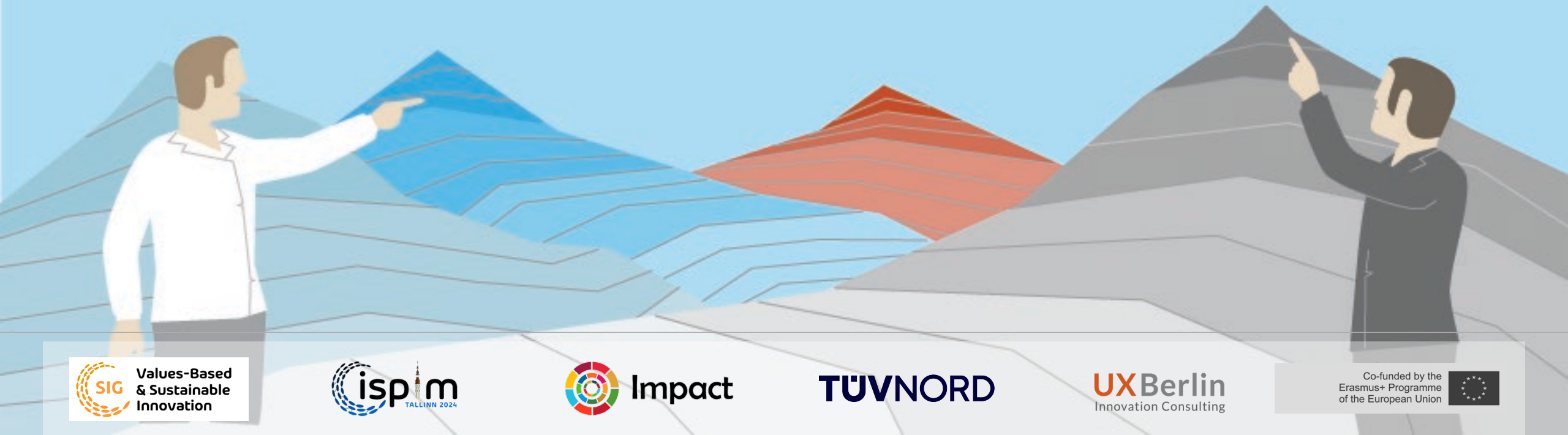


Sustainable Innovation Culture

From ESG Compliance to Forward Looking Cultures and Market Leadership

An interactive masterclass

by Prof. Dr. Henning Breuer and Kiril Ivanov (UXBerlin) and Roman Meier-Andrae (TÜV Nord),
for Innovation Leaders and Future Educators at the 2024 ISPIM Innovation Conference



Our goals for today and an agenda

Goals:

- Understand the role of culture in driving sustainable innovation, and
- familiarize with selected methods to further develop an existing culture in a sustainability-oriented way.

Agenda:

08:30 – 09:15 **Disambiguation:** *It takes a whole culture ...*

09:15 – 10:00 **Review:** Review your organizational values and innovation culture.

10:00 – 10:15 **Break**

10:15 – 10:40 **Case:** Understand challenges in establishing sustainable innovation cultures.

10:40 – 11:30 **Practices and Methods:** Familiarize with selected practices and methods.

11:30 – 12:00 **Outlook:** Outline your ways ahead into our common future.



Illustration by Luci Gutiérrez

Disambiguation /// Lets start with our understanding of the sustainable innovation culture components.

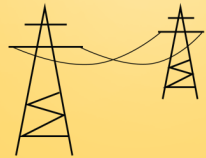
Please note on three post-its:

- What does **sustainability** mean in the context of your organization?
- How do you define **innovation**?
- How do you conceive of the concept of **culture** in this context?

✓ One post-it
per idea

✓ Write self-
explanatory
statements;
short &
precise

✓ Illustrate



Sustainability

Culture

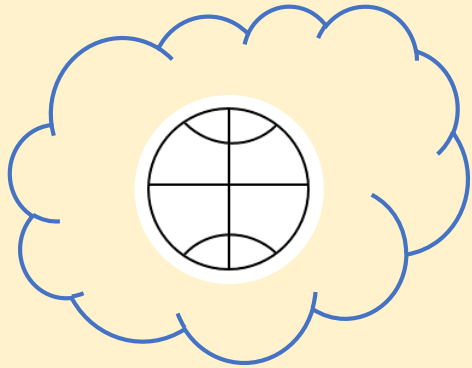
Innovation

01 It takes a whole culture ... to address great challenges.

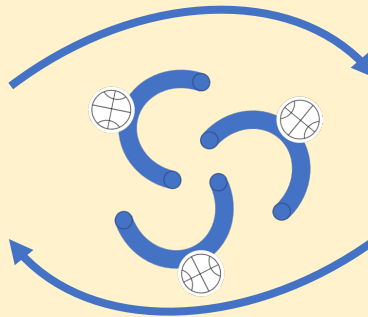


Disambiguation /// „Sustainable innovation culture” synthesizes three global concepts.

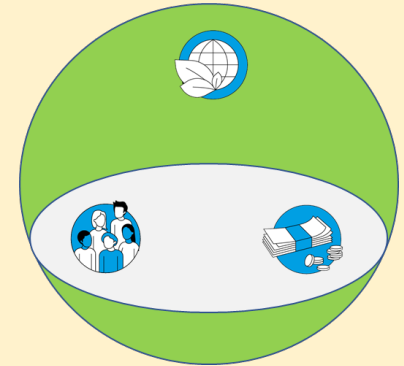
Sustainability



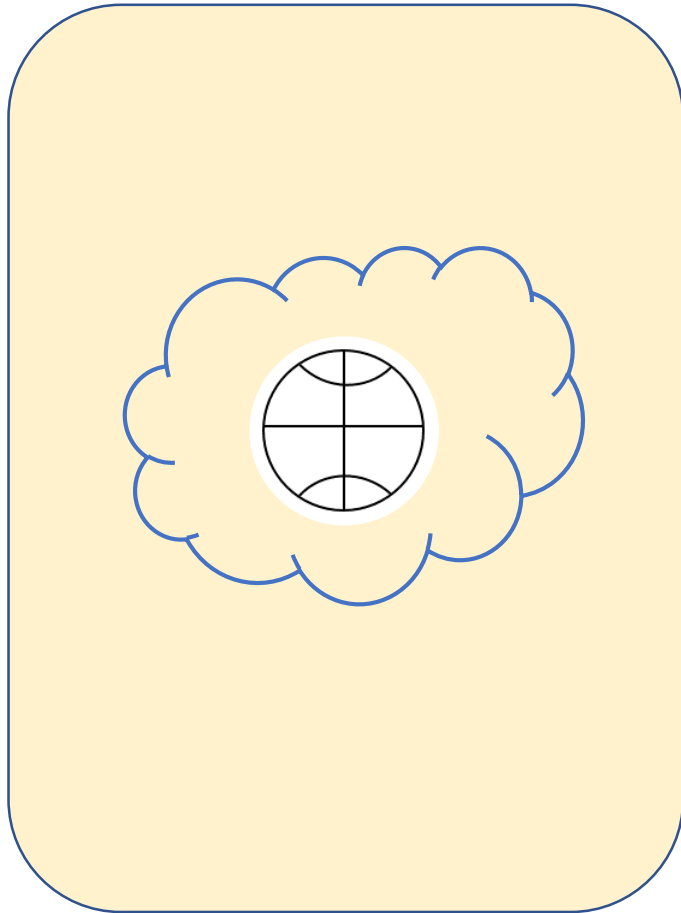
Culture



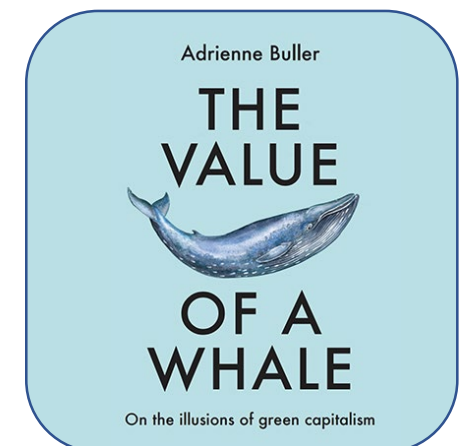
Innovation



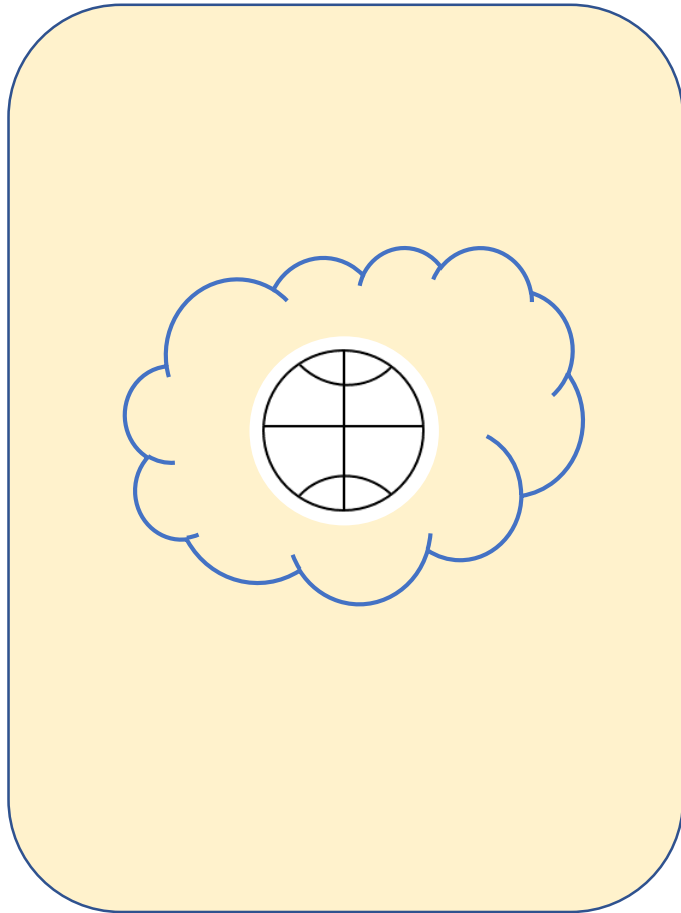
Sustainability /// Exploring potentials to contribute to and to benefit from sustainable development, companies need to revisit their normative guidelines and values.



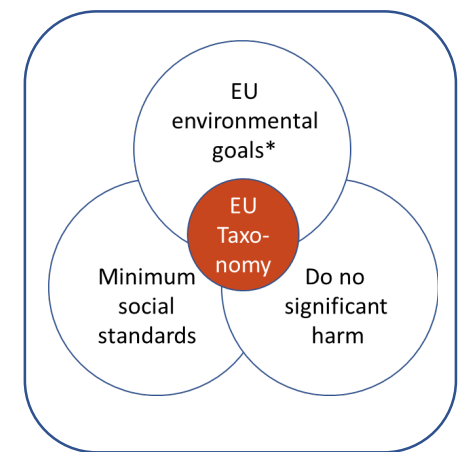
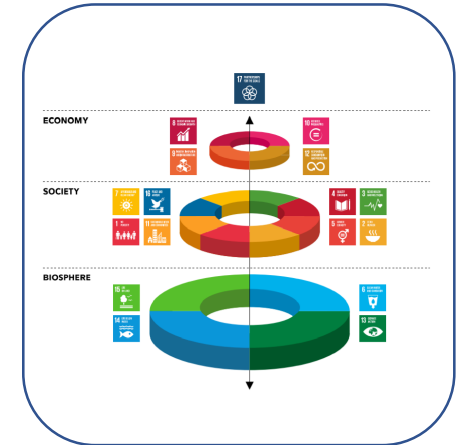
- Sustainable development as a „process of change to meet human needs and aspirations“* is based on **values of inter- and intragenerational equity**.
- The UN Conference on Trade and Development estimates annual investment **requirements** of US\$ 5-7 trillion to achieve the Sustainable Development Goals (and business **opportunities** worth US\$ 12 trillion).
- Corporate sustainability (reporting) should be context-dependent on carrying capacities and fair allocation of resources (stakeholder-inclusive); it is **specific to each organisation's strategy and normative guidelines**.



Sustainability /// Sustainable value creation is evolving from a voluntary ambition of a few idealistic entrepreneurs to an indispensable requirement for all companies.

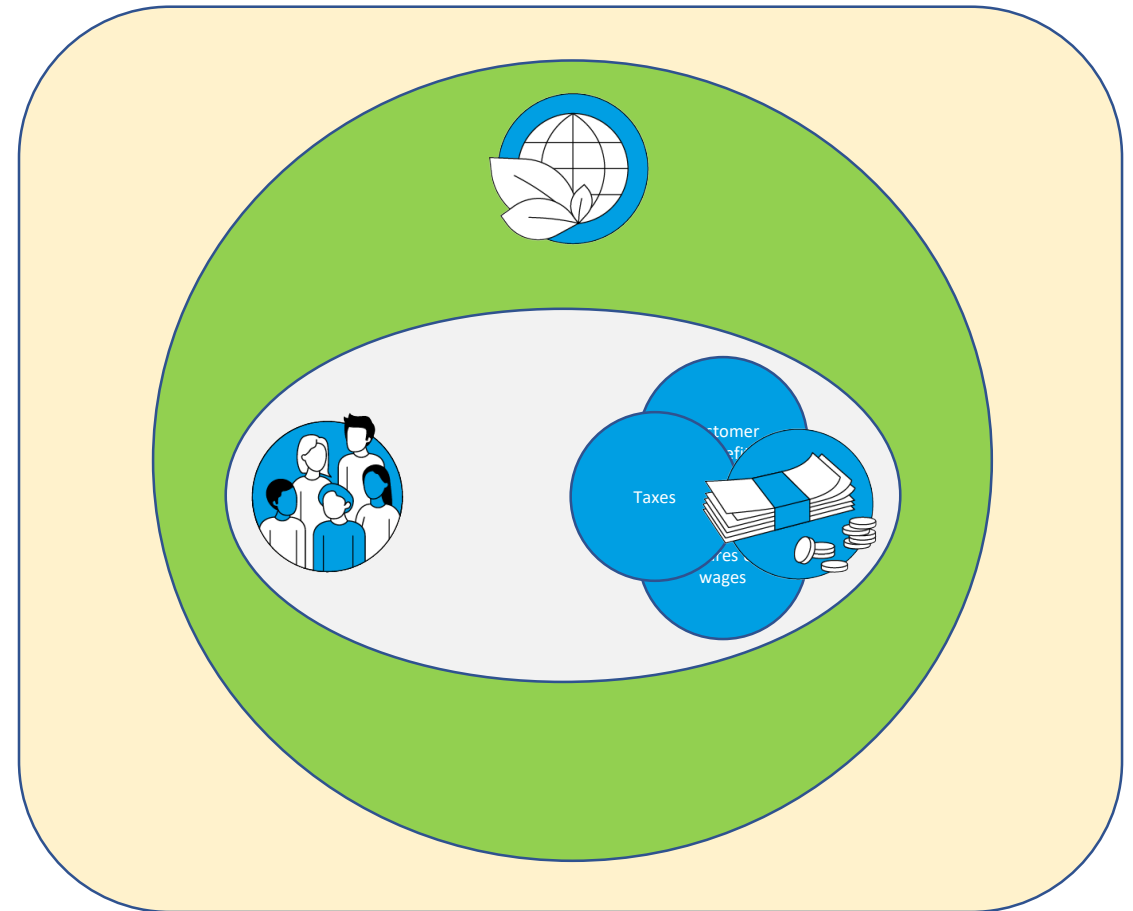


- **Multidimensional** value creation, seventeen SDGs (with 169 targets and even more indicators), six environmental goals of the EU Taxonomy (CSRD, CSDDD ...), ... need to be translated into unique normative guidelines (vision, mission, purpose, and underlying values), and incorporated in daily practices.
- Re-prioritization of business goals and **managing values** are required **to** continuously and reliably **create sustainable innovation and establish a sustainable innovation culture***: **Sustainable business**: “A sustainable organization expresses its purpose, vision and/or mission in terms of social, environmental and economic outcomes”**.



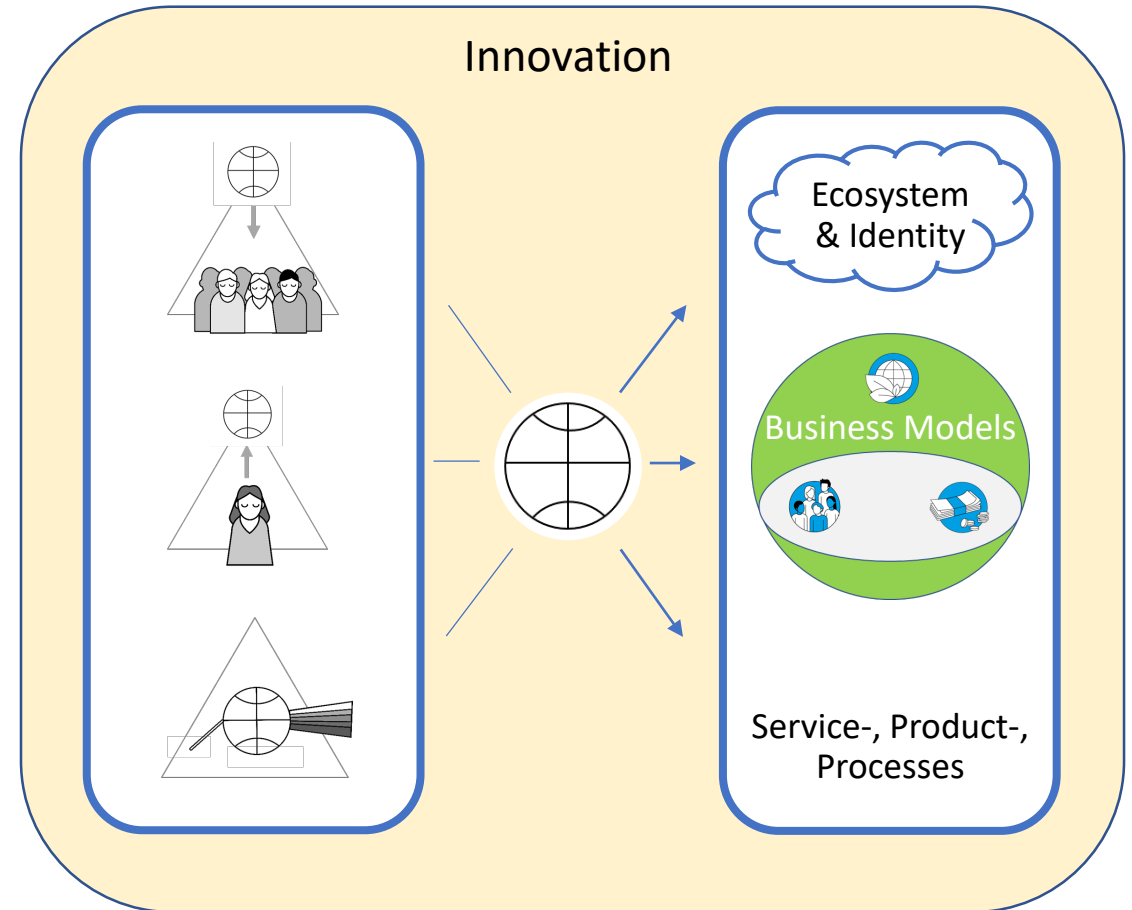
Innovation /// Backed up by EU regulation, we are already moving from traditional focus on economic or financial value-add to a multidimensional understanding of sustainable value creation.

- **Traditional** economic and management theory consider **value creation in economic terms** of customer benefits, profit to investors & wages to employees through company revenues. Indirect benefits to society stem from taxes and employment.
- This narrow understanding of values has now been extended to creation of **social** and **ecological** benefits – their range is still being explored.
- Think for instance of social inclusion services, participation or improved access to vital services, reduction of emissions or positive contributions to the strengthening of environmental ecosystems.



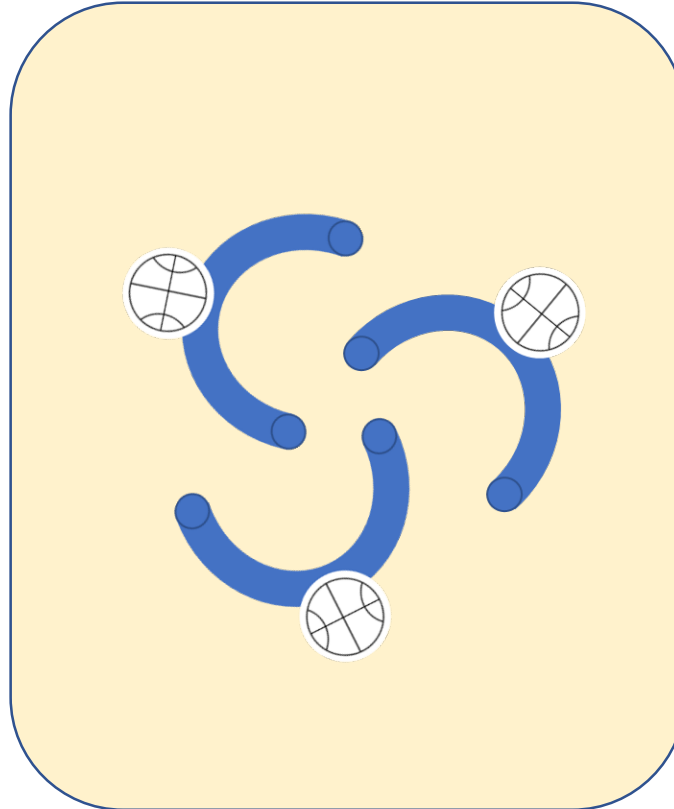
Innovation /// Moving from an opportunistic search of quick wins to a values-based endeavor.

- Innovation as a “new or changed entity [product, service, process, model and method], realizing or redistributing **value**”**, is an **outcome** of innovation activities or processes.
- Complementary to opportunistic search for competitive advantages and market differentiation, **values-based** approaches apply values as a (integrative) source, (directive) orientation mark and (generative) lever for innovation.
- **Sustainable innovation**: Changes an organization’s values to create and realize economic, social and environmental value”***



Culture /// Culture is acknowledged as most critical driver of business outcomes. Why?

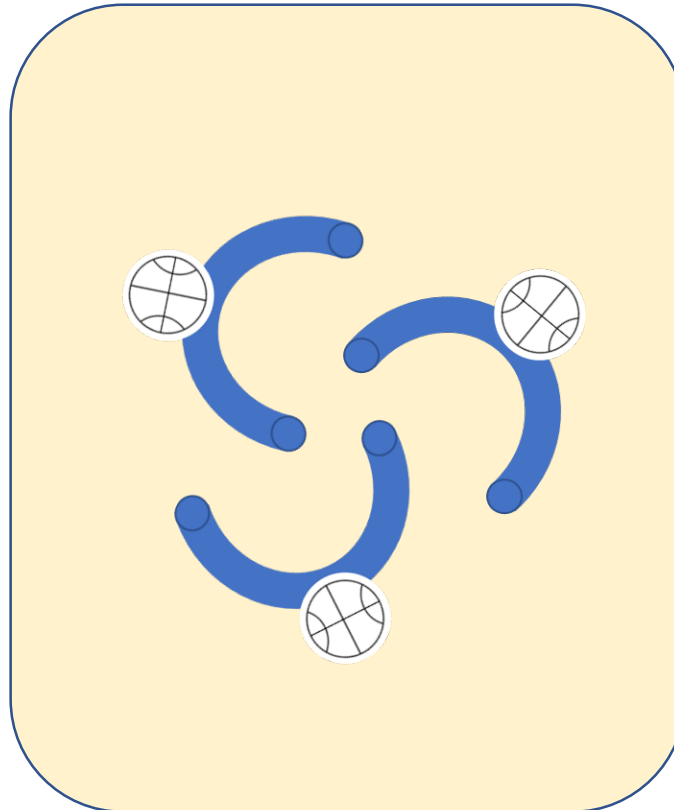
- 2023, a third of CEOs ranked culture as most important influence on financial performance (up from 7 percent in 2021). Almost all had worked on culture, 83 percent doing so at the time of study in 2023.
- 35 percent (“culture accelerators”) indicate that their companies take a rigorous, intentional approach to culture in relation to financial performance (up from 11 percent)



- Top reasons for focusing on culture are increasing employee engagement and innovation, and improving diversity and inclusion.
- “Highly innovative companies have a unique innovation culture [based on a] central core of values ...They are constantly trying and experimenting with new ideas, ways, and methods to enhance their performance” (Manohar & Pandit, 2014, 679).

Culture /// *It takes whole culture to bring about sustainable innovation or to **translate what we care about into desirable outcomes.***

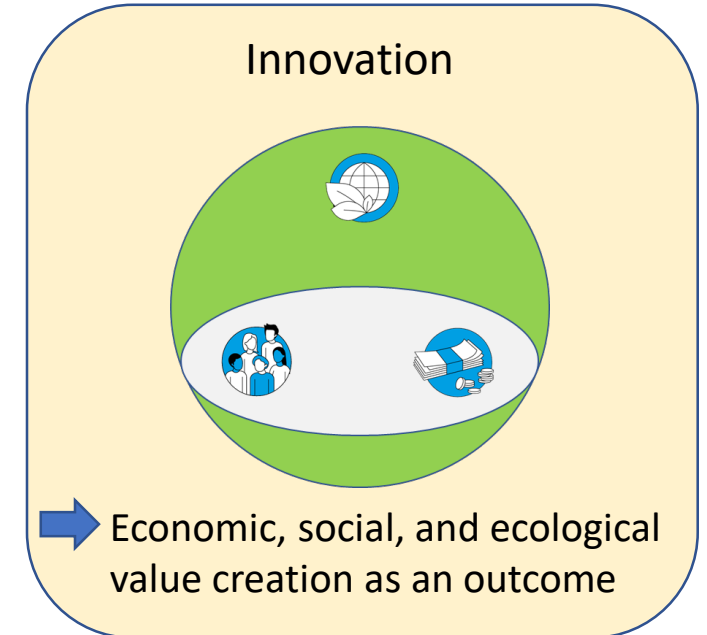
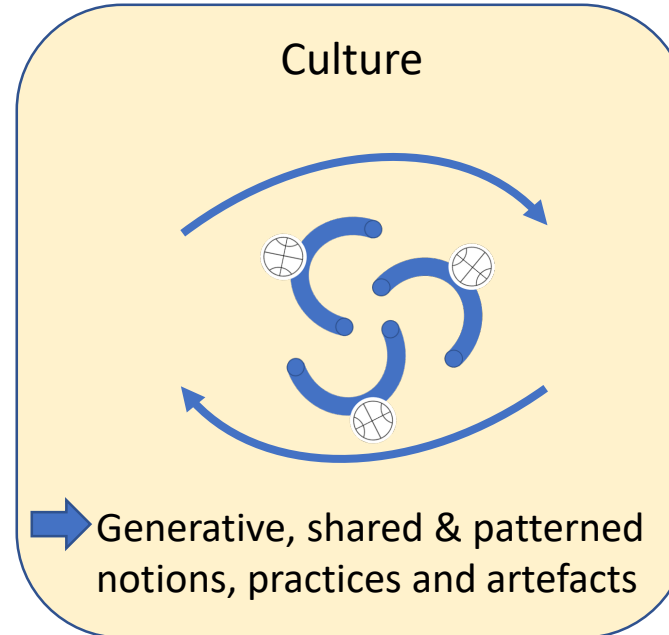
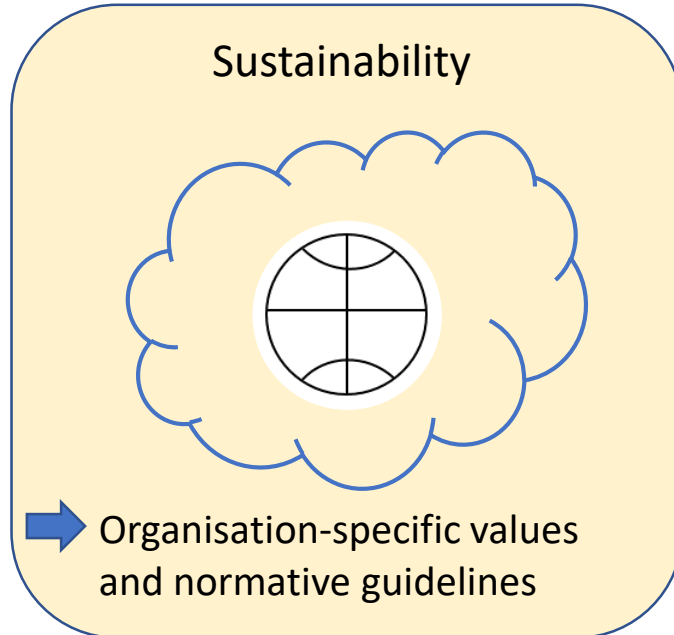
- The notion of culture indicates a holistic (anthropological) approach to shared or patterned **notions , practices and artefacts that make up an organisation.**
- We view culture as **generative** – translating what we care about (values) into desirable outcomes (economic, social, ecological value-add or benefits). We need to understand fundamental values to clarify our ambitions and design new courses of action.



➡ It takes a whole culture to **drive sustainable innovation:**

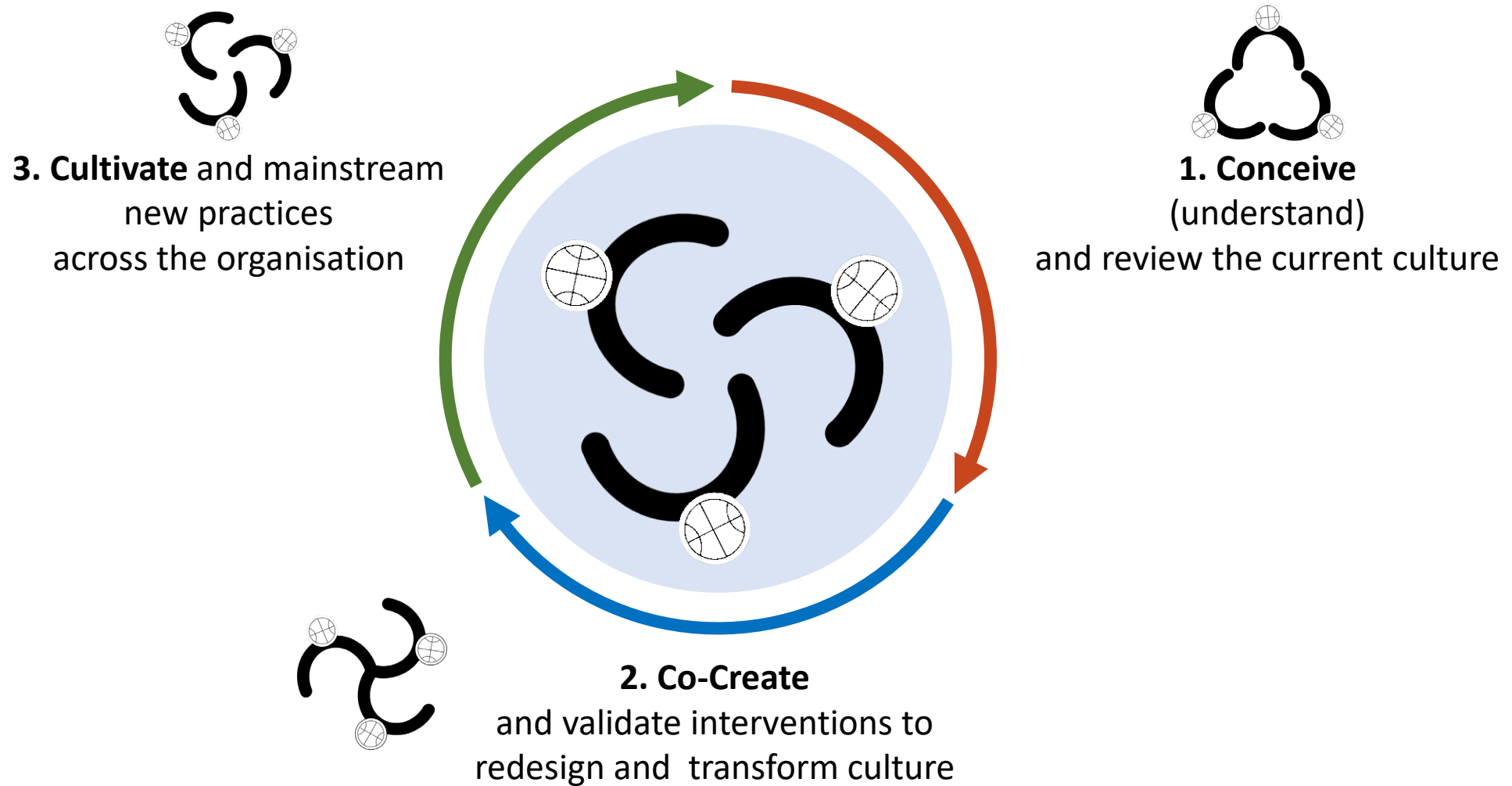
- not once, but repeatedly and reliably,
- not single solutions, but substantial contributions to sustainable development,
- despite of unforeseen barriers or resistance,
- against the odds of unintended consequences.

Disambiguation /// *Sustainable innovation culture is a configuration of patterns, based on shared values, enhanced by suitable artefacts, and designed to achieve sustainable results.*



Sustainable Innovation Culture: A deliberate approach to turn organisation-specific values of equity into economically, socially and ecologically beneficial outcomes, in a repeatedly and reliably manner, despite of unforeseen barriers or resistance, against the odds of unintended consequences. Sustainable Innovation cultures can be established through virtuous cycles of understanding, co-creating, cultivating practices to deal with sustainability challenges and contribute to sustainable development.

Framework /// *A framework of 3C activities allows to distinguish between proven practices and methods to cultivate sustainable innovation.*



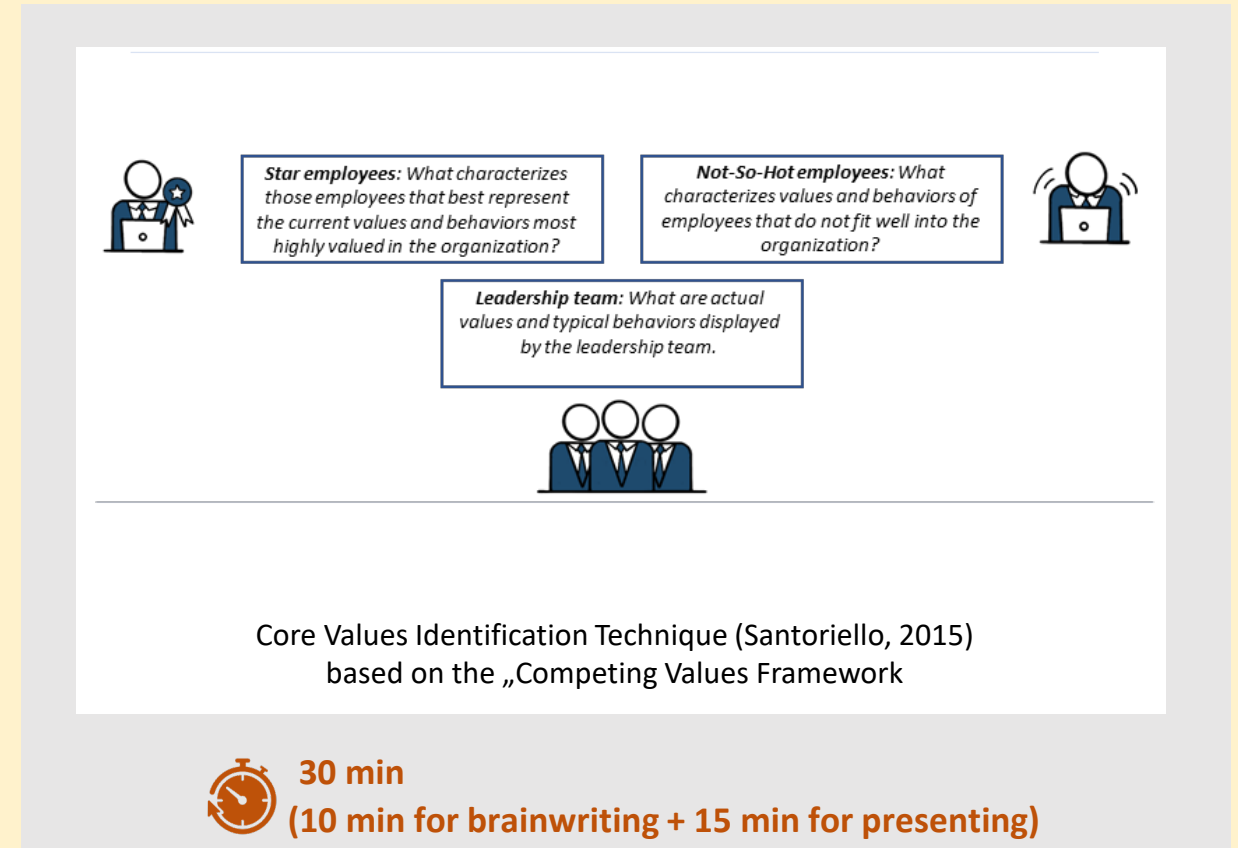
02 Review your organizational values and innovation

CULTURE



Review /// Mapping competing (empirically) enacted values

- Organisational values in general and specifically with respect to innovation are often implicit and conceal unconscious cultural conflicts and tensions.
- A need to review implicit values can arise from external demands (e.g. certification or reporting requirements) or internal challenges (cultural change, rapid growth, crisis).
- This mapping technique helps to elicit implicit values that shape the development of a sustainable innovation culture.
- Use the template to map your perceived values and behaviors within your organisational (corporate or university) culture.



Review /// Tensions between implicit values in TÜV NORD's sustainable innovation culture

- TÜV NORD's implicit values show, among others, values of curiosity, self-initiative and a constructive attitude against scepticism and having complaints as essential prerequisites for fitting well with the organization and effectively contributing to sustainable innovation.
- They hint to a tension between a failure-tolerant, flexible approach to leadership and a hierarchical control-oriented approach that emphasises risk aversion and performance orientation.



Star employees: What characterizes those employees that best represent the current values and behaviors most highly valued in the organization?

Self-initiative (1, 7, 9), experimentation (3, 4), curiosity (4, 8, 9), admitting mistakes (1, 2, 9), and tolerance to failure (1, 3, 4)

Not-So-Hot employees: What characterizes values and behaviors of employees that do not fit well into the organization?

Working in silos (3, 6), Fixed mindset (2, 3, 4, 9), Scepticism (8), Complaining (6), Preaching of rules (8)



Leadership team: What are actual values and typical behaviors displayed by the leadership team.

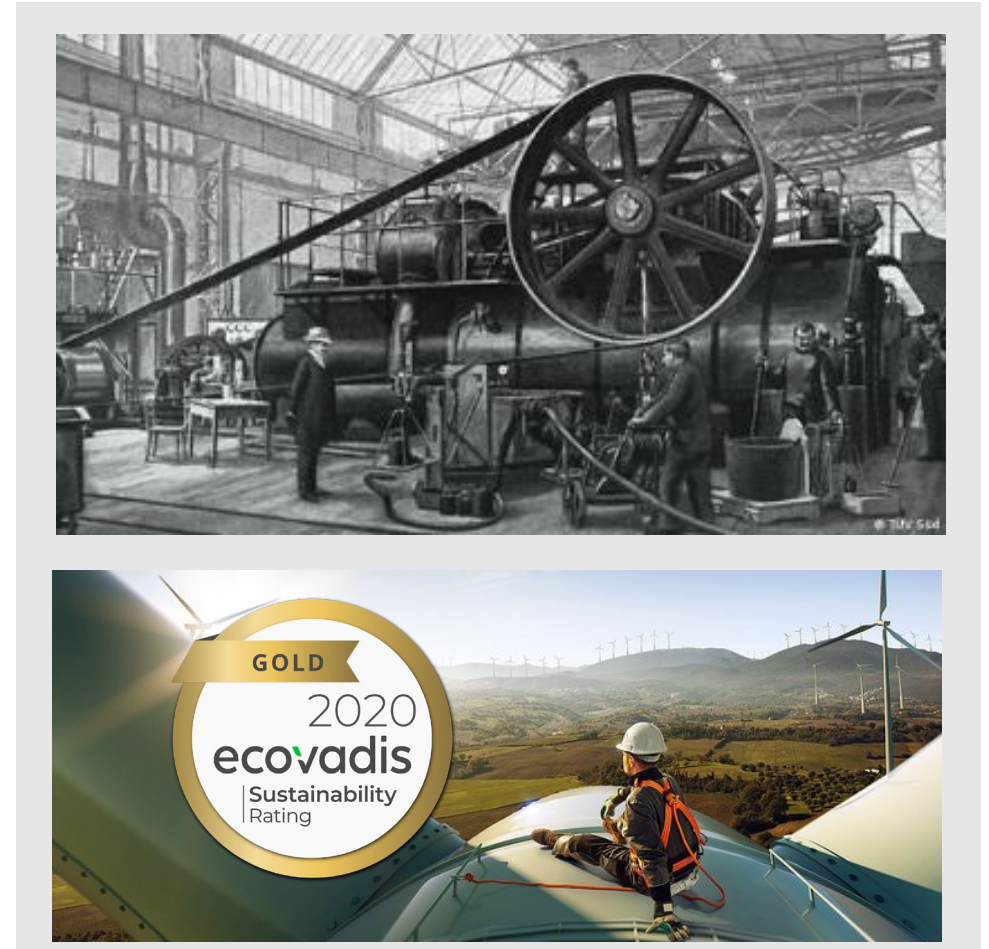


Employees value **flexible leaders** who appreciate and support subordinates and their ideas (5, 7, 8), enable self-initiative and independent work (2, 3, 8, 9) and are nonconformist in their decisions (6, 7).

However, flexibility is sometimes obstructed by **opposite tendencies** that characterize the organizational leaders (e.g. consensuality; 1, 5; risk-aversion; 1, performance-orientation 2).

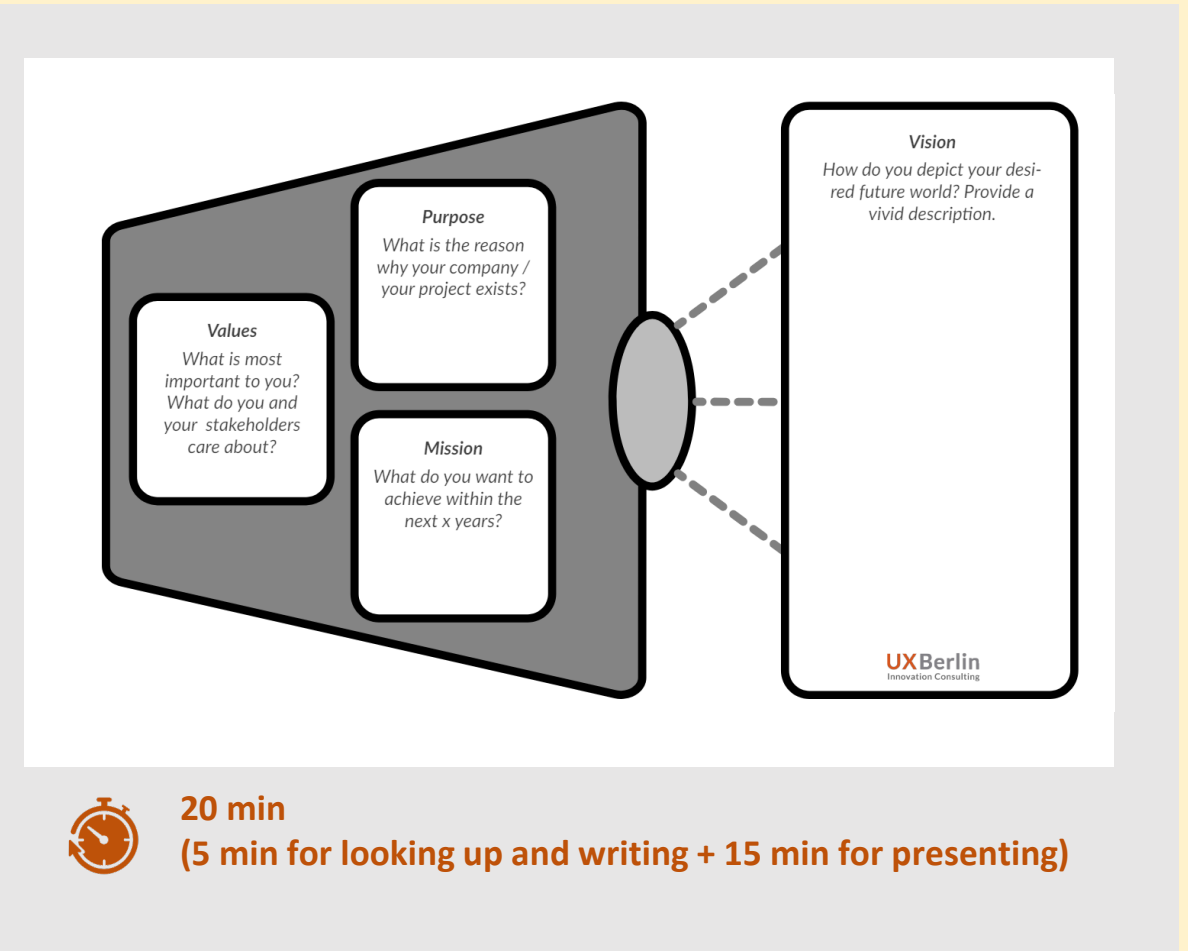
Review /// Sustainable Innovation and Innovation Culture at TÜV NORD (Roman).

- Originally founded with the purpose to ensure safety of steam engines, **TÜV NORD has always been operated and managed based on values.**
- Its **core values of safety and trust** are deeply engrained in the culture and daily practices of each employee.
- **Sustainability** is seen by some as a natural extension of safety as both protect (human) life, and it has been officially **established as one of 6 core values in 2018.**
 - “The focus is on our customers
 - Our employees are the key to success
 - Our integrity is the basis of everything we do
 - Our sustainability opens up new paths to a shared future
 - Our diversity opens up new opportunities
 - Our culture of innovation is trend-setting”*

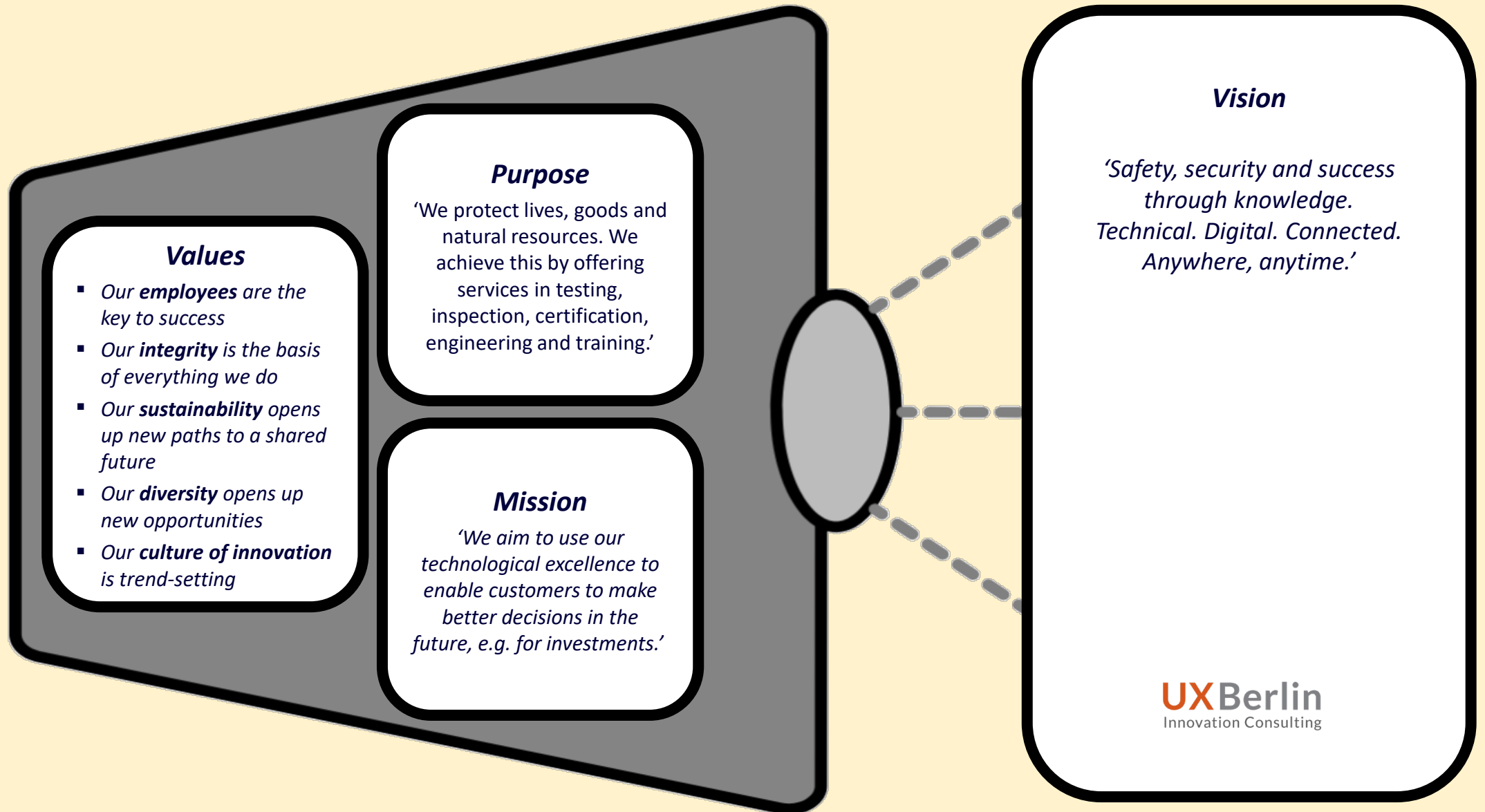


Review /// From values to purpose, mission and vision

- Try to recall or look up one important normative guideline (value, purpose, mission, or vision) of your organisation – ideally one with implications for sustainable development.
- Guiding questions:
 - **Values:** What is most important to you? What do you care about? (How do you express your notion of intra- and intergenerational equity?)
 - **Purpose:** What is the reason why your company / project exists? (How does it contribute to the long-term wellbeing of all people and planet?)
 - **Mission:** What does your company / project want to achieve within the next [5-30] years?
 - **Vision:** How do you depict our desirable, common future through a vivid description?

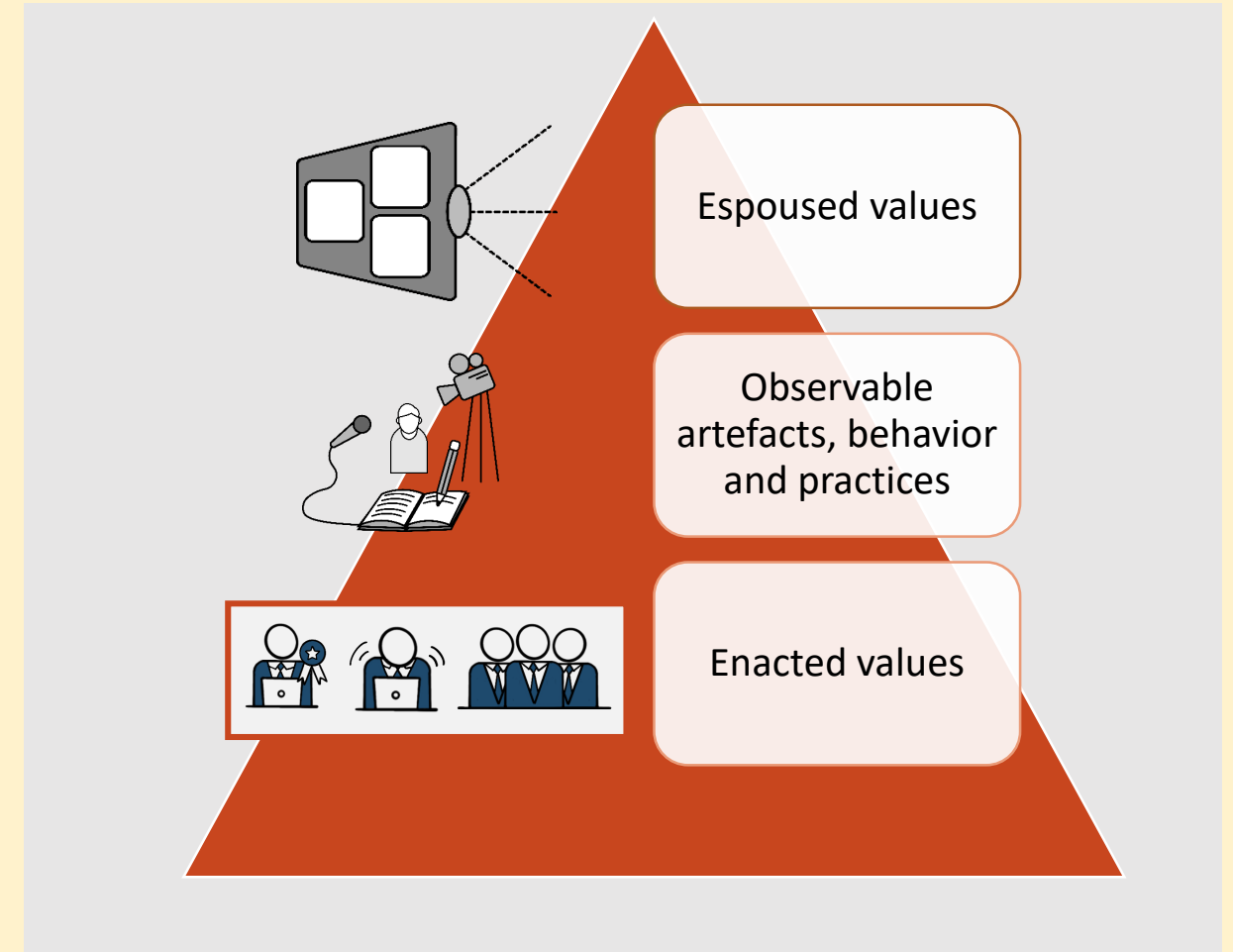


Review /// TÜV NORD's values, purpose, mission and vision



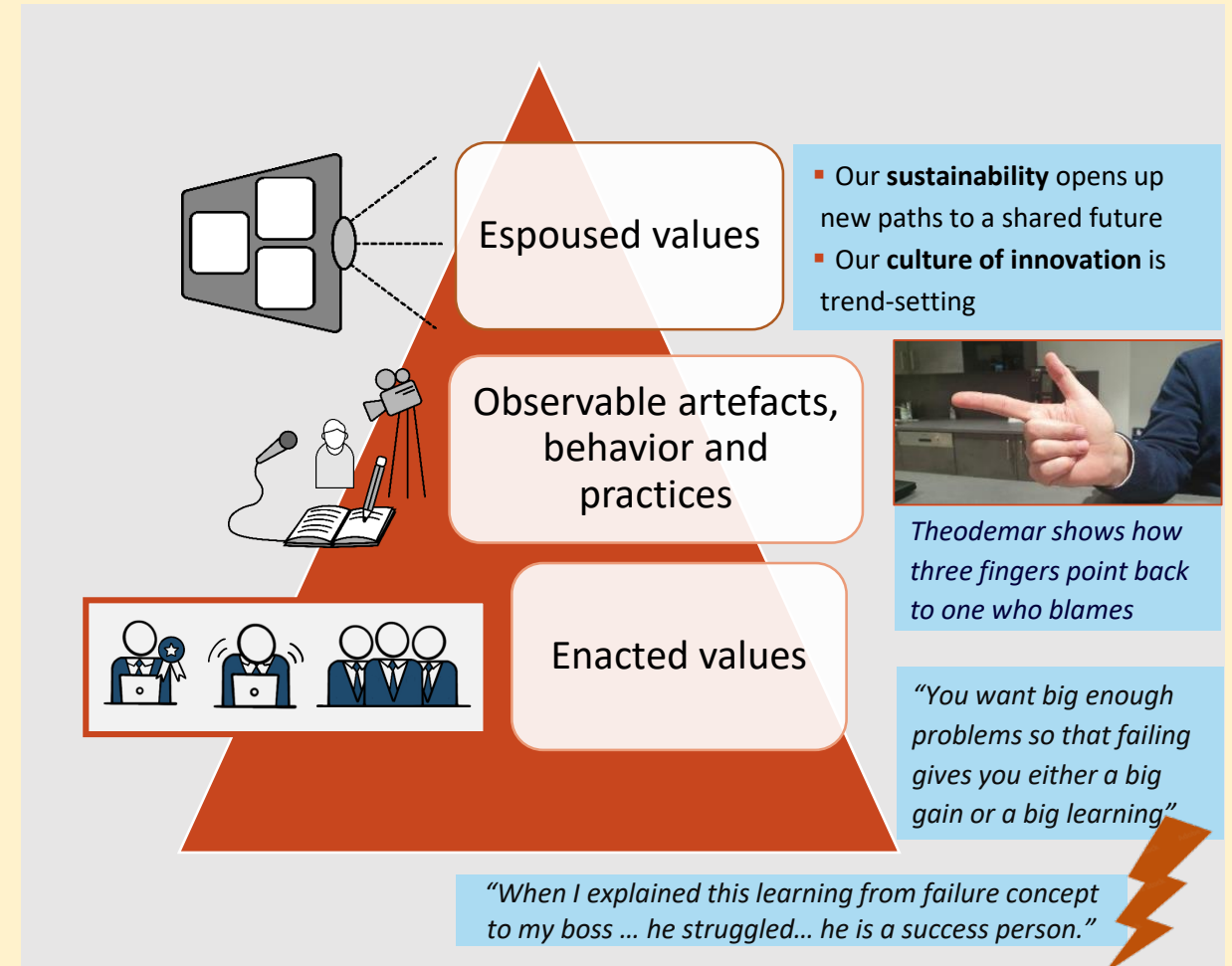
Review /// Discussion on tensions and value-action gaps

1. In how far do the official statements refer or relate to issues of corporate sustainability?
2. Do you see potential tensions between the official statements?
3. How do you see the relation between the enacted values you described and the official statements?
4. Which further tensions and value-action gaps do you notice in your organisation?



Review /// Discussion on tensions and value-action gaps (an Example from TÜV NORD)

- TÜV NORD's espoused values express a strong commitment to sustainable innovation by highlighting integrity, sustainability and a culture of innovation.
- Ethnographic observation revealed enacted values of flexibility, tolerance to failure, and self-initiative that many employees prioritized as crucial for exploring new areas of sustainable innovation.
- However, more traditional and industry-specific priorities of hierarchical control, risk aversion and performance orientation stand against them and necessitate a balancing act.





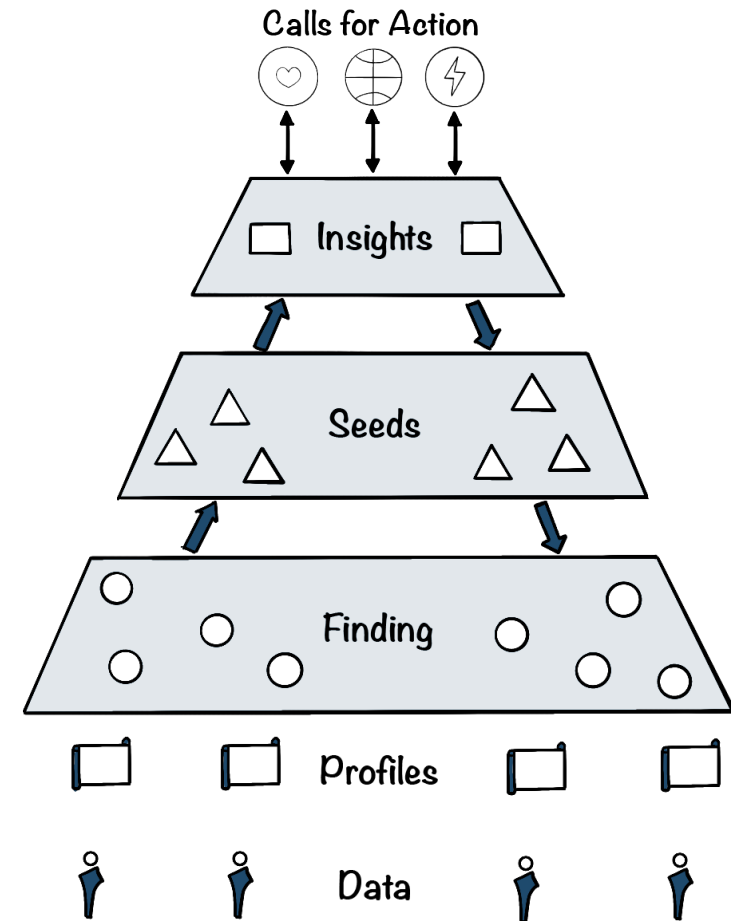
03 Understand challenges in establishing sustainable innovation

CULTURE



Case /// *Ethnography allows to understand challenges in establishing sustainable innovation cultures.*

- Culture comes so natural, it is not easy to grasp our own.
- Field studies are a holistic approach to generate insights on culture, respectively on latent needs and values, behavior and practices, conflicts and tensions
- Rapid ethnography can be applied in customer research, strategy or culture development in large or mid-sized firms:
 - Take a **step back** to grasp the culture holistically
 - **Interpret** symbolic forms, experiences, values and layers of cultural meaning
 - **Investigate values as dynamic**, context specific and subject to reinterpretation in the face of conflicts and tensions
 - **Gain insights** into otherwise implicit values or contradictory behaviours, such as tensions and values-action gaps



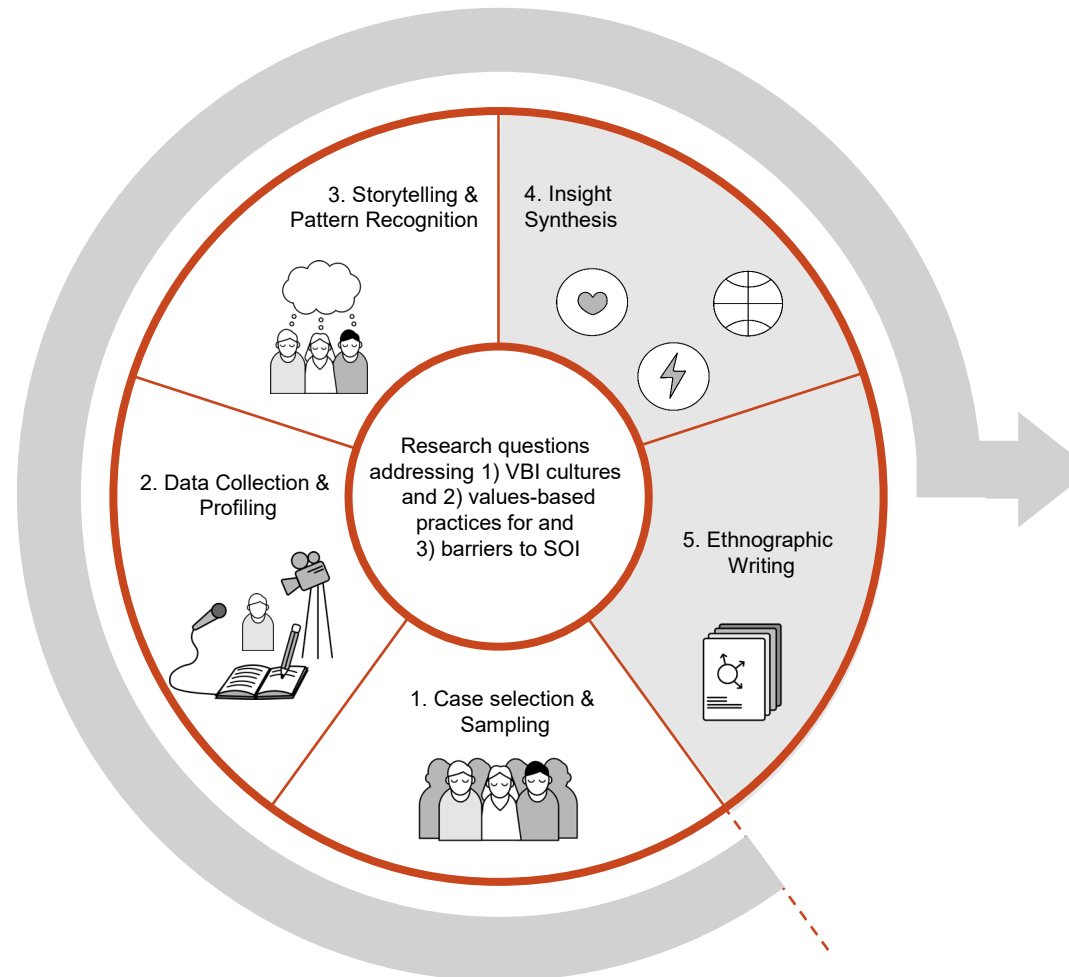
Culture /// *Ethnographically explored practices and challenges define task domains to establish a values-based & sustainability-oriented innovation culture.*

Nine respondents



No	Pseudonym	Position	Age Group
1	Theodemar	Group Innovation Management Director	50
2	Ronald	Digitalization Director	40
3	Christos	Operational Management Lead	45
4	Mark	Corporate Venturing	40
5	Martha	Strategic Management	45
6	Stefan	Product Management	45
7	Alex	Service Station Management	30
8	Ulrich	CR Management,	60
9	Holger	Head of Auditing	40

Ethnographic Research



Insights on values-practice gaps



An **illustrative statement** could be: ***“We want to establish a sustainability-oriented innovation culture...”***

so that we can comply with and act on our organizational values like sustainability or safety and trust in the digitalized world,

...but in some cases our history and engineering mindset prevent us from fully embracing a failure tolerant, stakeholder-inclusive and sustainability-oriented culture.”

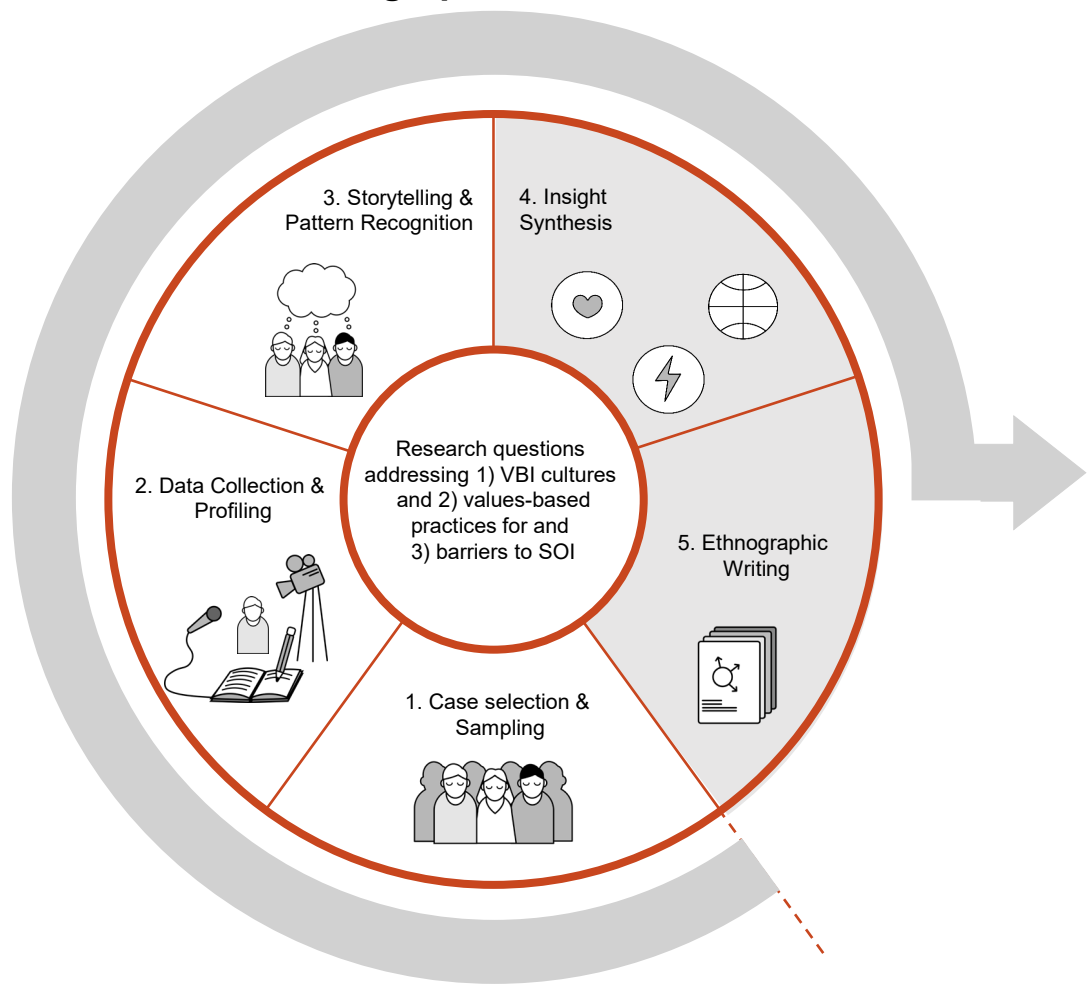
Culture /// *Ethnographically explored practices and challenges define task domains to establish a values-based & sustainability-oriented innovation culture.*

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Ethnographic Research



Insights on values-practice gaps



- I Sustainable Innovation Culture
- II Vertical Integration
- III Horizontal Collaboration
- IV External Interfaces
- V Practices & Methods
- VI Personal Alignment

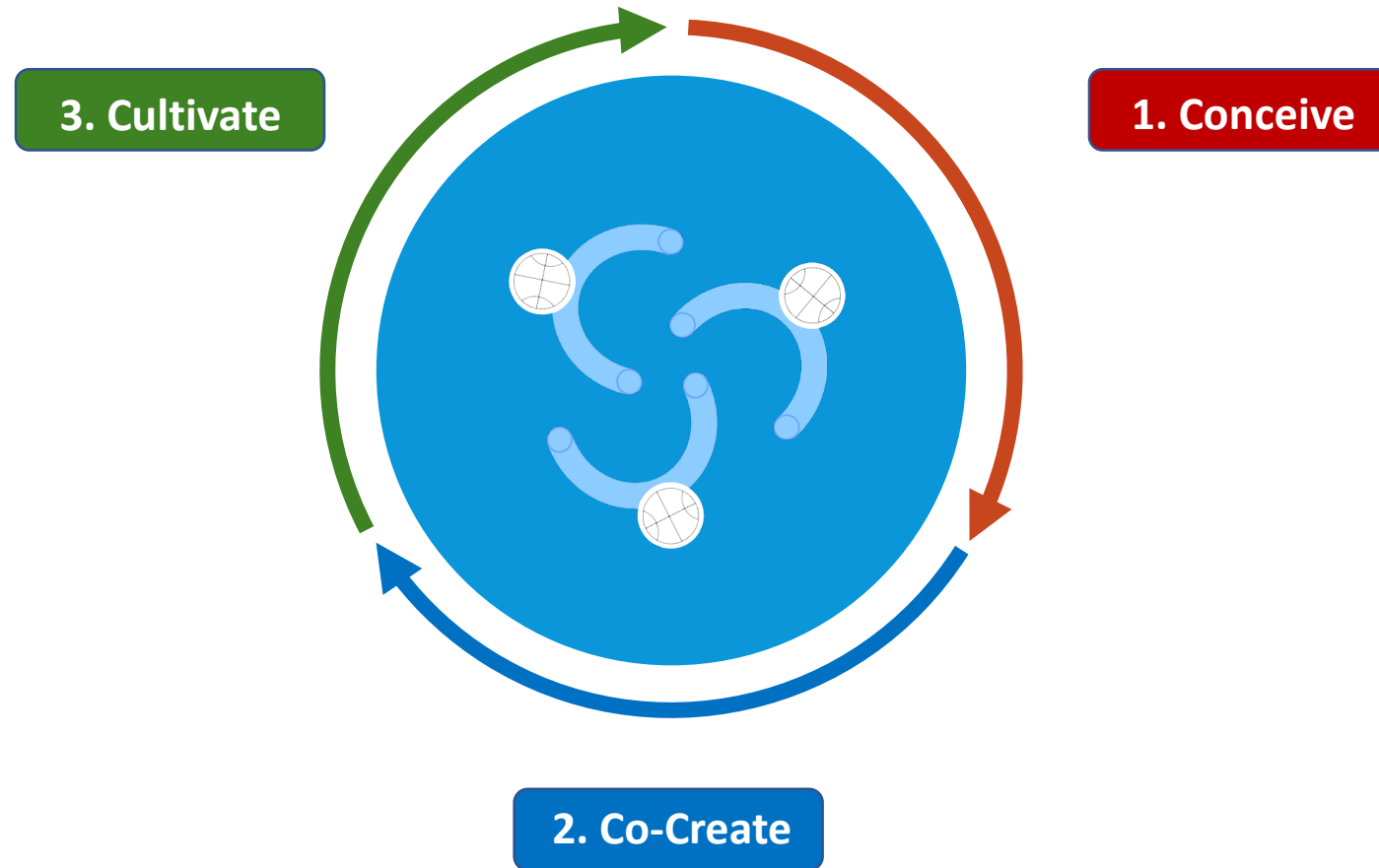
Culture /// How to introduce values of sustainability to an engineering-driven and safety-oriented business?

Insights	I Sustainable Innovation Culture	II Vertical Integration	III Horizontal Collaboration	IV External Interfaces	V Practices and Methods	VI Personal Alignment
Initial assumptions ("We thought...")	<i>Sustainability-oriented innovation is incorporated step-by-step into the organisational culture.</i>	<i>Bottom-up initiatives are encouraged to feed into an actionable strategy and a clear normative framing.</i>	<i>Flat hierarchies and a broad range of expertise empower the company to drive the sustainability-transition.</i>	<i>The company is a respected facilitator of corporate and institutional ecosystems driving the sustainability transition</i>	<i>New practices and methods are continuously evaluated, tried and adopted to drive sustainability-oriented innovation.</i>	<i>The personal motivation of the employees is translated into jointly effective contributions to the strategic and normative goals of the company.</i>
Contrasting findings ("but found...")	<i>History and safety culture create powerful preconditions for establishing a values-based innovation culture but also barriers to learning from failure and to establish a SOI culture.</i>	<i>Cases of a chasm between hierarchical levels with strategic ambitions unknown at the base and bottom-up initiatives missing adequate response.</i>	<i>Different divisions rarely collaborate on values-based and sustainable innovation and its assessment.</i>	<i>Engagement in values-based and SOI networks is perceived by individuals to be largely personal initiative - rather than a joint strategy</i>	<i>Introducing and mainstreaming new methods is a conflictual process to be carefully moderated. Even clarifying underlying frameworks right is an ongoing effort.</i>	<i>In spite of strong values-based motivations of the employees, these are not well aligned and leveraged for cultural transformation.</i>

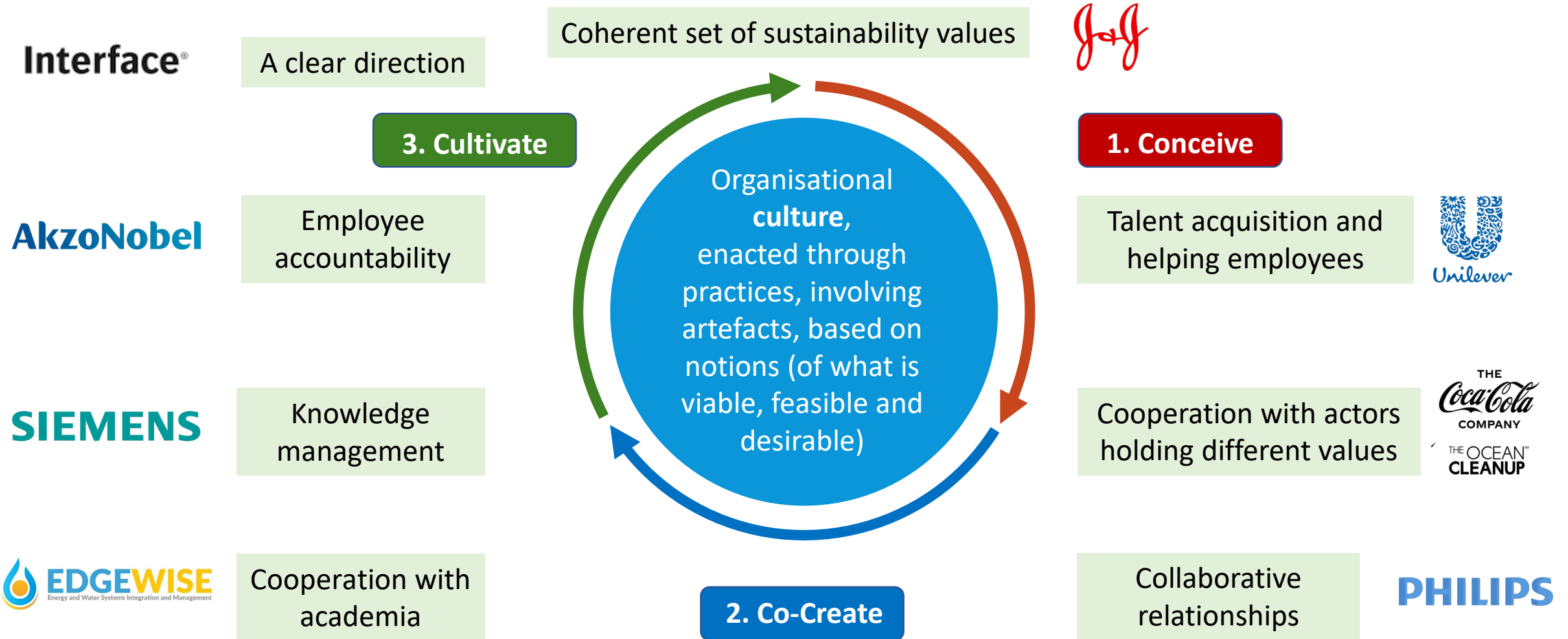
04 Familiarize with selected practices and methods.



Practices /// *Several practices have been reported in the literature.*



Practices /// Several practices have been reported in the literature*



* Geralts, T., Bocken, N.M.P. 2019. Driving Sustainability-Oriented Innovation. MIT Sloan Review. // Merritt, J. (2023). Plastic Pollution: Evaluating the Effectiveness of a Circular Economy Solution // Marques, J., Franco, M., & Rodrigues, M. (2023). International universities-firms cooperation as a mechanism for environmental sustainability: a case study of EdgeWise. // Schirmer-Kaegbein, U., & Reinheimer, S. (2021). Artificial intelligence for mapping and securing knowledge—sustainability for the most important corporate asset.

Practices /// Which behaviors or practices have you encountered in your organization?

- The level of alignment between daily practices and organizational values corresponds with level of maturity of a sustainable innovation culture.
- Reflexion on the alignment between values and individual or collective actions is an important step toward understanding the cultural strengths that can be harnessed and challenges that need to be addressed.

3 Practices

Describe one observable behavior or practice incorporating one of the normative guidelines of your organisation (left), and one contradicting it (right).



30 min

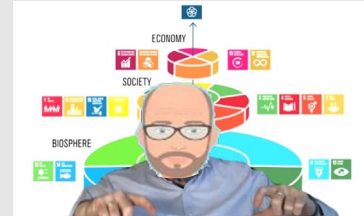
(10 min for brainwriting + 15 min for presenting)

Practices /// Two examples from TÜV NORD

- The level of alignment between daily practices and organizational values corresponds with level of maturity of a sustainable innovation culture.
- Reflexion on the alignment between values and individual or collective actions is an important step toward understanding the cultural strengths that can be harnessed and challenges that need to be addressed.

3 Practices

Describe one observable behavior or practice incorporating one of the normative guidelines of your organisation (left), and one contradicting it (right).

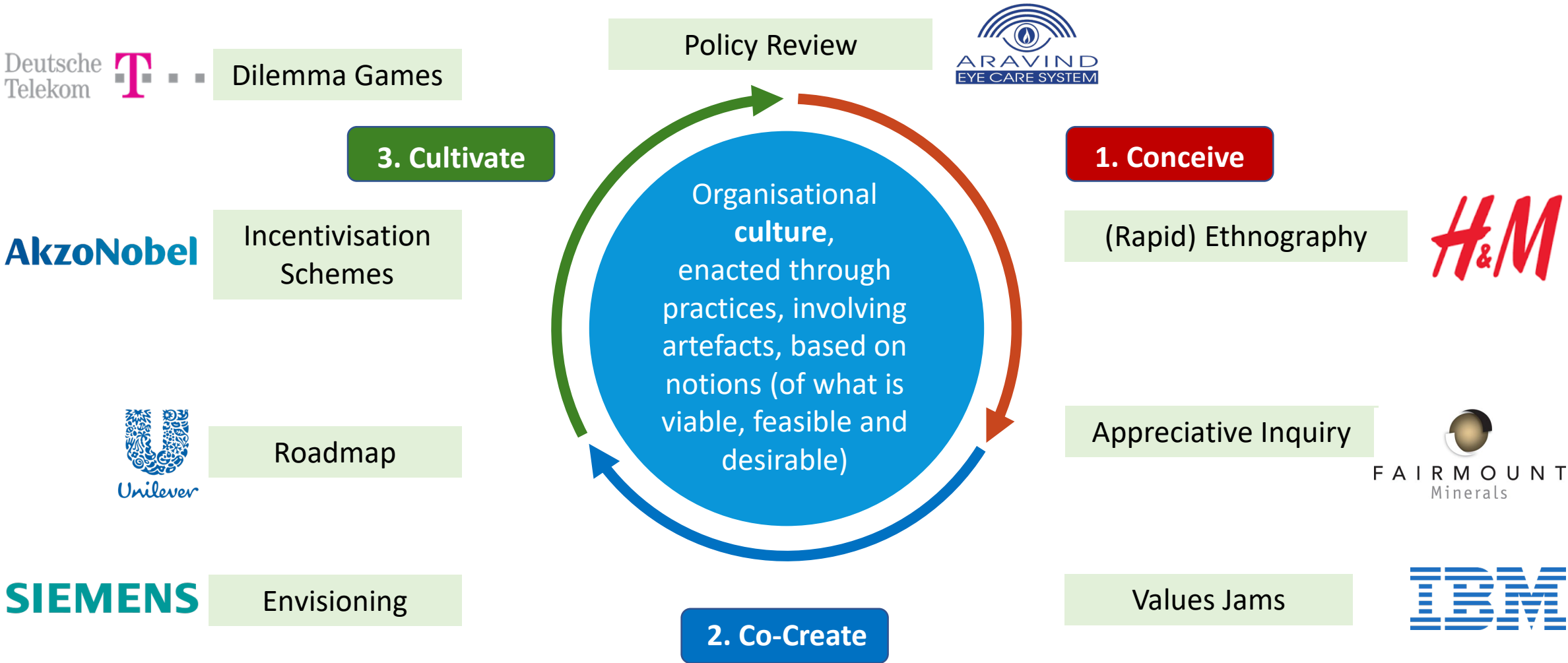


CR manager, Ulrich, conducted over 600 stakeholder interviews to define and promote a new corporate sustainability framework for system value creation. System value shifts from the traditional triple bottom line approach (juggling three balls while some departments have only one hand) towards a circular hierarchy of sustainability priorities based on the SDGs.



*Holger misses a **systematic understanding and integration of all aspects of sustainability**. During a project for developing a sustainability reporting verification standard, focus was put on environmental criteria and Holger's social auditing department was not involved. He thinks this diminished the project's outcomes because expertise on the social dimension were not sufficiently integrated.*

Methods /// Several methods have been reported in the literature (cards).



Methods /// Which methods could suit to cultivate sustainable innovation?

- Methods refer to widely established, reproduceable procedures to facilitate sustainable innovation practices and cultural development.
- **Conceiving** methods involve stakeholders in reviewing cultural tensions, practices and implicit values.
- **Co-creation** methods *engage both internal and external stakeholders in innovation-related activities, remodel business practices and activities towards sustainable value creation and aggregate stakeholder knowledge to enhance sustainability performance*
- **Cultivation** methods create virtuous circles of targeted output, valuable outcomes and desired impact.

4 Methods


Select and adapt one of the methods or interventions (left). Then envision how it should contribute to cultivate sustainable innovation in your organisation (right).




30 min
(10 min for brainwriting + 15 min for presenting)

Methods /// Two examples from TÜV NORD

Awareness Raising Workshops & Events



Align official values with daily practices through experiential workshops.



Breuer, H., Bessant, J., & Gudiksen, S. (2022). Gamification for innovators and entrepreneurs. De Gruyter. Case of Inspection Company in H. Breuer & K. Ivanov. (2022). Ethnographic study for the IMPACT project.


ising vents

ss serve to ion processes eholders. But t statements, loyees' daily


rkshops can ne adoption of ted practices. o experience, understand a lications and tion's culture. ble innovation ny promotes risk bearing e culture via n failure.

TÜV NORD promotes experimentation and a risk bearing mindset in its risk averse culture via thematic events to learn from failure.

Impact Assessment



Integrate sustainability criteria as heuristics to systematically evaluate innovation projects



*Case of science-based manufacturer from in Abril, C.; Camacho, M; Ivanov, K. (2022). Ethnographic study for the IMPACT project.

ssment

le innovation otion of practices neasure relevant ematic way. sments integrate as heuristics process stages. d and thoroughly ncy and fit with nd departmental

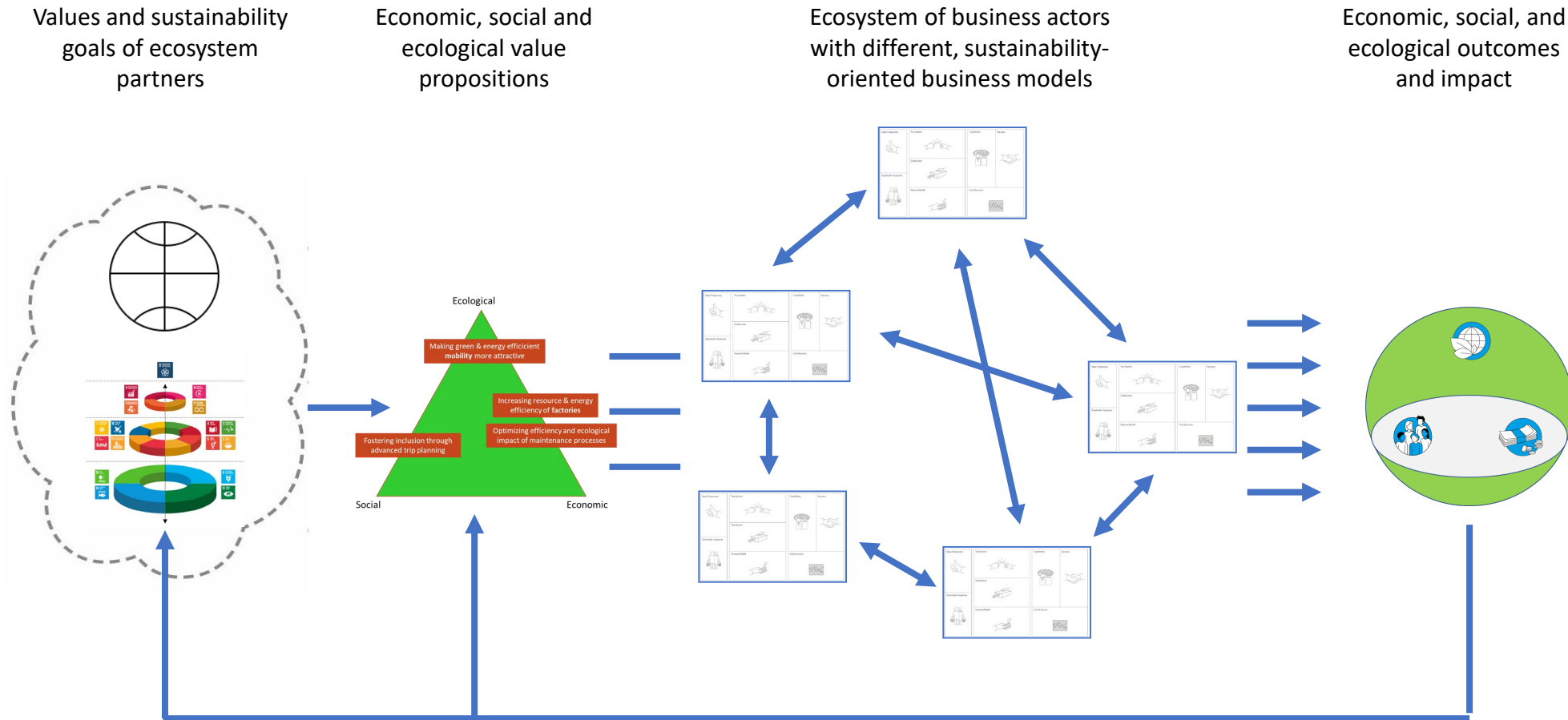
ection company eria to assess d inform gate ssessments are os and inspire ies (e.g. IT and e another.

It also uses sustainability criteria to assess innovation projects and inform gate decisions. Peer-to-peer assessments are introduced to break silos and inspire heterogeneous subsidiaries (e.g. IT and mobility) to learn from one another.

Methods /// Numerous interventions and facilitation methods are available.

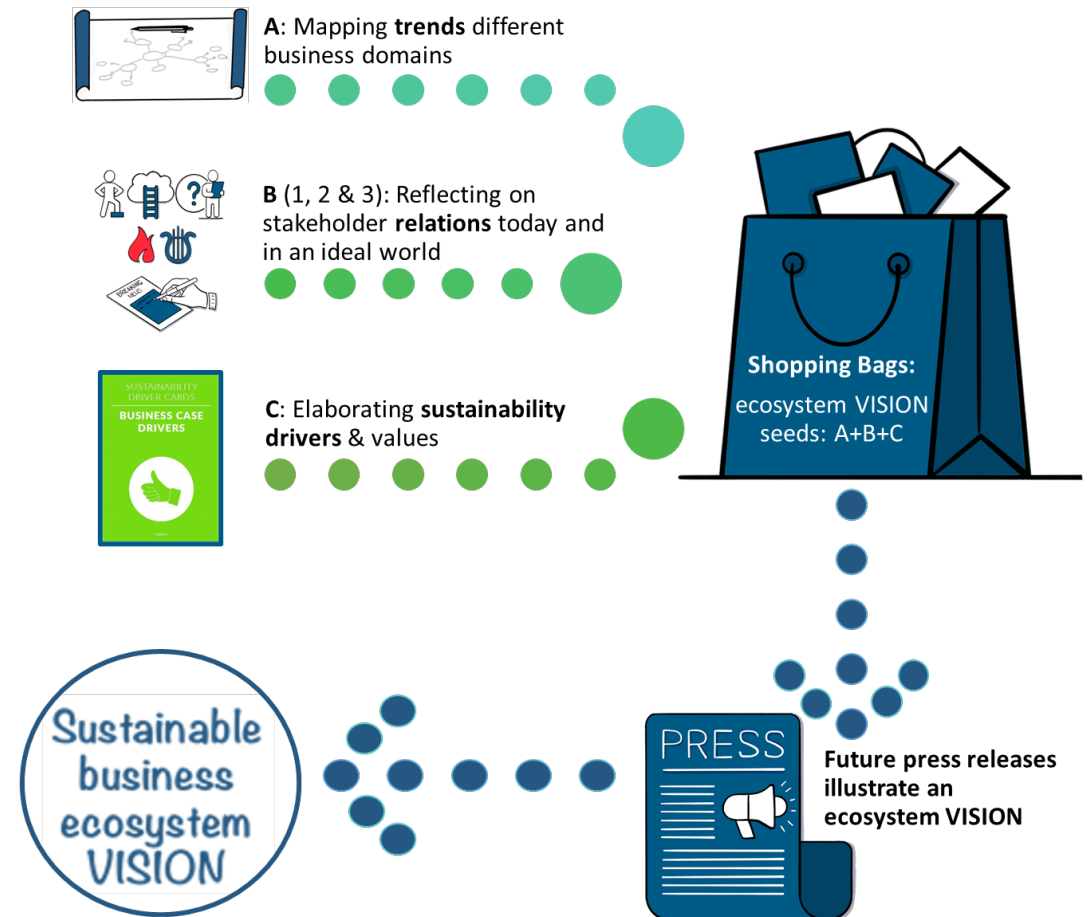


Methods /// *Sustainability-oriented ecosystem modelling identifies new collaborative value propositions and sustainable business models with new and already established business partners.*



Methods /// *A replicable workshop approach allows to envision sustainability-oriented ecosystems based on a review of trends, desirable stakeholder relations and sustainability drivers.*

- Many companies don't leverage their potential to enhance their business ecosystem through values-based partnerships and sustainability-oriented services.
- Commitment to a mutually desirable vision and common ground of understanding are basic preconditions to foster a collaborative culture and backcasting of immediate measures that can lead towards future sustainability-oriented ecosystems.
- TÜV NORD reviewed future trends, current stakeholder relations, and sustainability drivers to envision its role in future sustainability-oriented ecosystems.



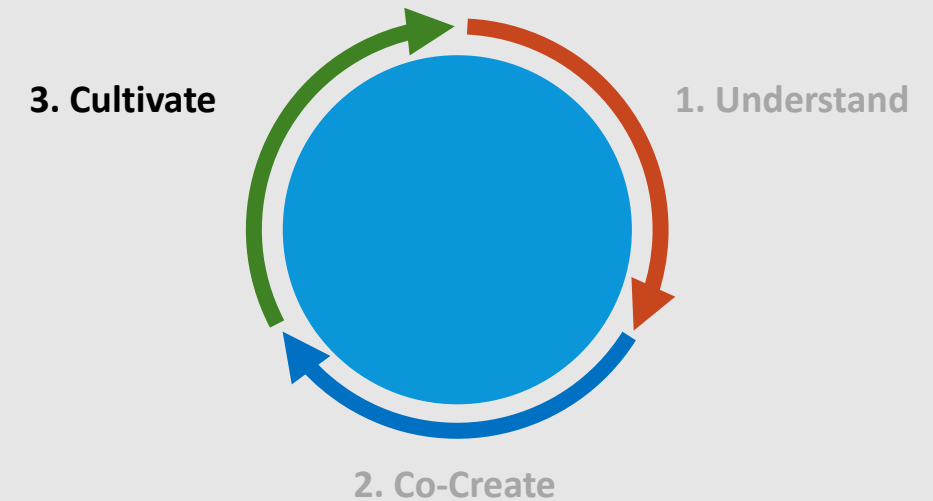
05 Outline your ways ahead into our common future



Outline /// Discussion how to cultivate sustainable innovation in your organization.

Please note on post-its and share with the plenary:

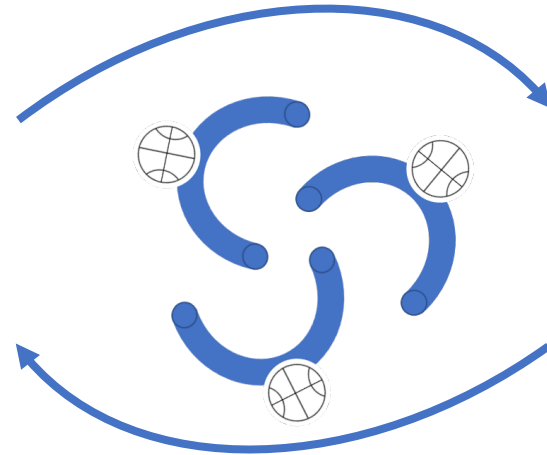
1. How does your organisation try to cultivate sustainable innovation? (Use yellow / orange post-its)
2. Can you share any stories of failure or success? (Use green post-its for success, red for failure)
3. Which challenges do you see for your organisation? (Use blue post-its)



30 min
(10 min for brainwriting + 15 min for presenting)

Feedback

- *What will you take away from today?*
- *What would you like to find out more about?*
- *Did anything surprise you today?*

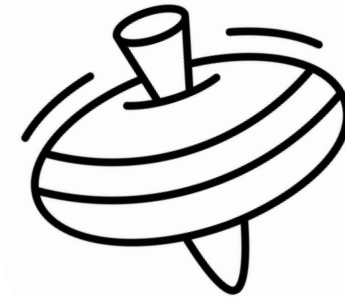


Thank you for your attention!

References:

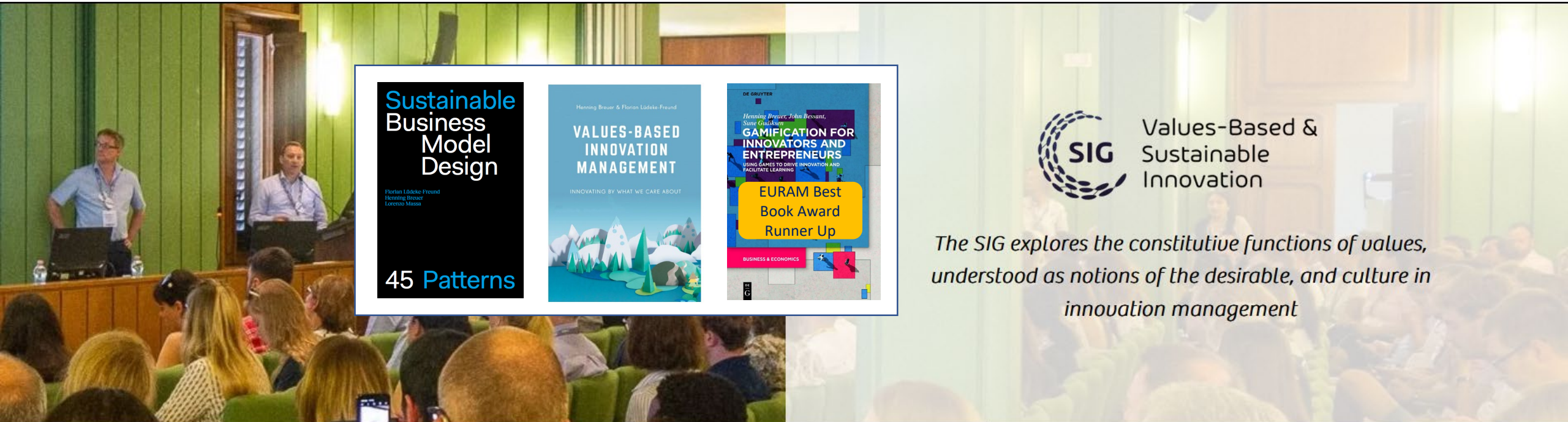
- Breuer, B., Ivanov, K. et al. (forthcoming 2024). **Sustainable Innovation Culture**. DeGruyter
- Breuer, H., Bessant, J. & Gudiksen, S. (2022). *Gamification for Innovators and Entrepreneurs: Using Games to Drive Innovation and Facilitate Learning*. Berlin, Boston: De Gruyter. <https://doi.org/10.1515/9783110725582>
- Breuer, H., Ivanov, K. & Abril, C. (forthcoming 2023). Management guidelines to address cultural challenges and facilitate values-based innovation through gamification. Int. J. Entrepreneurship and Innovation Management.
- Free download of the Gamification Design Pattern cards and further materials: <https://www.uxberlin.com/gamification-and-new-methods/>

Further Materials on www.uxberlin.com



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Thank you for your attention!



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