



Planetary Design Circle

Strategic Design Tool for Circular Business Modeling and Planetary Design.

Towards a planet oriented design strategy, focusing on a model, that incorporates the planet as an active player when it comes down to strategic planning, corporate decisions and design guidelines.

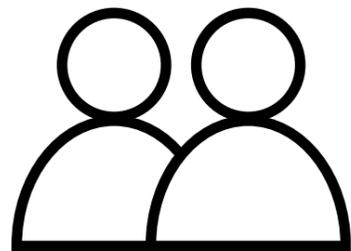
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Fraunhofer IZM

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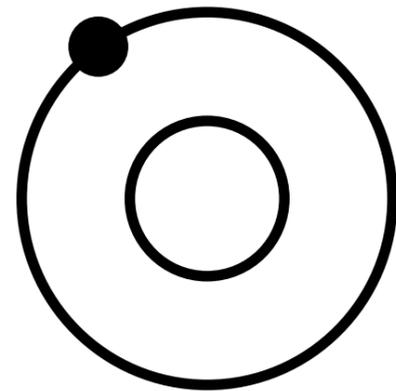
2020 Fraunhofer IZM



People

For people and stronger communities.

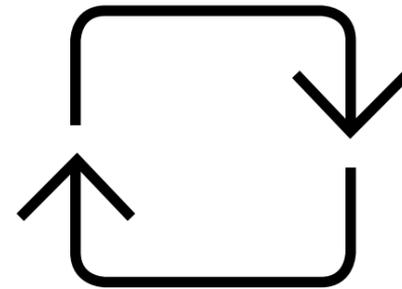
We want to design with and for people, with well-being at the core. Solving problems and serving real needs should be the priority of this stakeholder.



Planet

What can be achieved because prevented?

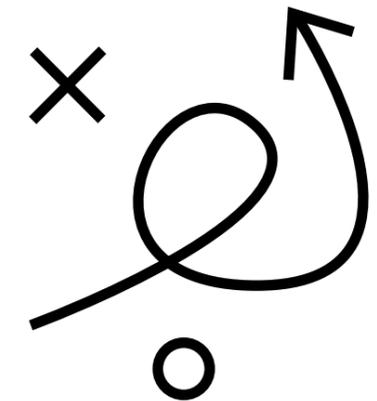
Towards a planet oriented design strategy, focusing on a model, that incorporates the planet as an active player when it comes down to strategic planning, corporate decisions and design guidelines.



Business

Circular models that operate over centuries.

Focusing on long-termism based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.

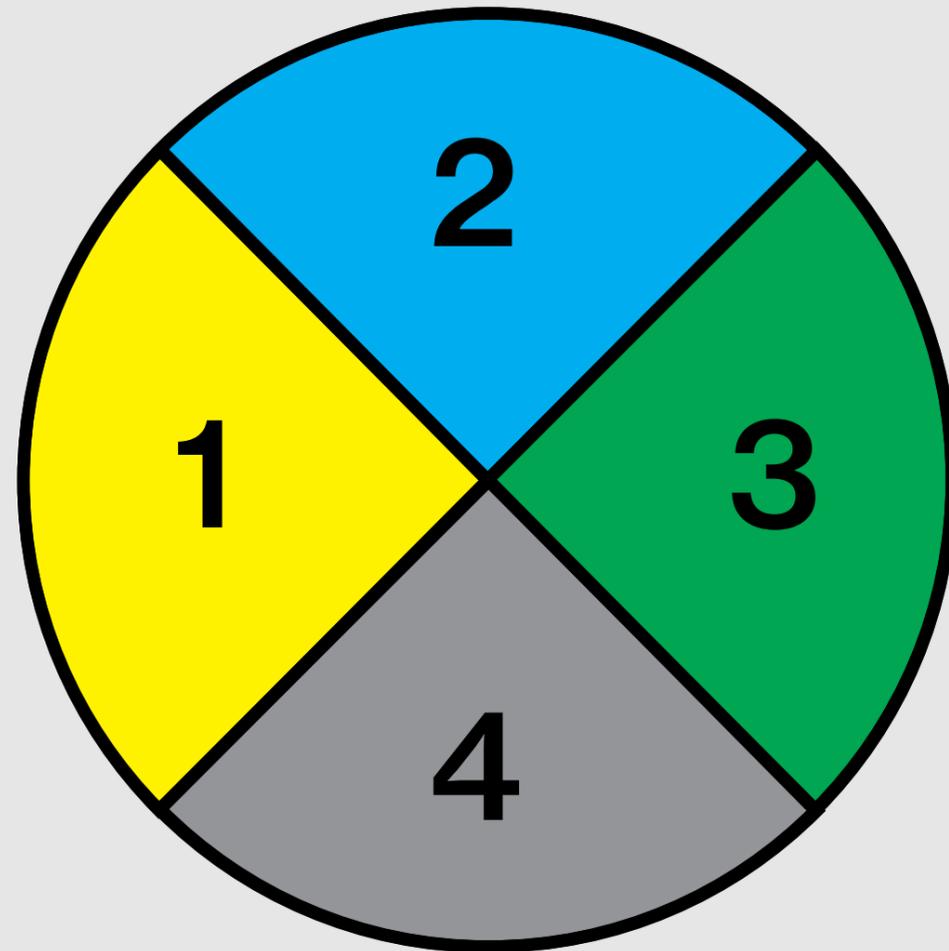


Design

Empowering research and technology for the better.

Design has the ability to facilitate technologies in meaningful ways. We need responsible design solutions, that visualize desirable future scenarios and formulate possible change.

People



Planet

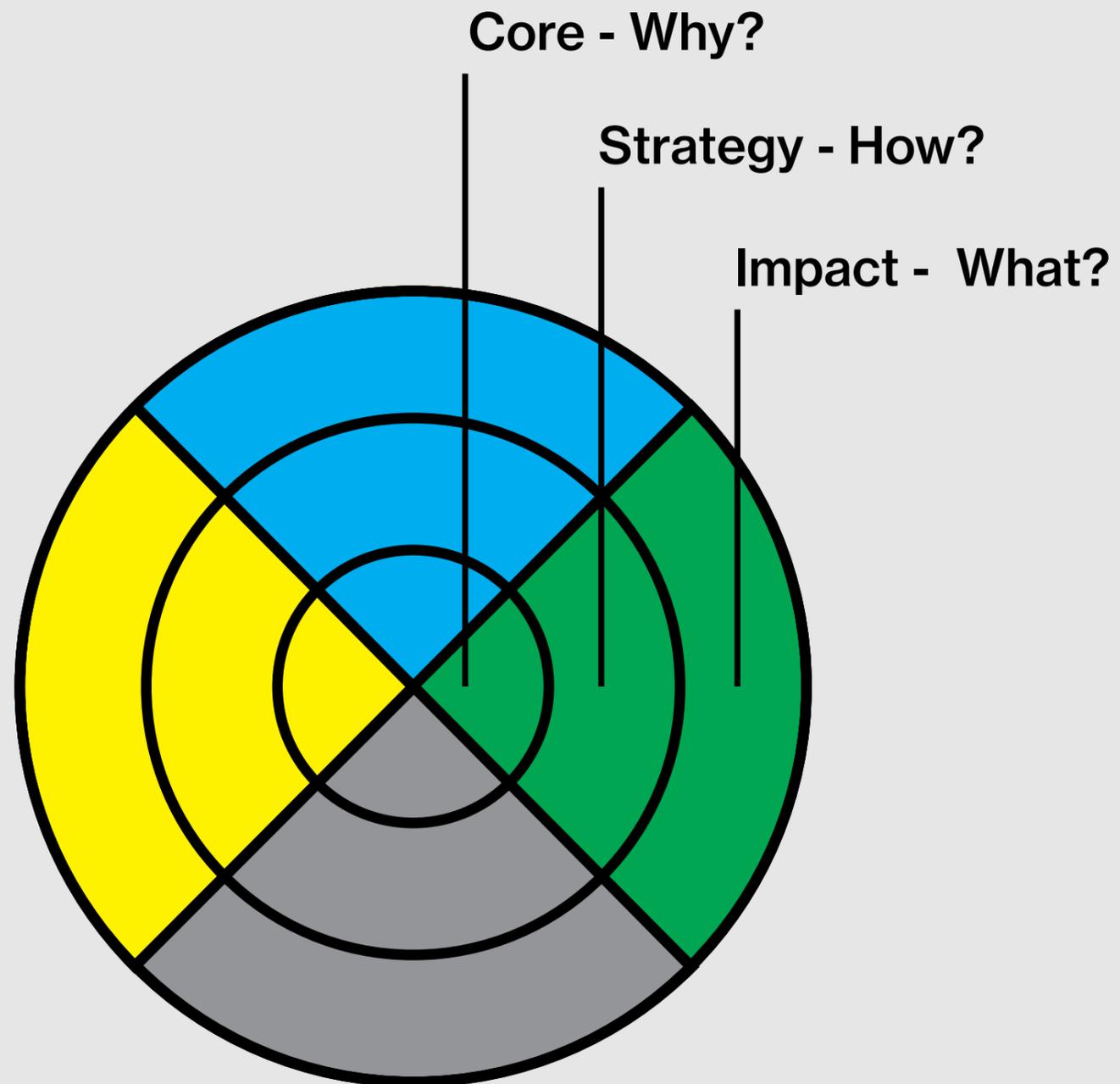
Design

Business

The Model

Stakeholders are listed in the order in which they are being addressed

As designers, entrepreneurs, scientists, environmentalist we are always confronted with each of these stakeholders when we propose a solution or ideate on new business models. This model is an attempt to visualize and summarize our intentions to align them with care on a planetary level to find actionable design solutions.



The Model

Core, Strategy, Impact

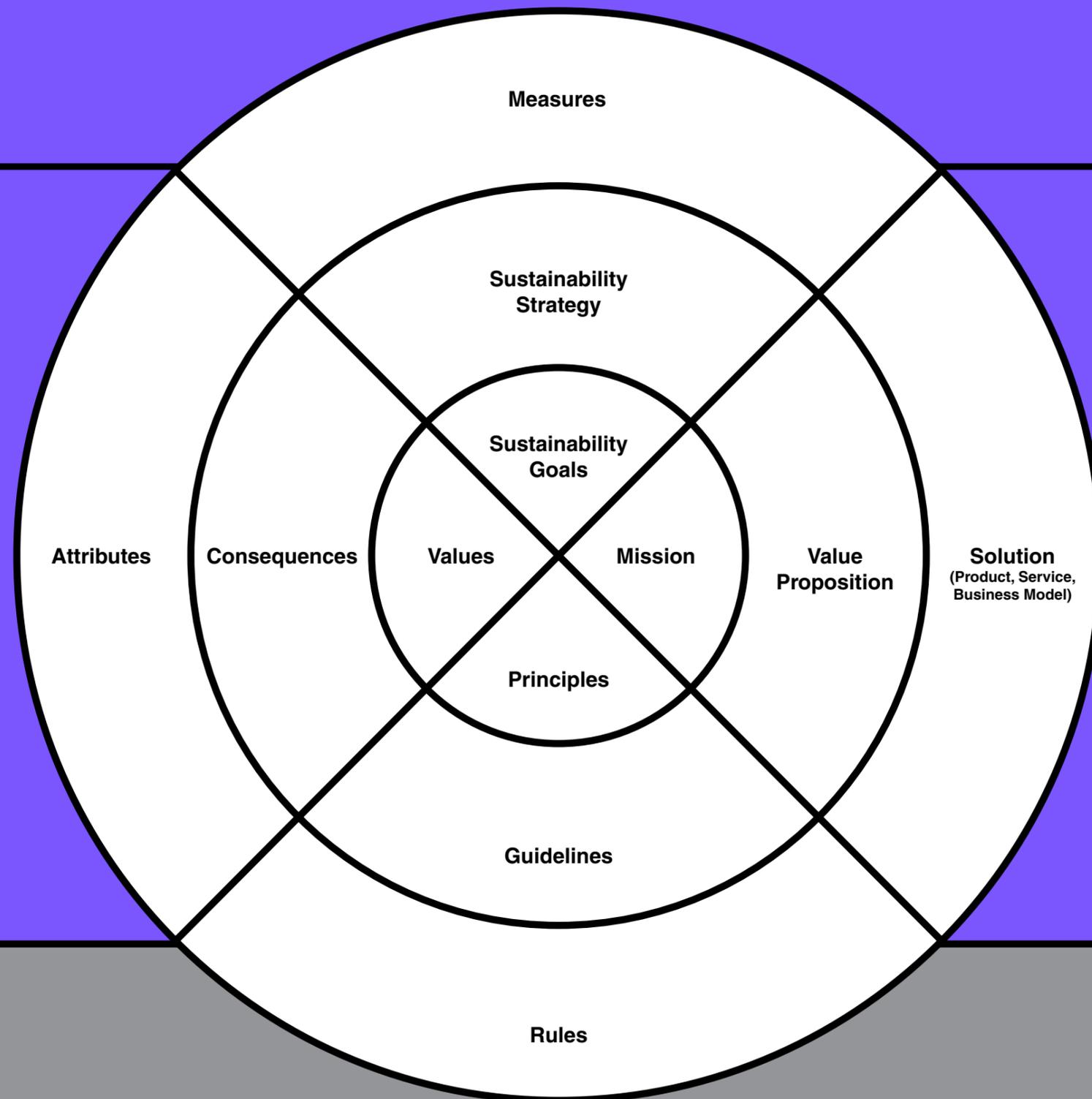
The Model indicates, that each stakeholder, as we move from core to outer shell, shares a common domain with each segment. The layers are quintessentially connected, therefore our design, business and values have to align with each stakeholder segment.

Overview

Moving through the Model

1.-3. We will map each segment (People, Planet, Business) and find the areas of conflict and missing attributes for each stakeholder. The main idea is to map the bigger picture, trying to estimate the impact on a human and planetary scale of our product and balancing the areas of conflict.

4. Once we have established our parameters, we can use these to define our design. This will help us to reconcile the ideated principles with a design strategy



2. Planet

Measures

Sustainability Strategy

Sustainability Goals

Values

Mission

Principles

Guidelines

Rules

1. People

Attributes

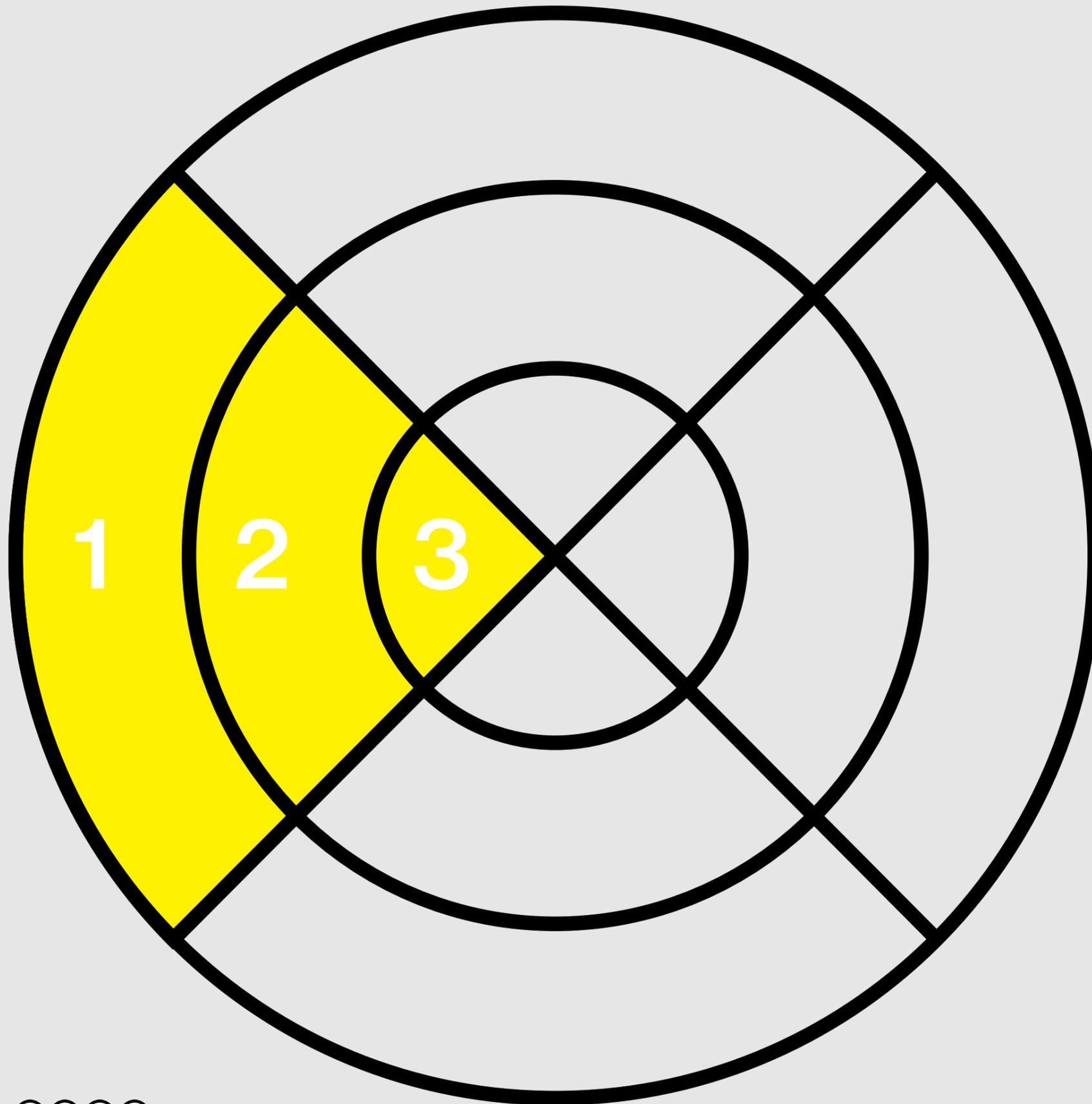
Consequences

Value Proposition

3. Business

Solution
(Product, Service,
Business Model)

4. Design



People

1. Attributes
2. Consequences
3. Values

Identify the user: Find out what attributes they want, this will lead to the consequences that the user and identify which values behind the wish. This is an interview technique which is called laddering to create a “Hierarchical Value Map”



1

Attributes:

The things that the user wants to have/ wants to do.
Why did you buy this product?

2

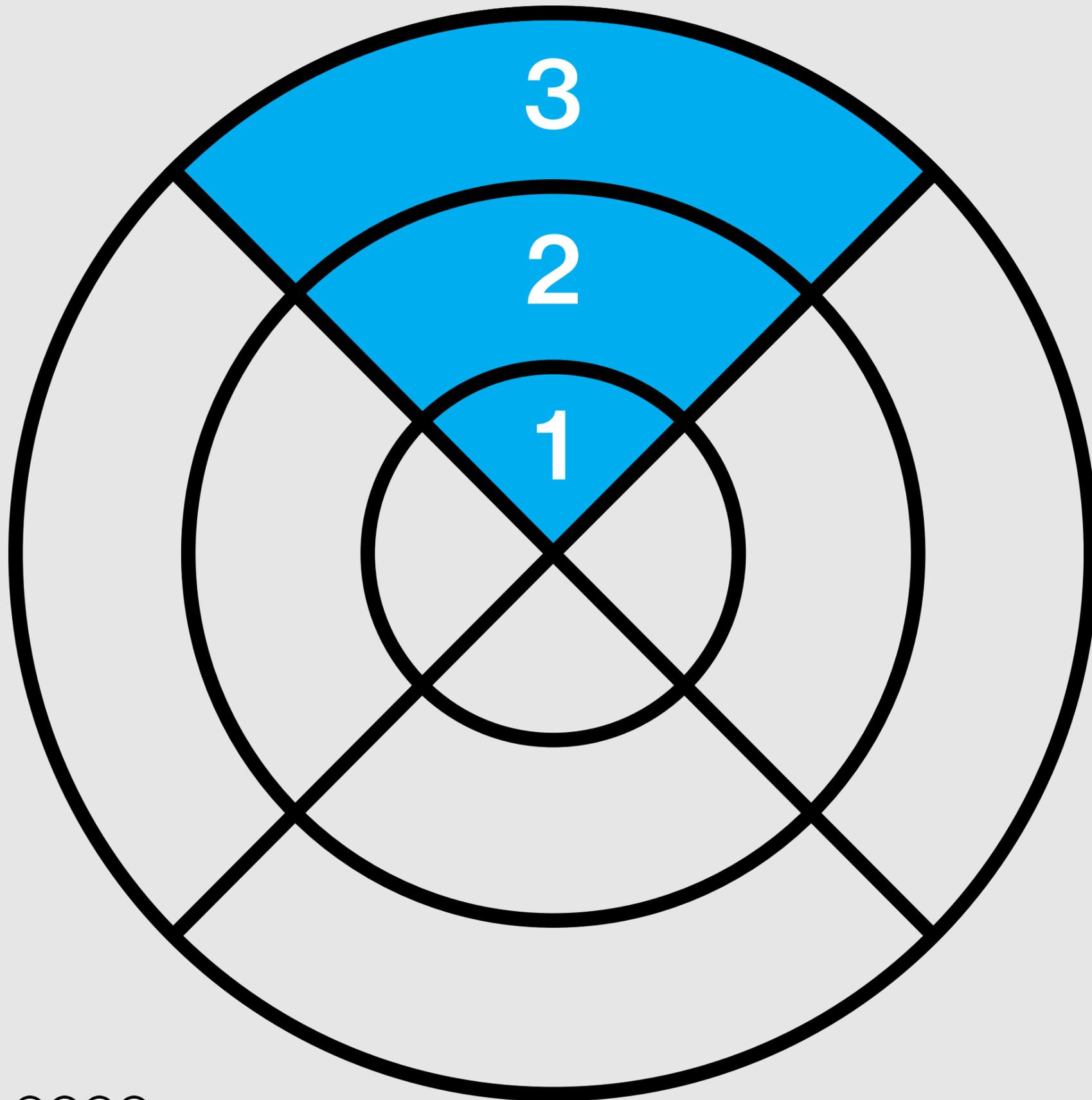
Consequences:

When you ask a user why they want these things, they will answer with consequences.
Why is that important to you?

3

Values:

When you ask why these consequences are important to them they will answer with achievements which are values.
Why is the ... important to you?



Planet

- 1. Sustainability Goals**
- 2. Sustainability Strategy**
- 3. Measures**

After having identified the values of the user, and motives of the company, we can link these to higher societal or environmental goals and work out our ecodesign strategy.



1

Sustainability Goals:

First, we have to identify the highest environmental and/or social impacts the sector has (hot spots), the legal and stakeholder requirements and based on this identify social and environmental goals. Think about what you want to improve instead of “just” reducing harm. What do you like to contribute to develop a social just society and/or regenerate nature. (see e.g. Raworth’s doughnut economics or the UN sustainable development goals). Sustainability goals of the company should relate to the users’ values (emotional aspect) and be reflected in the business motives (responsibility).

2

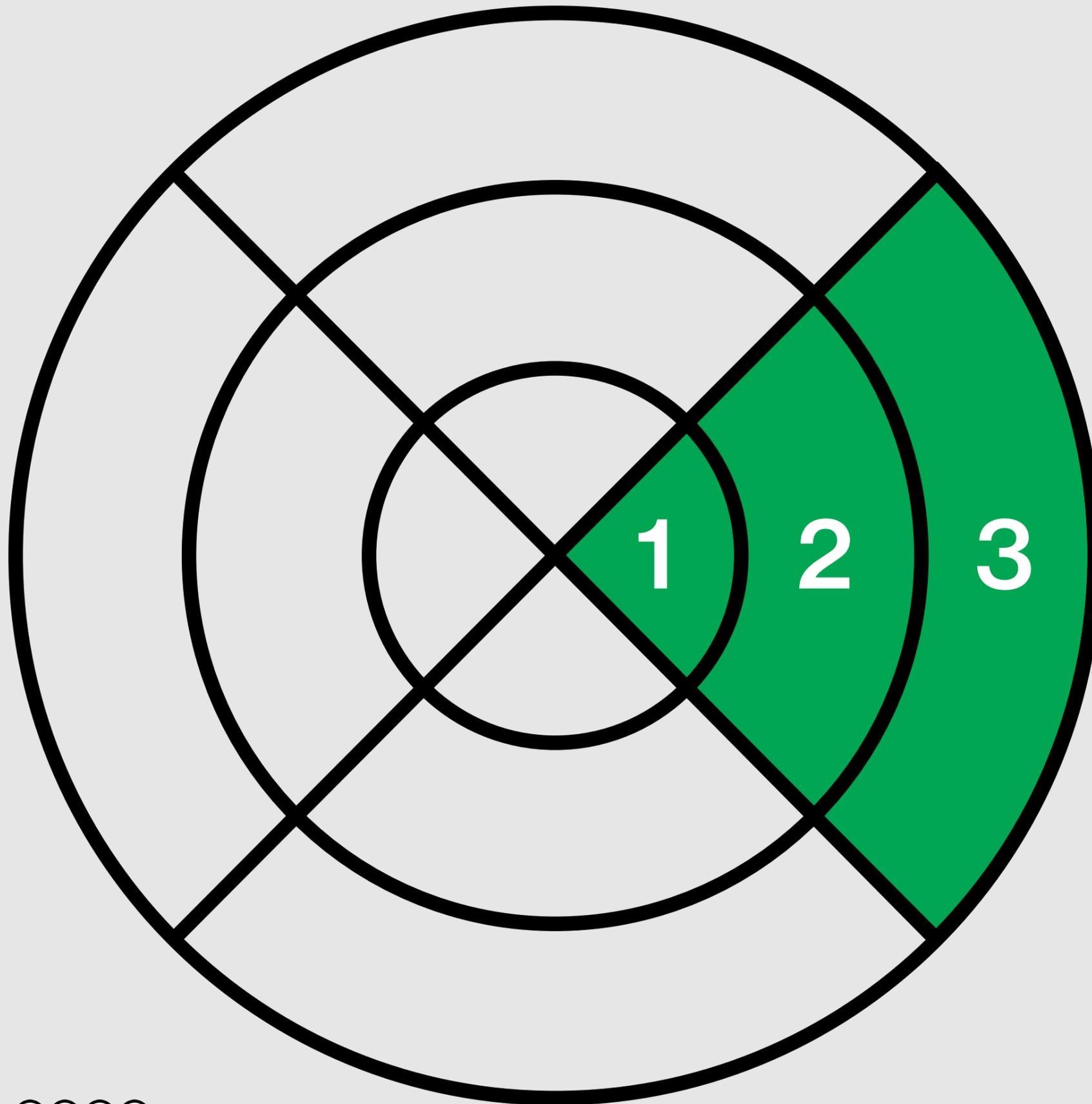
Sustainability Strategy:

Strategies: How? Here strategies can be set, which fit to the user’s values and the companies motives and contribute to a higher societal or environmental goals. The first step would be to identify how and to which extent the company’s activities are directly or indirectly linked to the higher environmental and societal goals. Activities should be prioritized according to the degree of influence this activity has to the goals and the potential to change this.

3

Measures:

Here, the company should decide how to realize the strategy exactly. Translate strategies into concrete measures, also for the solution the company offers to the clients That means what they need to change within their practices or which activities they have to add.



Business

- 1. Mission**
- 2. Value Proposition**
- 3. Solution**

The reason why companies are successful is primarily seen in their solutions, services or technologies. But technologies have no value as long as they are not following a higher plan. The key question for a company therefore is first to ask why they are in business, and what they are doing business for. The corporate values are important because they render the vision and mission statement of a company and form the business motive.

Therefore we start the cycle from the inside out, coming from the corporate motive that tells us why we want to solve a problem. With the strategy company should answer how they are going to solve the problem. The result is the technology/product/service as an output.



1

Mission:

What is your Vision & Mission for the company/ product? Together, these corporate values, vision statements and mission statements form the reasons for why a business exist: a business motive. If we take their values and combine these with corporate values, we can figure out the Why of the business.

2

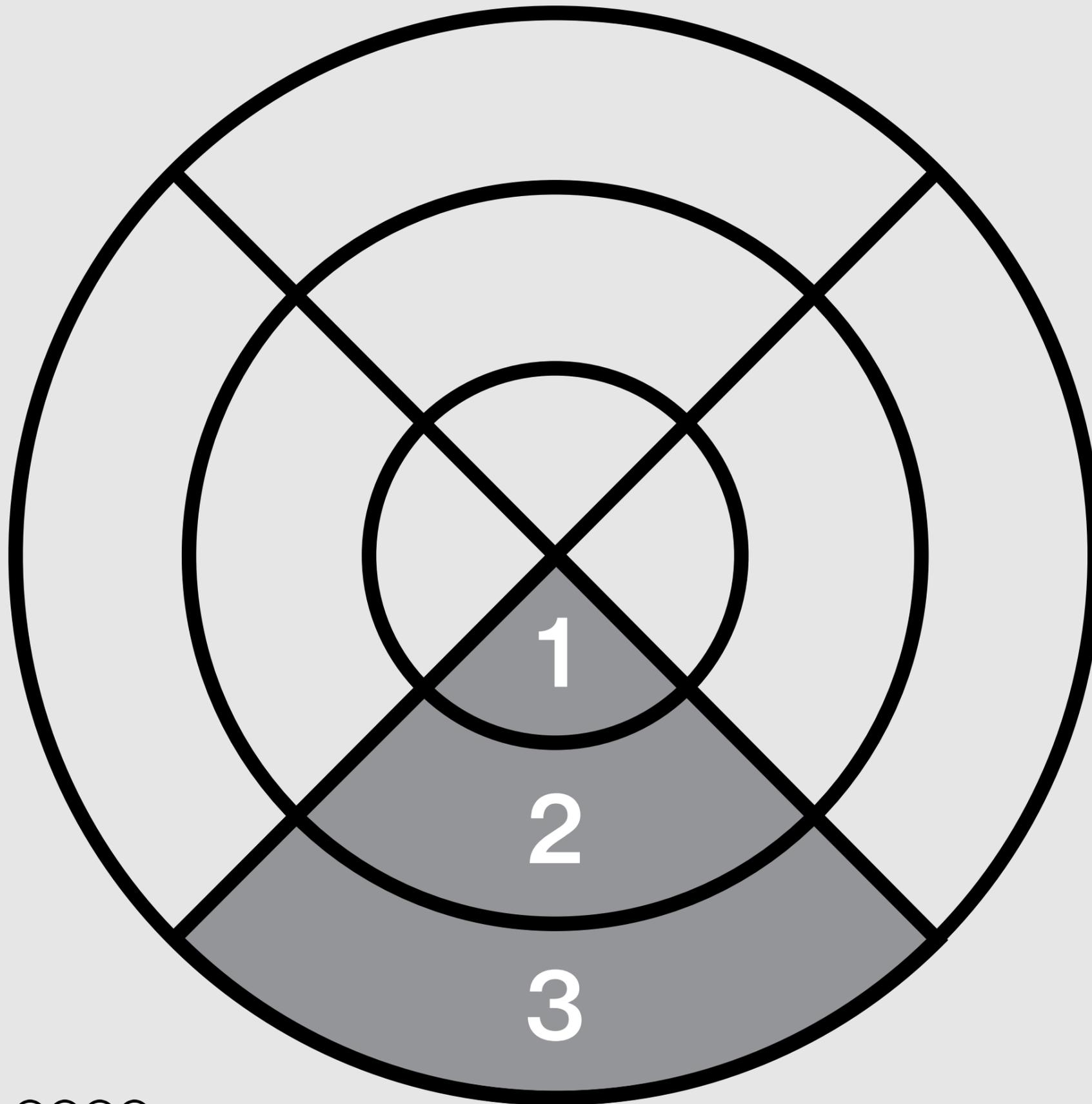
Value Proposition:

What is your strategy to execute your mission and what is your value proposition? Here we have to look at the customer jobs – the functional, social and emotional tasks customers are trying to perform, problems they are trying to solve and needs they wish to satisfy. Gains- How does the product or service create customer gains and how does it offers added value? Pains- formulate a description of exactly how the product or service alleviates customer pains.

3

Solution (Product, Service, Business Model):

What technology/approach are you using to meet the customers demand? What is your promise? Your products and services are your answer to your customer's problems and challenges. Depending on the depth of your product, you list selected features or performance characteristics individually. You should also differentiate between functional, social or emotional aspects of your service. It is important that you select the features of your product that you know or assume are particularly important to the customer.



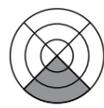
Design

- 1. Principles**
- 2. Guidelines**
- 3. Rules**

Finally, we want to inform our design with the decisions and information we gathered in the previous steps. To do so we need principles that match with our mission, the planetary goals and the user's values. From here we formulate guidelines.

These guidelines will layout the way we can apply the principles into the design. But at this stage, these guidelines are just recommendations. In the last step, we formulate rules out of these guidelines.

These rules are active recommendations on how the product, service or outcome should be carried out in respect to the guidelines and principles.



1

Principles:

Why do we need to design? To design we need principles that are based on the corporate mission and the user values. At this stage, we can formulate statements that frame more specific our principles for the final product. By formulating these statements, we start to build up the product upon the initial reason we are designing for. Example: People should be able to produce their own energy.

2

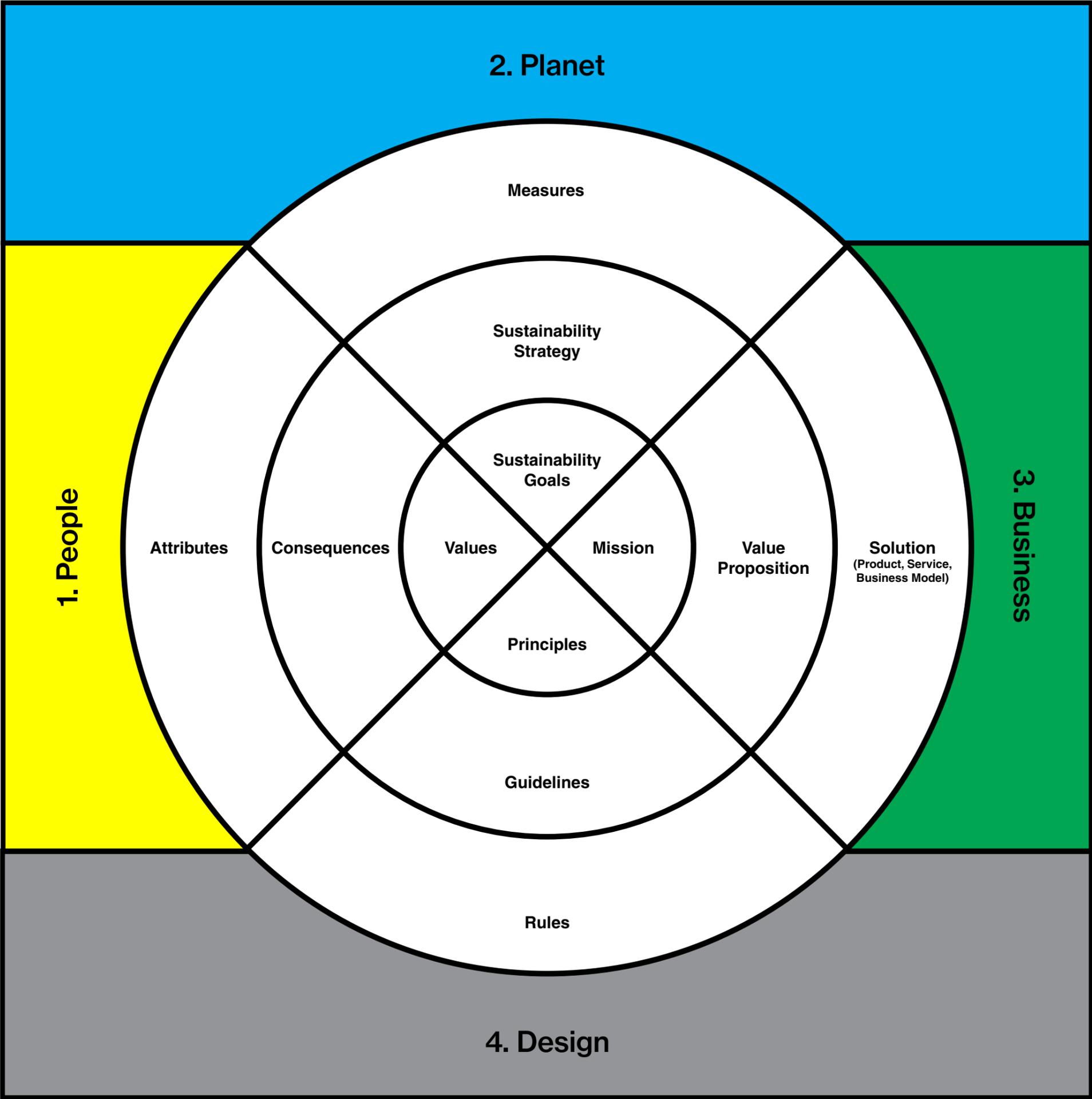
Guidelines:

Next, we can create guidelines from those principles: The guidelines need to match the consequences and attributes we formulated earlier And they should also comply with the strategy that is set to achieve business and planetary goals. Example: People have their own solar panels. People can trade with their renewable energy.

3

Rules:

The final step is to create a set of rules that we can use to create visual design, wireframes or prototypes, that deploy the guidelines into the design. To create rules, the requirements and feasibility of the technology that will be used in the end must be studied and solutions formulated. Example: Solar Panels have a fixed standard to fit every home. Panels are connected to a smart grid.



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4. Design

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Attributes

Consequences

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