



The „Design for Sustainability“ working group of the German UPA focuses on sustainable product development. Aiming for a life-centred design (LCD), views are expanded beyond humans - encompassing the whole biosphere and considering ecological, social and economic aspects. This one-pager presents three hands-on LCD methods supporting UX professionals to incorporate sustainability into their projects.

Non-Human Personas



Preparation > extensive
Implementation > 60 - 129 min
Follow-up > 30 min

5 to 10 people



Non human personas are non-human actors from the ecological environment or the animal world, that have a role in the design process or are effected by it.

Simialar to human personas, they were created by data and facts in order to capture the impact of our actions.

The method aims to incorporate environmental ressources and limits into the design process. A stronger awareness and empathie for non-human actors can help us to better estimate the environmental consequences of design decisions.

Preparation	Explanation
a list and a template with potential non-human personas	bring the list or templates with you so that the participants can prepare with them individually (build up knowledge and expertise, familiarise with the perspective)
Step	Explanation
15 min	
Intro: Moderator	Presentation of an example of a non-human persona
> 15 min	
individual preparation time for the participants	participants have time to get familiar with the topic and with the prepared materials (of the moderator)
60 min	
Plan the time genererously for the group work	Participants should work together in small groups to create non-human personas. These personas could then be prepared, for example, in graphical form, and presented at the end of the group work. During the group work, moderation is required.

Actant-Map



> 120 min

5 to 10 people
(e.g. subject matter experts or stakeholders)



The **Actant Map** is an extension of the Stakeholder Map, that takes into account both human and non-human actors (Actants). It is inspired by Bruno Latour's Actor-Network Theory (ANT).

This method recognizes all entities that can act or influence as actants and overcomes the traditional separation between active participants and passive objects.

The aim is to enable a comprehensive analysis of the interactions within complex systems by recognizing elements as actors that were previously regarded as ressources. These actors are capable of taking action that can have a significant influence on business performance.

Recommendation	Notes
A clear definition	Formulate a clear and research-based problem statement, that defines the focus of the map.
Interdisciplinary collaboration	Work with participants from different areas to ensure a comprehensive understanding of the actors and their interactions.
Iterative processes	Implement iterative approaches to keep the Actant-Map updated continuously.
Sustainability assessment	Consider the environmental, social and economic effects of the identified Actants. Analyze how these actors contribute to or detract from the sustainability of the system.

Phyigital Map



60 min

Expert or group



The method **Phyigital Map** allows for a high-level view of an interactive system including the digital as well as the physical components of the system.

System activities of users, providers and third parties are mapped onto four life-cycle stages „User finds & gets“, „in Use“, „End of Use“, and „Maintenance“, thus, enabling interpretations.

The method reveals the physical and digital interactions of system components across its life cycle.

Recommendation	Notes
Ensure expertise	People contributing to the map should be experts in the specialized fields that are discussed.
Contextual information	Provider and third-party activities need to be considered in the context of the interactive system.
Allow sufficient time	In a discussion, activities and connections will be identified and assessed. This should be supported by a moderation process and by allowing sufficient time.

