

# Sustainable business model innovation



**We are All  
shaping  
tomorrow**  
—



# Let's talk 'Sustainable Business Model Innovation' (SBMI)

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1. Why we need it:  
**Sustainability  
needs to happen at  
a systemic scale**

2. What it is:  
**Designing co-creative  
sustainable business  
models for People-  
Profit-Planet**

3. How to do it:  
**Understand the  
system, identify and  
re-combine salient  
elements, use proven  
strategies, experiment**

4. How to get started:  
**Begin with  
playfulness, go visual  
& prove value, then  
evolve and keep  
learning**



Questions to reflect on:

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



# 1

Why we need it:  
**Sustainability  
needs to happen  
at a systemic scale**

**Human activity has wrecked havoc...  
Causing a string of complex  
interrelated challenges**





**"Unsustainability is  
an unintended  
consequence of  
modern **beliefs** and  
**practices**"**

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*John Ehrenfeld*

# The Societal Context for Business is Changing



**Escalating investor and social activism**



**Mounting sense of urgency to mitigate Climate change impact**



**Rising standards for a social licence to operate**



**Growing demand for transparency on ESG performance**



**Integrating ESG performance in investment decisions**



**Rising expectations for a powerful corporate purpose**



**Expanding demand for good products that do good**



**Increasing collaboration for collective action**

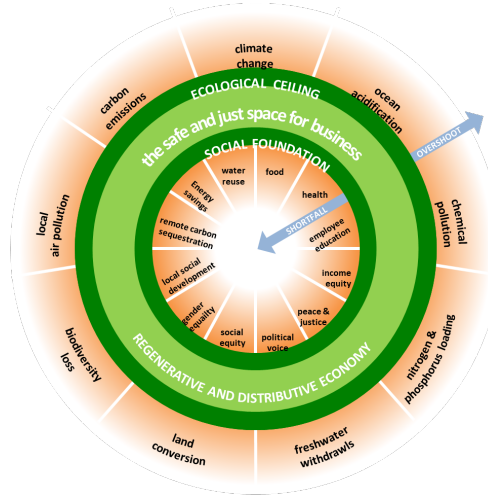
Source: BCG Analysis  
ESG = Environmental, social, and governance



The 17 Sustainable Development Goals are a call for action to promote prosperity while protecting the planet.

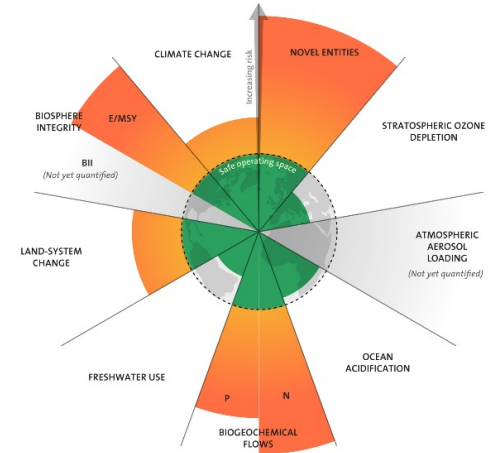


Transforming business models can support a transition towards thriving in a Doughnut - a safe and just space for humanity.



Source: Kate Raworth, 2017

Incorporating the principles of SDGs and Doughnut Economics in business models can help us operate within planetary boundaries.



Source: Persson et al 2022



**WE CAN MEET THE NEEDS OF ALL**  
**WITHIN THE MEANS OF THE PLANET**

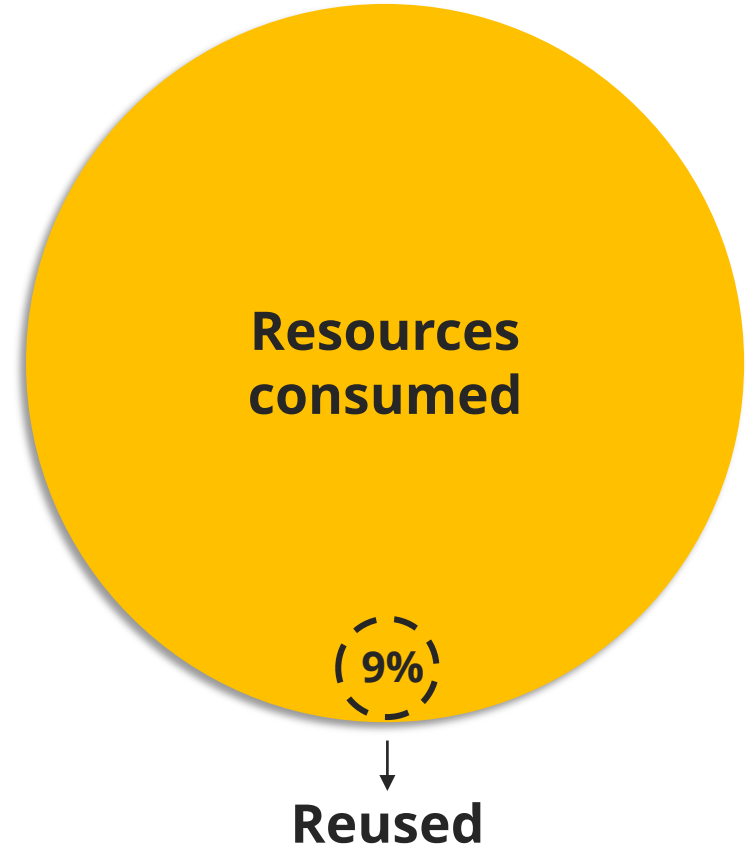
# We've been messing where we eat!

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## Can you see the wasted opportunities in waste?

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Sources: The Economist

## The business case for sustainability

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Pioneers in sustainability are outperforming their peers financially.



# We Want Your Used Patagonia® Clothing

**patagonia®**



## *Innovation for Sustainability*

**A historic  
responsibility**

**&**

**A big business  
opportunity**

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

## We've been part of the problem – let's turn that around

Human and planet centred design with its creative and experimental approach is sorely needed for sustainable business model innovation. It needs to be applied at a greater scale.



**Edible food packaging**

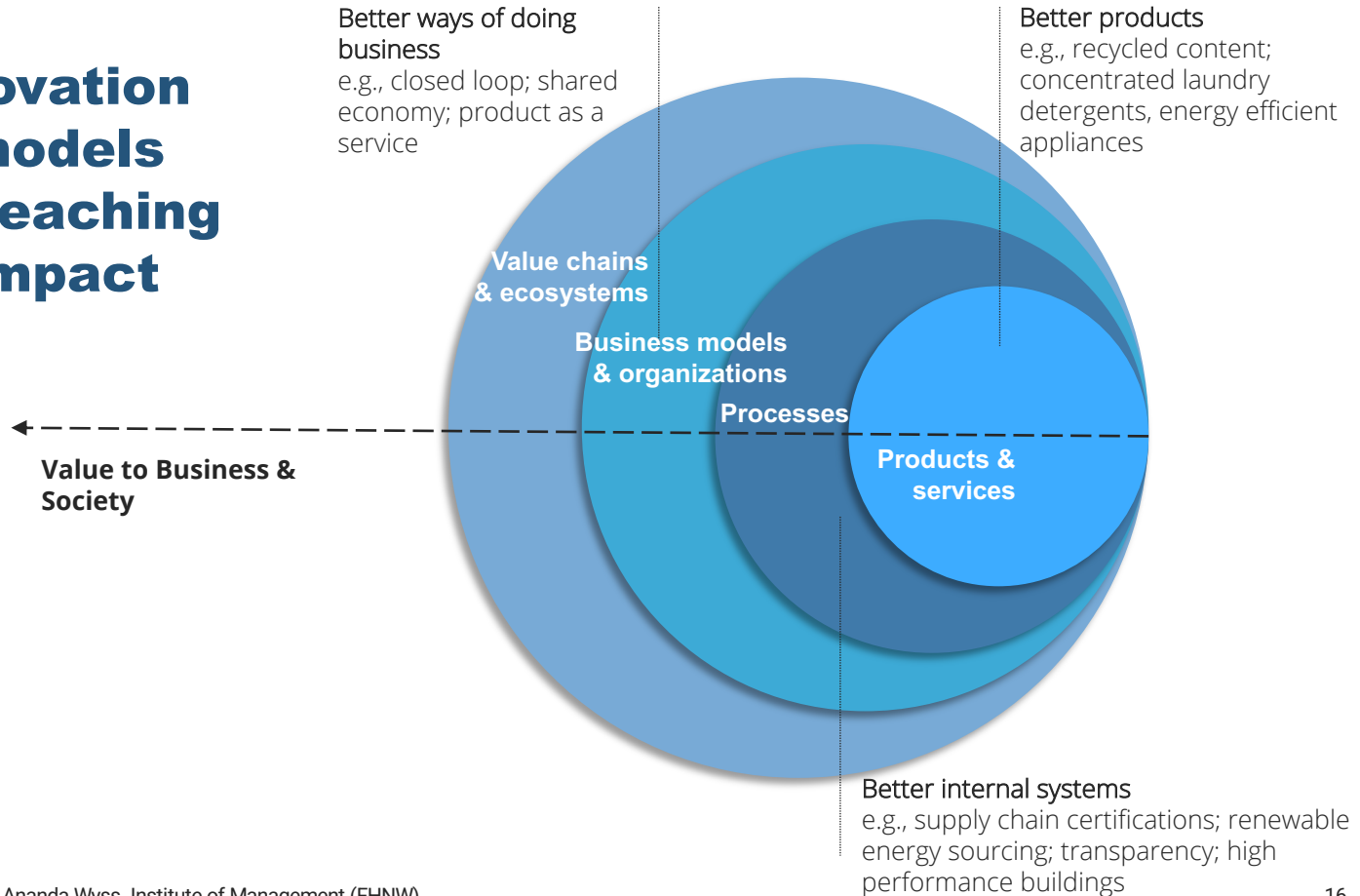


## Let's design and share responsibly

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The potential of digital technologies for sustainability are boundless – yet for the moment, access and impact are limited to communities who can afford them.

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

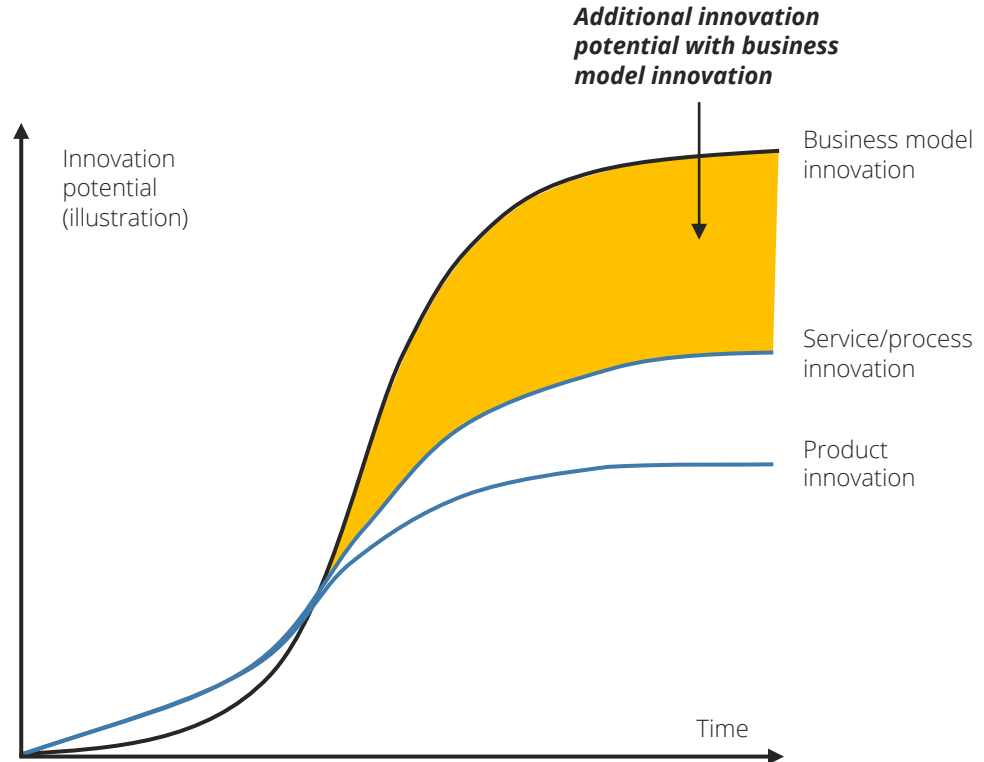


Source: Adapted from Loetscher & Kreis, 2018.



# The impact of business model innovation is greater

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Sources: BCG 2009, IBM 2006, MIT Sloan Management Review 2012

# 2

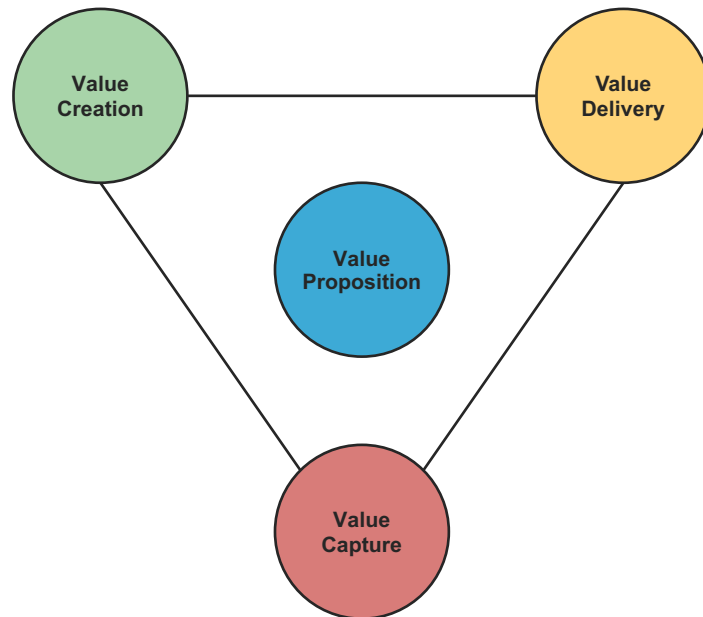
What it is:

**Designing co-  
creative sustainable  
business models for  
People-Planet-Profit**

**“A business model describes the design or architecture of the value creation, delivery & capture mechanisms employed” (Teece, 2010, p.191)**

*i.e., a business model is how an organization...*

creates  
delivers  
captures  
value



**Business model innovation refers to the process of altering a BM in response to internal and external incentives by developing, diversifying, acquiring, or transforming it.**

**(Foss & Saebi, 2017; Geissdoerfer et al., 2018)**



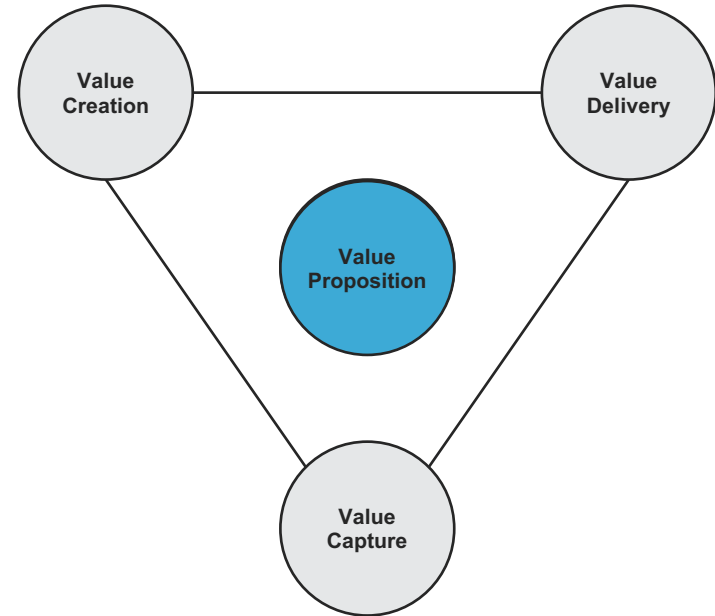
*i.e., business model innovation changes how business is done and considers...*



# value

What products, services or outcomes do people need?

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

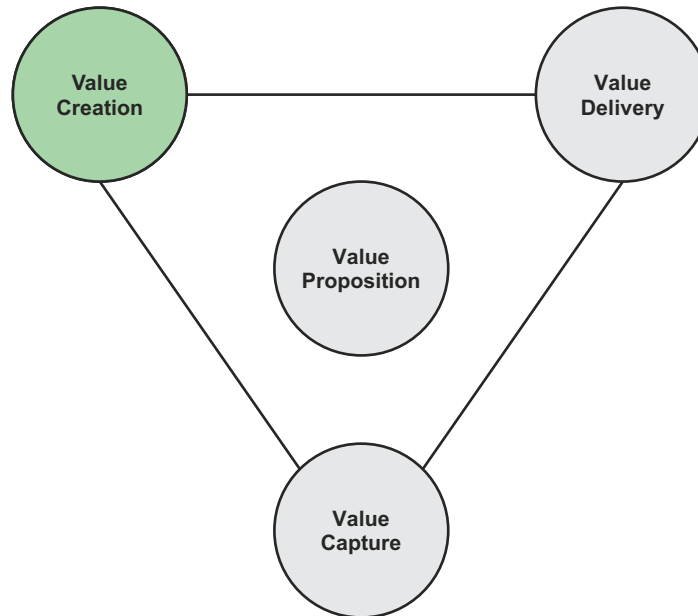


# creation

How can we improve our processes?

Can we partner up with someone?

Can we make better use of our unique capabilities?

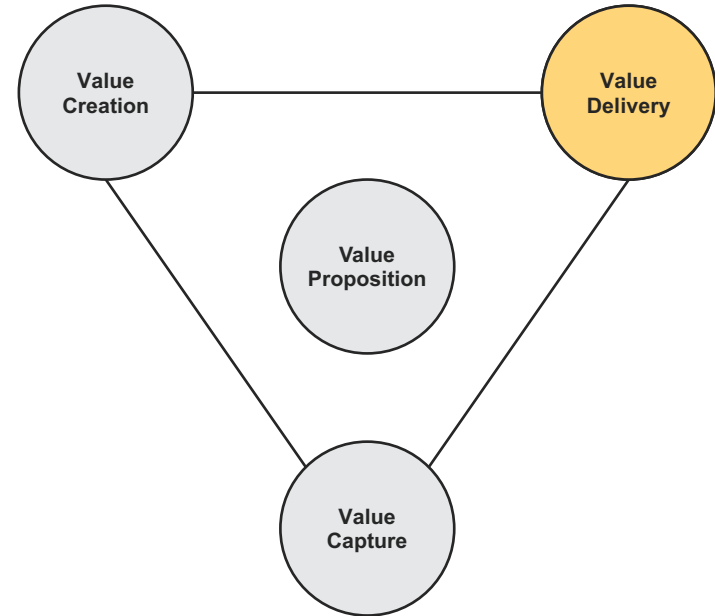


# delivery

Can we target a different segment?

Can we change our relationship with our customers?

Can we use different channels for distribution or marketing?

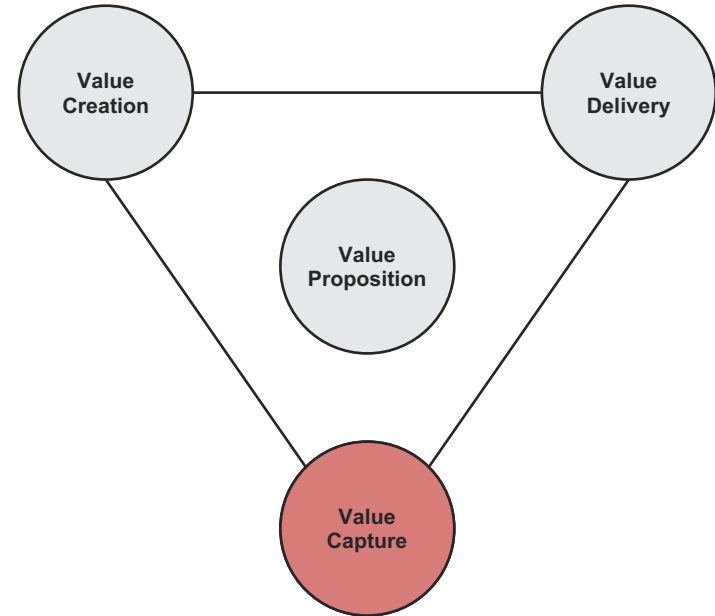


# capture

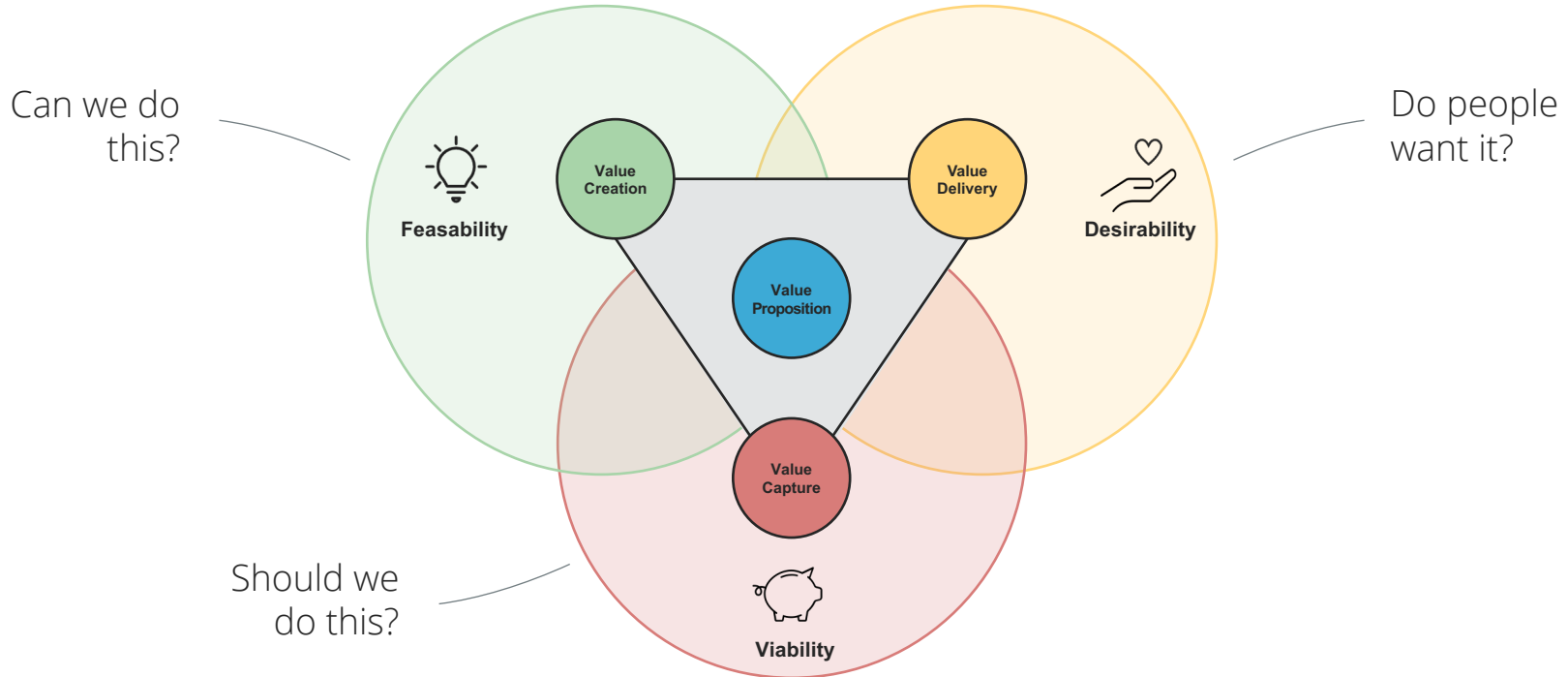
Can we change how or what we charge?

Can we create a new revenue source?

Can we decrease our cost?



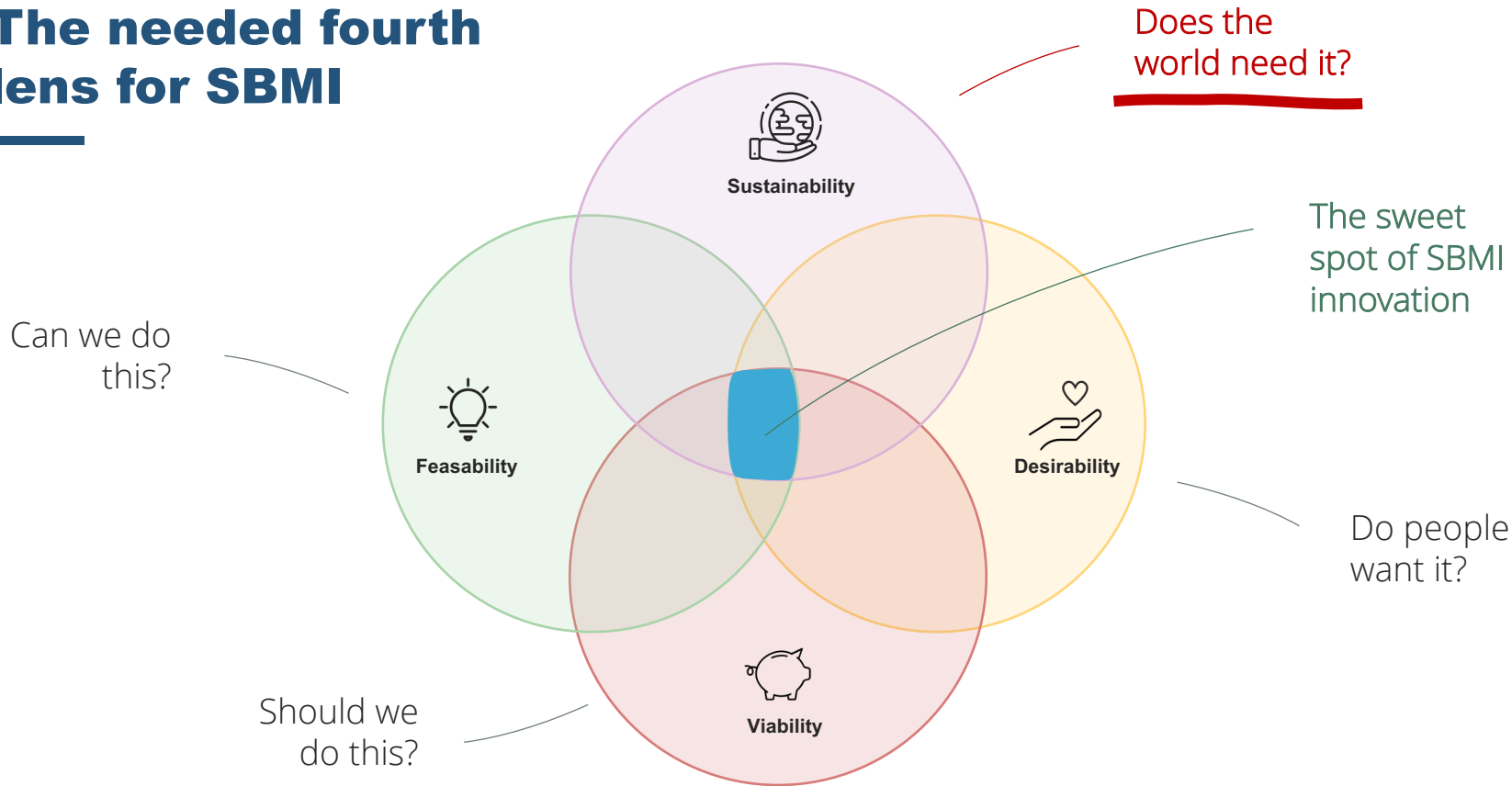
# The three lenses of innovation



Adapted from: The board of innovation and Hovgaard



## The needed fourth lens for SBMI



Adapted from: The board of innovation and Hovgaard

”

"I define **sustainability** as the possibility that humans and other life flourish on the Earth forever. /.../ Sustainability is ultimately a story about a world of **flourishing** and care."

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*John Ehrenfeld*

## **Two critical sustainability beliefs**



» **Human beings are caring, not utility maximising, organisms.**



» **The world is complex.**

## *Four shifts needed*

From:

To:

**Linear** → **Systemic**

**Combative** → **Co-creative**

**Single bottom line** → **Triple bottom line**

**Take-Make-Waste** → **Flourishing world**



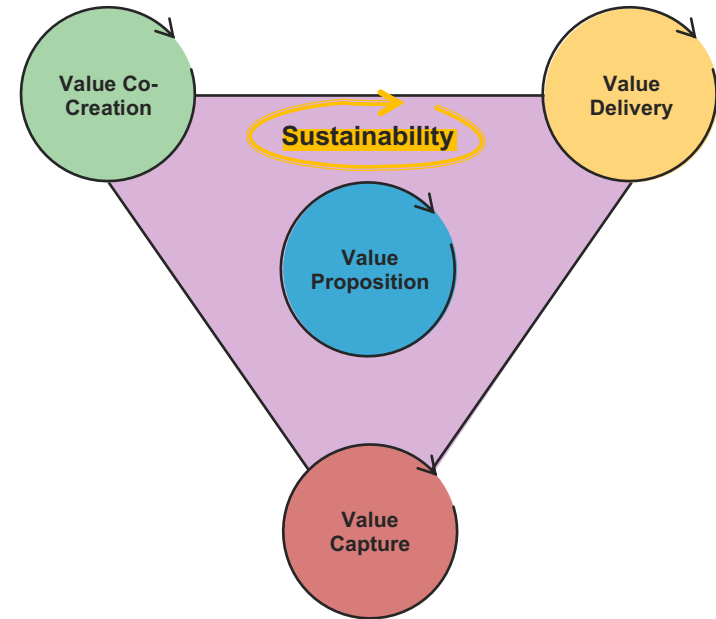


**Sustainable Business Model Innovation (SBMI) incorporates sustainability as guidelines for Business Model (BM) design and strives to enable organizations to operate within planetary boundaries. The aim is to contribute positively to the environment and society in addition to capturing economic value. It builds on traditional Business Model Innovation but applies to an extended context.**



## Sustainable business model innovation considers...

...how to innovate & co-create business models that sustains value in a way that has an overall net positive impact on people, planet and profit



# *Sustainable Business Models strive for balance ...*

**People**

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**Planet**

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**Profit**

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## **Sustainable business model innovation (SBMI)**

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- » Incorporates pro-active multistakeholder management and inclusion
- » Creates monetary and non-monetary value for a broad range of stakeholders
- » Holds a long-term perspective

Source: Geissdoerfer et al., 2018

## SBMIs support a Circular Economy

LINEAR  
ECONOMY



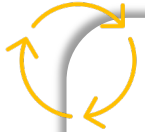
RECYCLING  
ECONOMY



CIRCULAR  
ECONOMY



# Proven strategies of sustainable business models...



## 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



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## SHARING PLATFORMS

### Optimize capacity use

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



Example:

**City bikes schemes**



# Proven strategies of sustainable business models...



## PRODUCT LIFE EXTENSION

### Extend life cycles

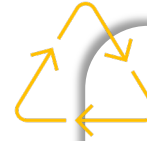
Repair & upgrade: Services for repairing, maintaining and upgrading to extend the product life or improve product.

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



Example:

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



## 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.



Example:

**Mushrooms from  
coffee grounds**

This Photo by Unknown Author is licensed under CC BY-NC

## SBMIs poised to accelerate (I/II) ...



### Circular

Closed-loop, reusable, biobased, zero-waste goods and services all represent business model innovations in which value propositions, delivery mechanisms and market accessibility are up for grabs



### Regenerative

An emerging space, where companies find value through innovations that restore, protect or enhance ecosystems. Biomimicry and other nature-inspired design innovations can fit here



### Decarbonized

Products and services made and delivered in a way that produce vastly reduced climate pollution. Renewable energy purchases are obvious examples, but that's just a start

## SBMIs poised to accelerate (II/II) ...



### Just

Business models that increase access to goods and services to marginalized individuals or communities or that expand job and career opportunities. Example: Apple's \$100 million Racial Equity and Justice Initiative



### Local

Turning waste streams into sources of value is one aspect of the growing relocalization of commerce. Vertical farms are another example — where goods are produced close to where they're needed.



### Post-growth

Uses sufficiency as an inspiration for reviving and redesigning business models. It shifts focus from material consumption to alternative measures of wellbeing. It highlights local sharing, repairing, self-provision etc.

# Regenerative sustainability

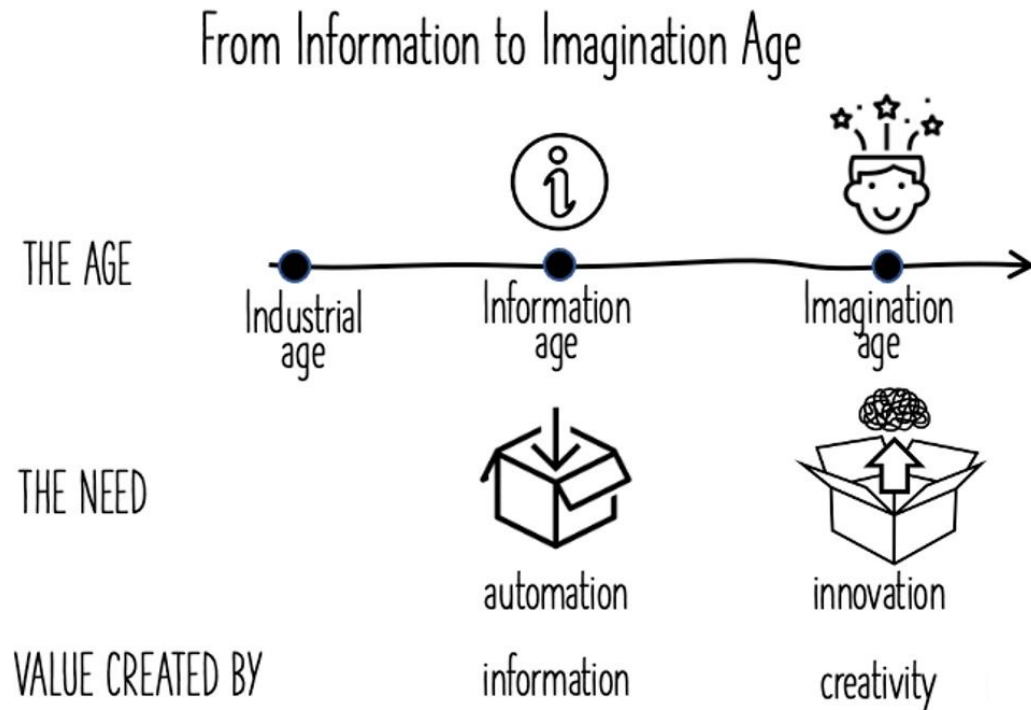
It's not enough to just mitigate the effects of human activity and unsustainability.

Regenerative sustainability seeks to design for human, ecosystem and planetary health. It asks us to learn how to participate with the environment. To shift our relationship to one that creates a whole system of mutually beneficial relationships.

Creating regenerative systems is more than a technical, economic, ecological or social shift: it goes hand-in-hand with an underlying shift in the way we think about ourselves, our relationships with each other and with life as a whole.



# Imagination is fuel for Regenerative Creativity



**“Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.”**

- Albert Einstein





### Questions to reflect on:

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

# 3

How to do it:

**Understand the system,  
identify and re-combine  
salient elements, use  
proven strategies,  
experiment**

## **Sustainable business model innovation (SBMI)**

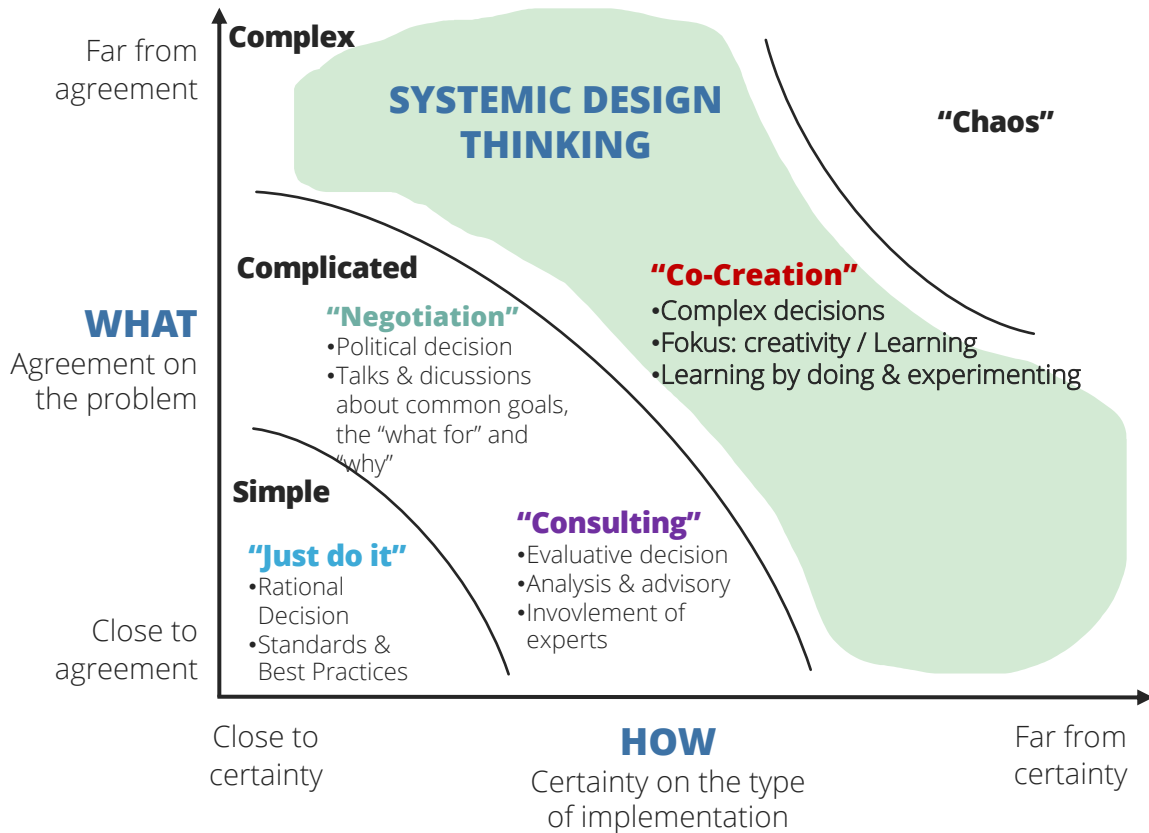
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Guiding principles...

- » **A Sustainability Orientation**, with clearly communicated vision
- » **Extended Value Creation** beyond only for the company, customers, and shareholders
- » **Systems Thinking**, recognizing business models as a boundary spanning interactive system
- » **Stakeholder Integration**, while recognizing their needs, interdependence, and influence

(Breuer et al., 2018)

# The Challenge



Source: Diehl, 2021.

## The Approach: Rules of the Game

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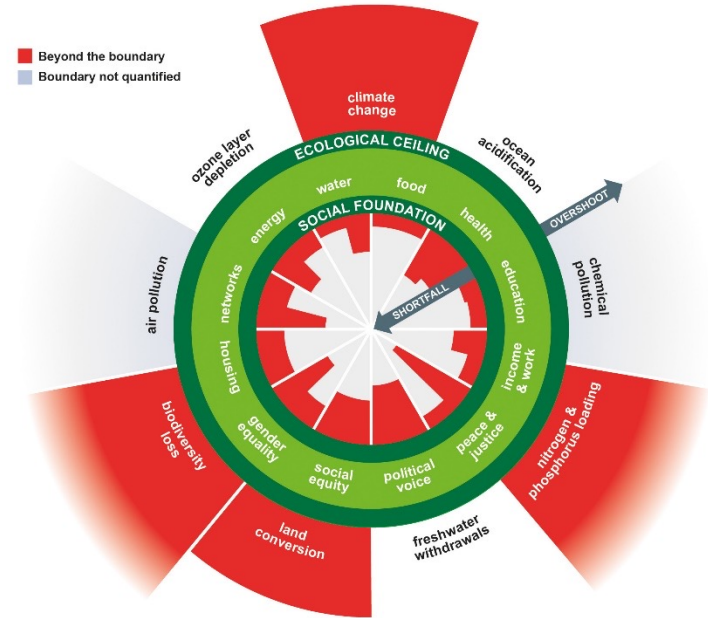
- 01** Design for outcomes
- 02** Deep dive into systems
- 03** Co-create with stakeholders
- 04** Get inspired, dare to think beyond
- 05** Test and measure what matters



# 01 Design for outcomes

To create sustainable business models (like other things) we need to *design* them.

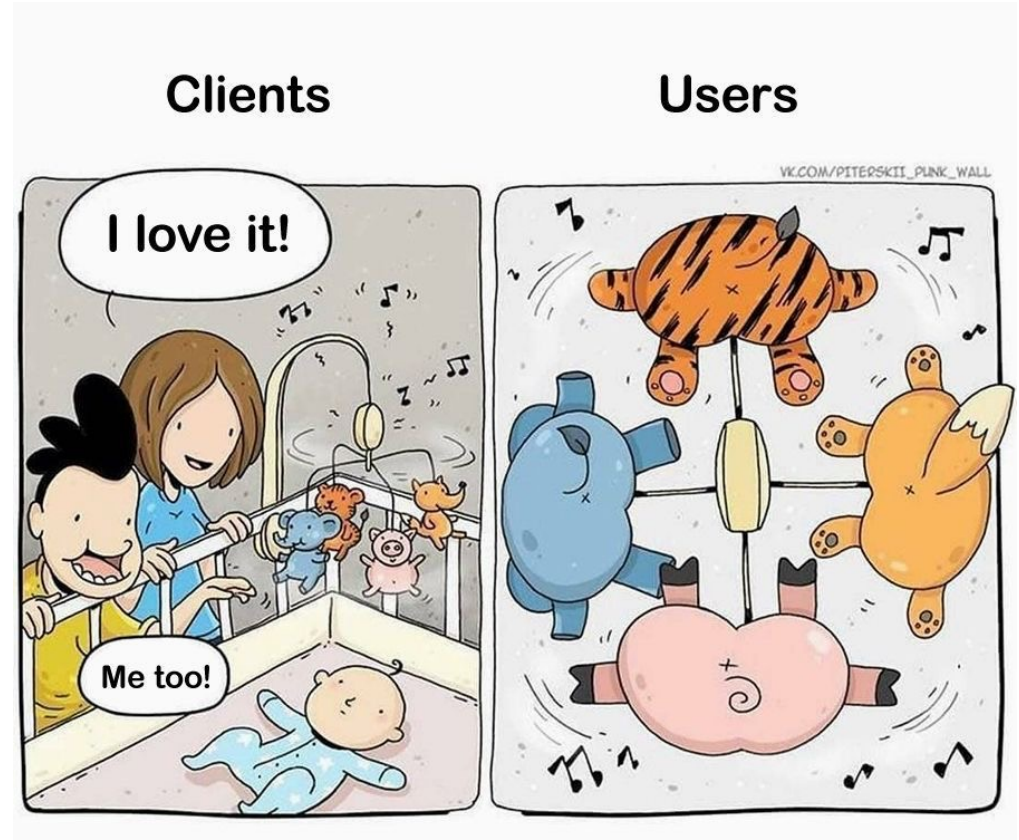
Design your business model considering *all* sources of need, opportunity and material risk relevant to *all* stakeholders. This increases the likelihood of realizing *your* impact *and all* of their goals effectively, efficiently, reliably and gracefully.



Sources: Kate Raworth, 2017

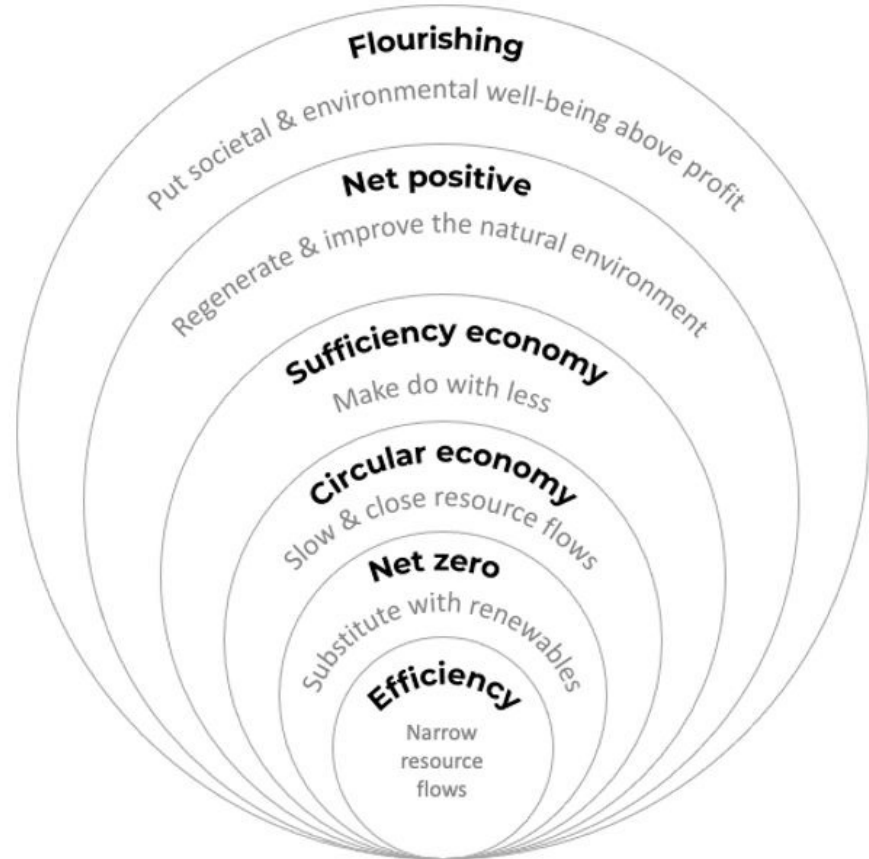


**People don't want you or your product. They want to get their problems solved or needs met. Therefore, build business models around outcomes.**



# What is your level of ambition for the sustainability transition?

Design for it!



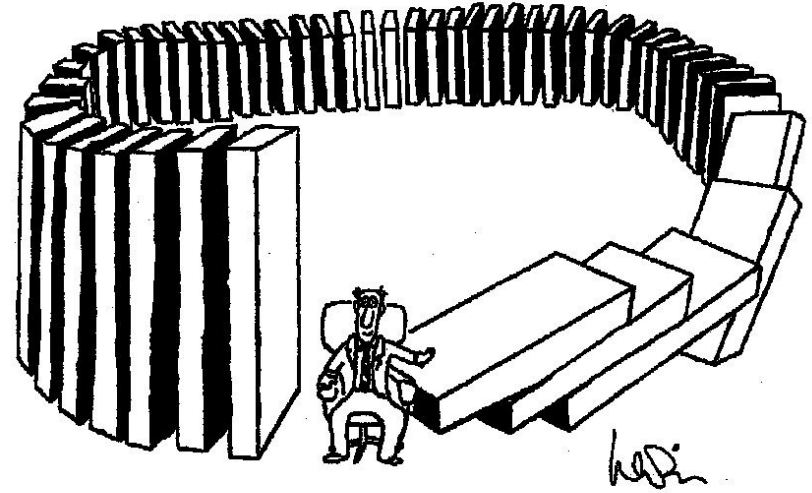
Based on Bocken, N. M., & Short, S. W. (2021). Unsustainable business models—Recognising and resolving institutionalised social and environmental harm. *Journal of Cleaner Production*, 127828.

Source: Adapted and shared by Jan Konietzko

## 02 Deep dive into systems

The inconvenient truth: to create an impact, avoid unintended consequences, understand material risks and find new opportunities there are even more considerations than when focused only on short term survival. The problems we need to solve are increasingly systemic and complex, so our approach need to be the same.

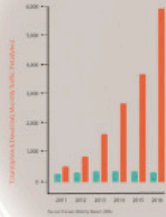
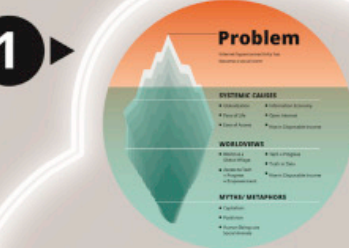
Do in-depth research, investigate the theme from a number of angles, and use this to map the system, actors, relationships, causal loops and processes in question. Look for value flows and intervention points.



**“The problems we face today cannot be solved at the same level of thinking as when we created them.”** - Albert Einstein

## Understanding the Problem the what

1



Consumption Trends: Average monthly data usage in GB per user

Source: Statista, based on data from various sources

### What Happens Online in 60 Seconds?

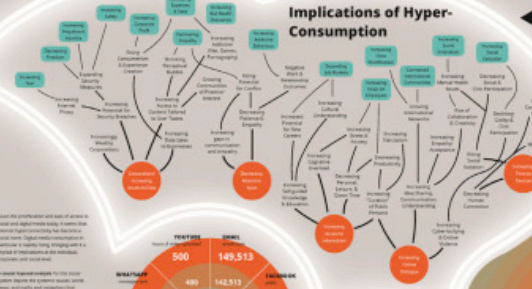


# Is it Time to Pull the Plug?

A systems inquiry into the wicked problem of hyperconnectivity in the digital age  
Pavol Bisk, Jan Karskus, Kishia Bahman, Mary Su / April 2017

The Fourth Industrial Revolution (the "digital revolution") is disrupting nearly every industry worldwide. Billions of people are connected to the Internet through multiple devices with unlimited access to information at all times. This hyperconnectivity is blurring the lines between the physical and the digital and having profound effects on every facet of life.

## Implications of Hyper-Consumption



## The Case of Netflix

Netflix is a case of digital disruption. It is a company that has disrupted the video rental industry. It has done this by using data to understand what its customers want and then using that data to create a personalized experience for each customer. This has allowed Netflix to grow its subscriber base from 1 million in 2000 to over 100 million today.

Netflix's success is a result of its ability to use data to understand its customers. It has done this by using data to understand what its customers want and then using that data to create a personalized experience for each customer. This has allowed Netflix to grow its subscriber base from 1 million in 2000 to over 100 million today.

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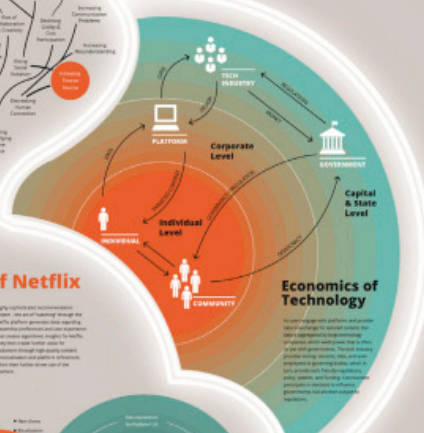
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4

## The Bigger Picture why it matters



2

## People & Power the who

3

## Cause & Effect the how

## Seeking a Balance

To add new services as well as to provide the benefits of new digital media we need to consider the impact of these services on society. We need to consider the impact of these services on society. We need to consider the impact of these services on society.

### Parents

- Monitor children's digital media engagement
- Act as a mediator in guiding children into the internet, educate children about digital information, promote safety and ethical values of internet
- Be mindful of providing the balanced environment that kids thrive in
- Children that take about use of technology and digital media in their lives and are not over-reliant on them get, without physical activity, less time in computer games, less time for their school work, less time for their social life, less time for their health, less time for their education, and less time for their life.
- Health or education issues, parental control, and design restrictions on devices

### The Individual

- Monitor digital identities by being careful about what is shared online
- Be aware of the terms and conditions of platforms and applications
- Be able to identify and act on digital information responsibly
- Be able to identify and act on digital information responsibly
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### Platform & Tech Providers

- Establish open standards of communication with users and an open standard
- Use user data insights to create and provide services that enhance the user experience and the benefits of digital media use to enhance the user experience
- Be transparent about personal data and use of personal data
- Monitor public and regulatory information that helps to protect the user's privacy and the user's data
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### Public Sector

- Conduct a risk assessment that helps to understand the implications of digital media use, particularly on children
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### Levers of Change

- Data & Insights
- Policy Shifts
- Public Perception
- Technology Design

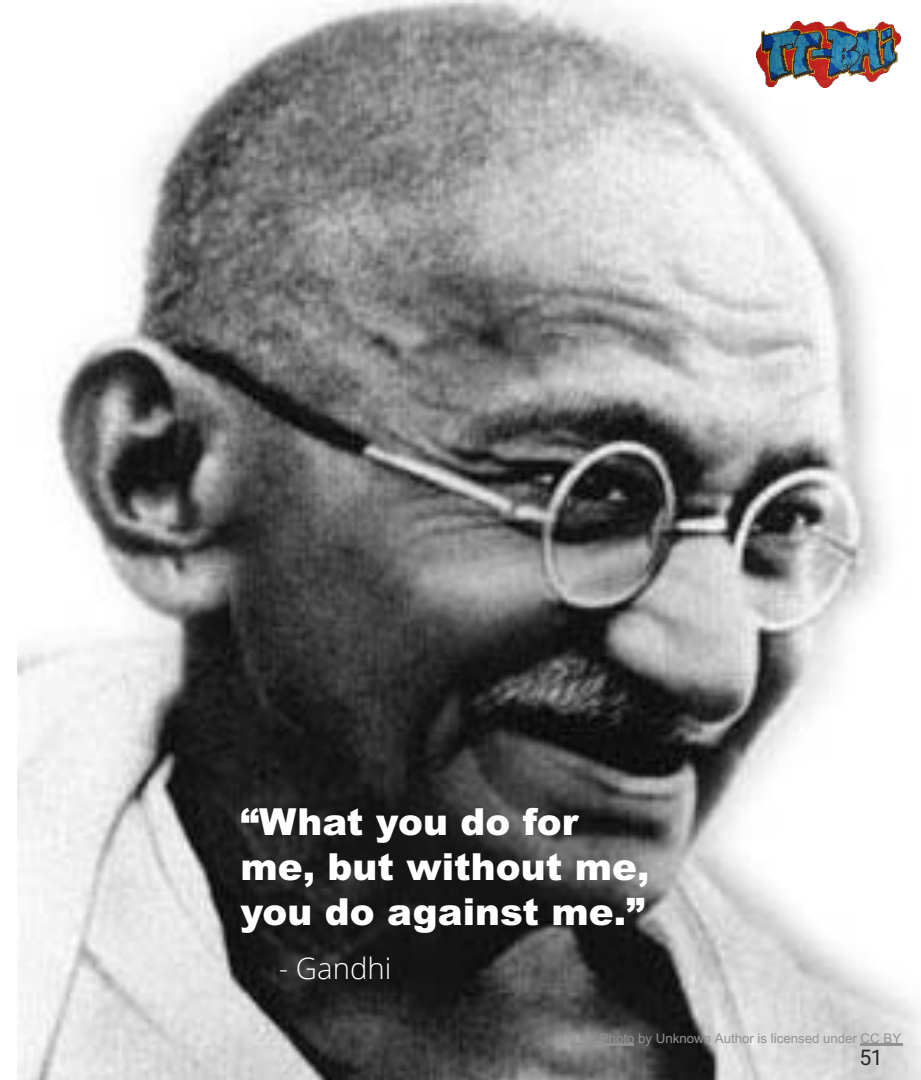


## 03 Co-create with stakeholders

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

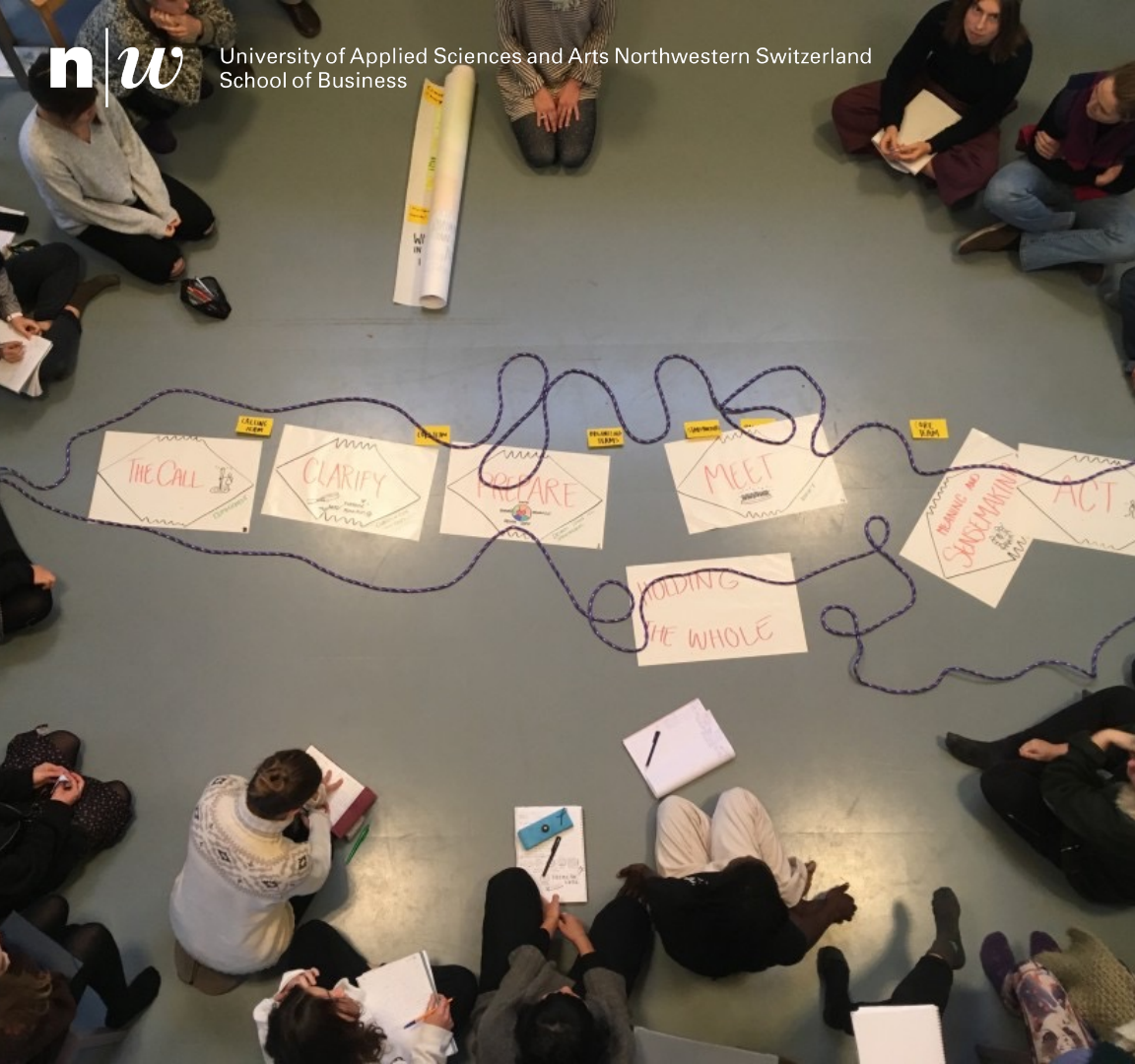
To understand and redesign the system, it's necessary to involve many types of stakeholders, as well as experts, to find root causes and solutions that will work in practice.



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

- Gandhi





*There is no greater power than a community discovering what it cares about.*

*Ask “What’s possible?” not “What’s wrong?” Keep asking.*

*Notice what you care about.  
Assume that many others share your dreams.*

*Be brave enough to start a conversation that matters.*

*Talk to people you know.  
Talk to people you don’t know.  
Talk to people you never talk to.*

*Be intrigued by the differences you hear. Expect to be surprised. Treasure curiosity more than certainty.*

*Invite in everybody who cares to work on what’s possible.  
Acknowledge that everyone is an expert in something.  
Know that creative solutions come from new connections.*

*Remember, you don’t fear people who’s story you know.  
Real listening always brings people closer together.*

*Trust that meaningful conversations change your world.*

*Rely on human goodness. Stay together.*

*Margaret J. Wheatley,  
Turning to One Another*

## Practicing the Art of Hosting

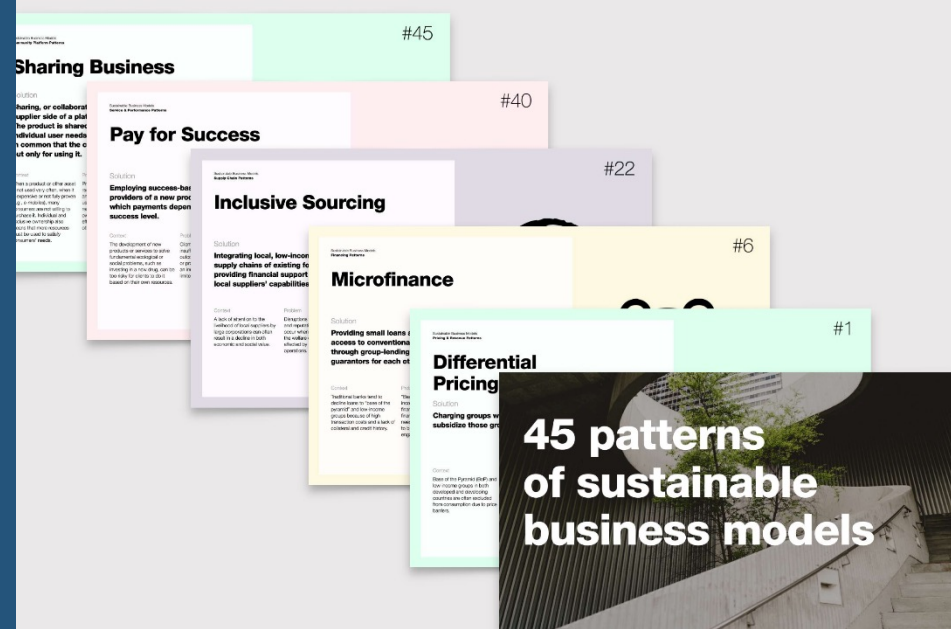
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## 04 Get inspired, dare to think beyond

Instead of starting entirely from scratch, take inspiration, copy and adapt proven strategies and patterns of sustainable business models. But dare to think beyond.

Take inspiration from proven strategies and natural systems, then imagine and ideate lots of alternative business models, before you prototype and test a few on stakeholders.





**The best source of innovation is nature!**







**Let's do the same with the SBMIs we design**



## 05 Test and measure what matters

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To reduce risk of failure, prototype, test and experiment as early as possible. Make your ideas visual, tell the story and get feedback from stakeholders. Without data we are in the dark, and we can do more harm than good.

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





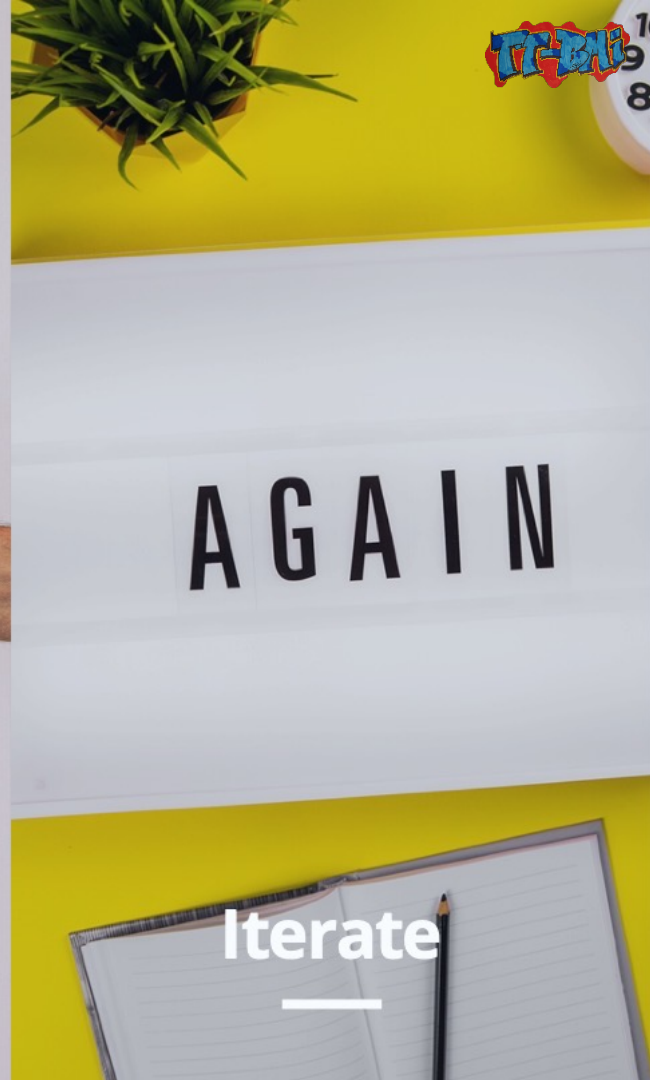
**Prototype**

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**Learn**

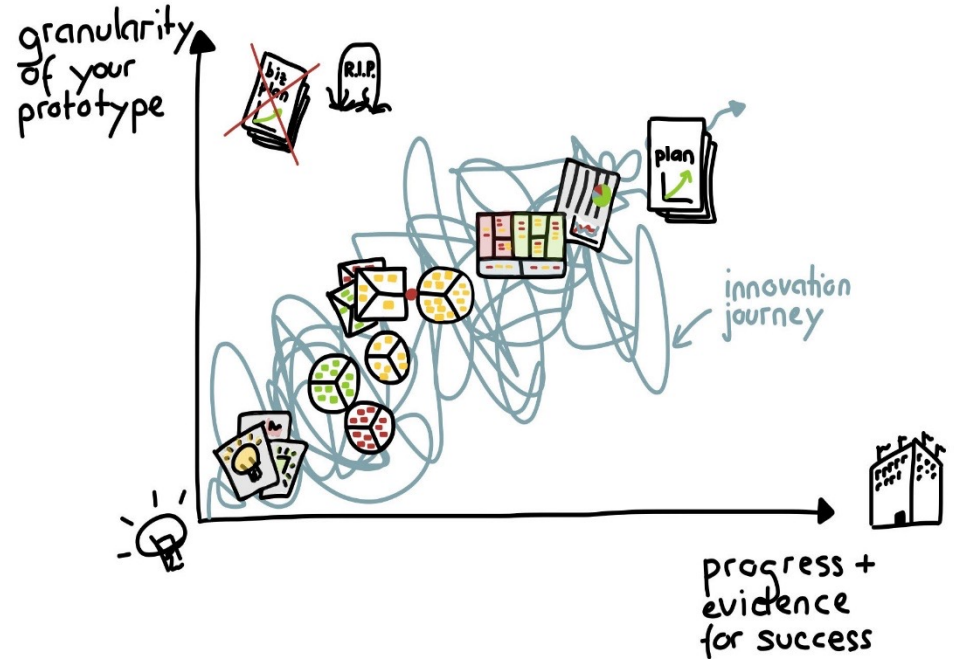
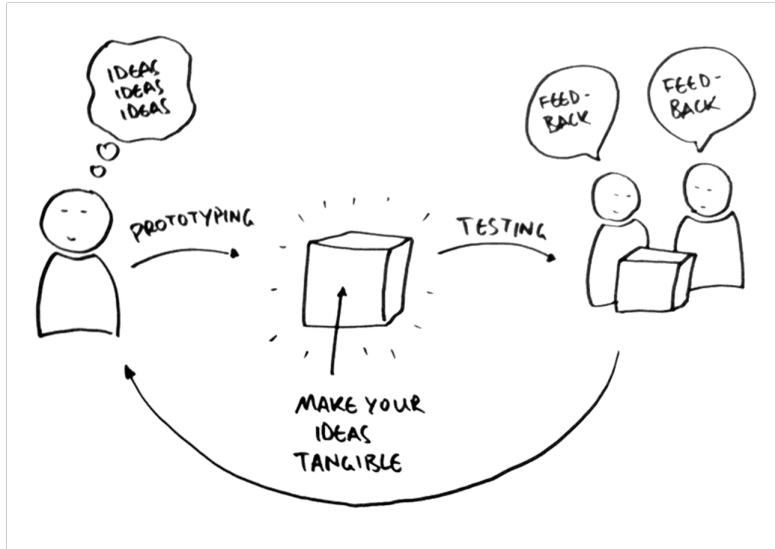
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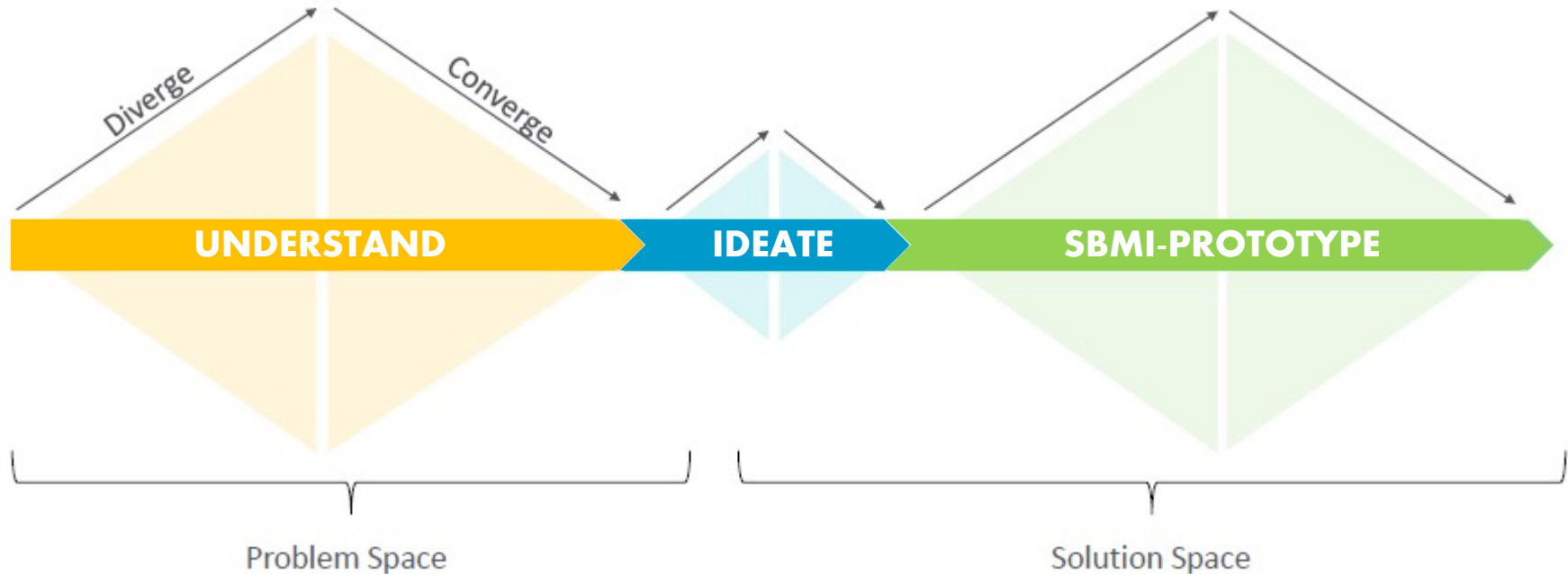
**Iterate**

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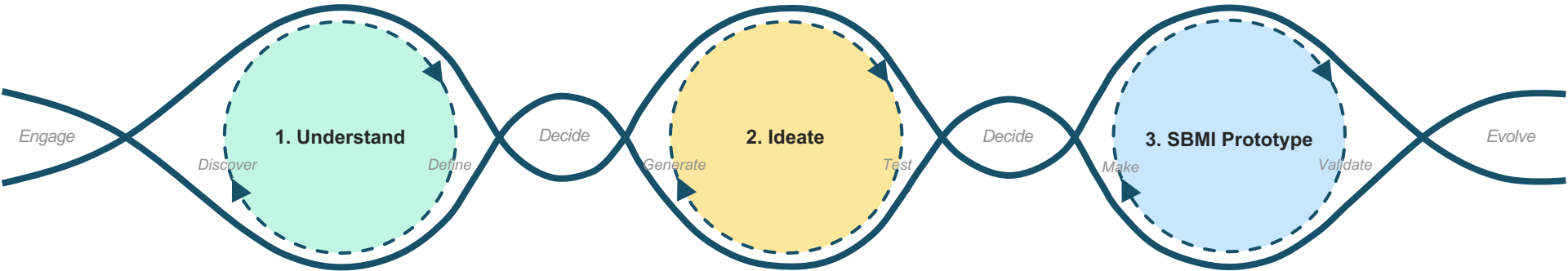
# Prototype, Learn, & Iterate



## The mindset: Combine divergent & convergent thinking



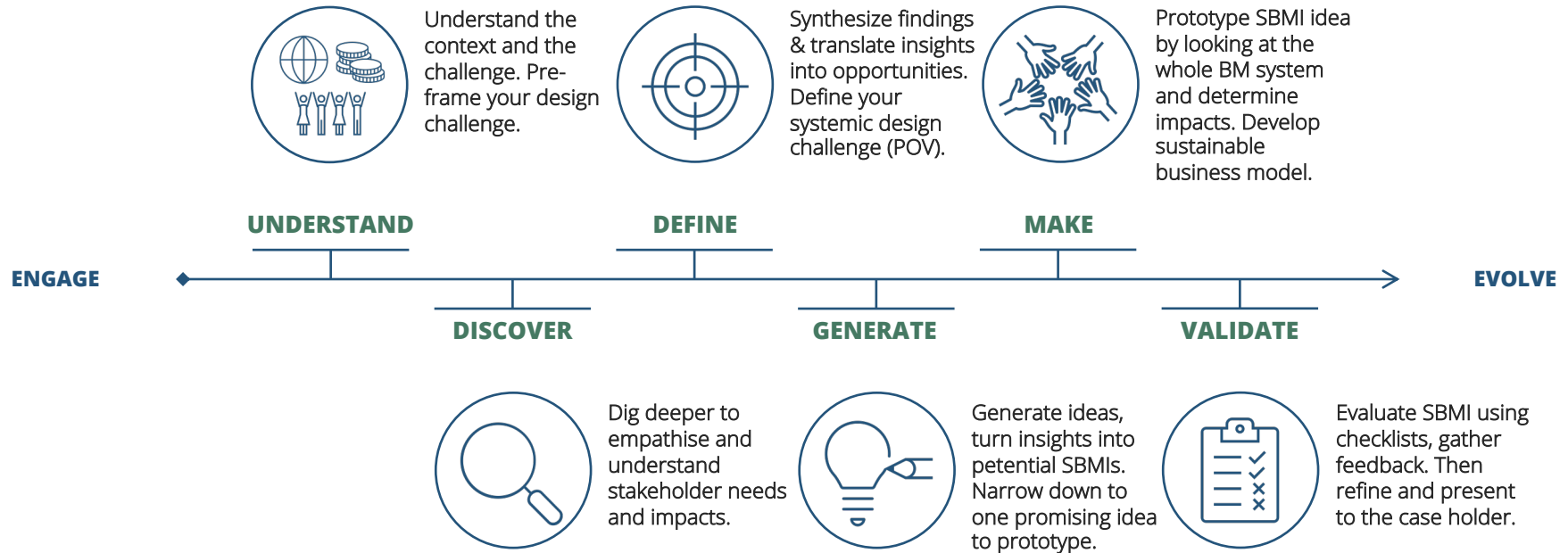
## The process...



- » Discover unmet needs of people, planet, profit
- » Map the system, actors & flows in the value chain
- » Define clear outcomes & needs to be met
- » Take inspiration from proven strategies & living systems
- » Co-create solutions and business model changes
- » Test prototypes on stakeholders & assess impact



# The Methodology @ TT-BMI





## Helpful tools & approaches for understanding...

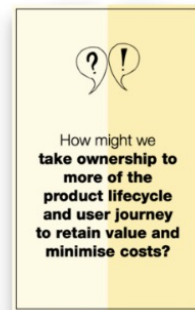
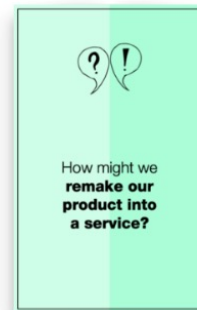
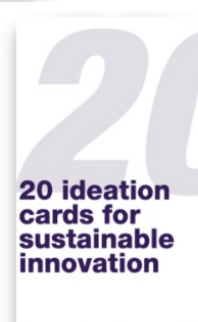
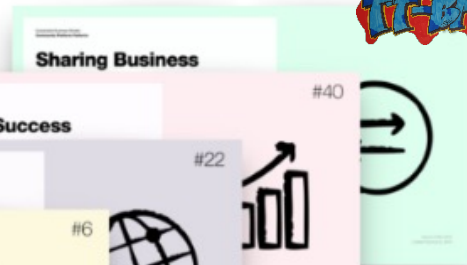
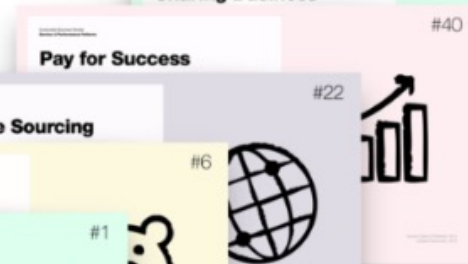
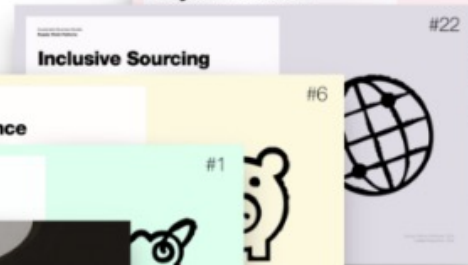
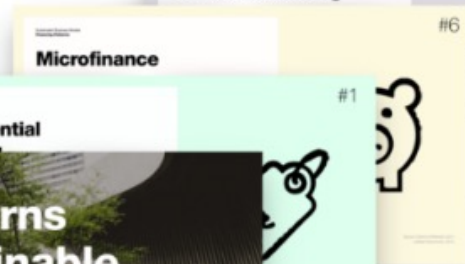
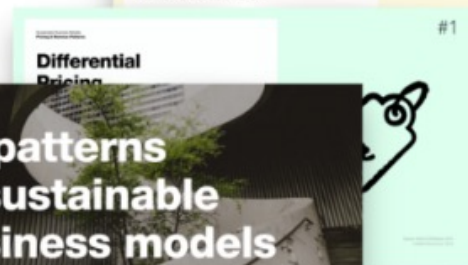
- Research the given company
- Problem tree analysis
- Stakeholder & Value mapping
- Mapping trends (macro & micro)
- Interviews & observations
- Empathy mapping

### Value map



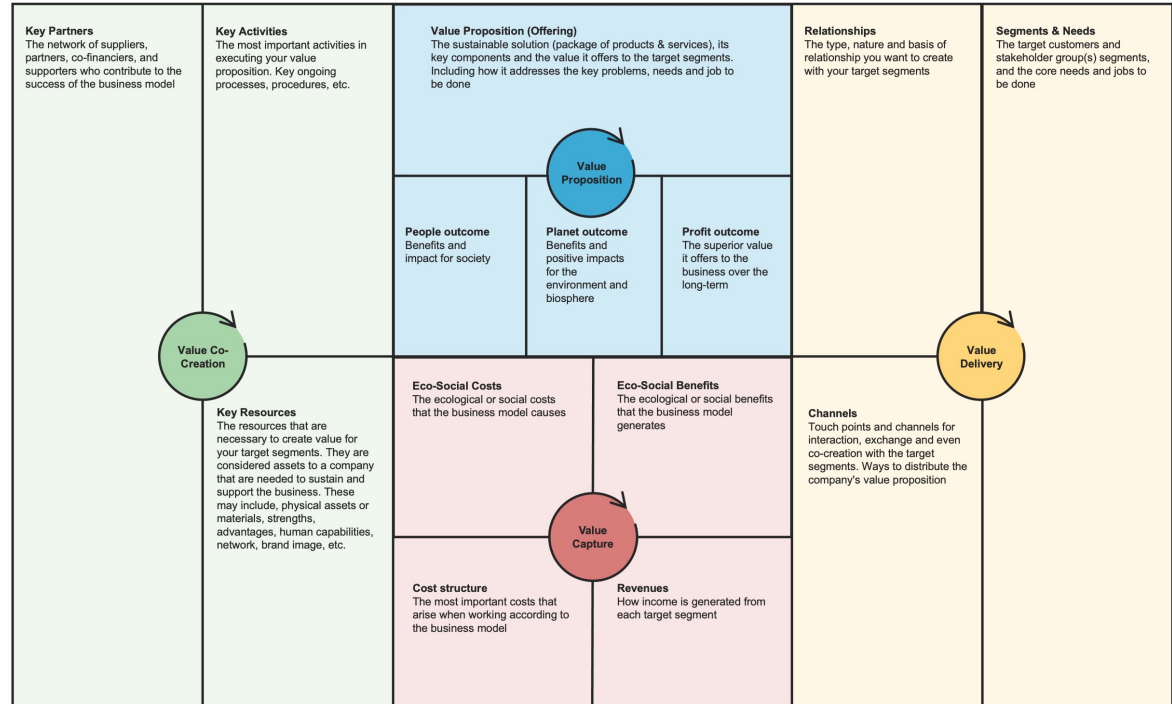
## Helpful tools & approaches for ideating...

- Brainstorming & brainwriting
- How might we's
- Idea napkins
- Backcasting
- Cluster & vote

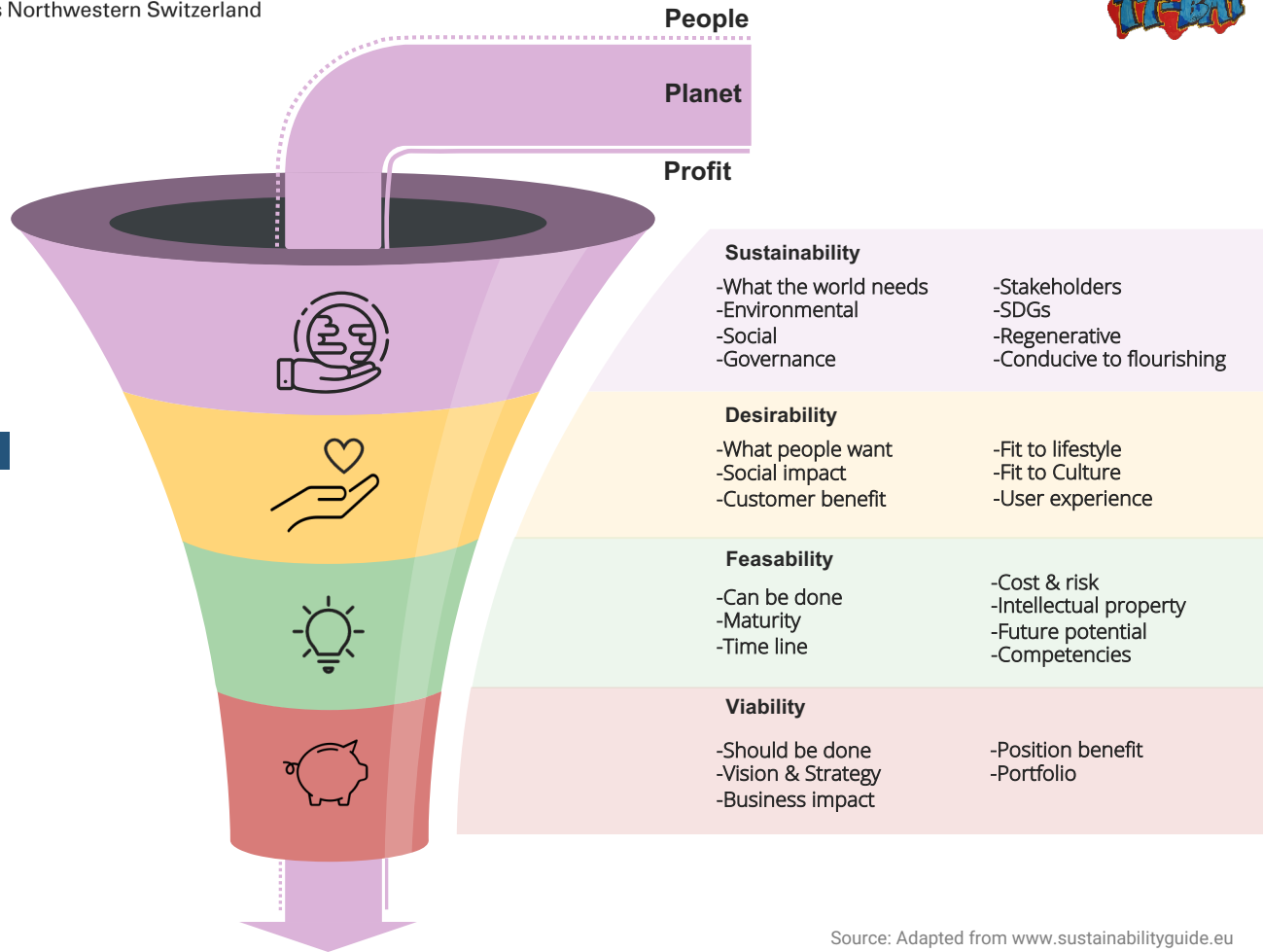


## Helpful tools & approaches for SBMI prototyping...

- Mapping the BM ecosystem
- Evaluation funnel
- Impact assessment
- Stakeholder feedback



# The SBMI evaluation funnel



Source: Adapted from [www.sustainabilityguide.eu](http://www.sustainabilityguide.eu)

# 4

How to get started:

**Begin with  
playfulness, go  
visual & prove  
value, then evolve  
and keep learning**

## Four tips to get started...

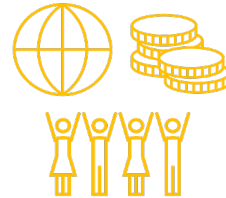
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**Begin with  
playfulness &  
curiosity**



**Go visual, share  
the opportunity  
using stories**



**Prove value  
people-planet-  
profit**



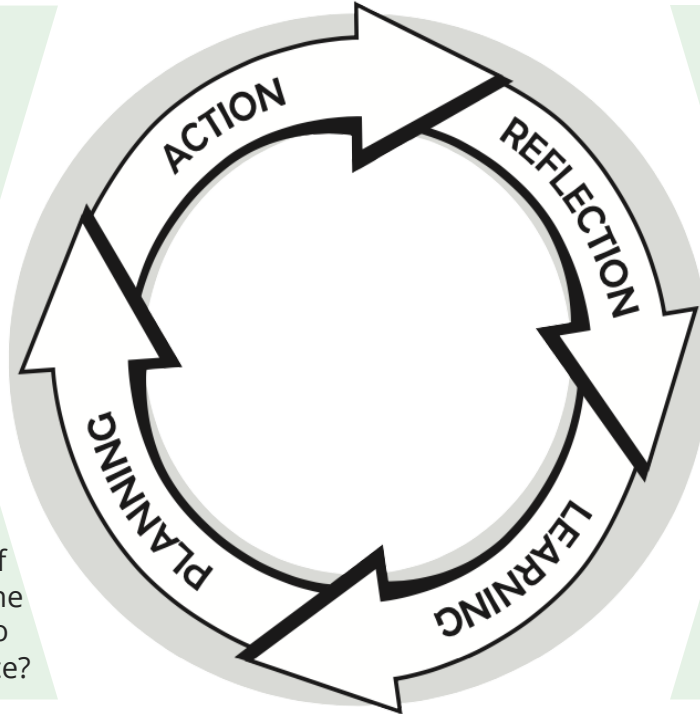
**Keep learning! Once  
the idea is proven,  
evolve & keep  
learning**



# The Action Learning Cycle and Questions

What significant things happened?  
Describe the events. Who was involved, what did they do? What picture emerges? How did I/we feel?

So what does this mean for practice?  
What do we want, to do, to happen?  
How? What are we going to do differently? What do we have to let go of or stop doing? How will we not repeat the same mistake? What steps will we use to build these new insights into our practice?



Why did it happen, what caused it?  
What helped, what hindered? What did we expect? What assumptions did we make? What really struck us? Do we know of any other experiences or thinking that might help us look at this experience differently?

What would we have done differently?  
What did we learn, what new insights? What was confirmed? What new questions have emerged? What other theories help us to deepen these learnings? What guidance do we get for the future?



Question to reflect on:

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

~~*Move fast and break things*~~

**Move steady and fix things**





**All of us are shaping  
tomorrow**

[www.tt-bmi.ch](http://www.tt-bmi.ch)

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