

Challenges of circular transformation

Ljubljana, November 8th, 2019
Christiaan Kraaijenhagen

Innoboost





www.footprint.wwf.org.uk





Circular Economy

An economy in which stakeholders collaborate in order to maximise the value of products and materials, and as such contribute to minimising the depletion of natural resources and create positive societal and environmental impact.





Prioritise
regenerative
resources



Design
for the
future



Preserve
& extend what's
already made



Rethink
the business
model



Incorporate
digital
technology



Use
waste as
a resource



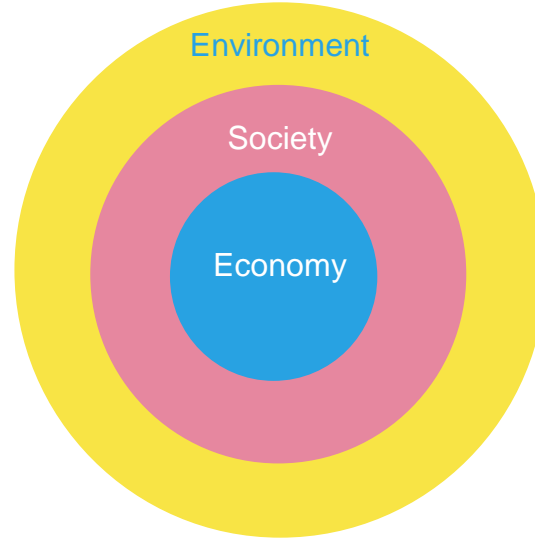
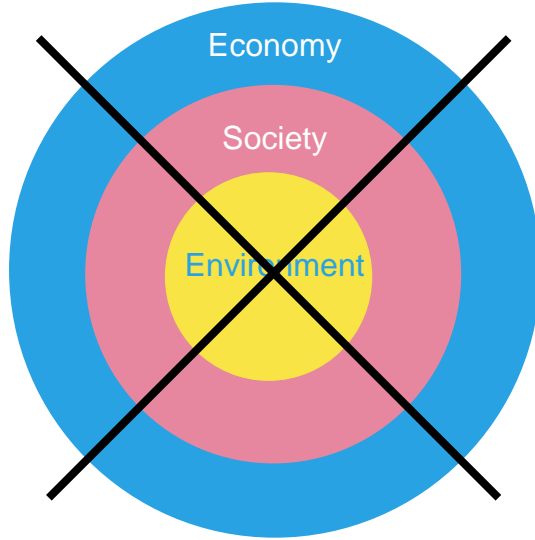
Collaborate
to create
joint value

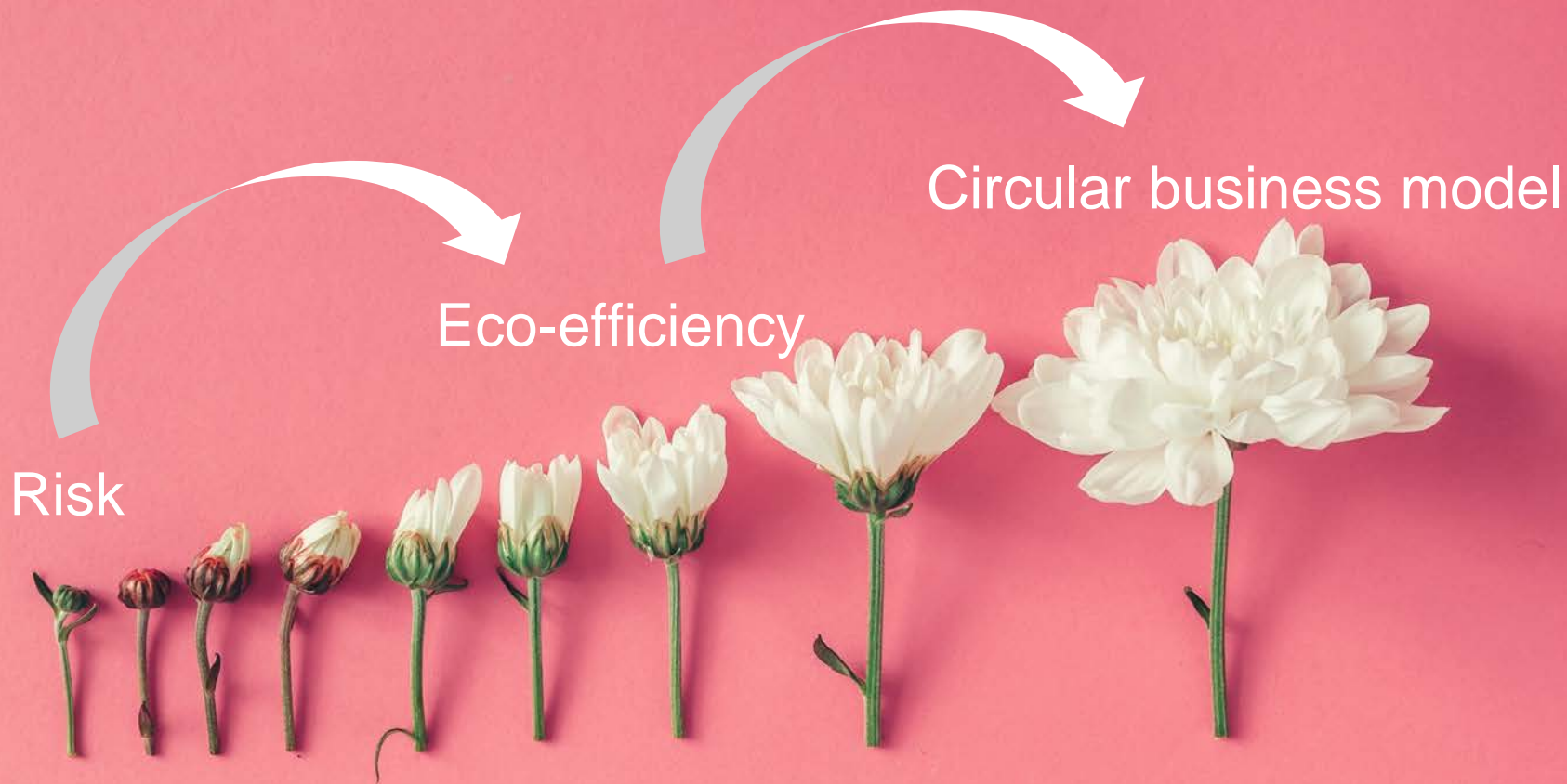
+ Biodiversity Regeneration

A net economic
Benefit of **€1.8
trillion by 2030**

Volatile prices









PHILIPS

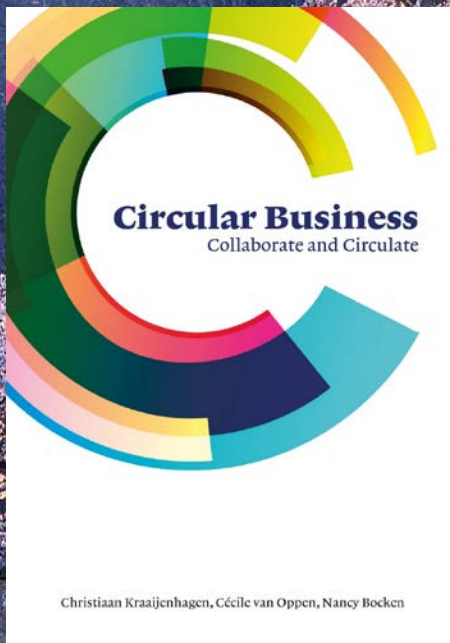


||| From
commodity to
service to
experience

||| Let's put **people** at the heart
of innovation and create **profit to**
be proud of

**That's how businesses can be a force for
good**







**Evaluate and learn
between every step**

PHILIPS



Evaluate and learn
between every step



MUD JEANS



peerby





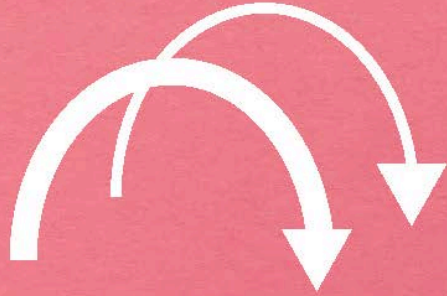
Key topics for today

- Leadership
- Vision and purpose
- Sketching the system
- Circular business model innovation

Principles / mindset:

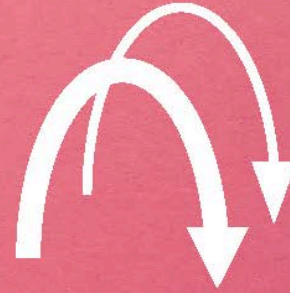
- Experiment
- Collaborate





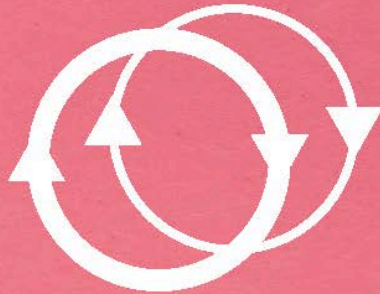
Linear flow

We take resources, make products and dispose products when they become obsolete



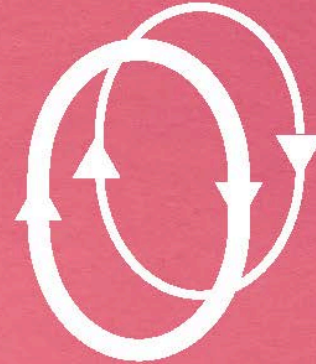
Narrowing loops

Strategies to use few resources to manufacture products and developing energy-efficient products.



Closing loops

Strategies related to recycling in order to 'close the material loop' after multiple reuses.



Slowing loops

Refers to strategies such as maintenance, repair, refurbishing and remanufacturing to encourage product reuse

**Evaluate and learn
between every step**



Circular business
starts with **leadership**



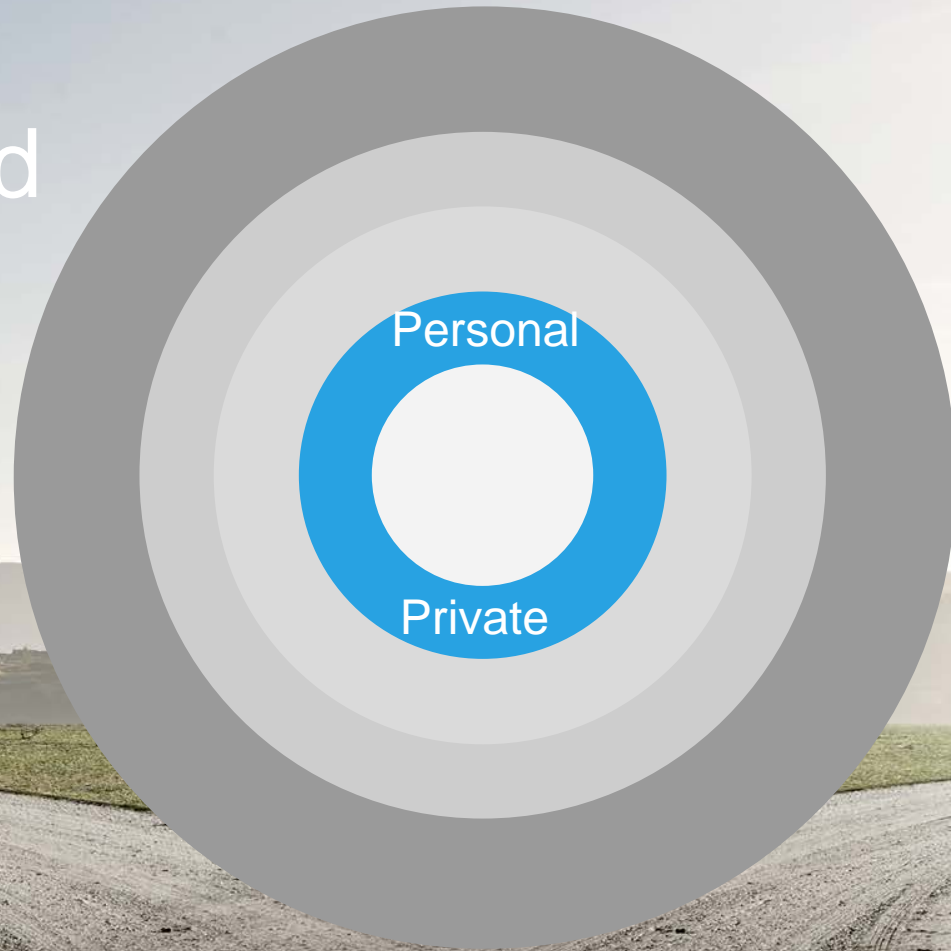
||| Leadership
dilemma: Satisfy
financial
stakeholders on
short term vs long
term?



A person in a dark suit and black shoes stands on a wooden pier extending into a blue sea under a bright sky with scattered clouds and birds. The person holds a large, transparent sheet that covers the pier and sea, creating a visual transition between the two scenes. The text "Steer beyond short term financials..." is overlaid on the right side of the image.

Steer beyond short
term financials...

||| You lead

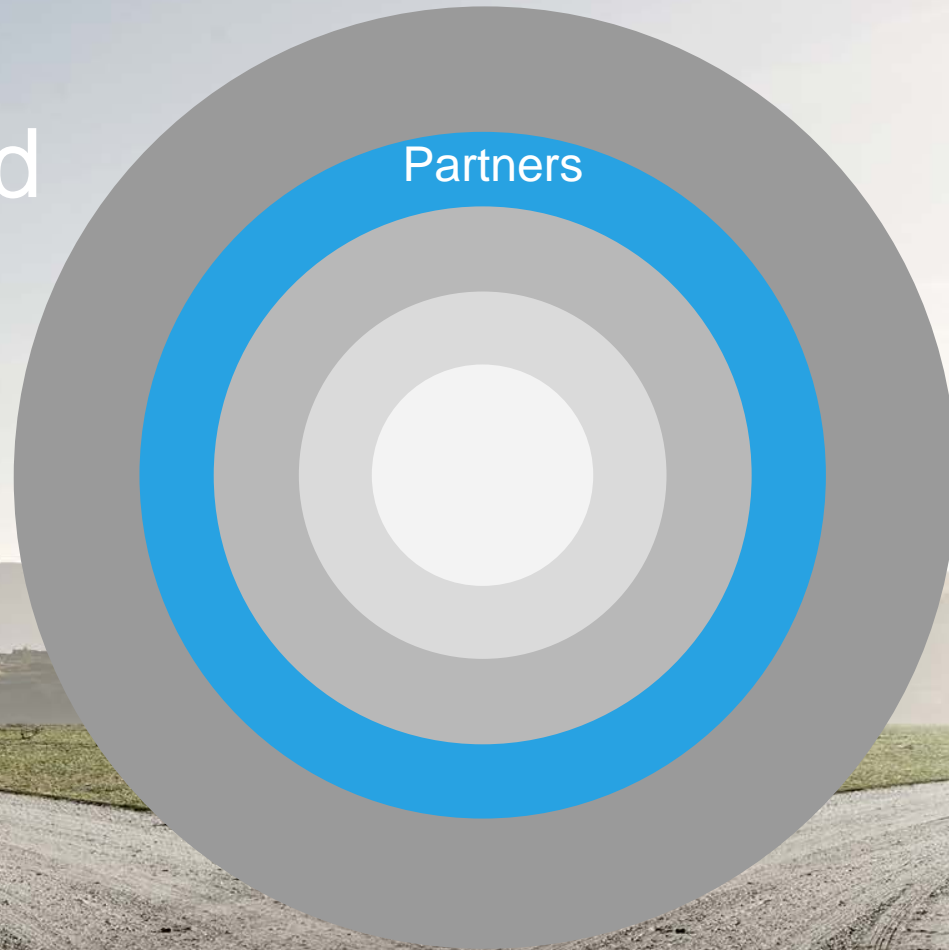


||| You lead

Professional

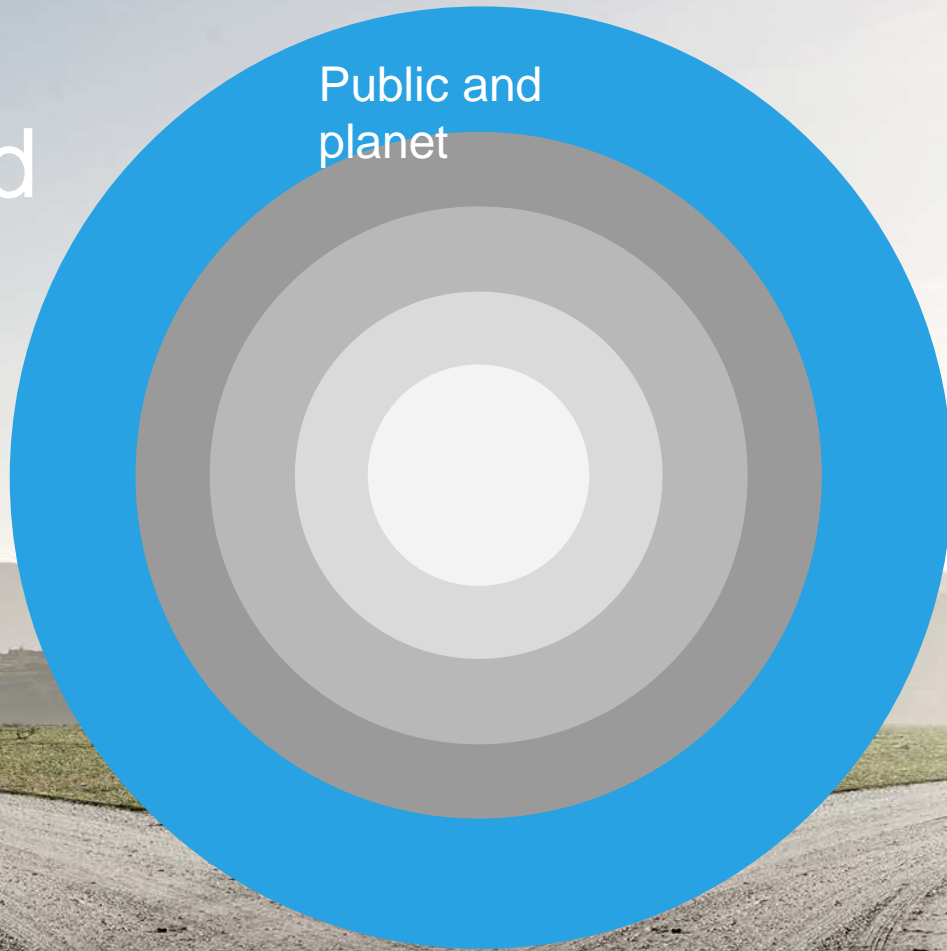


||| You lead



||| You lead

Public and
planet





**Evaluate and learn
between every step**



A landscape photograph showing a dirt road that splits into two paths. The road is dark and has visible tire tracks. The surrounding area is green and grassy. In the background, there are mountains and a line of trees. The sky is hazy. A semi-transparent dark rectangle is overlaid on the left side of the image, containing the text '||| Vision and purpose'.

||| Vision and purpose

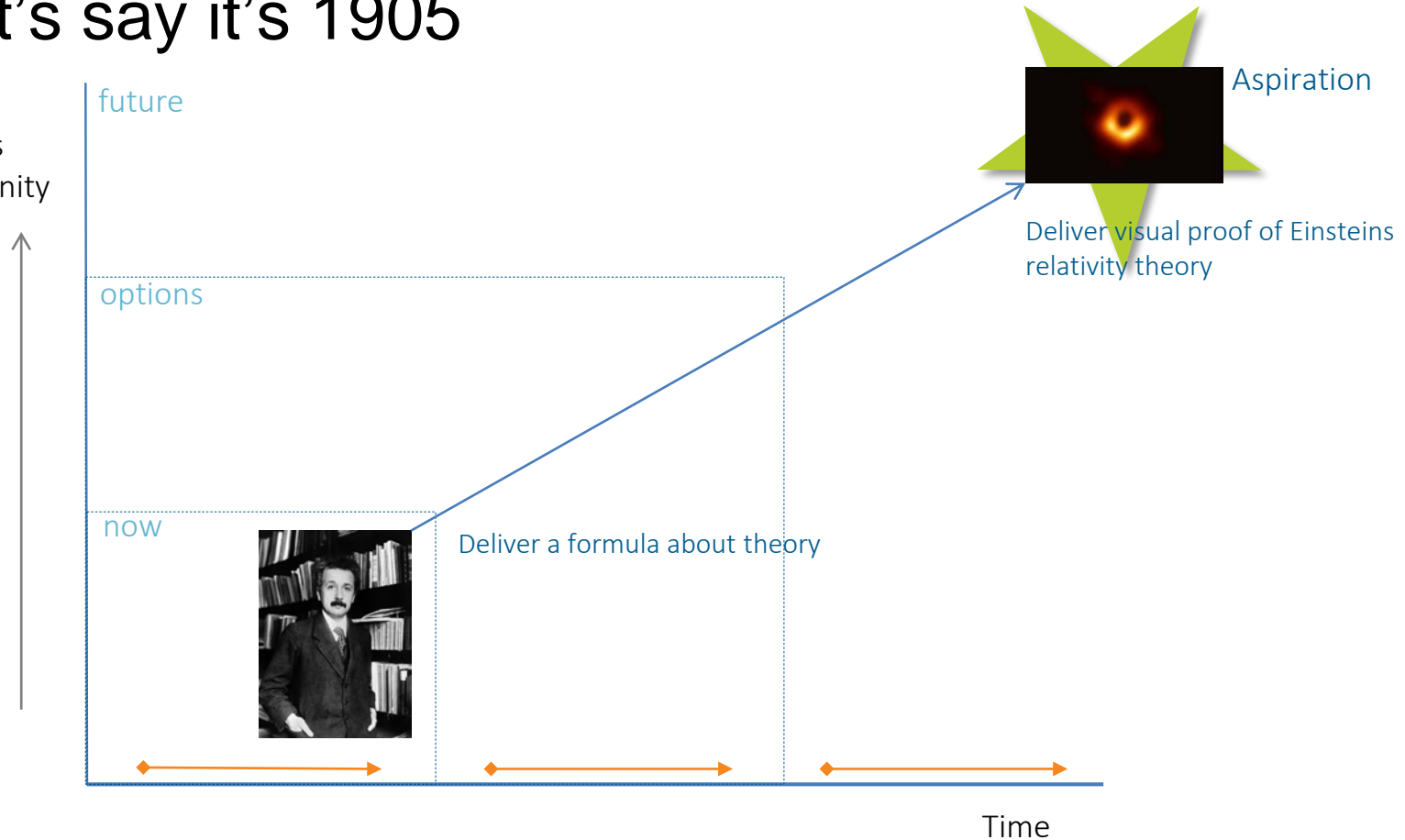


Imagination will often carry us to worlds that never were. But without it, we go nowhere.

Carl Sagan

Let's say it's 1905

Circular
business
opportunity



Build the best
product, cause
no unnecessary
harm, use
business to
inspire and
implement
solutions to the
environmental
crisis

**We're in
business
to save
our home
planet.**

patagonia

We regreen dry
land by using
ancient water
harvesting
techniques,
enabling
rainwater to
infiltrate the
ground again

JUSTDIGGIT

If we can warm up the earth, we can also cool it down.



We produce
hamburgers on a
large scale in a
factory setting,
without
slaughtering
animals for it

The world's first slaughter-free meat



We color textiles without using fresh water, so we reserve fresh water for people to drink.

A promotional image for DyeCoo. It features a central graphic of a silver metal ring with a red powder-like substance being poured through it. To the left of the ring is a white, crumpled fabric, and to the right is a red, crumpled fabric. The background is a light gray gradient. In the top left corner, there is a white circular logo with the text 'DyeCoo' in a stylized font. In the bottom right corner, there is a white circular logo with the text 'NO COMPROMISE' in a bold, sans-serif font. Below the central graphic, there is a black horizontal bar with white text.

DyeCoo

The World's first supplier of 100% water free and process chemical free textile dyeing solutions

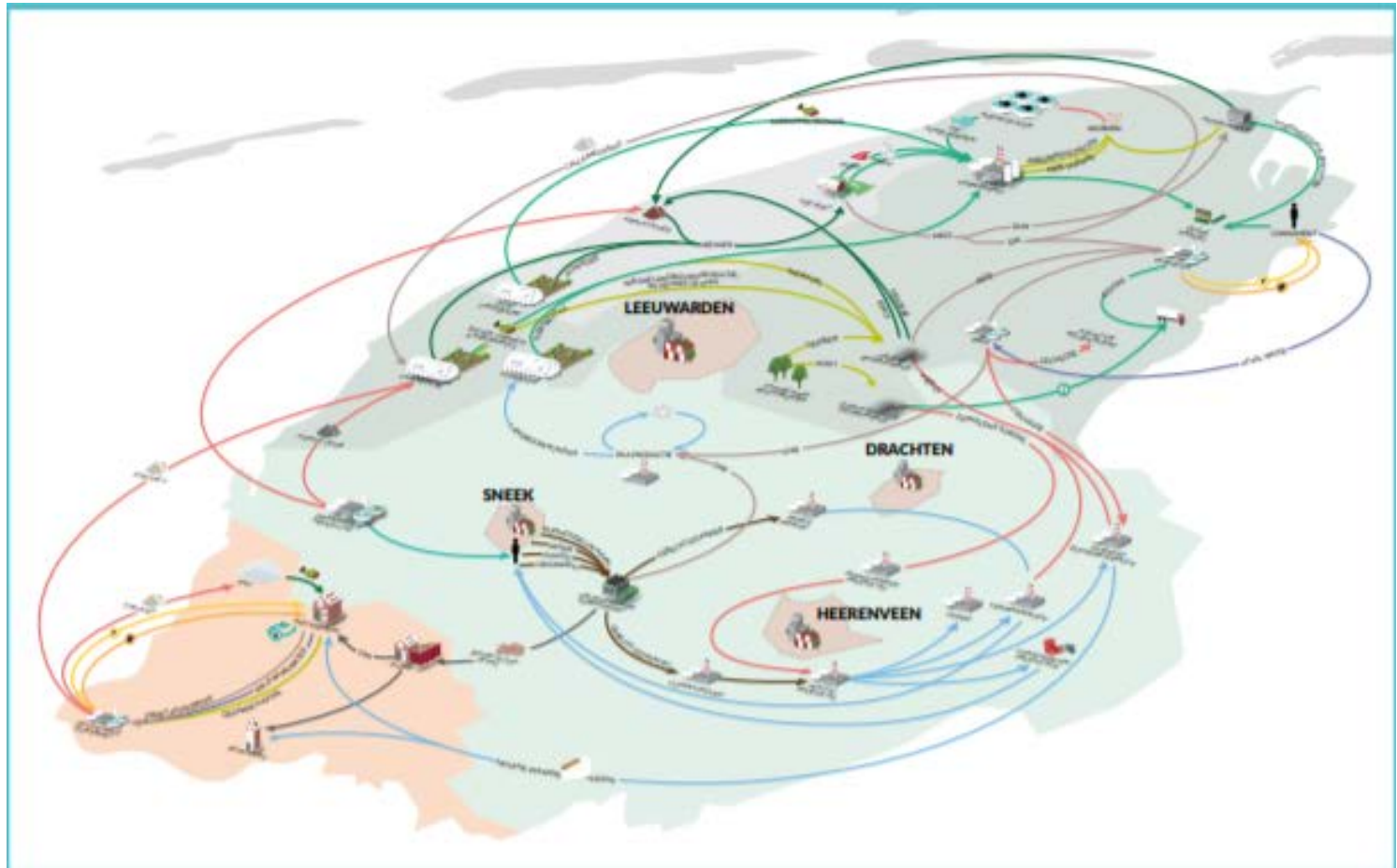
NO
COMPROMISE

**Evaluate and learn
between every step**



A landscape photograph showing a dirt road in the foreground, leading towards a green field and a line of trees. In the background, there are mountains under a hazy sky. A semi-transparent dark rectangle is overlaid on the left side of the image, containing the text '||| Sketching the system'.

||| Sketching the system



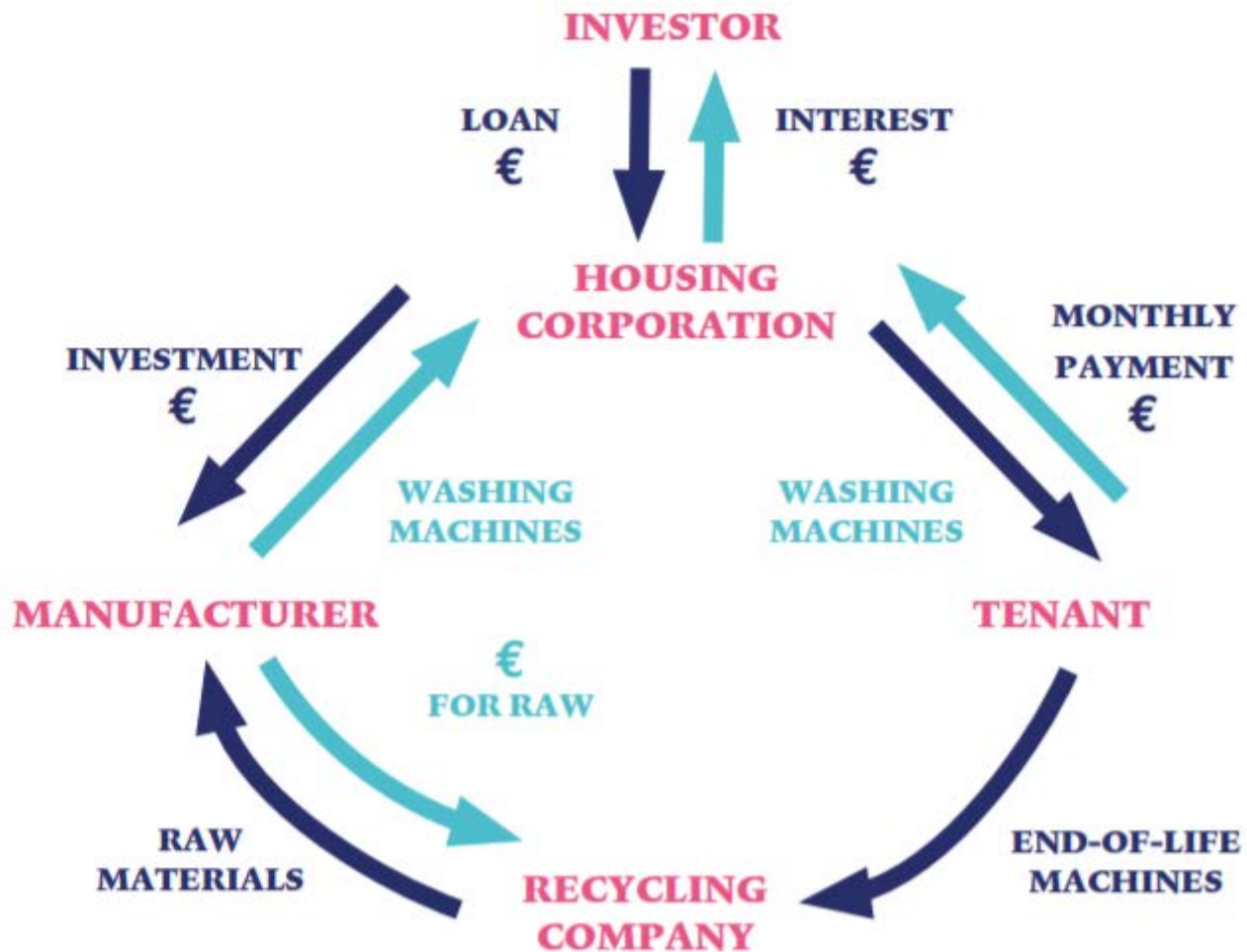
Source: Metabolic, Urgenda 2014, Circular Economy scan of Province Friesland, the Netherlands.

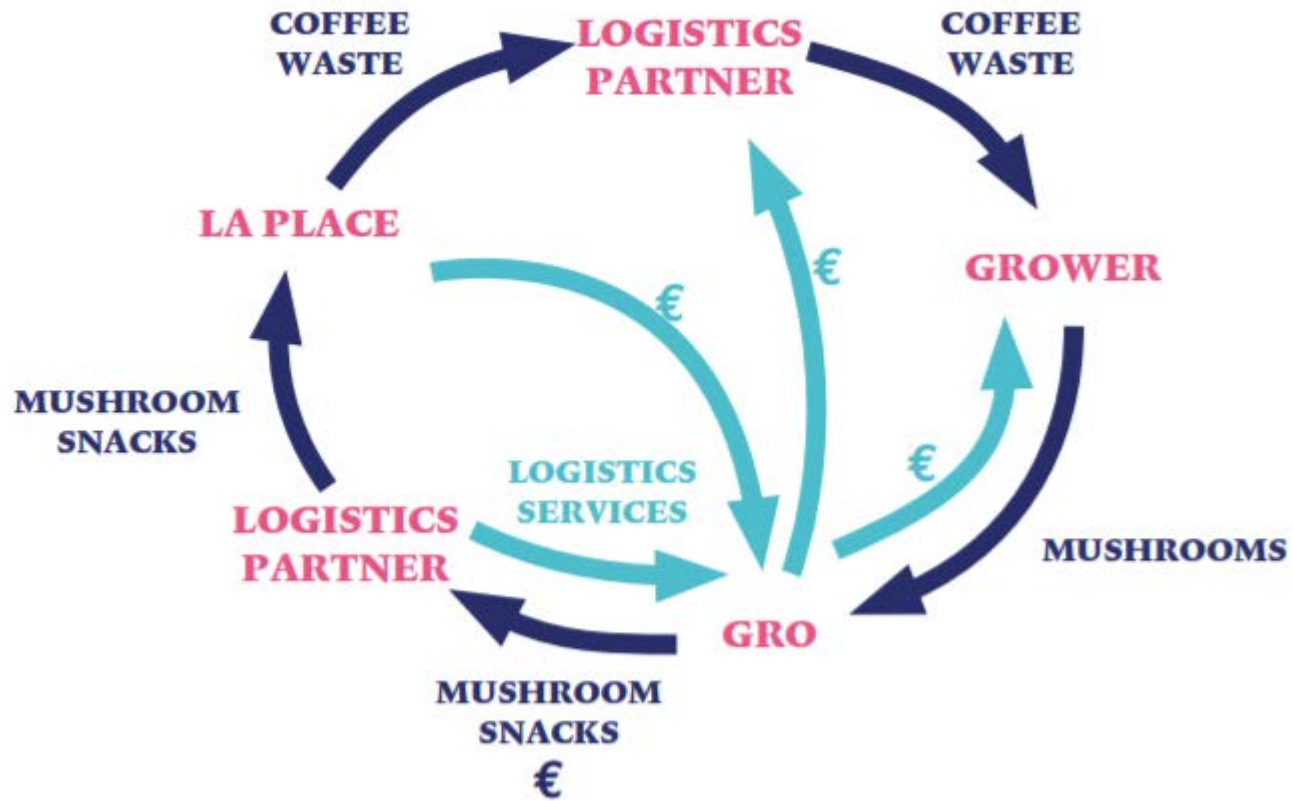


Sketching the system

- Determine the value propositions for your customer(s)
- Identify stakeholders / actors in the system
- Identify the values of the stakeholders / actors in the system:
 - Goods / Services
 - Financial
 - Societal / environmental
 - Data
- Sketch the optimal system







**Evaluate and learn
between every step**



A landscape photograph showing a dirt road intersection. In the foreground, a wide dirt road with visible tire tracks leads towards the right. To the left, a narrower path or road branches off. The middle ground features a green field. In the background, there is a dense line of evergreen trees, and further back, a range of mountains under a hazy, overcast sky. A semi-transparent dark grey rectangular box is overlaid on the left side of the image, containing the text.

||| Circular transformation through experimentation



Ever **tried**
Ever failed
No matter
Try again
Fail again
Fail better

- Becket

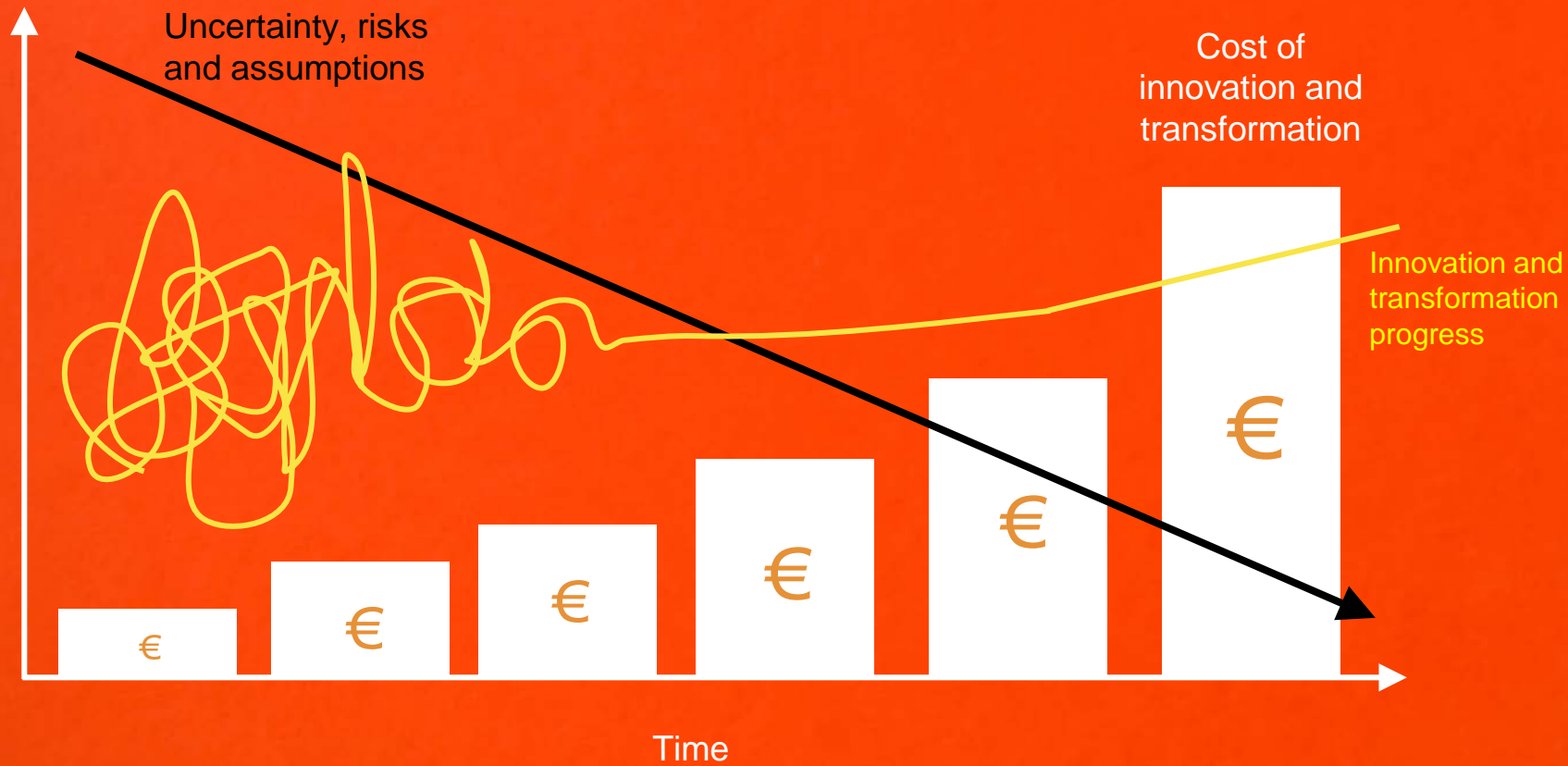


**Think big,
start small.**

||| Experiment = Low risk and investment

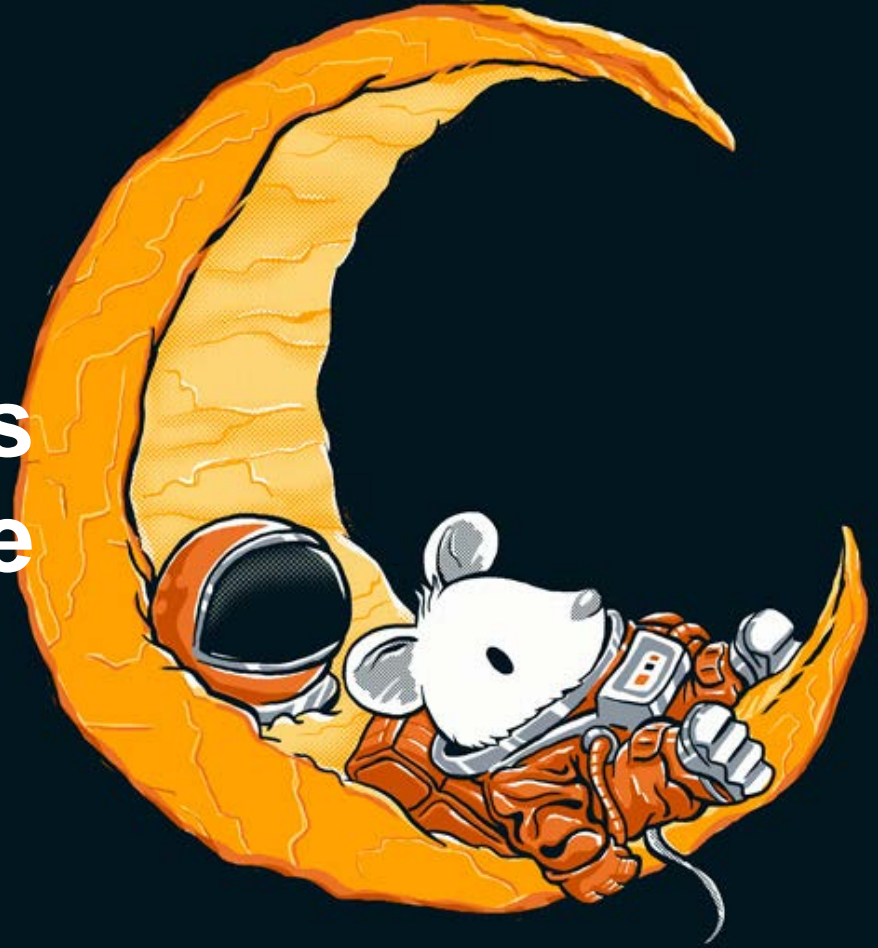


‘Try only for one month. Let’s do it’

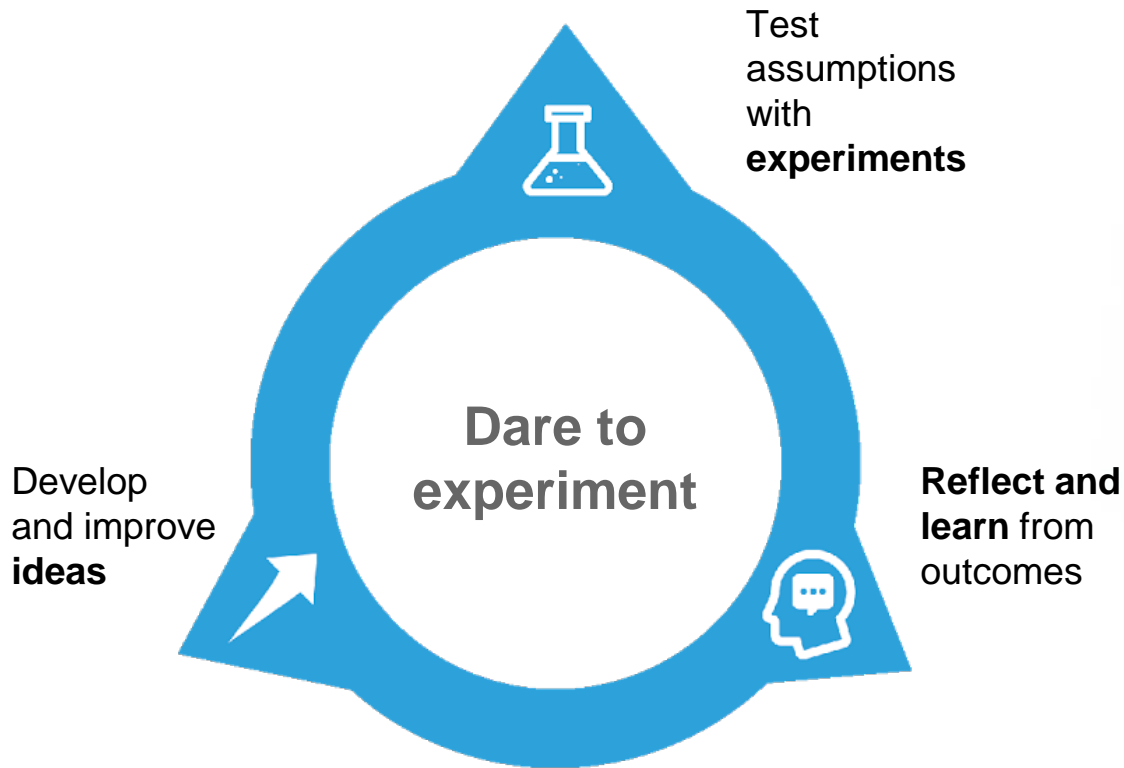


||| Assumption

Everybody knows
the moon is made
of cheese





Our approach




Mud Jeans
How can we make
leasing more
attractive to
customers above
owning jeans?



A: Want to show sustainability can be fun

**Lease-A-Jeans**
Sponsored • 




Can we make a sustainable lifestyle fun again and again?





Infinite Fun
www.mudjeans.eu

[Learn More](#)


Be the first to like this.

 Like  Comment  Share

B: Subscription to community with lifestyle tips

**Lease-A-Jeans**
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We have to become more sustainable, can we help each other?




Join our movement
www.mudjeans.eu

[Learn More](#)

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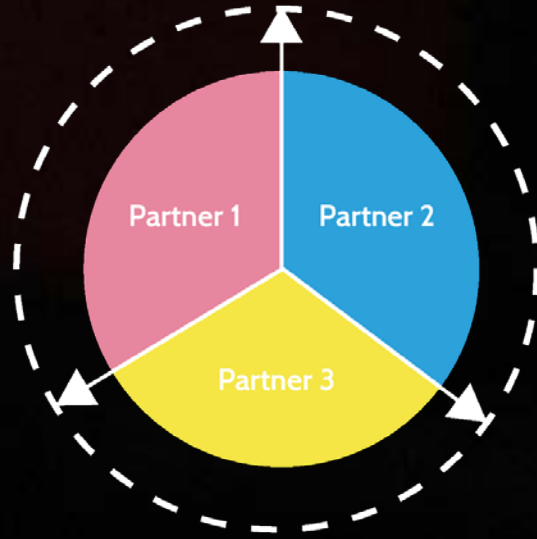
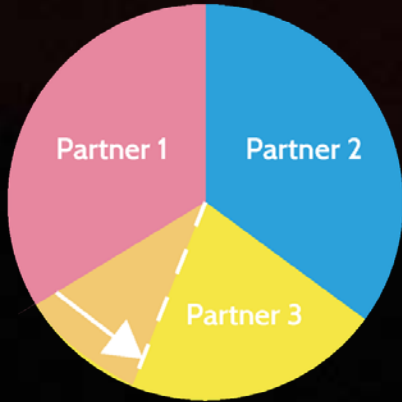
 Like  Comment  Share



||| Collaboration and experimentation with Partners

Source: circl.nl

How do we get to a circular business together?





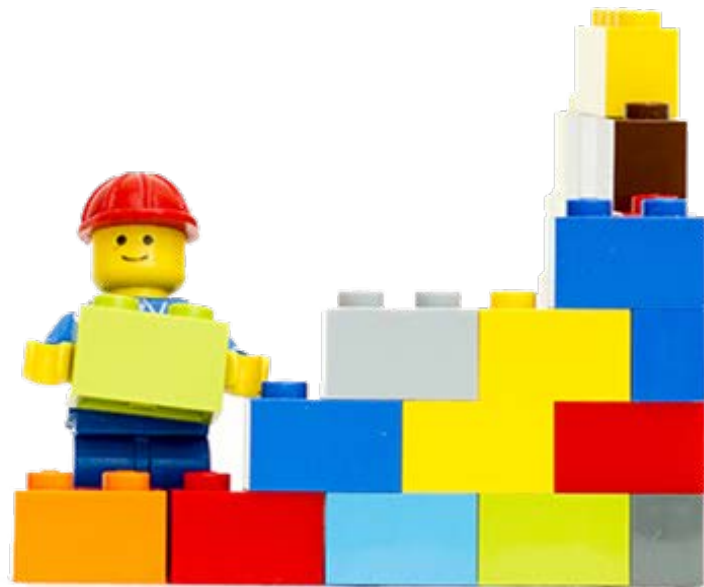
Collaboration with partners in the value chain



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Start experimenting with **value chains**
partners including **customers**





Source: www.net-works.com



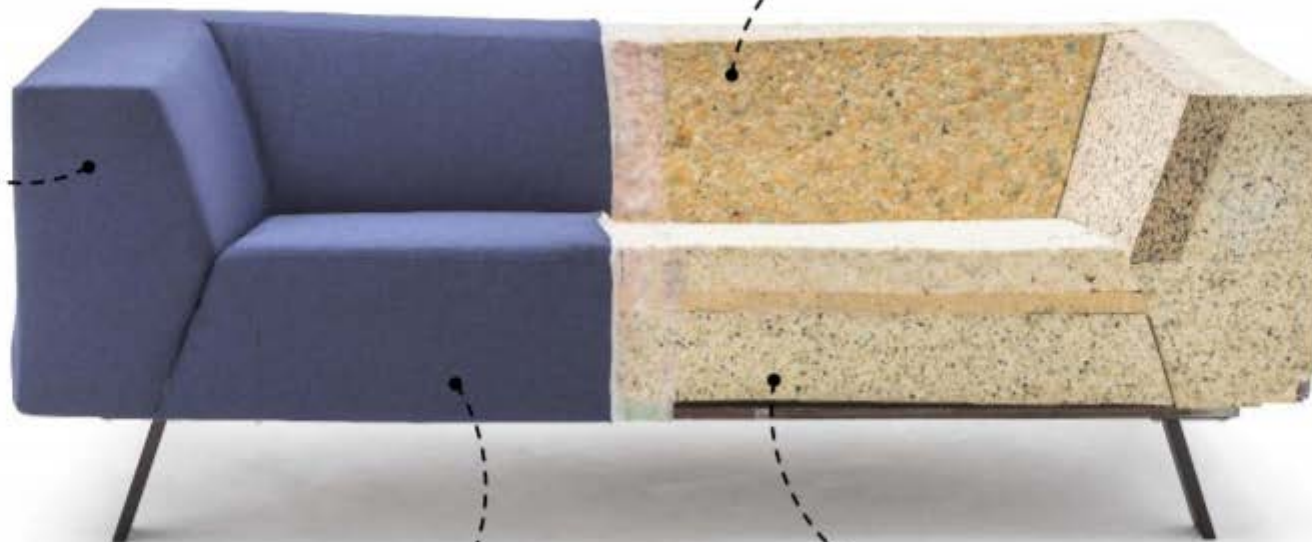
Gispen

From returned Cabinet doors to Sofa



FABRIC MADE FROM
100% RECYCLED
PLASTIC

FOAM MADE FROM
RE-USED MATTRESSES



NO FIXATION
ELEMENTS NEEDED
ANYMORE > ALL
PRINTED IN THE FRAME

FRAME MADE FROM
100% RECYCLED PLASTIC

**Evaluate and learn
between every step**



||| Circular design =
“higher investments”

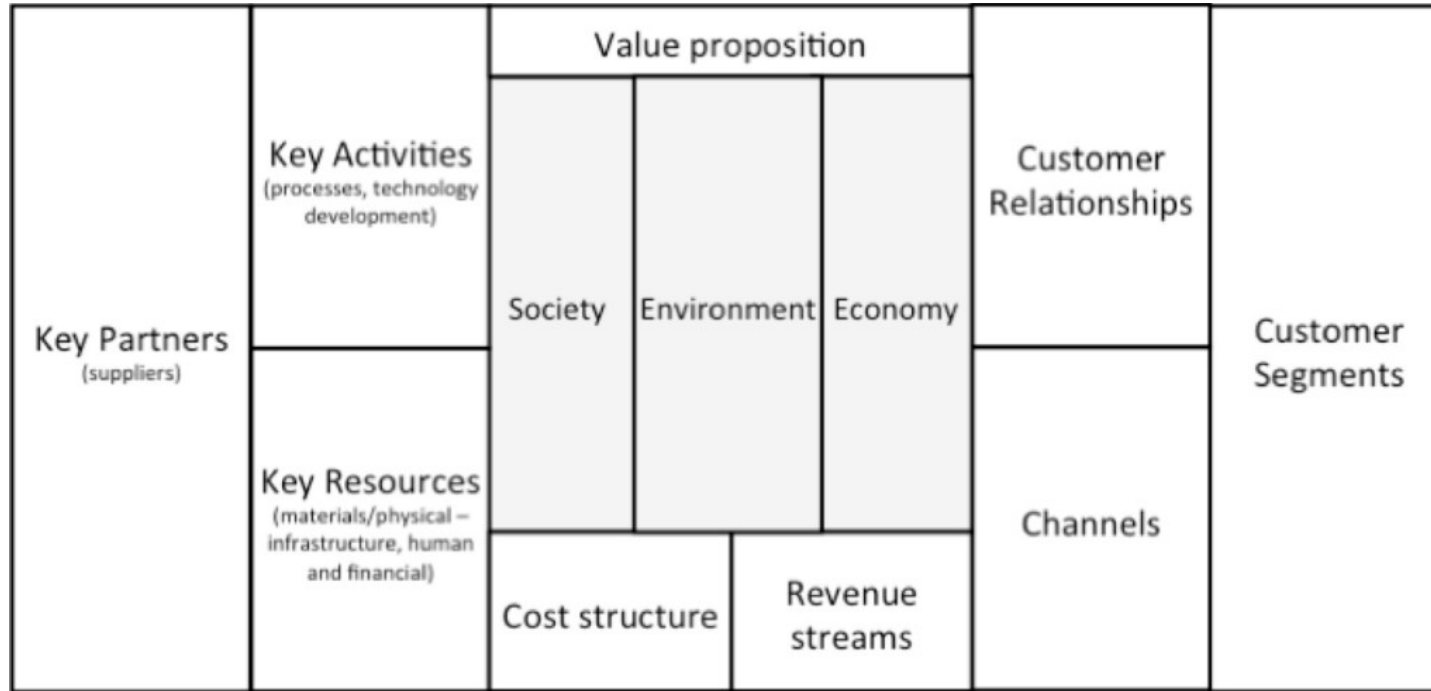




**Circular business model innovation
starts with adding customer value**



Business model elements





Key areas of business model innovation

What if you change:

- Extend **customer relations**; different owners than customer, different moments of (re)usage
- Build long **partnerships**; collaborate in the value chain and think about collaborative models
- **Revenue models**; pay per use models (iso. one off transactions)
- **Channels**: b2b, b2b2c, etc





That will impact

- Activities; like disassembly and reverse logistics
- Cost; like depreciation of assets
- Resources; like (capabilities of) people and materials





LEASE A JEANS

Monthly fee: €7,50

LEARN MORE

Source: www.mudjeans.eu/

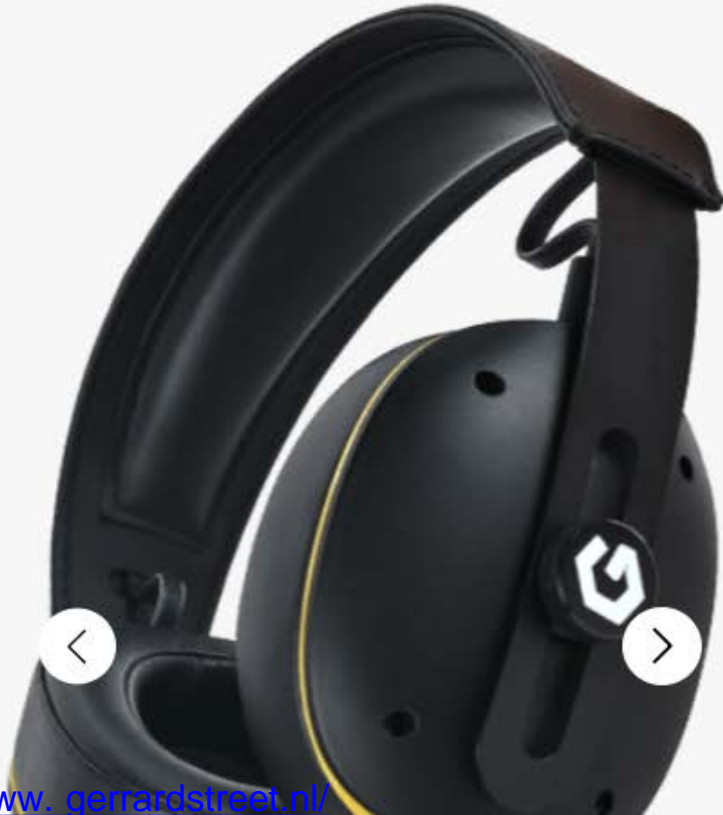


ESRAARD
STREET



BOSS

*De kick-ass draadloze hoofdtelefoon voor
€9,99 per maand of €100 per jaar.*



DAY

*De bedrade hoofdtelefoon voor €7,50 per
maand of €70 per jaar.*





Source: www.fresh-r.eu/







Source: www.roetz-bikes.com



Source: www.swapfiets.nl



Distance
5284 KM

Milage
4.5 L/KM

Topspeed
134 KMH



Prins Hendrikkade 21, Amsterdam

Available



[Source: www.philips.nl/c-m-pe/ontharing/lumea-try-and-buy](http://www.philips.nl/c-m-pe/ontharing/lumea-try-and-buy)



Source: www.homiepayperuse.com



WHAT WE OFFER

Our Service

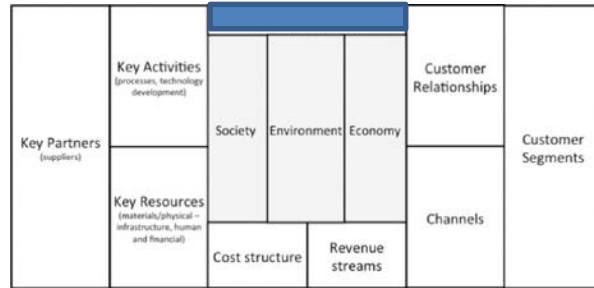
In the area of Amsterdam / Delft / Rotterdam / The Hague / Den Haag / Utrecht / Eindhoven we deliver new, super efficient Zanussi A+++ washing machines, with free delivery and installation.

Our Prices

- A **cold** wash costs **€0,75** (incl. VAT)
- A **30°C** wash costs **€1,00** (incl. VAT)
- A **40°C** wash costs **€1,50** (incl. VAT)
- A **60°C** wash costs **€2,00** (incl. VAT)



This all starts with a strong Value Proposition based on customer and other stakeholder needs





Groupings	Technological			Social			Organisational	
	Archetypes			Archetypes			Archetypes	
Examples	Maximise material and energy efficiency	Create value from waste	Substitute with renewables and natural processes	Deliver functionality rather than ownership	Adopt a stewardship role	Encourage sufficiency	Repurpose for society/ environment	Develop scale up solutions
	Low carbon manufacturing/ solutions Lean manufacturing Additive manufacturing De-materialisation (of products/ packaging) Increased functionality (to reduce total number of products required)	Circular economy, closed loop Cradle-2-Cradle Industrial symbiosis Reuse, recycle, re-manufacture Take back management Use excess capacity Sharing assets (shared ownership and collaborative consumption) Extended producer responsibility	Move from non-renewable to renewable energy sources Solar and wind-power based energy innovations Zero emissions initiative Blue Economy Biomimicry The Natural Step Slow manufacturing Green chemistry	Product-oriented PSS - maintenance, extended warrantee Use oriented PSS- Rental, lease, shared Result-oriented PSS- Pay per use Private Finance Initiative (PFI) Design, Build, Finance, Operate (DBFO) Chemical Management Services (CMS)	Biodiversity protection Consumer care - promote consumer health and well-being Ethical trade (fair trade) Choice editing by retailers Radical transparency about environmental/ societal impacts Resource stewardship	Consumer Education (models); communication and awareness Demand management (including cap & trade) Slow fashion Product longevity Premium branding/ limited availability Frugal business Responsible product distribution/ promotion	Not for profit Hybrid businesses, Social enterprise (for profit) Alternative ownership: cooperative, mutual, (farmers) collectives Social and biodiversity regeneration initiatives ('net positive') Base of pyramid solutions Localisation Home based, flexible working	Collaborative approaches (sourcing, production, lobbying) Incubators and Entrepreneur support models Licensing, Franchising Open innovation (platforms) Crowd sourcing/ funding "Patient / slow capital" collaborations

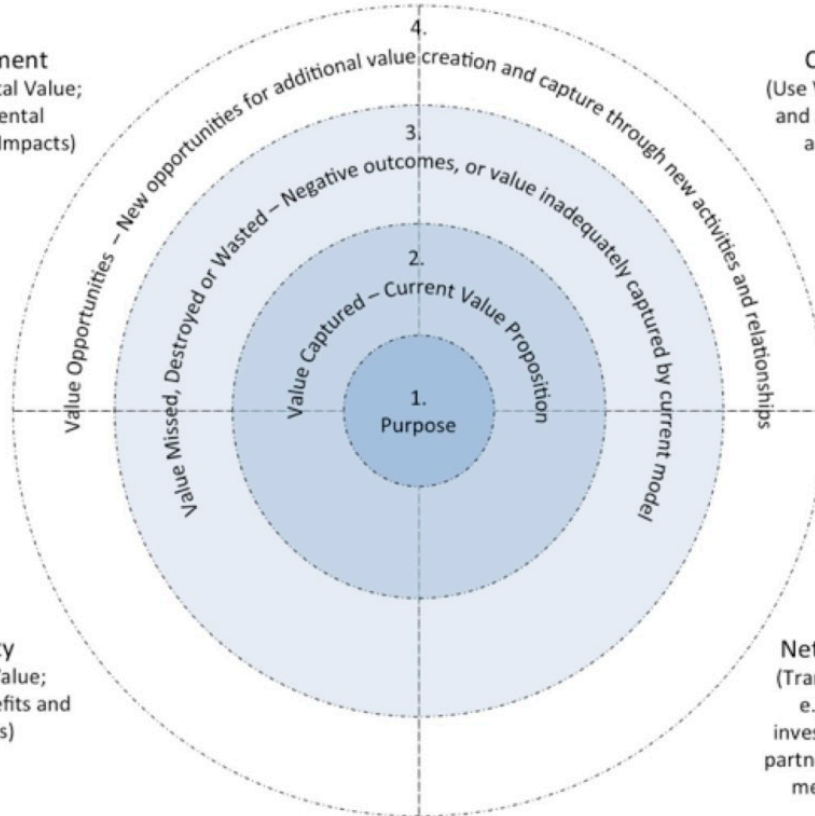


Environment
(Environmental Value;
Environmental
benefits and Impacts)

Customers
(Use Value; perceived
and actual benefits
and impacts)

Society
(Societal Value;
Societal benefits and
Impacts)

Network actors
(Transaction Value;
e.g. focal firm,
investors, suppliers,
partners, distributors,
media, research
institutes)





Work in groups

- Group 1: Leadership, vision and purpose
- Group 2 & 3: Sketching the system
- Group 4 & 5: Circular business model innovation

Result will be present to Skaza



Questions?


Book available at:
www.circularcollaboration.com

Download free tools:
www.innoboost.nl

kraaijenhagen@innoboost.nl
+31 6 10 88 60 85



inno**boost**



||| We aim to leave
people and planet
better than we
found them



Resources

[Bocken, N., Schuit, C., Kraaijenhagen, K. 2018. Experimenting with a circular business model: Lessons from eight cases. Environmental innovation and societal transitions \(in press\). https://doi.org/10.1016/j.eist.2018.02.001](https://doi.org/10.1016/j.eist.2018.02.001)

[Schuit, C.S.C, Kraaijenhagen, C., Bocken, N.M.P. Kickstarting circular business experimentation – From product ownership to customer experience. Innoboost & TU Delft.](#)

[Kraaijenhagen, C., Van Oppen, C., Bocken, N. 2016. Circular business. Collaborate & Circulate. Circular Collaboration, Amersfoort, The Netherlands. Available at www.circularcollaboration.com](http://www.circularcollaboration.com)

www.innoboost.nl

