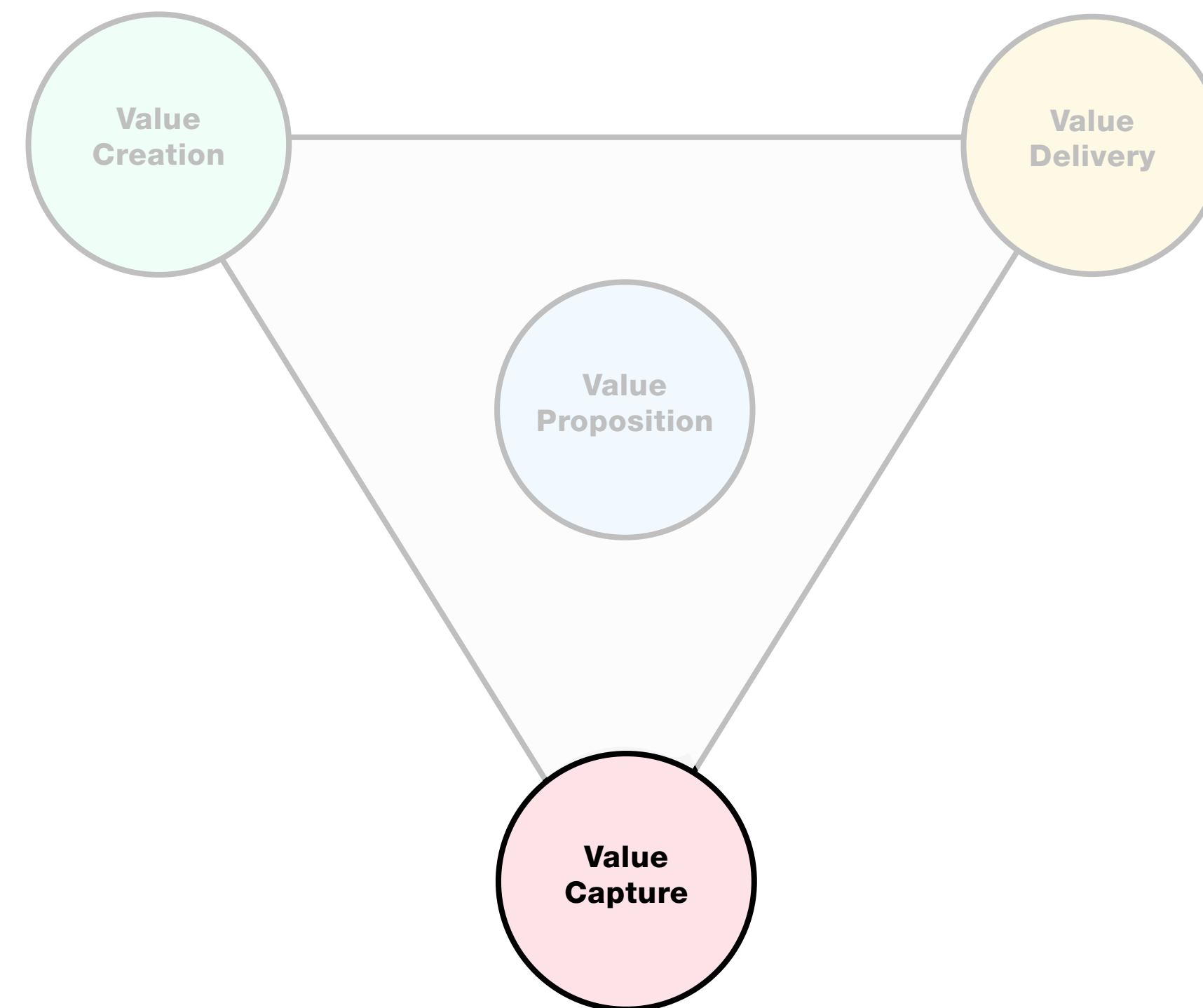
## Business model innovation

# capture

**Can we change how  
or what we charge?**

**Can we create a new  
revenue source?**

**Can we decrease  
our cost?**



Example

## **A more sustainable and digital credit service**

Together with a large Norwegian bank, we took the challenge to redesign the credit card product. We took away the card, made it into a digital service, and nudged users to set up downpayment plans immediately with a lower interest rate.

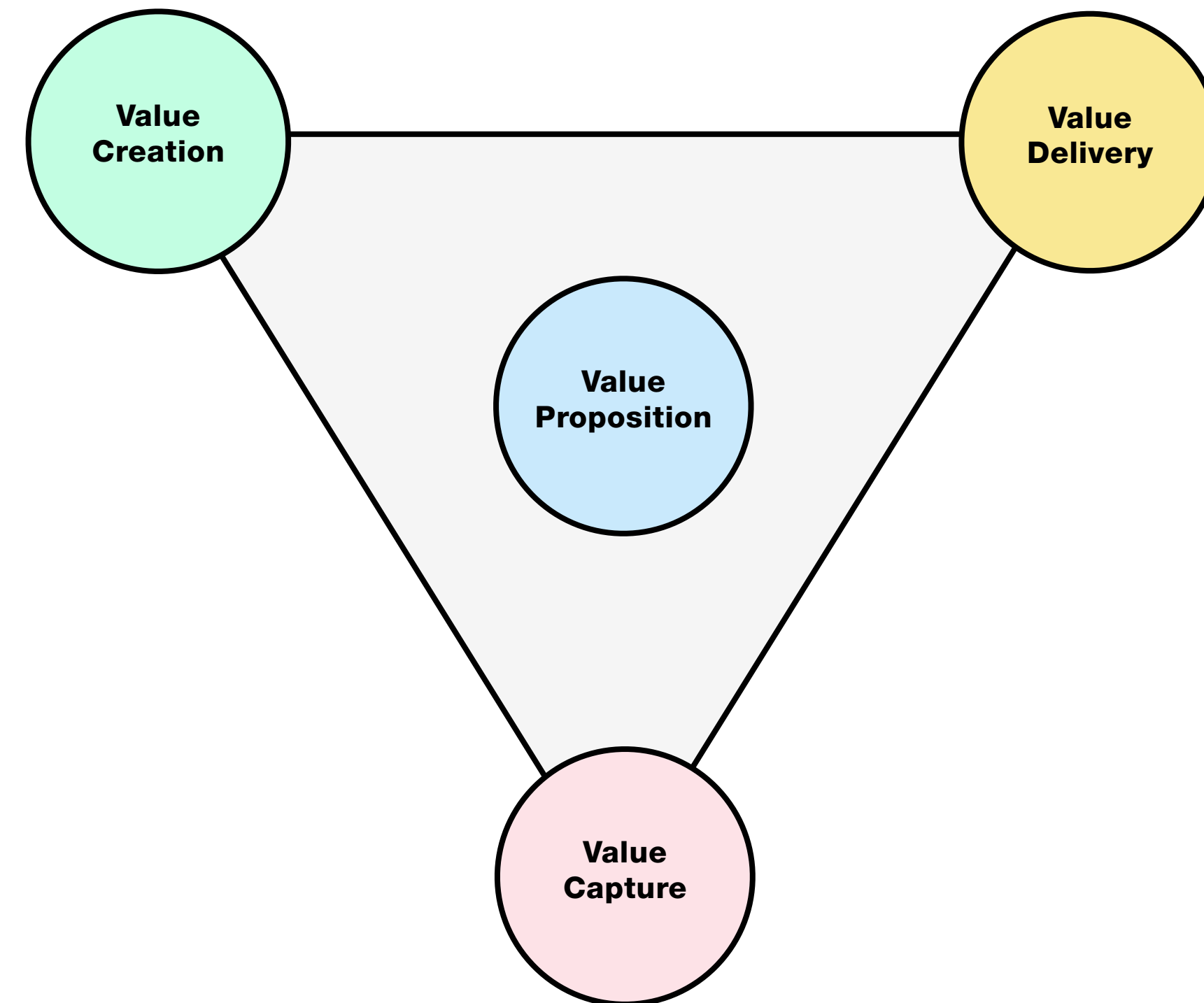




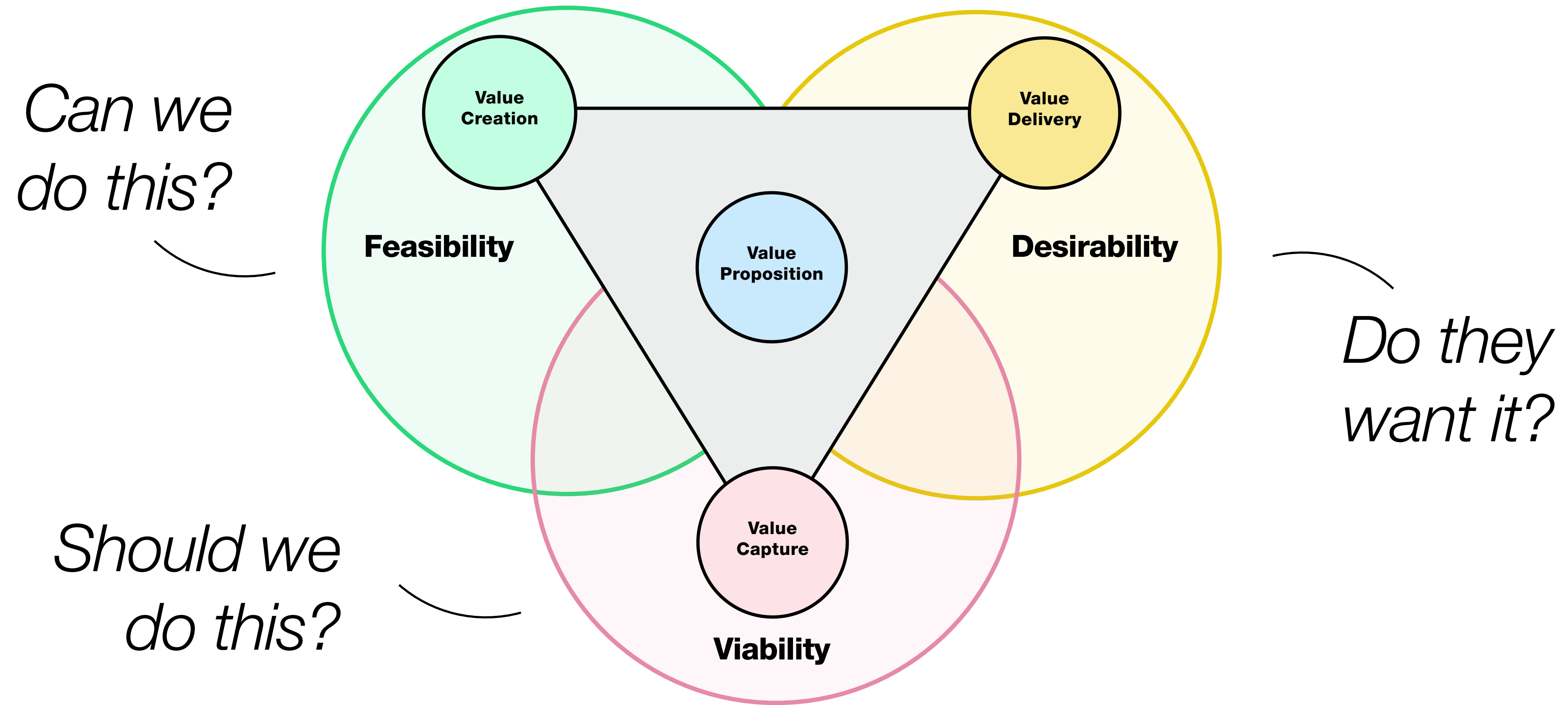
## Business model innovation

Creating a new business model or systemic improvements in how an organisation...

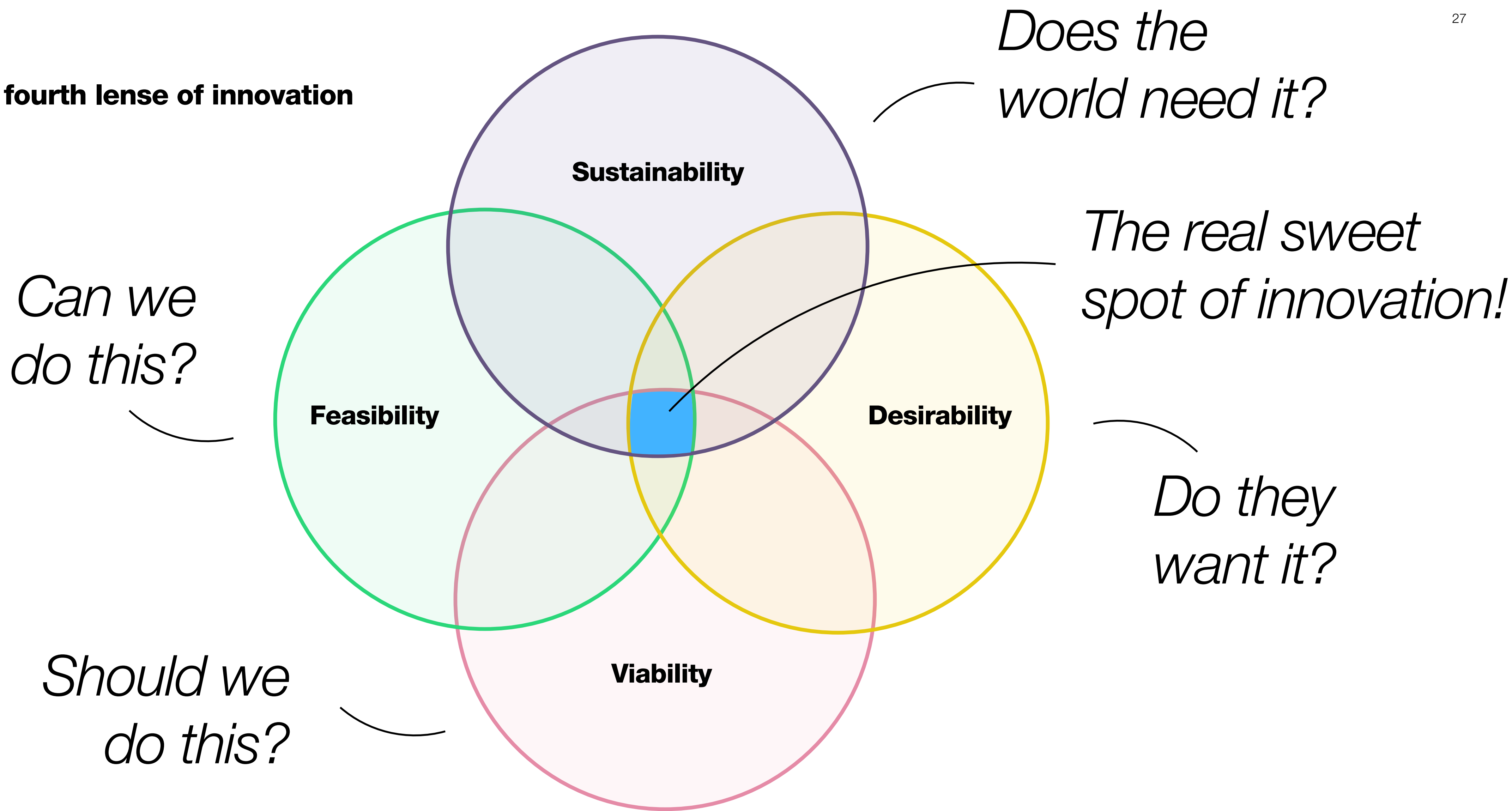
creates  
delivers  
captures  
value



## The three lenses of innovation



**We need a fourth lense of innovation**



**Three shifts needed**

From:

To:

**Linear**



**Circular**

**Combative**



**Co-creative**

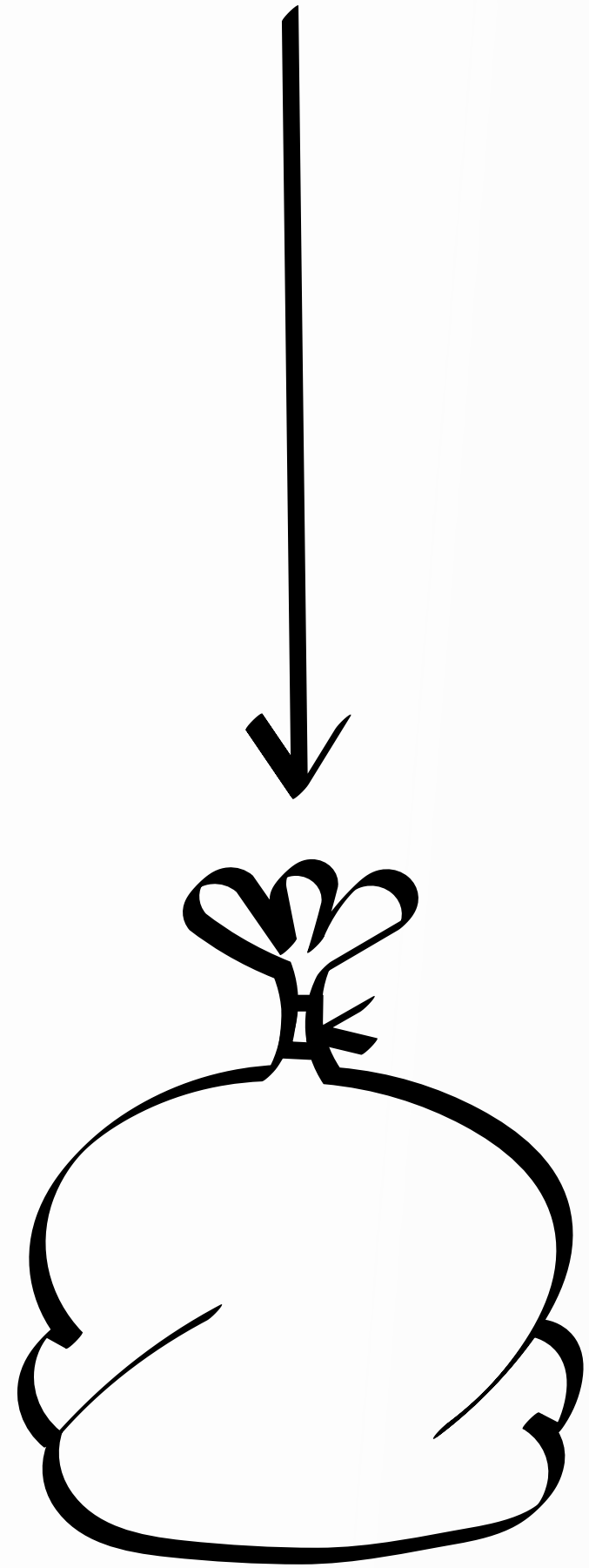
**Single bottom line**



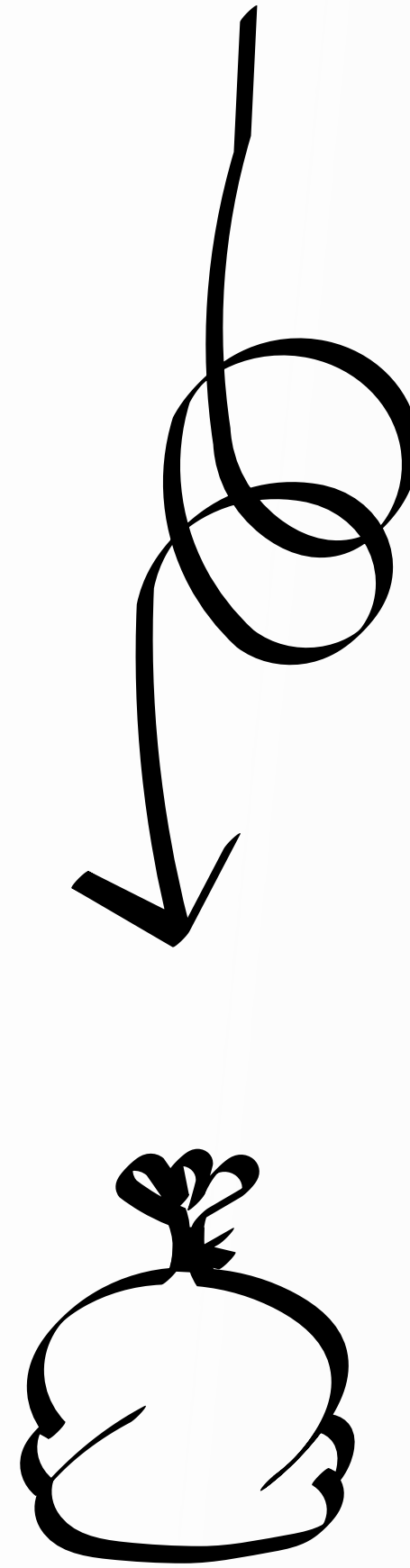
**Triple bottom line**



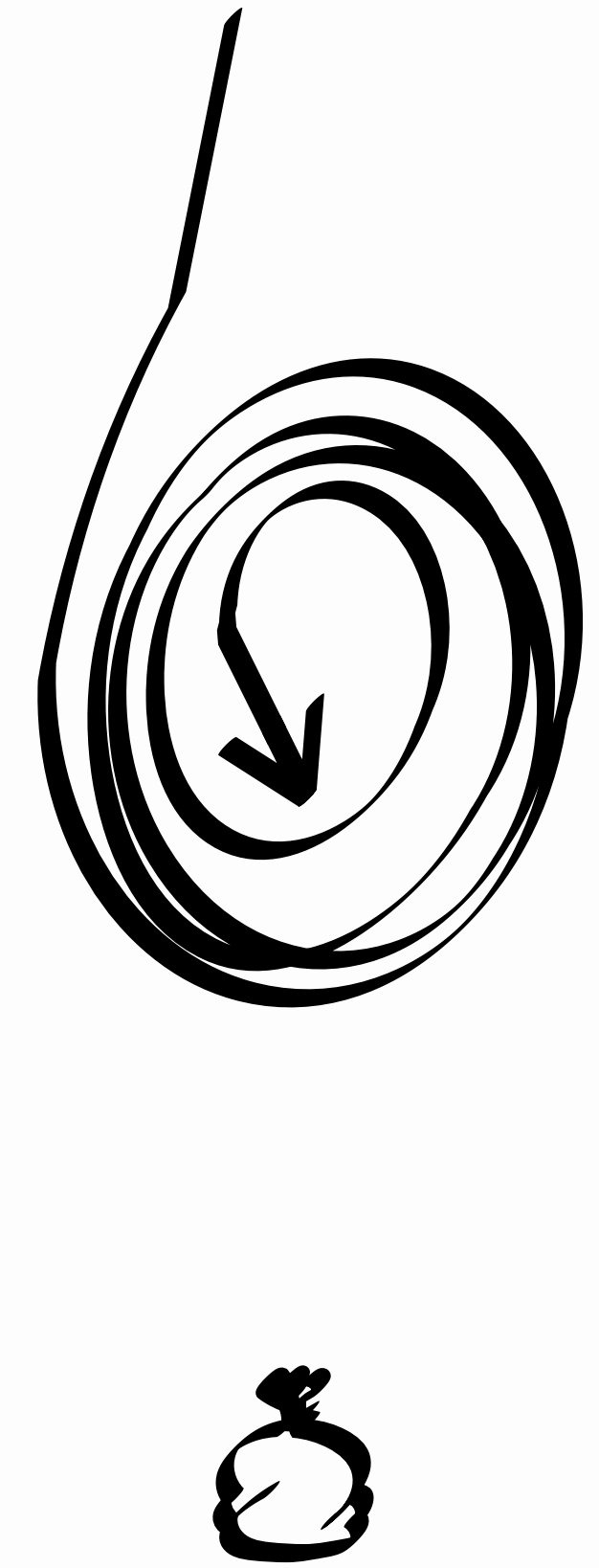
# Linear



# Recycling

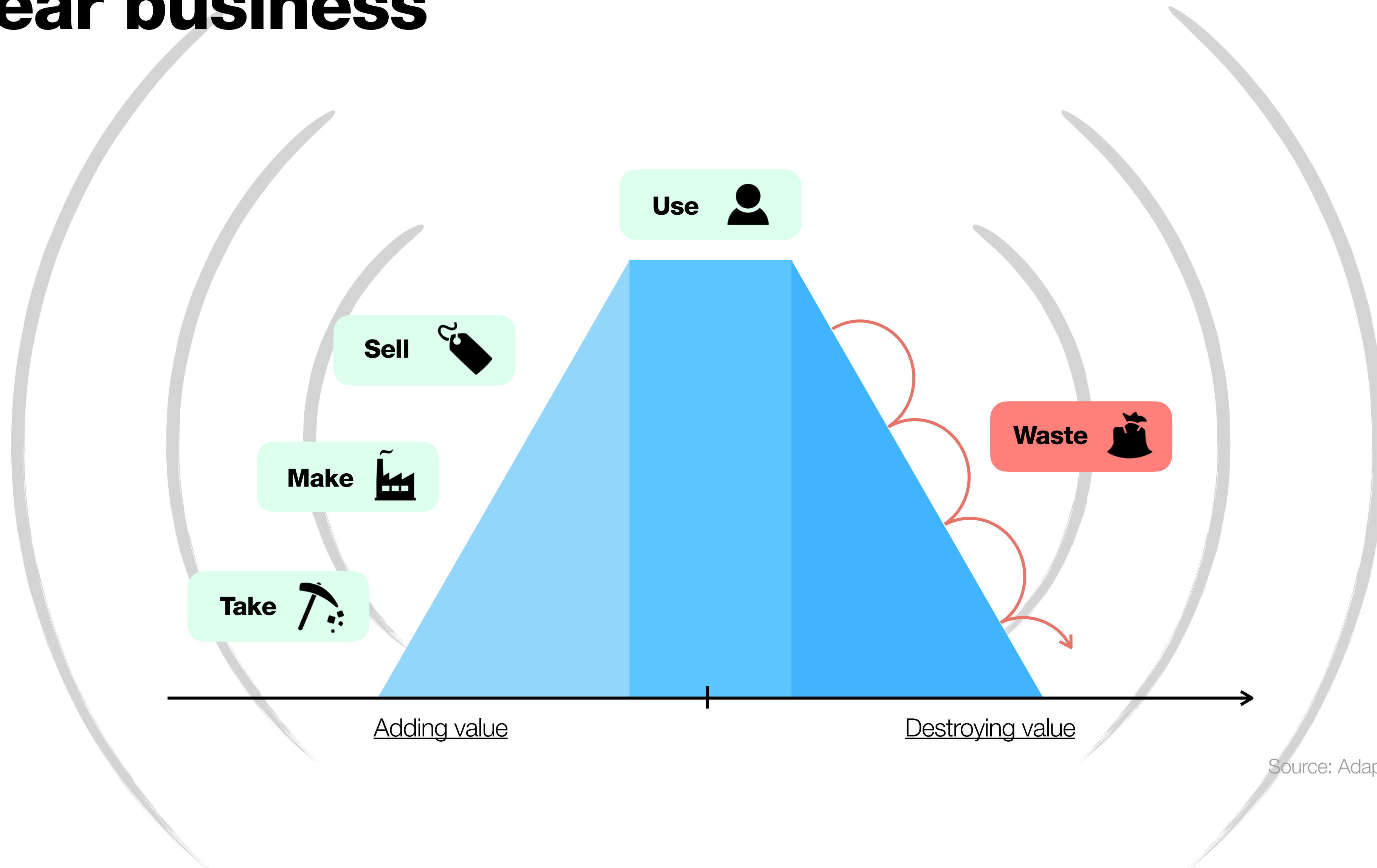


# Circular



# A linear business

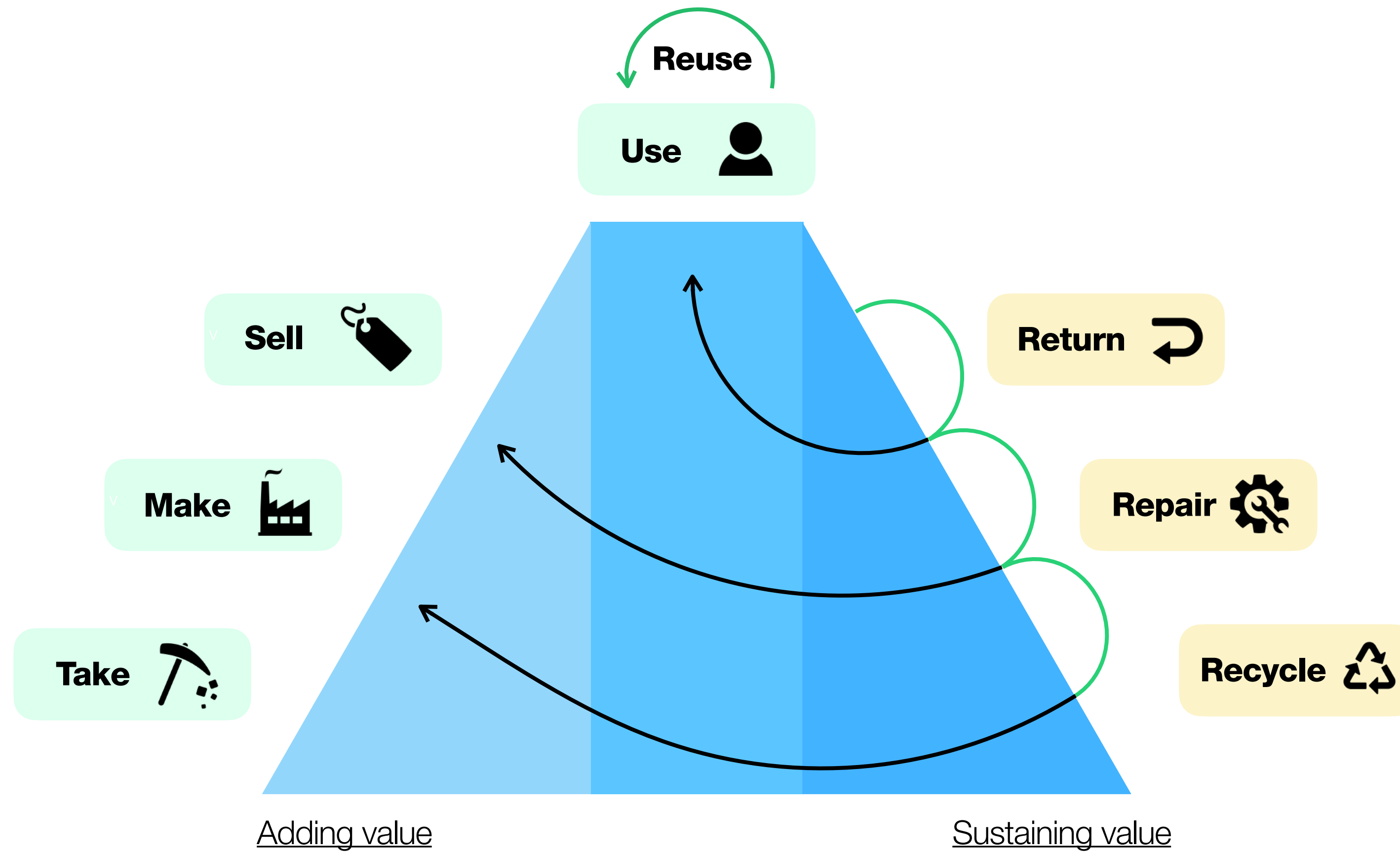
Negative  
ripple  
effects



Hidden  
costs



# A circular business



What it is

# A circular, collaborative economy





# Open, co-creative business models are win-win-win

For too long businesses have been run like armies, where it's all about winning at the expense of others. Let's turn that on its head.



~~Win-win-win~~



# People

Social

# Planet

Environmental

# Profit

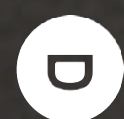
Financial

**There is no sustainability without the 'triple bottom line'**

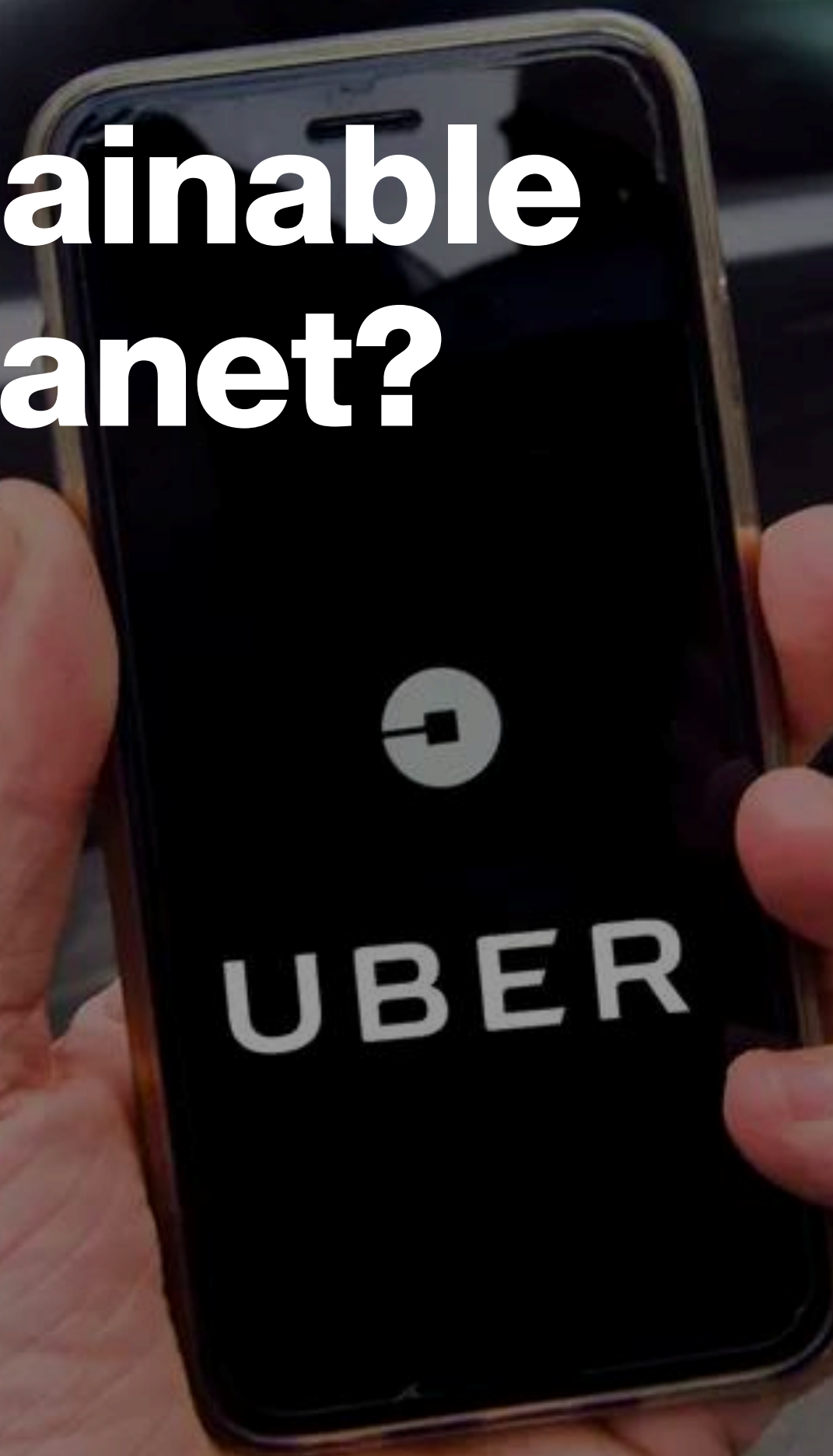


***Profit for a company is like oxygen for a person. If you don't have enough of it, you're out of the game. But if you think your life is about breathing, you're really missing something.***

- Peter Drucker



**Are Uber and Airbnb sustainable  
for people, profit and planet?**



## Time for regenerative sustainability

***It is not enough to mitigate the effects of human activity (...)  
Regenerative design seek not only to reverse the degeneration of the earth's natural systems, but also to design human systems that can co-evolve with natural systems.***

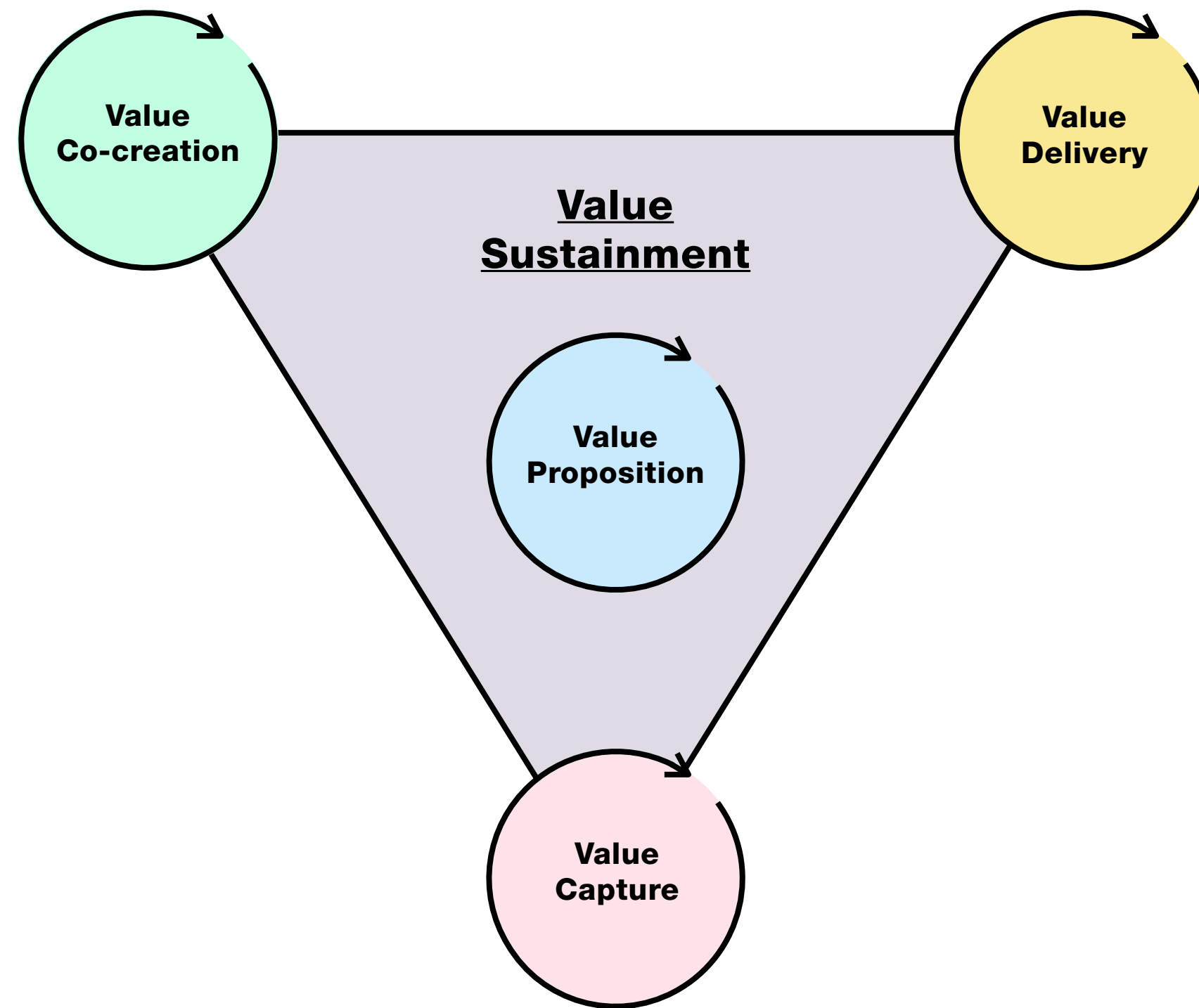
- Pamela Mang



***Revision***

# A business model is how an organisation...

co-creates  
delivers  
captures  
sustains  
value



**Definition**

**A sustainable business model is how an organisation co-creates, delivers, captures and sustains value in a circular way, having an overall net positive impact on people, profit and planet.**



# Proven strategies of sustainable business models





# Proven strategies of sustainable business models

1

 **CIRCULAR SUPPLIES**

**Reform use of resources**

Built to last: Design durable and easy to repair products

Circular supplies: Phase out the use of scarce nonrenewable resources in production

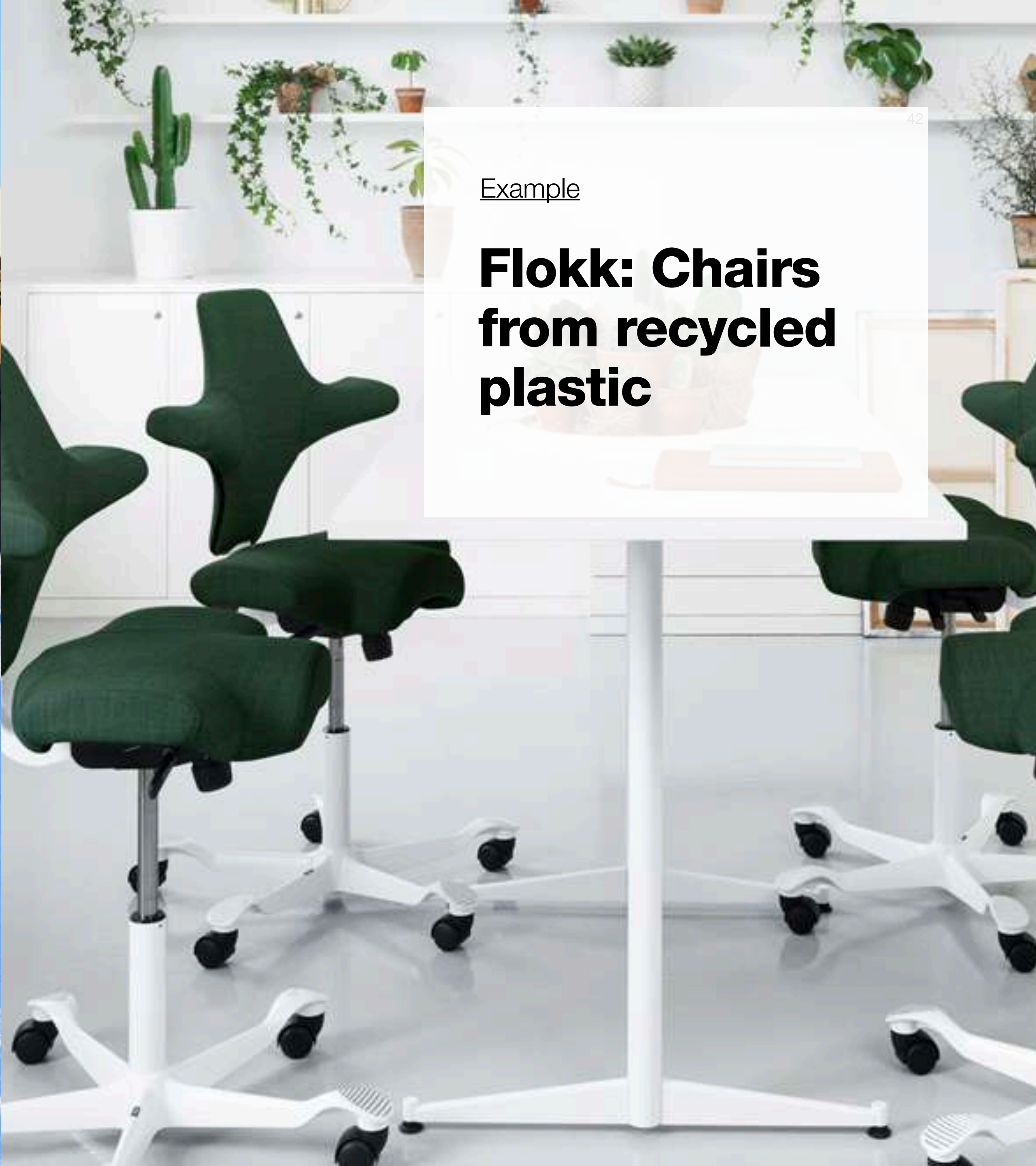


What it is




Example

# Flokk: Chairs from recycled plastic



# Proven strategies of sustainable business models



## SHARING PLATFORMS

**Optimise capacity use**

Share: Deliver platforms and solutions so products can be shared, e.g. pay per use, product leasing, sharing or renting.





What it is

Example

**City bikes schemes:  
Sharing to decrease  
idle time**

# Proven strategies of sustainable business models



 **PRODUCT LIFE EXTENSION**

**Extend life cycles**

Repair & upgrade: Services for repairing, maintaining and upgrading to extend the product life or improve product.

Remanufacture and resell: Resell products at the end of their useful life, for example after repairing or upgrading.




Example

**GoGood:  
Refurbished  
second hand  
furniture-as-  
a-service**

# Proven strategies of sustainable business models

4

 **RESOURCE RECOVERY**

**Recover value in waste**

Recycle/upcycle: Recover and collect materials from products at the end of life for reuse in new production.

Return: Develop systems that use waste and by-products.



What it is




Example


## **Rotterzwam: Mushrooms from coffee grounds + BlueCity**





# Proven strategies of sustainable business models



 **PRODUCT AS-A-SERVICE**

**Offer outcome-oriented solutions**

Pay for access: Allow customers access through a subscription or pay for use – maintenance included.

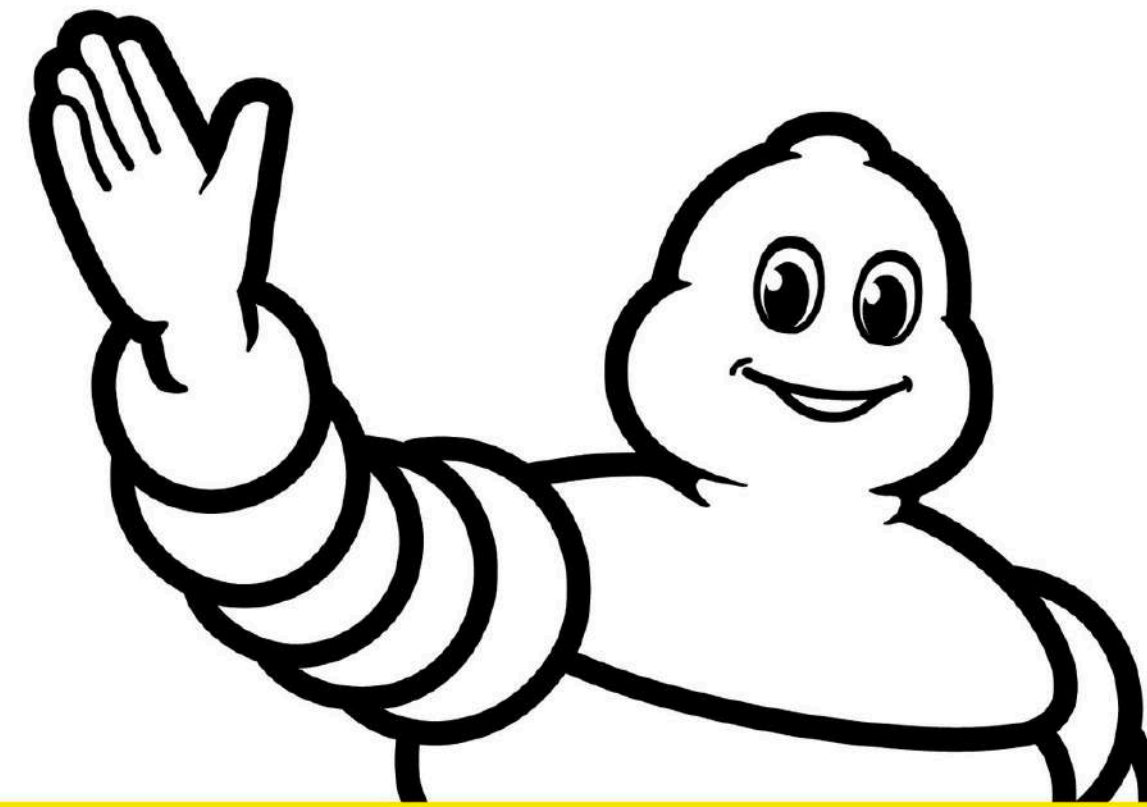
Pay for performance: Allow customers to buy level of service, quality or results.



# Apple Retail iPhone Upgrade Program

Example

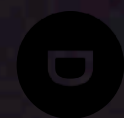
**Apple:**  
Smartphone  
service



**MICHELIN**



iPhone 6s





Example

## Tailored dietary plan with food subscription

For a big Nordic food company we developed several business model concepts, all based on going direct to customers, and offering food and supplements as a service to help people live healthier lives.

# As-a-service is most powerful because it spans across and keeps the loop tight

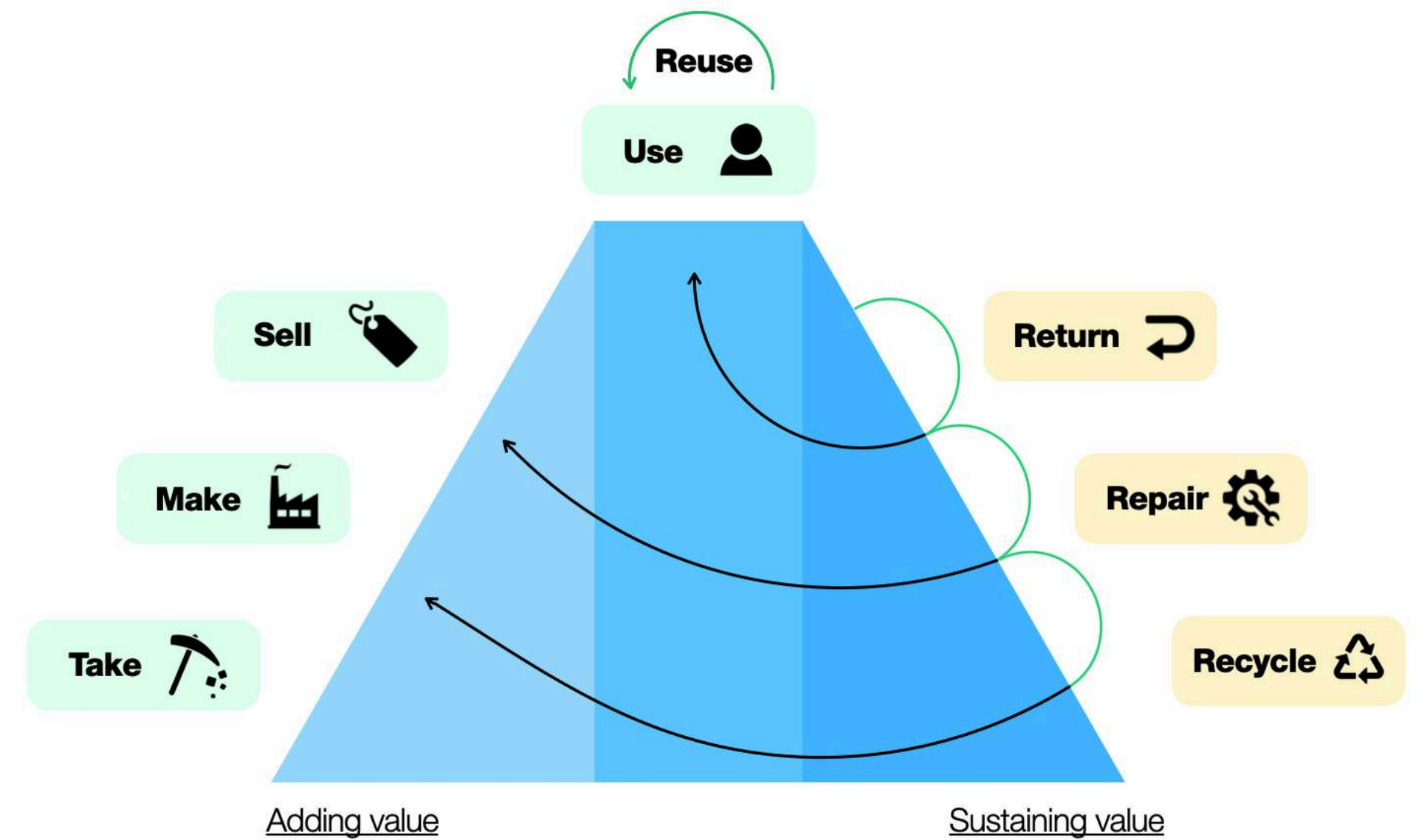
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## PRODUCT AS-A-SERVICE

### Offer outcome-oriented solutions

Pay for access: Allow access through a subscription or pay for use – maintenance included

Pay for performance: Allow customers to buy level of service, quality or results



# Q&A

Questions for you:

- **In your country or industry, have you seen good examples of sustainable business models?**
- **What could your company do to get started with this?**




How to do it:

**Understand the  
system, use proven  
strategies, experiment**



**The approach: Six rules of thumb**

- 
- 01 Design services for outcomes**
  - 02 Deep dive into systems**
  - 03 Co-create with stakeholders**
  - 04 Obsess over waste and value**
  - 05 Apply proven strategies**
  - 06 Test and measure what matters**



Rules of thumb: Service-logic

# 01 Design services for outcomes

**People don't want you or your product. They want to get their problems solved or needs met. Therefore, build business models around outcomes not ownership.**

Services are better at doing this and ensuring loyalty and good experience over time – and they are generally more sustainable because value is retained.

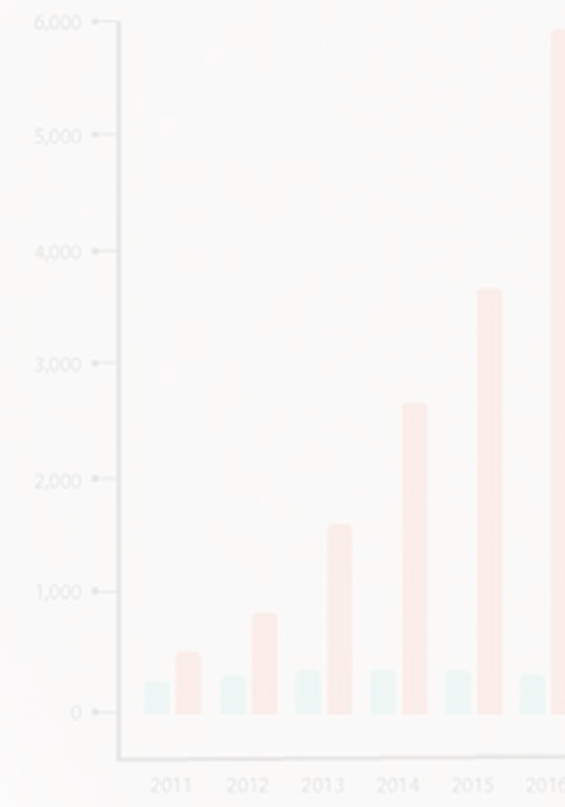




# 02 Deep dive into systems

The problems we need to solve are increasingly systemic and complex, so our approach need to be the same.

Do in-depth research, investigate the theme from a number of angles, and use this to map the system, actors, relationships, causal loops and processes in question. Look for value flows and intervention points.

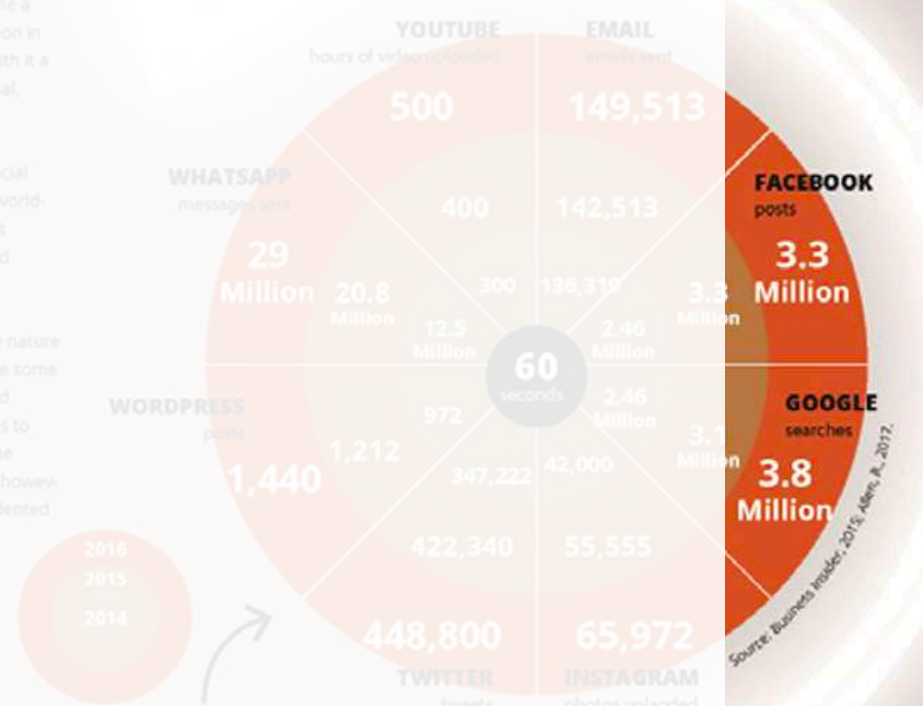


### Consumption Trends

Two diagrams illustrate the exponential growth of digital media consumption within the last three to five years.



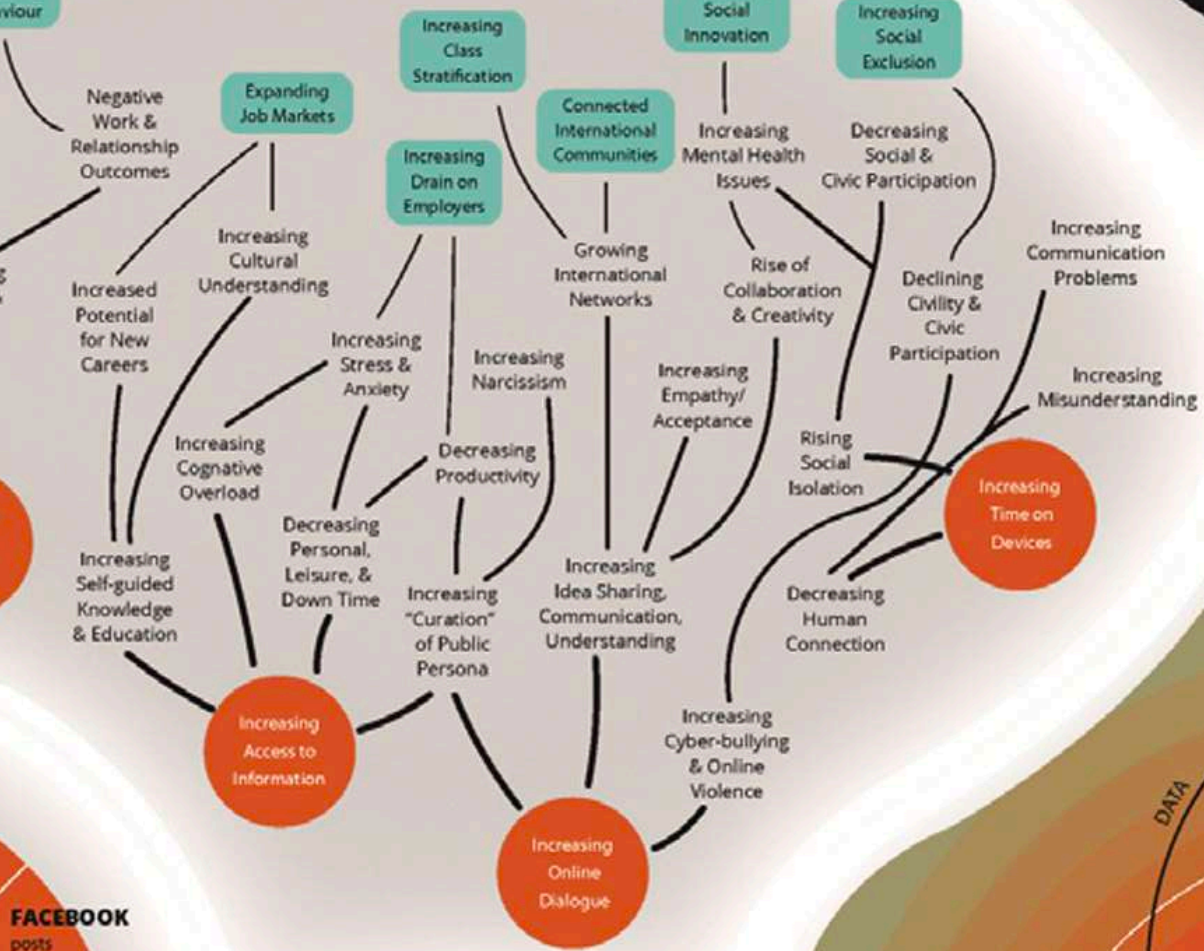
### What Happens Online in 60 Seconds?



### Design That Satisfies Needs



## Implications of Hyper-Consumption

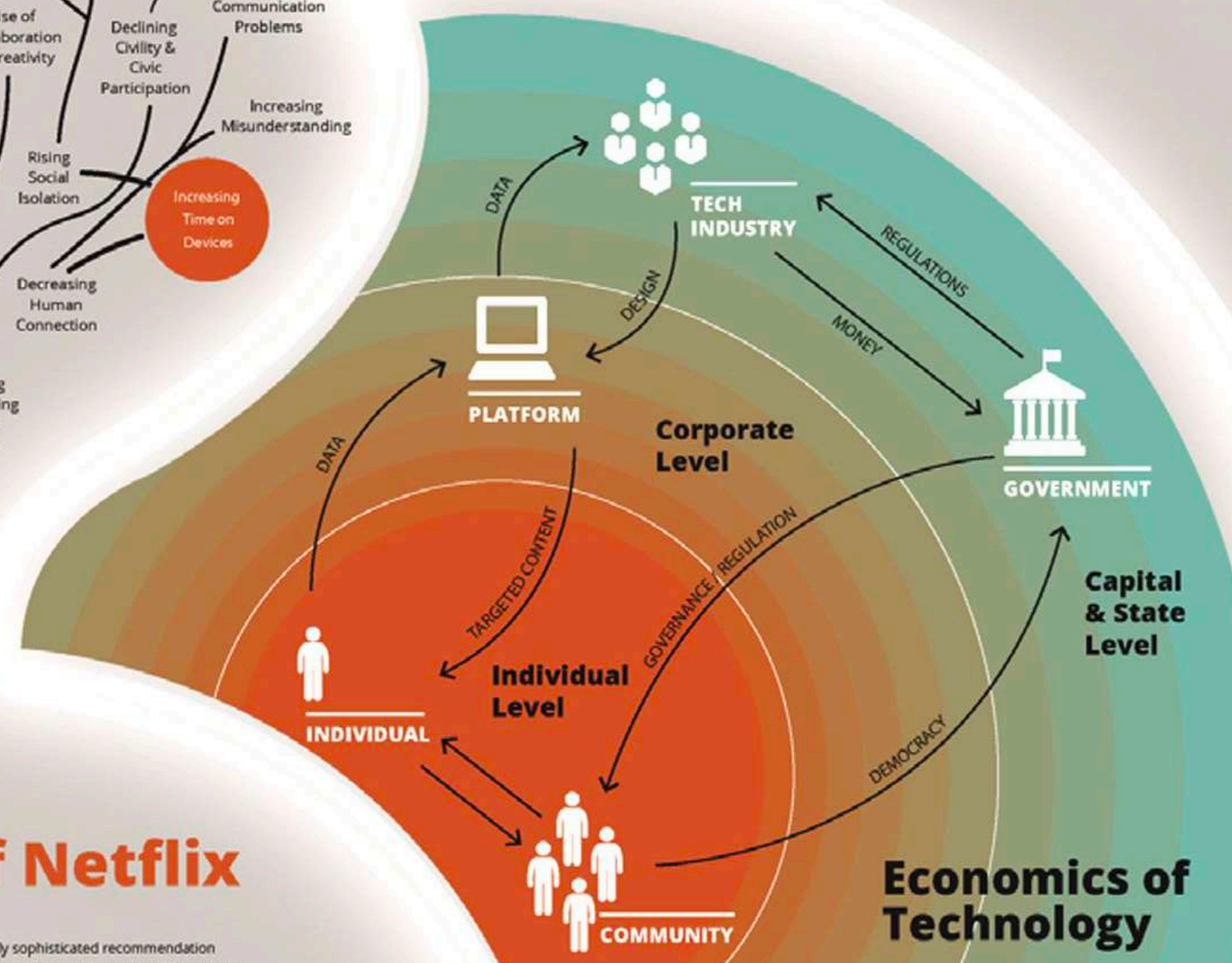
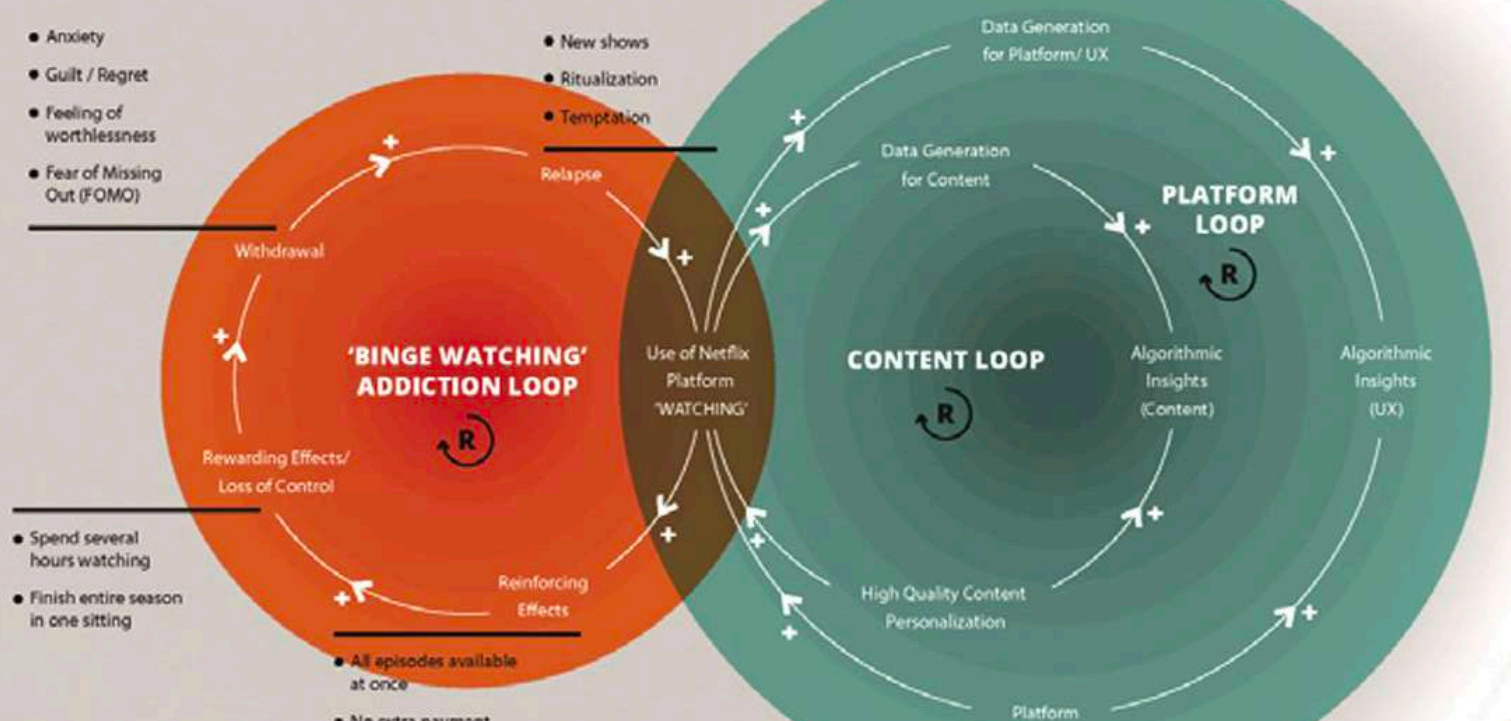


4

## The Bigger Picture why it matters

## The Case of Netflix

Netflix is a video-on-demand platform that is currently the dominant channel providing access to high-quality film and television content online. The reinforcing **Content and Platform Causal Loops** are meant to be a case study of the systemic motivations behind hyper digital consumption (as outlined in the Motivation Loop relevant to the digital media landscape). Netflix's most distinctive value proposition to users is its highly sophisticated recommendation system - the act of "watching" through the Netflix platform generates data regarding viewership preferences and user experience that creates algorithmic insights for Netflix. They then create further value for customers through high-quality content personalisation and platform refinement, which then further drives use of the platform.



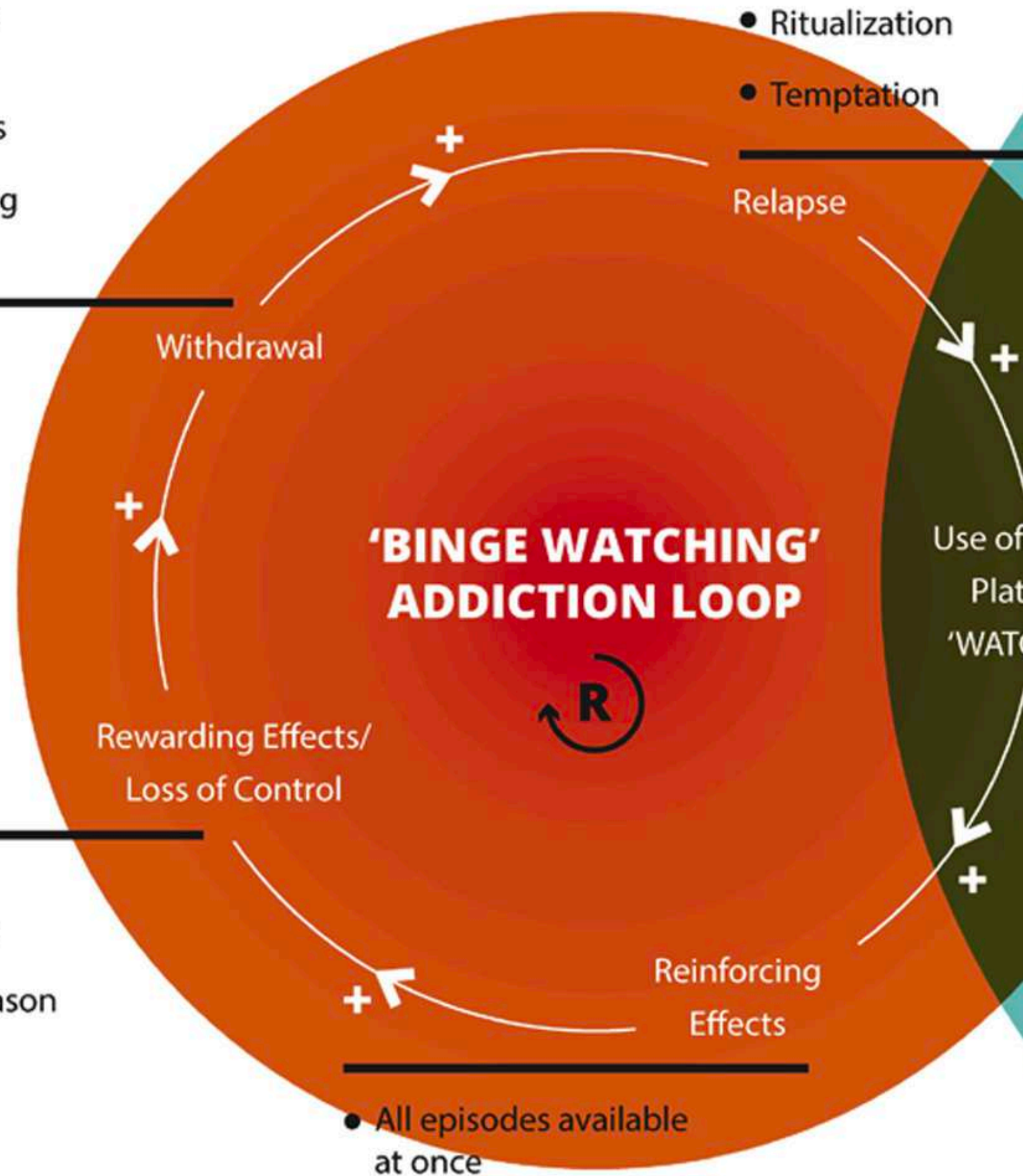
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## People &



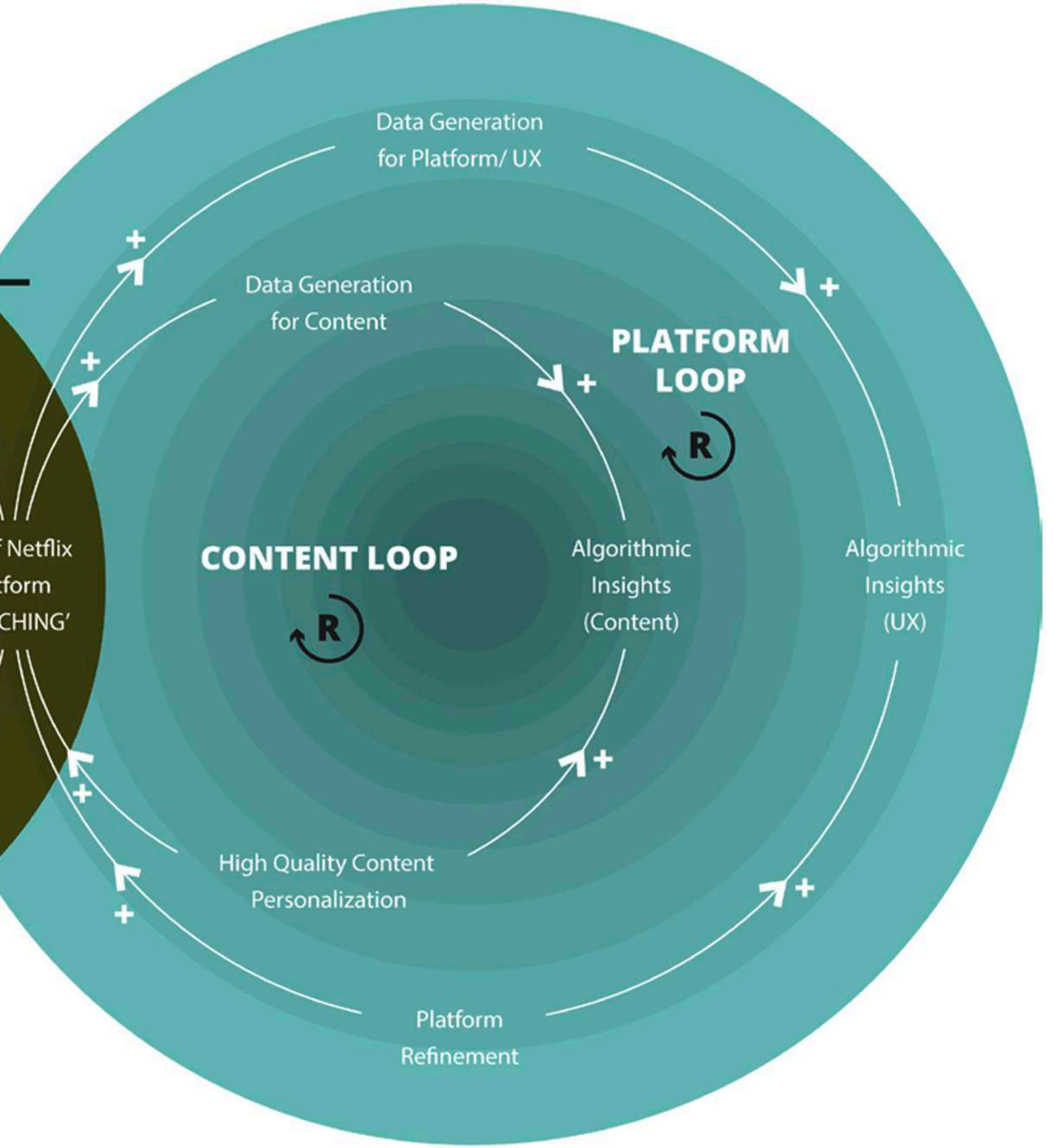
- Anxiety
- Guilt / Regret
- Feeling of worthlessness
- Fear of Missing Out (FOMO)

- New shows
- Ritualization
- Temptation



- Spend several hours watching
- Finish entire season in one sitting

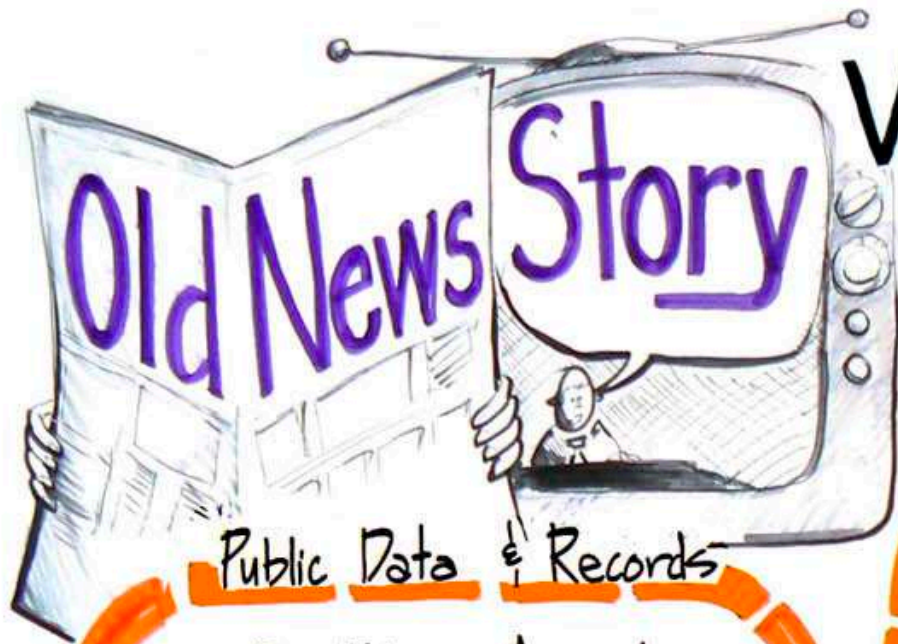
- All episodes available at once
- No extra payment
- No need for social interaction
- Endless recommendations that autoplay



Use of Netflix Platform  
'WATCHING'

**CONTENT LOOP**

**PLATFORM LOOP**



# Value Network Map



- The Map Makers**
- Kara Andrade - Maynard Institute
  - Sherrin Bennett - Interactive Learning Systems
  - Dave Cohn - spot.us
  - Kaliya Hamlin - Identity Women
  - Peggy Holman - Journalism that Matters
  - Ytaelena Lopez - Maynard Institute
  - Chris O'Brien - San Jose Mercury News
  - Chris Peck - Memphis Commercial Appeal
  - Martin Reynolds - Oakland Tribune
  - Stephen Silha - Journalism that Matters

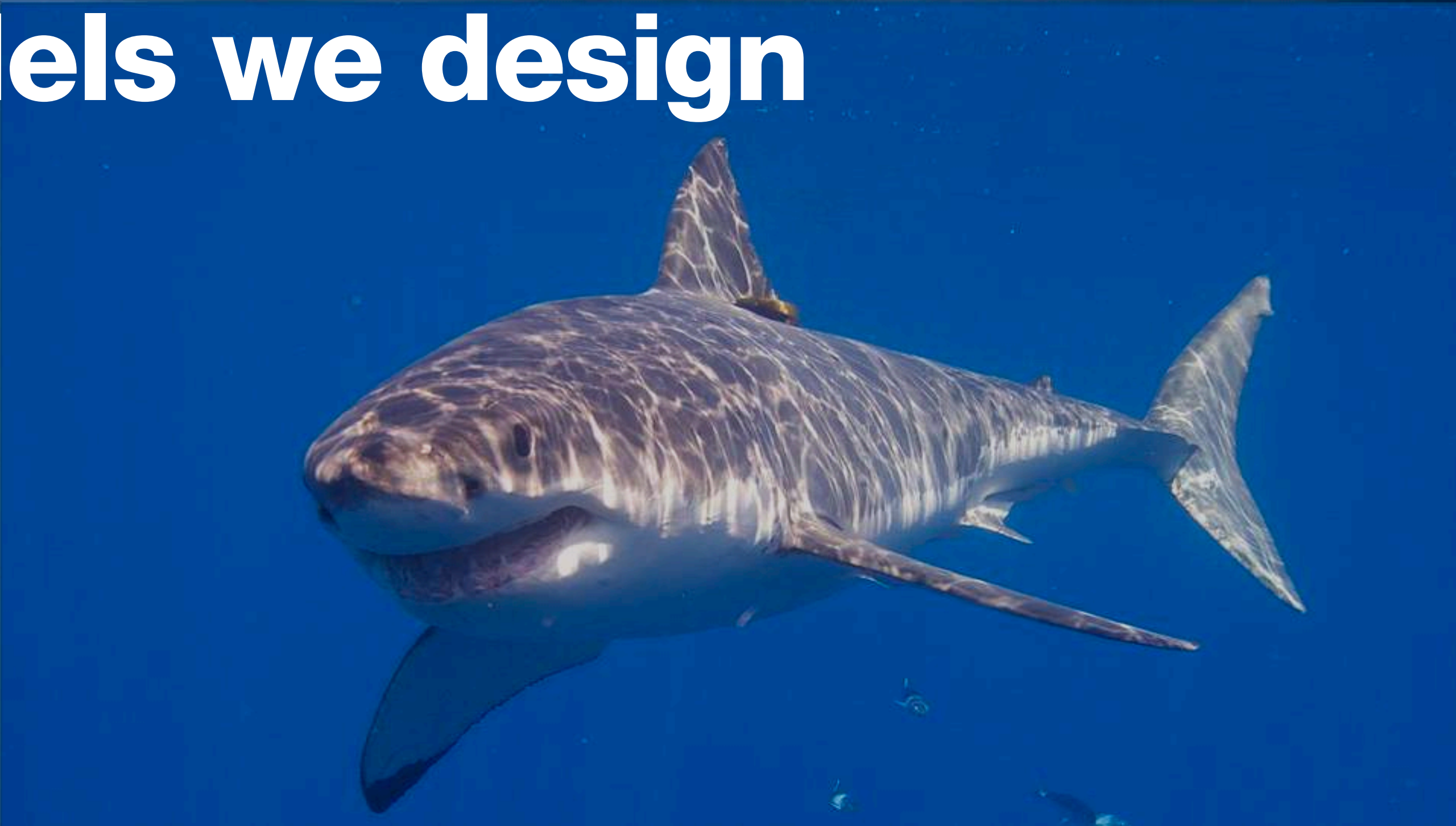
© 2008 - Original Visual Map by Sherrin Bennett  
 © 2009 - Version 2.0 by Steven Wright wrightmarks.com

**The best source of innovation  
is the oldest one: Life**





**Let's do the same with the  
business models we design**



Rules of thumb: Co-create

# 03 Co-create with stakeholders

**A business model can only be sustainable if it's open and collaborative, so our approach has to be the same.**

To understand and redesign the system, it's necessary to involve many types of stakeholders, as well as experts, to find root causes and solutions that will work in practice.



***What you do for me,  
but without me, you  
do against me.***

- Gandhi

Rules of thumb: Waste

# 04 Obsess over waste and value

**Waste is any resource, tangible or not, that doesn't have significant value. So find waste and idle resources, and remove or make use of them.**

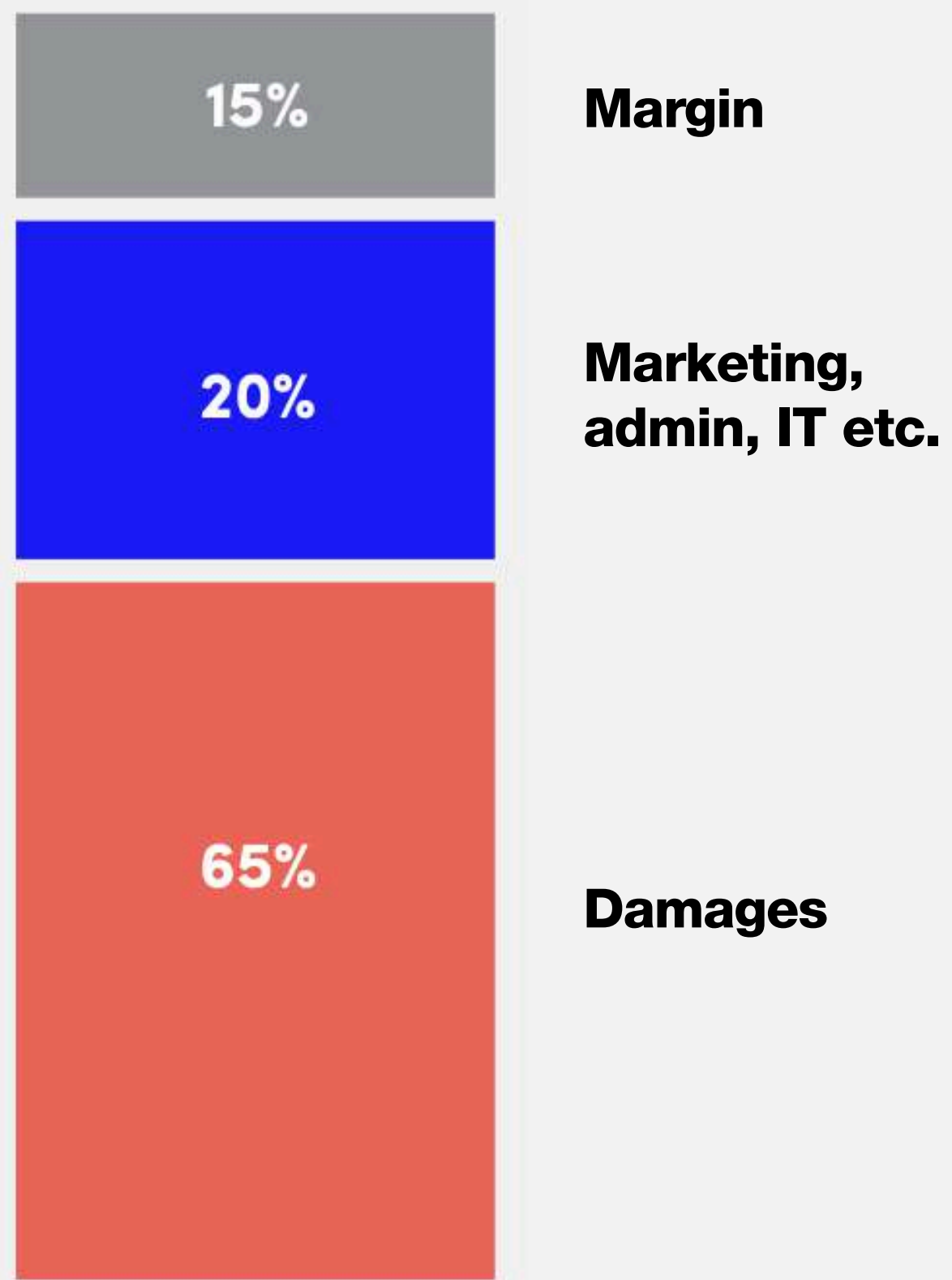
Stay laser-focused on what brings value for people, profit and planet, and what doesn't.







### Typical cost structure in the industry:



Example

**Rema Insurance: Preventing damages is win-win-win**

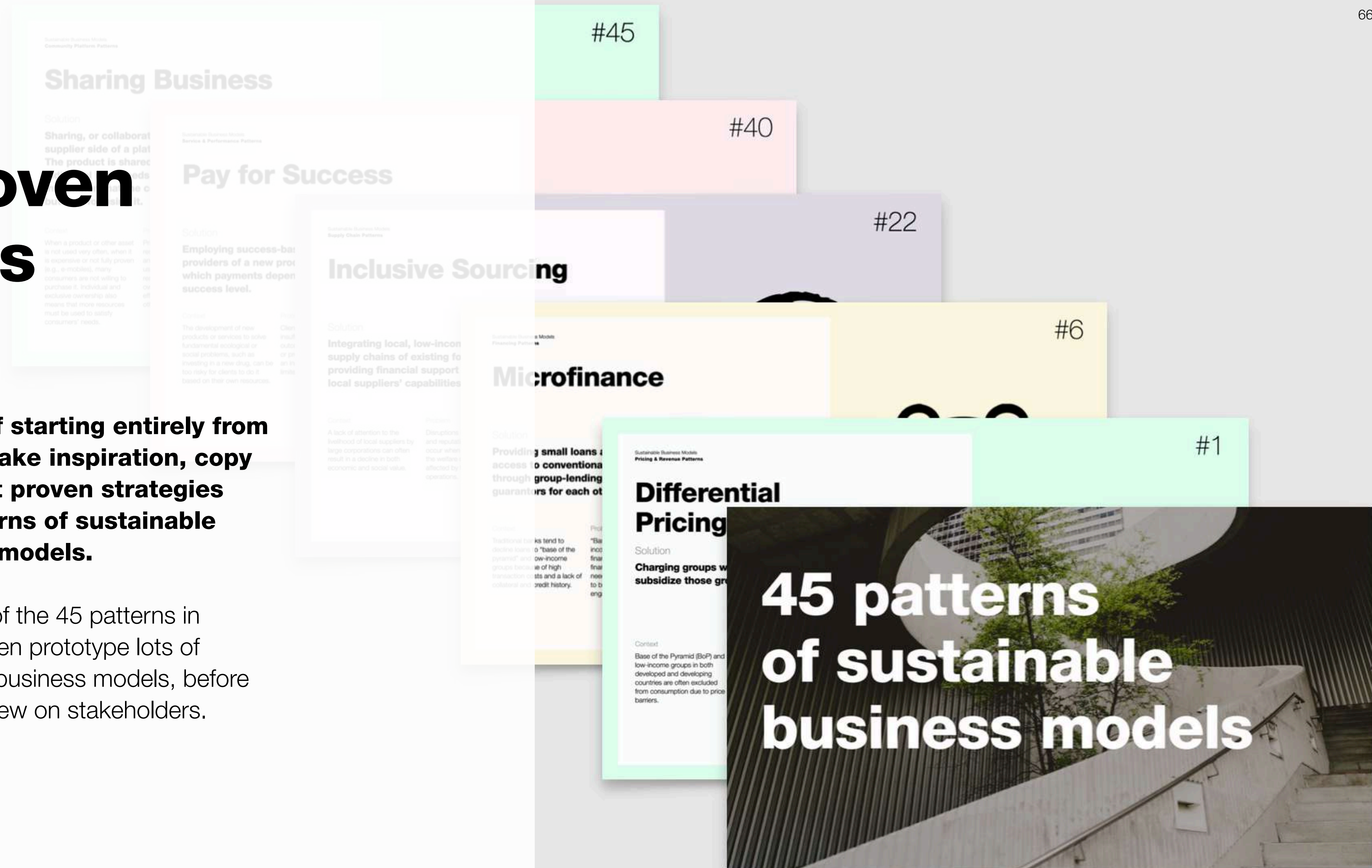
Lavpris



# 05 Apply proven strategies

**Instead of starting entirely from scratch, take inspiration, copy and adapt proven strategies and patterns of sustainable business models.**

Make use of the 45 patterns in ideation, then prototype lots of alternative business models, before you test a few on stakeholders.



**45 patterns  
of sustainable  
business models**

# Service & Performance Patterns

Patterns that emphasise the functional and service value of products and that offer performance management, i.e. how value propositions are defined and delivered.

Sustainable Business Models  
Service & Performance Patterns

## Result-oriented Services

Solution

**The client and provider in principle agree on a result, and there is no pre-determined product involved. The service provider owns the product and is responsible for its use. This creates more accountability within the broader system for product disposal, and higher likelihood of product repair, reuse and recycling. The customer pays for an outcome and not for buying or using a particular product.**

Context

Replacing established and/or complex products, or technologies in a broader sense, is challenging due to several barriers to their diffusion. In particular providers of eco-friendly technologies have to find ways to make their offerings attractive.

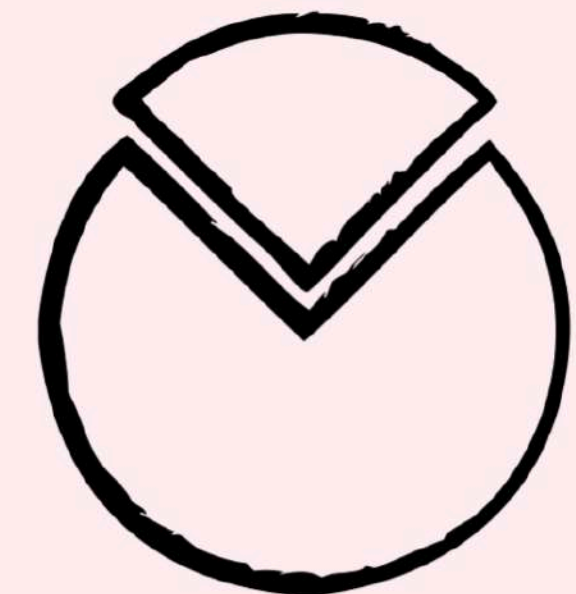
Problem

Switching from old, often inefficient products can be complicated and expensive for users. They are thus not willing or able to invest in new, more efficient products, or technologies in a broader sense. In some cases, this can inhibit switching from old and inefficient products to new, more eco-friendly versions.

Example

Xerox introduced "pay per print" solutions that have been followed by most copier producers. Pay per print means that the customer pays per print, while the copier producer takes over all activities needed to perform the copying or printing functions, including paper, toner, maintenance, repair and replacement of parts or whole copiers if necessary.

#42



Source: Flanig, 2015  
Lücke-Freund et al., 2018



# 06 Test and measure what matters

**To reduce risk of failure, we test and experiment as early as possible. Without data we are in the dark, and we can make more harm than good.**

Identify risky assumptions, things that just have to be true for success, and test the ones you feel queasy about first.



**Instincts, even if based on experience, are regularly wrong.**

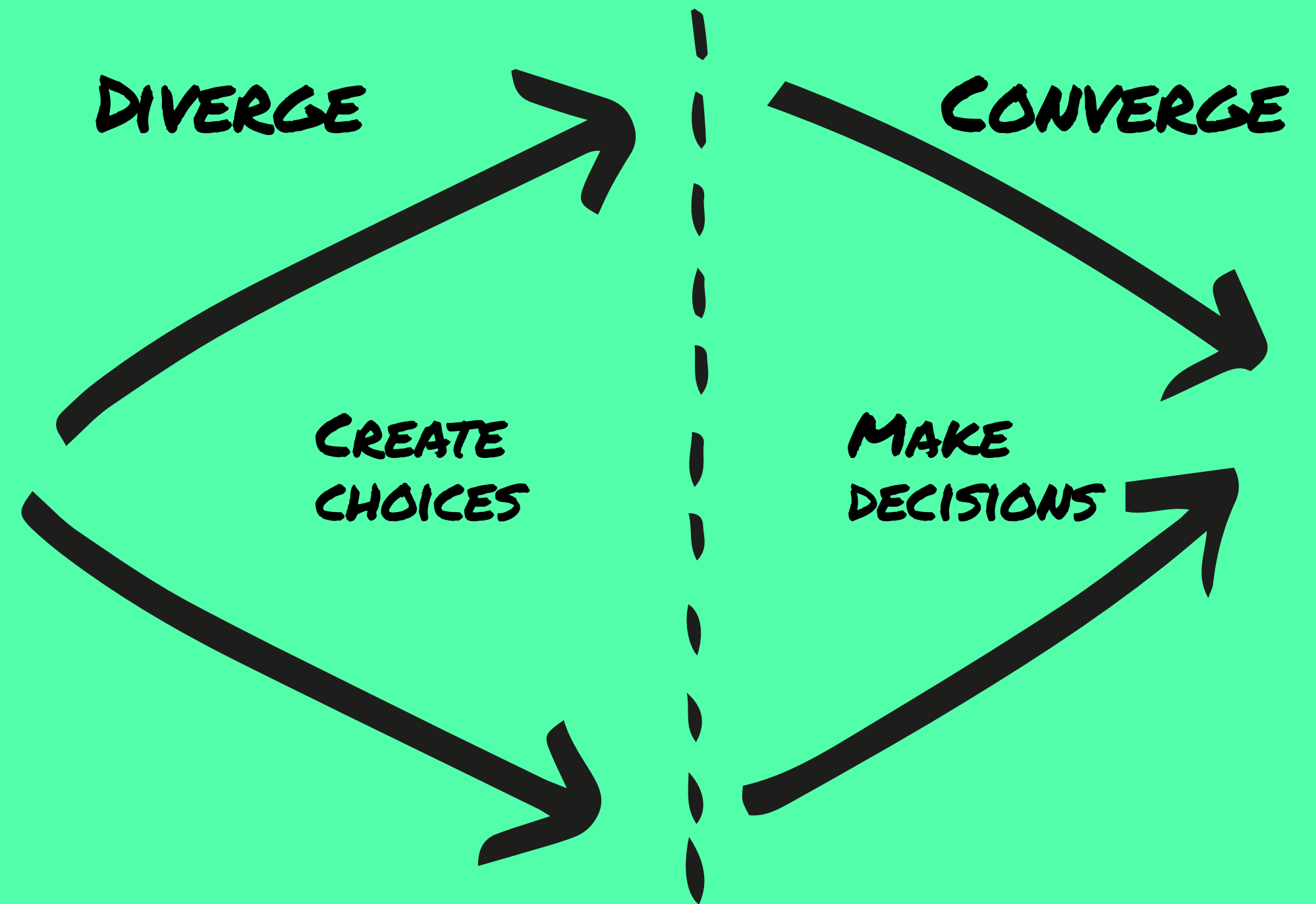
**Decisions need to be based on data, not hunches from hippos\*.**



**\*highest paid person's opinion**

# To make good decisions we need goals, values and data

Designers sometimes over-prioritise divergence and make vital decisions with subjective voting and insufficient data.



# The 'scientific method' applied to innovation

1

## Find the opportunity

- Look for gaps
- Pick a goal and a KPI
- Measure baseline and/or set a target

2

## Form an hypothesis

- With data: Find commonalities/correlation
- Without data: Educated guess
- Ideate improvements



3

## Create an experiment

- Design a test or
- Make changes in production
- Measure/gather data

4

## Analyse and decide

- Did we reach our target?
- Why/not?
- Repeat or go back



# Validating the market

## Key questions:

**Do enough people consider this problem important enough to make up an addressable market for our value proposition?**

Are people actually willing to reach into their wallet and buy in a real purchase situation?



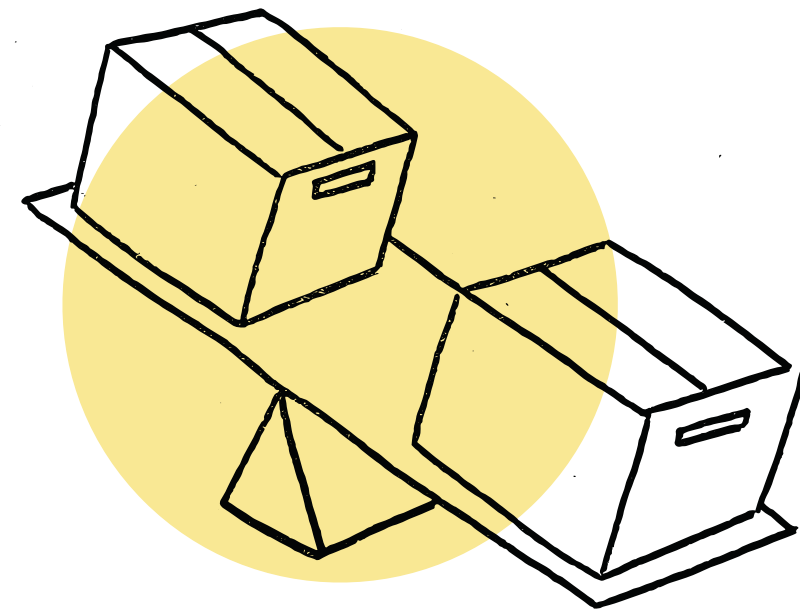


# Validating the market: Key methods



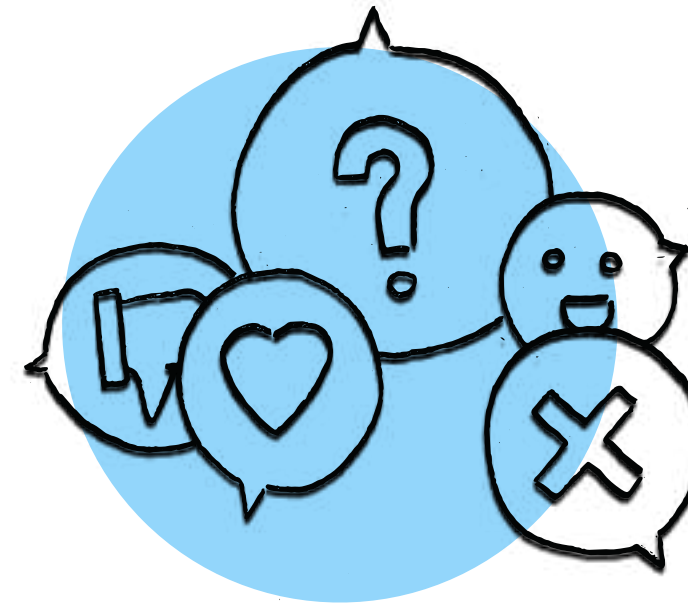
## Smoke test

Pretend to sell your (fictional) product to test if people are willing to buy, register or pre-order (at a price that covers costs).



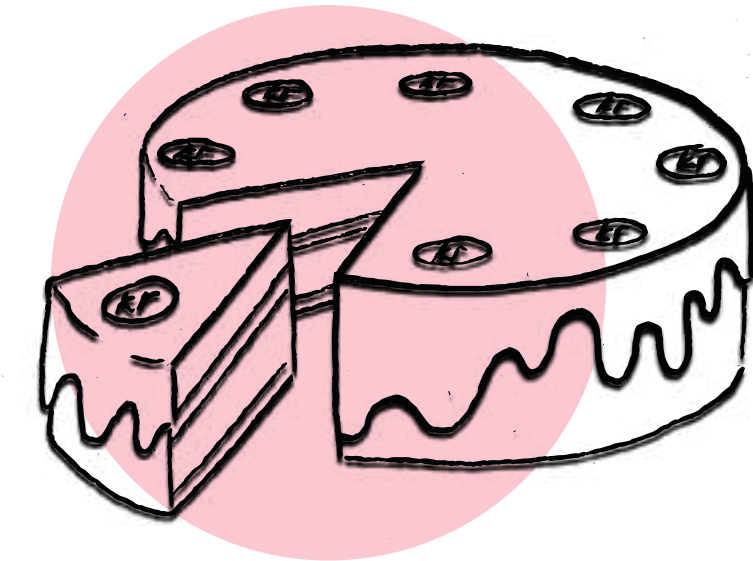
## Conjoint analysis

Based on an advanced survey, statistically estimate consumers' trade-offs and preferences for different combinations of features and prices.



## Validation survey

After qualitative research, do a survey to quantify how many people have the main need/problem you are targeting. If you already have a product, ask users how they would feel if it disappeared.



## Numerical prototype

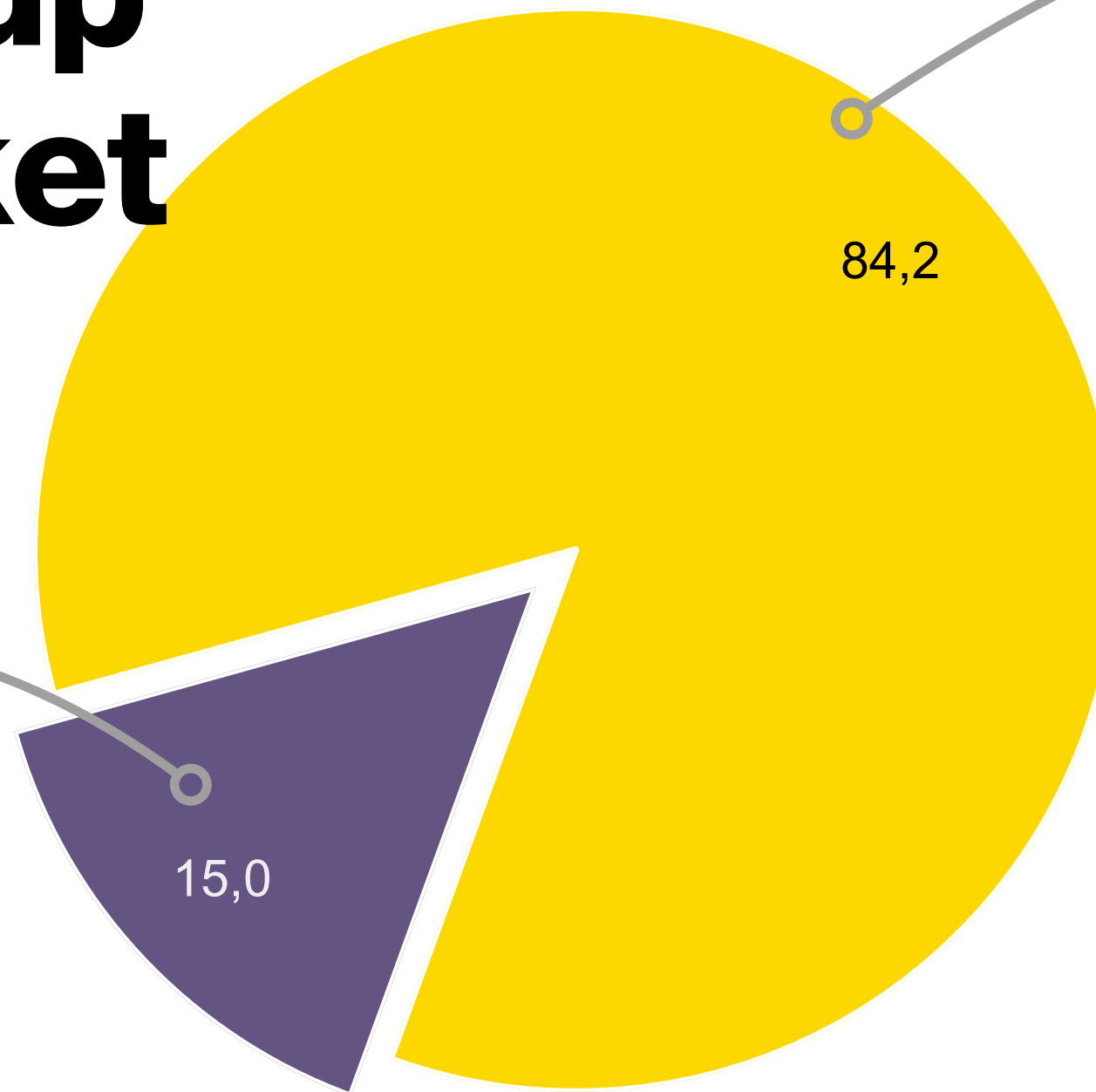
Based on quick desk research and educated guesses, you make rough estimations of market size or potential revenues.



# Validation survey showed target group is 15% of the market



«Lost control»



● Usikker

● Kontroll



# Smoke test to validate willingness to pay

A

FOR KUNDER | FOR RENHOLDERE

Rent hjem - enkelt, trygt og fornuftige priser!

Kun 1200,- per vask

[→ Meld din interesse](#)

Jeg godtar bruk av personopplysninger som beskrevet [her](#)

B

FOR KUNDER | FOR RENHOLDERE

Rent hjem - enkelt, trygt og fornuftige priser!

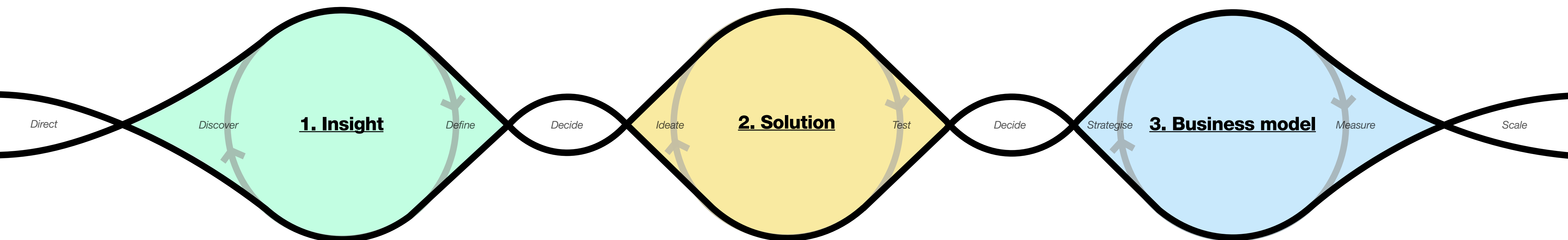
Kun 900,- per vask

[→ Meld din interesse](#)

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# The sustainable innovation process



- Discover unmet needs of people, profit, planet
- Map the system and flows in the value chain
- Define clear outcomes and problems to be solved

- Take inspiration from proven strategies and living systems
- Co-create solutions and business model changes
- Test prototypes on stakeholders

- Prototype the full business model as a system
- Define risky hypotheses, set up experiments
- Set go-to-market strategy, scale up as risks go down

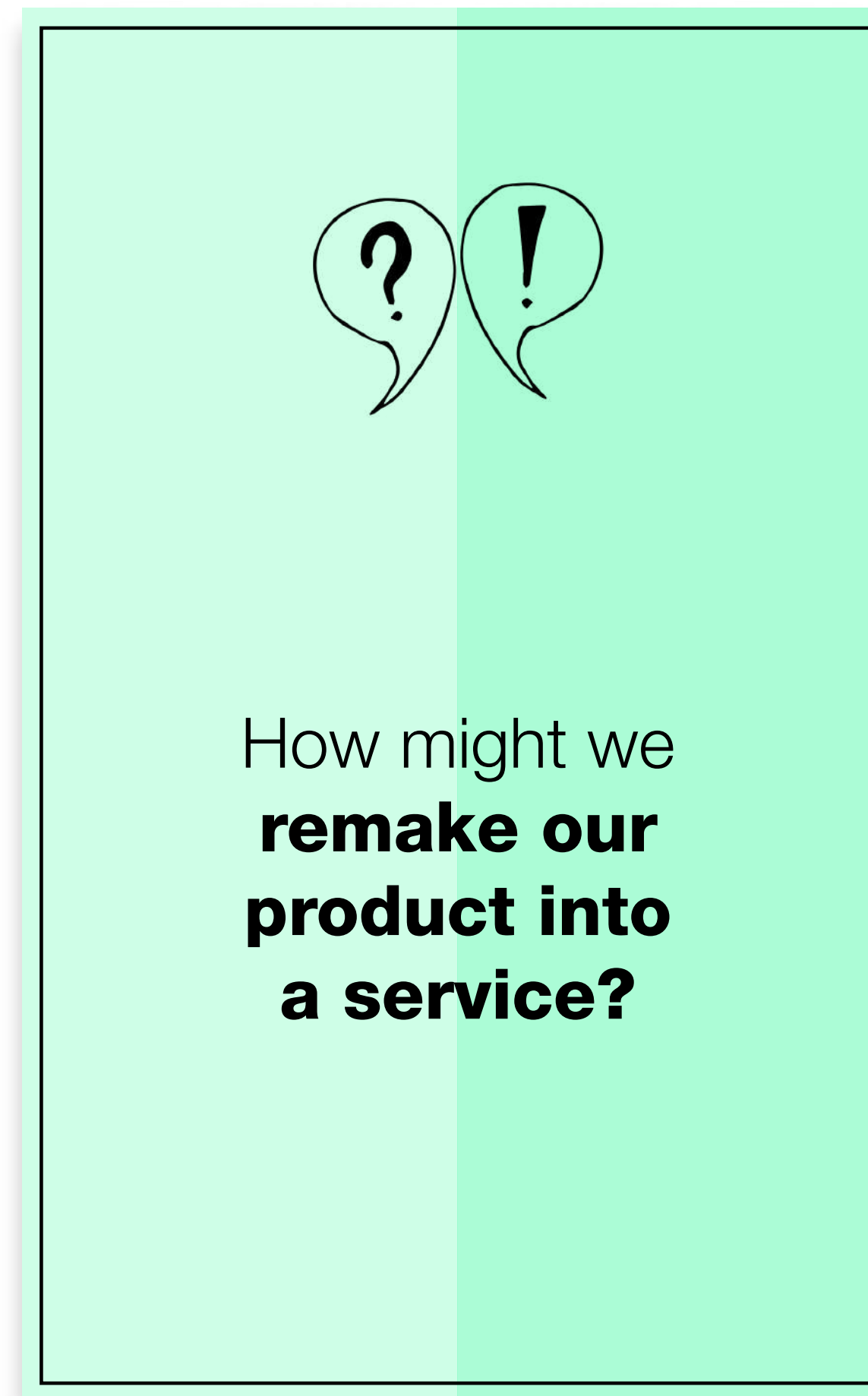


**Four tools for sustainable business model innovation**

# Value map



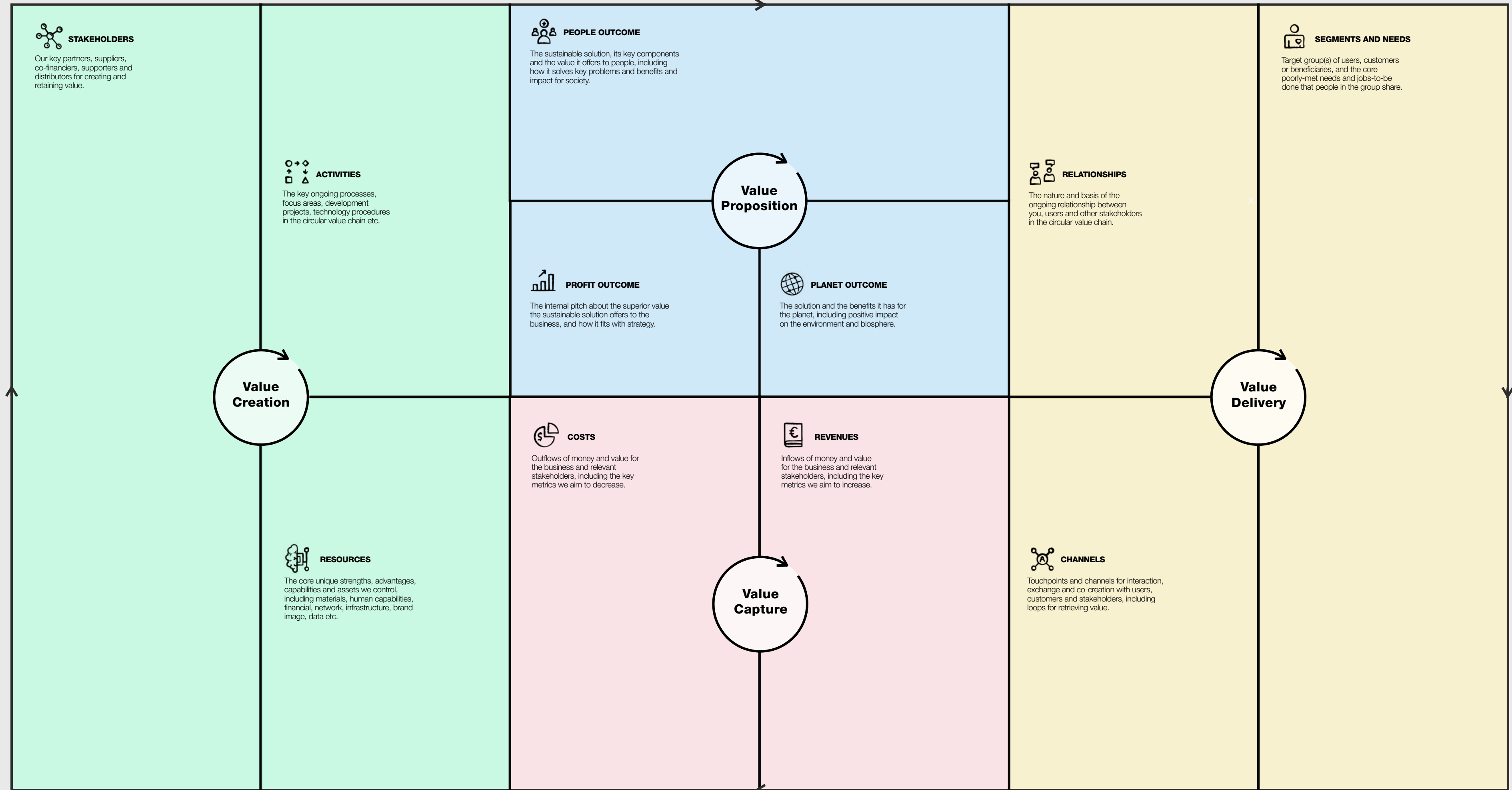
**Four tools for  
sustainable business  
model innovation**



# Four tools for sustainable business model innovation

## Sustainable Business Model Canvas

Designed for: \_\_\_\_\_ Designed by: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_



Source: Adapted from Blocken et al and Osterwalder

## Four tools for sustainable business model innovation

Sustainable Business Models  
Community Platform Patterns

### #45

## Sharing Business

Solution  
**Sharing, or collaborat supplier side of a plat The product is shared individual user needs in common that the c but only for using it.**

Context  
When a product or other asset is not used very often, when it is expensive or not fully proven (e.g., e-mobiles), many consumers are not willing to purchase it. Individual and exclusive ownership also means that more resources must be used to satisfy consumers' needs.

Sustainable Business Models  
Service & Performance Patterns

### #40

## Pay for Success

Solution  
**Employing success-ba providers of a new pro which payments depen success level.**

Context  
The development of new products or services to solve fundamental ecological or social problems, such as investing in a new drug, can be too risky for clients to do it based on their own resources.

Sustainable Business Models  
Supply Chain Patterns

### #22

## Inclusive Sourcing

Solution  
**Integrating local, low-incon supply chains of existing fo providing financial support local suppliers' capabilities**

Context  
A lack of attention to the livelihood of local suppliers by large corporations can often result in a decline in both economic and social value.

Problem  
Disruptions and reputati occur when the welfare affected by operations.

Sustainable Business Models  
Financing Patterns

### #6

## Microfinance

Solution  
**Providing small loans a access to conventiona through group-lending guarantors for each ot**

Context  
Traditional banks tend to decline loans to "base of the pyramid" and low-income groups because of high transaction costs and a lack of collateral and credit history.

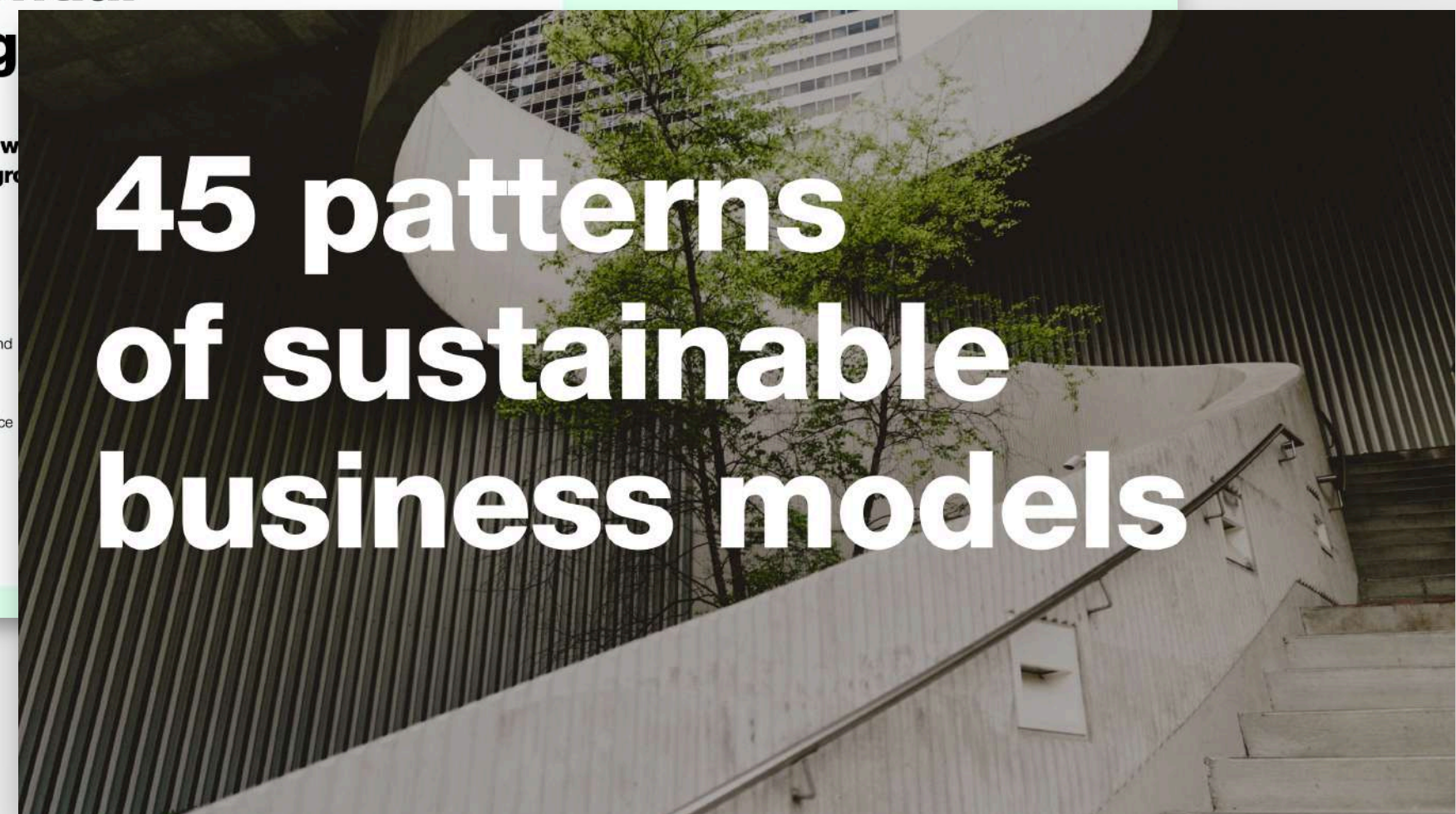
Sustainable Business Models  
Pricing & Revenue Patterns

### #1

## Differential Pricing

Solution  
**Charging groups w subsidize those gro**

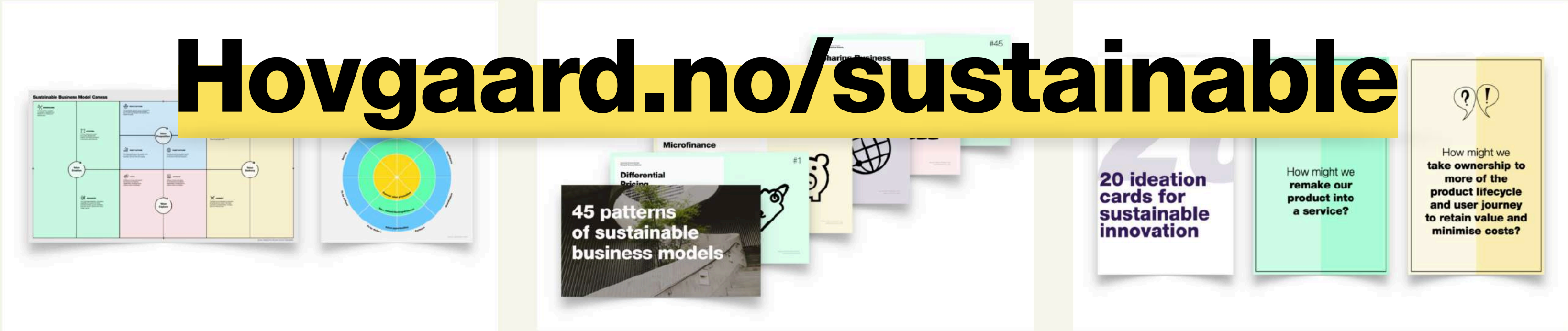
Context  
Base of the Pyramid (BoP) and low-income groups in both developed and developing countries are often excluded from consumption due to price barriers.





## Download tools and resources for sustainable business model innovation

# Hovgaard.no/sustainable



### The sustainable business model canvas

#### + The value map

Two tools for co-creating business models and identifying new opportunities for sustainable innovation. Print big, get your post-its, gather key stakeholders and start prototyping.

[Go to tool ->](#)

### Patterns of sustainable business models

This is a deck of typical patterns business models that have a proven potential for good, sustainable impact. So you can take inspiration and copy from the best.

[Go to tool ->](#)

### Ideation cards for sustainable innovation

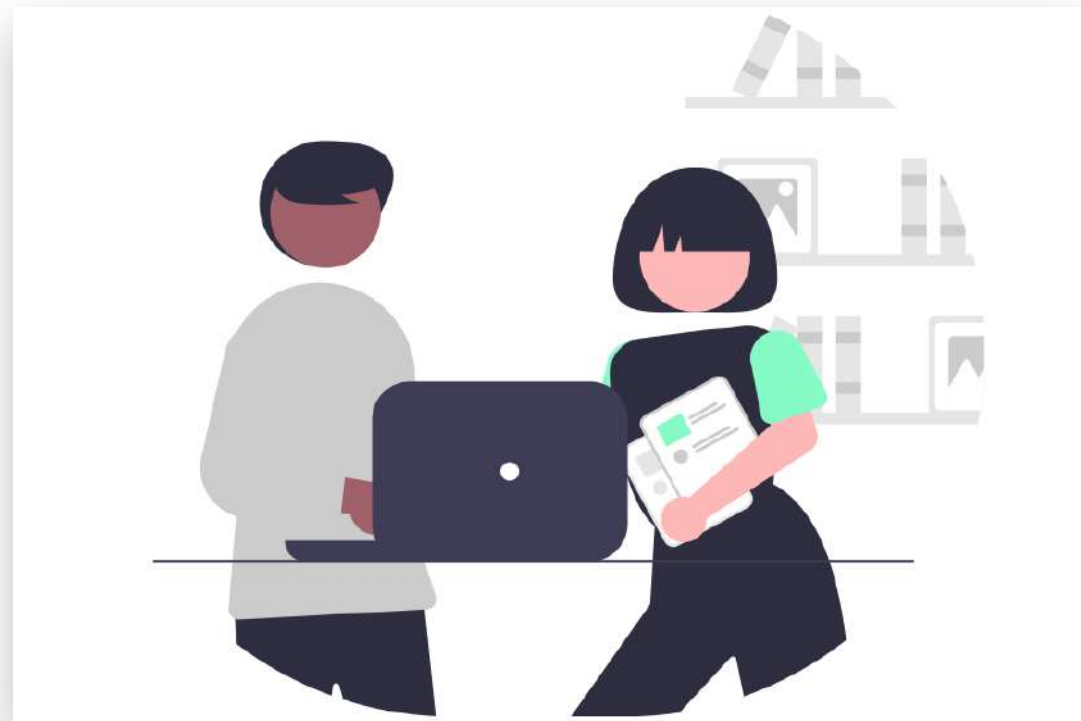
Spark new ideas for circular solutions or sustainable services with this deck of cards with research-based "how might we?" questions. Great for workshops.

[Go to tool ->](#)

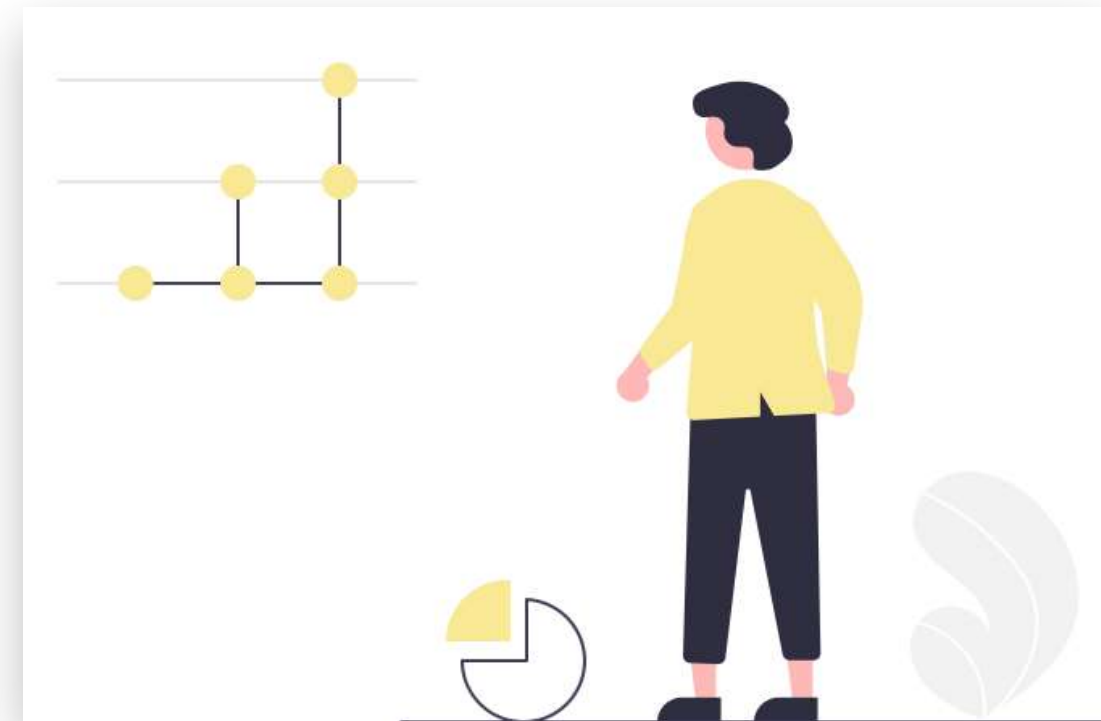
How to get started:  
**Begin guerrilla  
style, prove value,  
then scale**



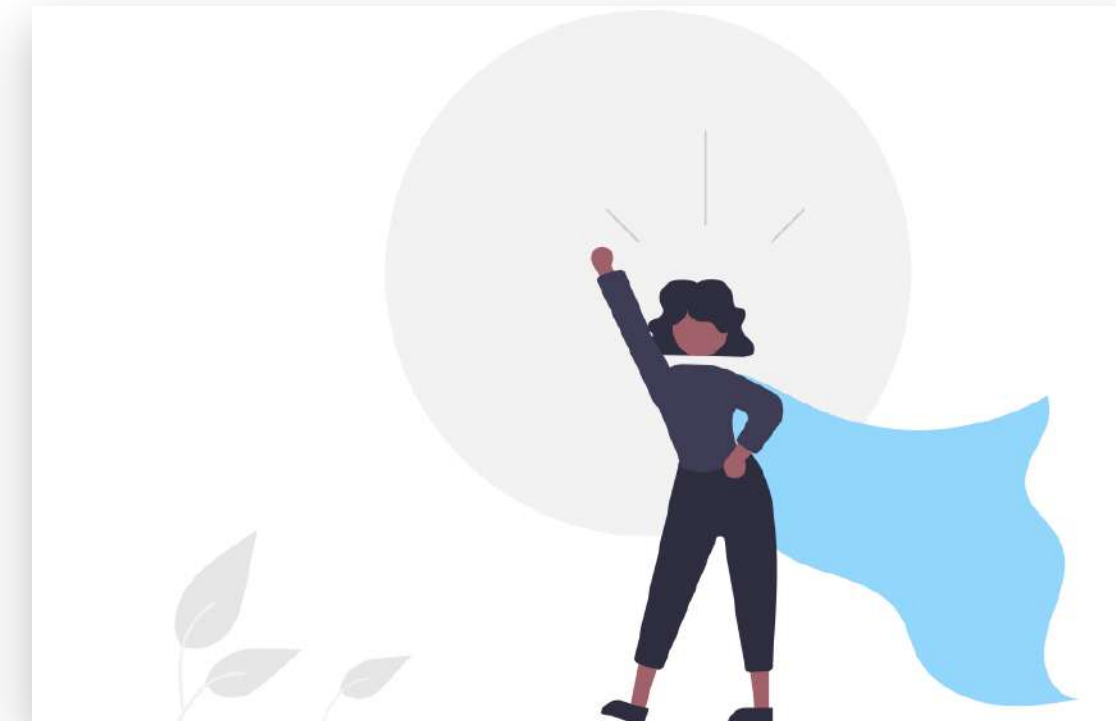
## **How to get started: Four tips**



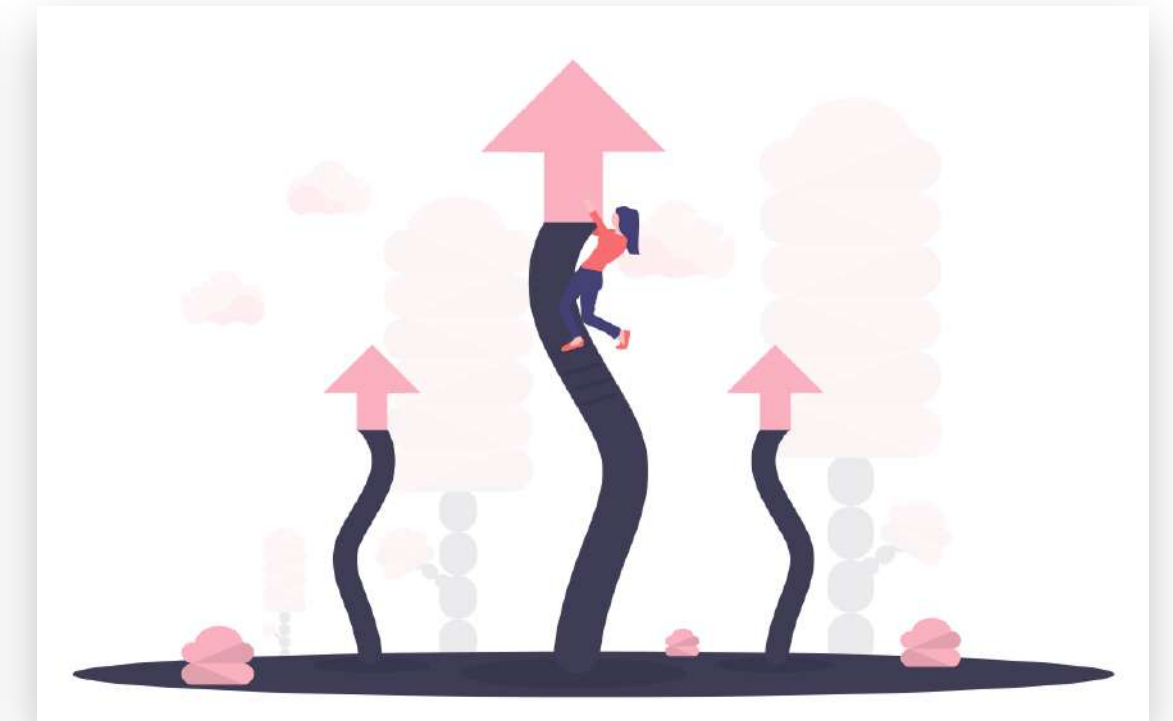
**Start small, guerilla style with a couple of colleagues**



**Sell the business opportunity using numbers and stories**



**Lean in like an entrepreneur, and play the long game**



**Go big when you have proven the value of sustainable innovation**



~~*Move fast and break things*~~

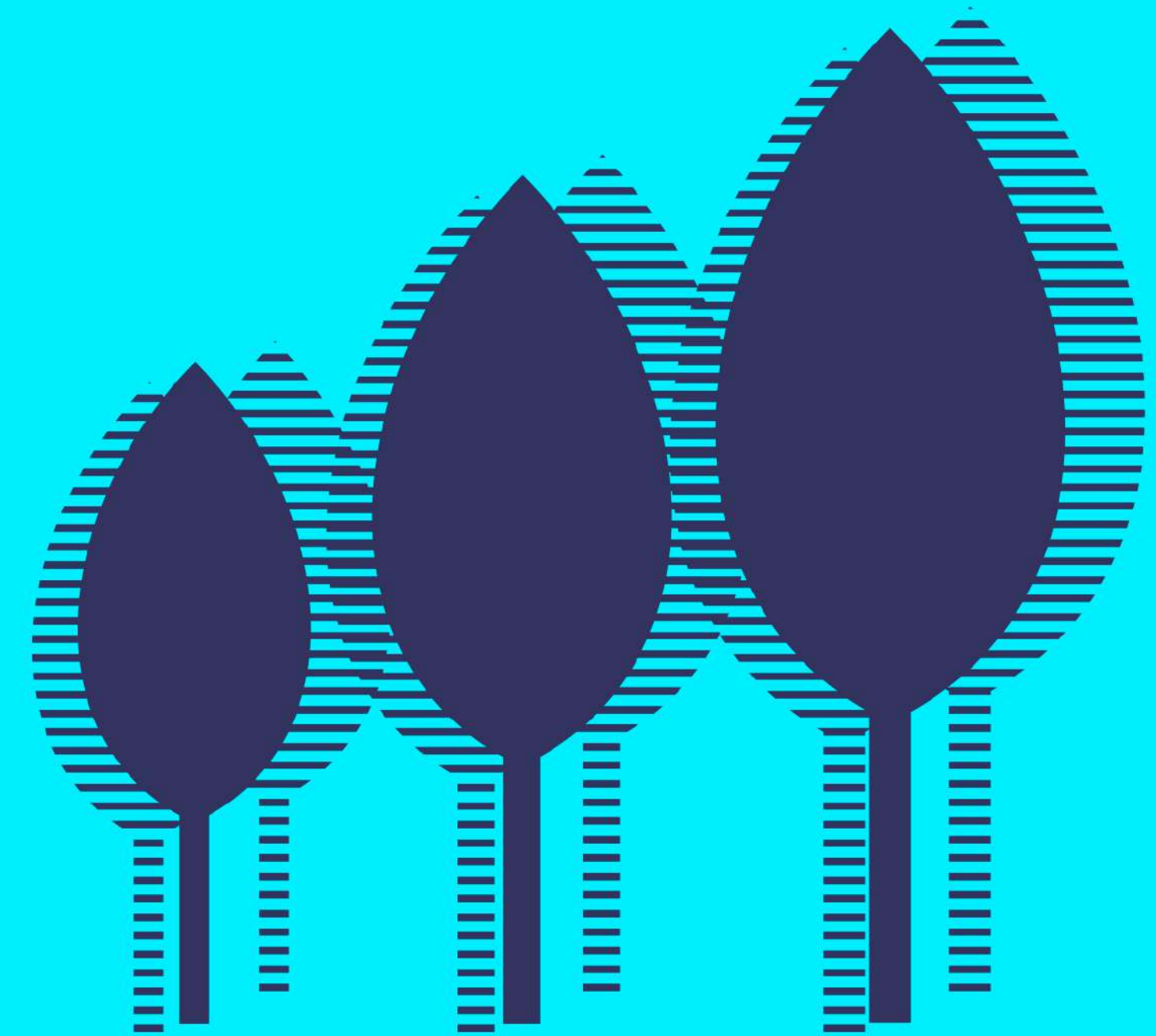
**Move steady and fix things**



# Business design for sustainable growth and innovation

6-WEEK COURSE, April 12 - May 21

Check it out at [servicedesign.college](https://servicedesign.college)



Questions for you:

- **What do you now think sustainable business model innovation is really about?**
- **What was your main takeaways or aha moments?**