



Knowledge Entrepreneurship Workshop

Manual

Denise Vesper | Universität des Saarlandes | Saarbrücken | 2025

Content Overview

The workshop "Become a Knowledge Entrepreneur" is aimed at both students and employees of each partner university. The workshop can either be conducted in one or two days – two days are however preferred. In the workshop, participants reflect on their own knowledge, skills, and abilities and discuss networking strategies. These strategies are then used to develop initial ideas on how to advance social, ecological, and digital transformations.

To advertise the workshop, the following text can be used:

Unlock Your Career Potentials: Join Our Knowledge Entrepreneurship Workshop!

Are you ready to take control of your professional journey and make a lasting impact on the world? This workshop is designed to empower you with the tools, strategies, and mindset needed to unleash your true career potentials while addressing the pressing challenges faced by society today. Through engaging activities and insightful exercises, you will gain a deep understanding of your strengths and areas of expertise, allowing you to shape a fulfilling and purpose-driven career.

Our workshop emphasizes the importance of social impact and equips you with the tools to tackle societal, digital, and ecological problems head-on. Whether it's addressing poverty, fostering sustainable practices, or leveraging technology for positive change, we'll help you develop innovative and impactful solutions that truly make a difference.

What to Expect: During this workshop, you'll engage in interactive sessions and collaborate with like-minded individuals. You'll leave the workshop equipped with practical strategies, a clear roadmap, and a network of supportive individuals ready to embark on their own entrepreneurial journeys.

Don't miss this incredible opportunity to shape your future and make a meaningful impact. Join our Knowledge Entrepreneurship Workshop today and unlock your true potential while contributing to a better, brighter world. Together, we can create a future that is both prosperous and sustainable.

Register now to secure your spot! Limited seats available.

For more information and registration, visit our website or contact us at [contact information].

Workshop Schedule – 1 Day Workshop

Time	Content
9.00 – 9.30	Welcome and procedure
9.30 - 10.00	Knowledge Entrepreneurship – what is this? Short definition and introduction to effectuation
10.00 – 11.00	Knowledge, Skills, Abilities, and Others (KSAOs) - Reflection of one's own knowledge, abilities, skills and interests
11.00 – 11.15	Coffee break
11.15 – 11. 45	Networking strategies
11.45 – 12.30	Introduction to social, ecological, and digital challenges and transformations and in- troduction to design thinking
12.30 – 13.30	Lunch break
13.30 – 14.00	Defining challenging transformations
14.00 – 15.30	Using design thinking to address a chosen social, ecological, or digital challenge – Ideating and Prototyping
15.30 – 15.45	Coffee break
15.45 – 16.45	Presentation of the approaches developed for the selected challenges
16.45 – 17.00	Feedback and Closing.

Workshop Schedule – 2 Day Workshop

Day 1

Time	Content
9.00 – 9.30	Welcome and Procedure
9.30 - 10.00	Knowledge Entrepreneurship – what is this? Short definition and introduction
10.00 – 11.00	Introduction to Effectuation
11.00 – 11.15	Coffee break
11.15 – 13.00	Start with your means: knowledge, skills, abilities & other characteristics
13.00 – 14.00	Lunch break
14.00 – 15.00	Other characteristics – Personality, interests, and vision journey
15.00 – 15.15	Coffee break
15.15 – 17.15	Networking strategies
17.15 – 17.45	Conclusion and preparation for Day 2

Day 2

Time	Content
9.00 – 9.30	Welcome and Procedure
9.30 - 10.00	Introduction to social, ecological, and digital challenges and transformation and introduction to design thinking
10.00 – 11.00	Defining challenging transformations
11.00 – 11.15	Coffee break
11.00 – 13.00	Using design thinking to address a chosen social, ecological, or digital challenge - Ideation
13.00 – 14.00	Lunch break
14.00 – 15.30	Using design thinking to address a chosen social, ecological, or digital challenge - Prototyping
15.30 - 15.45	Coffee break

15.45 – 16.45	Presentation of the approaches developed for the selected challenges and discussion
16.45 – 17.15	Reflection on most important vision for own career
17.15 – 17.45	Feedback and conclusion

Detailed Workshop Description – 1 Day Workshop

Time	Content	Materials
9.00 – 9.30	<p>Welcome and procedure</p> <ul style="list-style-type: none"> • <i>The trainer welcomes participants.</i> • <i>Trainer and participants briefly introduce themselves (name, background, motivation for the workshop).</i> <p>If participants have not yet filled in the questionnaire on Knowledge Entrepreneurship, they are kindly asked to do so now (by showing a slide with the link and QR code to the questionnaire).</p> <p>Then, participants are asked to shortly introduce themselves by saying their name. They are asked the following questions:</p> <ol style="list-style-type: none"> 1. How long have you been working in your current role/at your institution? 2. What is your professional background and current area of responsibility? 3. How clear are your future career development plans at the moment? <p>Participants write down what should happen during the workshop so that they see it as a valuable use of their time.</p> <p>The written expectations are collected by the trainer and stuck to a wall or pinboard. The expectations should be sorted by the trainer into different categories. The trainer can react to the different expectations and say whether and if yes, how they might be addressed during the workshop.</p> <p>After the introduction of the participants, the trainer presents the schedule of the workshop and explains shortly what is planned for each section of the workshop. The schedule can either be shown as a slide or be written on a flipchart.</p>	<p>Slides with background information and workshop schedule.</p> <p>(Flipchart with schedule)</p> <p>Moderation cards</p> <p>Pens</p> <p>Adhesive tape OR Pinboard and pins</p>
9.30 - 10.00	<p>Knowledge Entrepreneurship – what is this?</p> <p>Short definition and introduction</p> <p>Participants are asked to brainstorm on the term “Knowledge Entrepreneur(ship)”. Participants are first asked to enter the terms and ideas that come to their mind about entrepreneurship. Afterwards, they are asked to write down their initial thoughts and ideas on what might be the differences between Knowledge Entrepreneurship and the traditional view on entrepreneurship.</p> <p>Their thoughts can either be collected on moderation cards, which are collected by the trainer and stuck to a wall or a pinboard or the trainer can use free software</p>	<p>Mentimeter.com – word cloud</p> <p>OR</p> <p>Moderation cards</p> <p>Pens</p> <p>Adhesive tape OR pinboard and pins</p>

	<p>such as mentimeter.com and present a slide there. Here, it is recommended to use the function "word cloud".</p> <p>The trainer discusses with the participants the collected answers:</p> <ul style="list-style-type: none"> • What are similarities? • What are differences? • Do specific categories build up? If yes, how could these be named? <p>This brainstorming is followed by a definition of Knowledge Entrepreneurship and examples:</p> <p>Slide: Increasing challenges (social, environmental, digital) require flexible mindsets and active interventions</p> <p>Examples for challenges (from slide):</p> <ul style="list-style-type: none"> • Helping colleagues and teams adapt to new digital tools or workflows (digital) • Introducing environmentally friendly practices at the workplace, such as reducing printing or energy consumption (environmental) • Improving internal communication and collaboration across departments (social) • Creating new professional learning opportunities, e.g., workshops or peer groups (social) <p>Slide: At the same time challenge of transforming own knowledge and expertise into action</p> <p>Slide: Increasing challenges (social, environmental, digital) require flexible mindsets and active interventions + At the same time challenge of transforming own knowledge and expertise into action → Need for Knowledge Entrepreneurs</p> <p>Slide: "Knowledge entrepreneurs are people who use their skills to make an active contribution to society. Through their actions, they help society meet the digital, environmental and social challenges it faces."</p> <p>The trainer introduces this definition and emphasizes the main points:</p> <ul style="list-style-type: none"> • Use of competences and knowledge • Contribution to society (<i>this may involve developing new projects or services within one's institution, founding an initiative, or driving internal innovation – starting a business is not required</i>) • Aim: addressing and overcoming digital, social, and ecological challenges <p>The purpose of this workshop is then highlighted:</p>	<p>Slides</p>
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Time and guidance for identifying own knowledge entrepreneurial potential and experiencing first steps of acting as a knowledge entrepreneur

Introduction to Effectuation – successful entrepreneurs: effectual vs. casual reasoning

Slide: Developed by Prof. Dr. Sara Sarasvathy

- Sarasvathy, S. D. 2001. Causation and Effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency, *Academy of Management Review*, 26(2): 243-288.
- Derived from research at Expert-Entrepreneurs

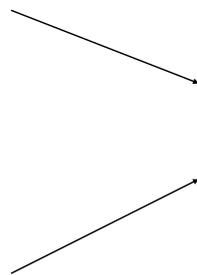
Effectuation =

Entrepreneurial thinking and acting as a proactive, creative, flexible and yet controlled behaviour in the face of uncertainty

Slide: Causation (Recipe X leads to result Y) vs. Effectuation (Creative combination of A, B, and C leads to result Z)

Adaptation for employees: Instead of recipes, think of established

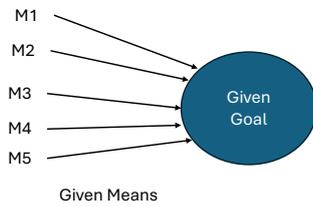
- 1.1. *Causation in institutions = following established processes, workflows, project guidelines, or administrative routines.*
- 1.2. *Effectuation in institutions = creatively using available resources, knowledge, and networks to develop new solutions for organizational challenges.*



Slide: Causal vs. Effectual Reasoning

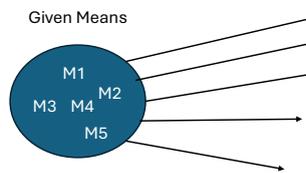
Managerial Thinking (Causal)

Distinguishing Characteristic
Selecting given means to achieve a pre-determined goal



Entrepreneurial Thinking (Effectual)

Distinguishing Characteristic
Imagining a possible new end using a given set of means



The trainer introduces the distinction between means-driven and goals-driven. The focus should be on existing and known values.

Focusing on goals could lead to problems such as

- Big goals do not offer guidance to how to achieve them
- Small set goals constrain.

Recommendation: Focus on what is available/means without ignoring

Example:

- 1.3. Instead of only setting the goal *“digitize all workflows by 2028”*, focus on today’s available tools, expertise, and networks that can already be used to make step-by-step progress toward digitalization.

Slide: Exercise: Effectuation STORIES

Link: <https://effectuation.org/stories>

Activity:

- In small groups, participants explore the Effectuation Stories (if not done in preparation).
- They categorize the stories by the type of challenge addressed (digital, ecological, social) and identify where the effectuation principles are applied.
- Participants who already read the stories in preparation share where they spotted effectuation principles.
- Optionally, participants are invited to share practical examples from their own workplace where they solved a problem creatively by using existing resources, colleagues, or networks.

Slide: Exercise: Effectual Thinking (15 Minutes)

Take notes on your own:

- What is your next step in your professional role/career development within your institution?

	<ul style="list-style-type: none"> • What would you do in order to reach this step if you act according to the effectuation principle? <p>Pair work:</p> <p>Share and discuss your notes with your neighbour.</p>	
	<p>Coffee Break</p>	
<p>10.00 – 11.00</p>	<p>Start with your means: Knowledge, Skills, Abilities, and other Characteristics (KSAOs) - Reflection of one's own knowledge, abilities, skills, and interests</p> <p><i>Slide: Effectuation Circle</i></p> <p>Picture Source: https://creativebusinessmodels.com/2019/05/a-creative-entrepreneurial-process/</p> <p>Slide: Introduction of the effectuation principle “Start with your means.”</p> <p>3 categories which should be the basis for all considerations:</p> <ol style="list-style-type: none"> 1) Who am I? Traits, skills, tastes, ... 2) What do I know? Training, education, specific knowledge, ... 3) Who do I know? Social and professional networks <p>The combination of these three categories leads to opportunity development and goal development.</p> <p>In this part of the workshop, the participants will focus on the first two categories, the third will be in the focus of the next part of the workshop (Networking)</p> <p>Slide: Knowledge, Skills, Abilities, and Others (KSAOs)</p> <p>Knowledge à declarative and procedural knowledge, the amount of information and knowledge that a person possesses; learnable</p>	<p>Slides</p>

	<p>Skills → set of skills, capabilities, characteristics that can be learned in order to master a specific task (e.g. <i>project management, using new digital systems, moderating a meeting</i>); learnable</p> <p>Abilities → basic characteristics (e.g. intelligence) that cannot be learned or are difficult to learn, in order to cope with a whole range of tasks (Aamodt, 2010)</p> <p>Other characteristics → interests, motives, attitudes, values; difficult to learn</p> <p>Slide: Examples for KSAO</p> <p>K: Knowledge about institutional processes, compliance rules, digital systems, project management ...</p> <p>S: Facilitation of meetings, use of administrative or research software, conflict resolution skills, foreign language proficiency (for international collaboration)</p> <p>A: Organizational skills, analysis of situations, communication</p> <p>O: political orientation, values (e.g., <i>sustainability, openness to change, service orientation</i>), <i>interests related to workplace engagement</i></p> <p>Handout – KSAO Workshop</p> <p>Participants are asked to fill in the Handout KSAO (Attachment 1) (10 – 15 Minutes)</p> <p>Slide: Exercise: Learning milestones and interview (40 Minutes)</p> <p>The trainer asks participants to go together in pairs. Each writes down places or times when they have failed or succeeded and learned something from it on moderation cards. Participants should use key work situations, such as implementing a new tool, managing a difficult project, dealing with a crisis, or successfully completing a demanding task.</p> <p>These cards are placed on the floor. With their partner, participants stand at one of the cards. Then, they ask each other:</p> <ul style="list-style-type: none"> • What did you learn at this point? • How do you know that you have learned something? <p>Handout Milestone and KSAO (Attachment 2)</p> <p>Use the following personal reflection questions (e.g. about strengths, values, and knowledge) as moderation cards to support participants in choosing and narrating meaningful situations. (Attachment 2)</p> <ul style="list-style-type: none"> - Optional Reflection Questions – Moderation Cards for Situation Narration: These questions (about strengths, values, knowledge, etc.) can be used in addition to the interview questions to help participants narrate 	<p>Handouts "KSAOs"</p> <p>Handout Milestone & KSA</p> <p>Moderation cards</p> <p>Pens</p>
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	<p>their situations in more detail or from different perspectives. (Attachment 2)</p> <p>After 20 Minutes, participants should change the roles.</p> <p>Participants are asked to write down new findings on their handout and specify the KSAOs of their partner on the respective handout.</p> <p>Then, participants reflect in the plenary whether this exercise helped them to come up with new insights.</p> <p>Slide: Reflection on exercise</p> <p>Then, participants reflect in the plenary whether this exercise helped them to come up with new insights.</p> <p>How was the exercise? How did you identify the KSAO's of your partner? What do you now know about your own means?</p>	
<p>11.00 – 11.15</p>	<p>Lunch Break</p>	
<p>11.15 – 11.45</p>	<p>Slide: Warm-up</p> <ul style="list-style-type: none"> - Participants stand in a circle. - They perform 1, 2, 3 squats sequentially, counting aloud "1, 2, 3." - The language used for counting can vary to make it more dynamic (e.g., switch between English and local language). <p>Purpose: Light physical activation and team focus before the next workshop session.</p> <p>Slide: Other characteristics – Personality (Big Five)</p> <ul style="list-style-type: none"> - Openness to experience: High appreciation for new experiences and variety, inquisitiveness, creativity, diverse cultural interests. - Conscientiousness: Orderliness, reliability, punctuality, discipline, ambition. - Agreeableness: Altruism, compassion, benevolence, trust, cooperativeness, compliance, need for harmony. - Extraversion: Sociability, activity, talkativeness, cordiality, optimism, cheerfulness. 	<p>Slides</p>

- Neuroticism: Nervousness, anxiety, sadness, insecurity, low need for control, inappropriate reactions to stress.

Slide: Exercise – Personality test (10 min)

Participants scan the QR code and complete a short online Big Five personality test. Do the test individually (approx. 10 min).

Slide: Big Five

- Percentile: A score at or below which a given percentage falls.
- Example: 47% of people score lower in emotional stability.
- Personality traits are not something idiosyncratic to a person but show themselves as deviations compared to others.

Participants are invited to reflect on *how their personality traits may influence their workplace roles, collaboration, or leadership style.*



Results summary

Your results from the IPIP Big Five Factor Markers are in the table below. The table contains a raw score and also a percentile, what percent of other people who have taken this test that you score higher than.

Factor	Factor label	Raw score	Score percentile
I	Extroversion	50	47
II	Emotional stability	8	31
III	Agreeableness	1	1
IV	Conscientiousness		
V	Intellect/Imagination		

Big Five personality trait scores calculated by www.psychometrics.org

Trait descriptions

Factor I Factor II Factor III Factor IV Factor V

Factor I was labelled as **Extroversion** by the developers of the IPIP-BFFM. Factor I is sometimes given other names, such as Surgency or Positive Emotionality.

Individuals who score high on Factor I are outgoing and social. Individuals who score low tend to be shut ins.

Slide: Other characteristics – Interests

Interest:

- 1.4. Cognitive involvement/attention devoted to something.
 - Object of interest: Concrete objects, thematic areas of knowledge, specific classes of activities.
 - Level of interest: Defined by the subjective appreciation of the object of interest and how positive the associated emotional states are.

Slide: Exercise – Interests (15 min)

Handout Network-
ing

1.5. Participants are then asked to draw a rough mind map with anything that comes to their mind regarding the questions: *Which aspects of your work catch your interest?*

1.6. *In which professional topics/fields are you most engaged?*

In a second step, participants should draw a new mind map and sort themes:

1.7. Is there a thread across the areas?

1.8. What themes are recurring?

Plenary discussion should link these themes to *potential contributions to organizational development and transformation (e.g., sustainability initiatives, process improvement, digitalization projects)*.

"We start the Vision Journey and jump a few years into the future: *Your initiative as a knowledge entrepreneur within your institution has turned out better than you could have ever imagined.*

What exactly happened to make the project so successful? Let your imagination run wild, you are not bound by probabilities.

Slide: Vision Journey (10 minutes)

The trainer now leads the participants to the vision journey. This should be done carefully to allow the participants to feel comfortable with the idea and do not dismiss it as unrealistic.

Text of the vision journey:

You are working on the project:

1.9. What are you doing?

1.10. Where are you?

1.11. What does your workplace look like?

1.12. What do you see, what do you hear, what do you feel?

Now you have a team meeting:

1.13. What does it look like?

1.14. *What is your role in making this the best team you've ever worked in?*

Now your working day is coming to an end. You go out and meet a colleague or partner you haven't seen for a while. They ask you about your work and you talk about how everything went *really well*.

1.15. What exactly do you talk about?

1.16. What is most important to you?

Back home you get the news that a major magazine has written about your project and your work. Full of anticipation you click on the article – *what does it say about the contribution of your institution and your role in it?*

Finally, ask yourself:

1.17. What is your basic feeling?

1.18. Listen to yourself and try to find some terms that describe your feelings well.”

Slide: Your future as a knowledge entrepreneur exercise

After the vision journey, participants are asked to note down the most important points of their vision:

1.19. What do you still remember?

1.20. What was important in relation to your initiative or project within your institution as a knowledge entrepreneur?

Did you identify any specific insights for improving your workplace, organizational processes, or collaboration?

Networking strategies

Slide: Exercise – Network! (15 Minutes)

Participants are asked to write down 3 questions nobody has ever asked them before. Then, they walk through the room and when they meet someone, they ask each other these questions. They then exchange one of their cards. The participants should talk to everyone at least once. The exercise takes approx. 15 minutes

Slide: Effectuation principles

Means (bird in hand) – 3) Question = Who do I know? Social and professional networks

Slide: Networking

Networking is building relationships before you need them. Then when you need them, you will know whom to call and he or she will want to help you. (Darling, 2003)

In the workplace, this especially involves collaborating across departments, building trust with administrative units, and engaging with external stakeholders such as partner universities or local authorities.

Slide: Exercise – Networking reflection

What is a past situation, in which you networked successfully?

Encourage participants to think of *examples from their workplace or institution*, such as:

- 1.21. successfully finding support from another department,
- 1.22. solving a problem by activating a professional network,
- 1.23. initiating cooperation with external partners.

Slide: Example: Paula is an app developer in the area of health management

This slide is used as an example of how networks can look. The trainer explains the different types of networks and how these could be used by Paula.



Slide: Exercise: Who is in your network concerning your vision as knowledge entrepreneur?

Participants are asked to fill out the handout “Networking” (Attachment 3) asking them who they know:

- In their rolodex (LinkedIn, Facebook, ...)
- Colleagues and managers within their department
- Contacts in other departments or administrative units
- External partners (e.g., municipalities, companies, NGOs, partner universities)
- Professional associations or communities of practice
- Serendipitous acquaintances in their professional life
- Where are gaps in their networks?

This should take approx. 10 minutes.

Slide: Exercise – Interview (10 + 10 min)

Participants pair up and ask each other the following questions:

- 1.24. Who are the people in your network?
- 1.25. Who is important for your *professional vision or initiative in your institution?*
- 1.26. Why is this person important?
- 1.27. How is the current contact?
- 1.28. What is your goal concerning future contacts? (*Who is still missing in your professional network?*)
- 1.29. What have you already done to get in touch with these people?
- 1.30. What could still be done to strengthen or establish this contact?

Each participant interviews their partner for 10 minutes, then they switch roles.

Slide: Reflection of exercise (5 min)

Discuss in plenary: How was the exercise? What gaps did you identify? What are your strategies to close these gaps?

Slide: Steps to establish new contacts

Participants should follow these steps to build meaningful professional connections:

- 1.31. Identify a goal (e.g., why do you want to get in touch with someone/ in which way can he/she be useful?)
- 1.32. Get to know your counterpart (ask questions and present yourself)
- 1.33. Establish a relationship (e.g., similar interests)
- 1.34. Take your time - contacts need to grow
- 1.35. Offer added value to your interlocutors
- 1.36. Communicate your concerns openly – be authentic
- 1.37. Maintain the contact (e.g., find follow up reasons)

Focus should be on *developing sustainable professional relationships across departments and with external stakeholders such as municipalities, NGOs, or partner universities.*

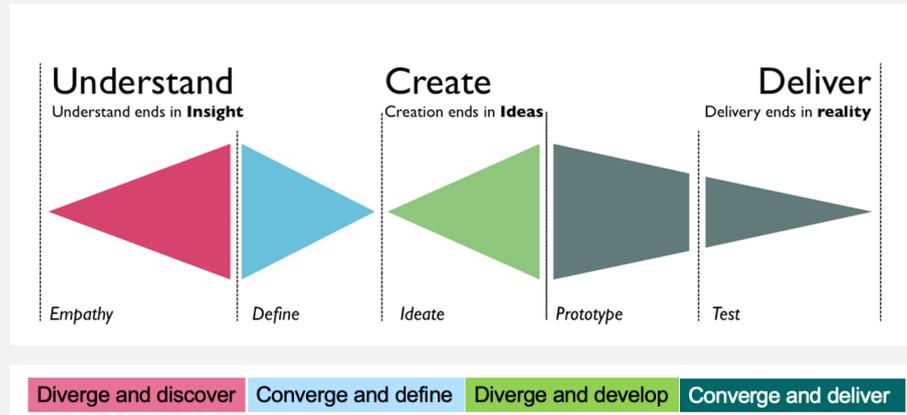
The trainer also collects tips and experiences from the participants.

Slide: Exercise (10 min)

In the end of this part, participants are asked to set a specific goal to adapt a networking strategy. They are invited to think about *a concrete project, responsibility, or process in their workplace* that is important to them. Then, they reflect on possible contacts they might need (inside or outside their institution) and how to involve them in their network.

	<p>Conclusion and preparation for day 2</p> <p>The trainer summarizes shortly what the participants have learned/trained today:</p> <ul style="list-style-type: none"> 1.38. KSAOs 1.39. Information seeking 1.40. Networking <p>The trainer emphasizes how these elements are connected to <i>institutional development, cross-departmental collaboration, and improving everyday processes and services</i>.</p> <p>They ask the participants whether they have any feedback for Day 1.</p> <p>Then, participants are asked to think about a social, ecological, or digital challenge for the next day that they would like to address and prepare a short presentation for this challenge.</p>	
<p>11.45 – 13.00</p>	<p>Day 2</p> <p>Slide: Warm-up – Equilateral triangle (10 min)</p> <p>Participants select two others to form an equilateral triangle without speaking.</p> <ul style="list-style-type: none"> - The exercise continues until all triangles are formed (best done in a large space). - Afterwards, ask who their chosen partners were. <p>Debrief: Movement of one person affects the whole system → illustrates interdependence and transitions.</p> <p>Introduction to societal, ecological, and digital challenges and transformations and introduction to design thinking</p> <p>Mostly input by the trainer. However, you can also leave room for discussion about the presented thoughts and challenges.</p> <p>Slide: Design Thinking: Process of flexible thinking to develop solutions for a specific problem</p>	<p>Slides</p>

The trainer shortly introduces the design thinking approach. The main focus should be on the divergent and convergent thinking during the different phases of the process.



Slide: Design Thinking

Now, the trainer explains that design thinking is an agile approach that can be used to solve problems in a variety of contexts. It always starts with empathizing = talking to other people, to learn about their problems

- 1.41. In an institutional setting, empathizing means listening carefully to colleagues, administrative staff, students, or external partners.
- 1.42. The aim is to understand their needs and challenges in organizational processes (e.g., digital workflows, cross-departmental communication, sustainability requirements).

Slide: Empathize (15 Minutes)

In this workshop, the focus is on transformations that are either societal, ecological, or digital

Slide: Examples of societal transformations

- Globalization and global trade (economic relation, e.g., role of China and Europe)
- Changes in social roles (e.g., gender roles, demographic change in the age distribution)
- Social conflict (migration, war)
- urbanization

Slide: Examples of ecological transformations

- Environmental protection (transportation, circular economy)
- Climate change (extreme weather events, floodings)

1.43. Change in nutrition behaviour

Flipchart, Pens

	<ul style="list-style-type: none"> - Sustainable campus management (energy efficiency in buildings, waste reduction, paperless workflows) <p>Slide: Examples for digital transformations</p> <ul style="list-style-type: none"> - Ubiquitous computing → physical and digital spaces are merging (e.g., Chat GPT) - Partial replacement of existing structures with computer-based or fully digital processes - Introduction of new administrative or research software at universities (e.g., exam management systems, research data platforms) - Hybrid teaching and working models, requiring new digital infrastructures and collaboration tools <p>Slide: Exercise: Empathize and identify problems</p> <p>Participants are asked to get together in groups of 3-4. They shall then brainstorm as many problems as they can think of that are caused by these transformations and note down keywords in their group (5 minutes)</p> <p>1.44. The focus should be on challenges within their institution, for example:</p> <ul style="list-style-type: none"> 1.45. Fragmented communication between departments. 1.46. Inefficient or incompatible digital tools. 1.47. Limited resources for sustainability initiatives. 1.48. Increased staff workload due to digitalization. <p>Participants are asked to write down keywords only.</p> <p>Slide: Gallery walk</p> <p>Groups are then asked to take a look at the ideas of the others. Where possible, broader categories are build and connections are drawn.</p>	
<p>14.00 – 14.30</p>	<p>Defining challenging transformations</p> <p>Slide: Design Thinking</p> <p>After the empathizing phase, we now enter the defining phase in which we aim at defining the challenges more precisely.</p> <p>Slide: Exercise: Define challenging transformations (30 minutes)</p> <p>The groups are asked to define 1 of the identified challenging problems more precisely. They should specify:</p> <ul style="list-style-type: none"> 1.49. Who is involved in this problem? 1.50. What are the needs of these people? 1.51. What organizational or structural factors cause the problem? 	<p>Slides</p>

	<p>1.52. Why does this problem persist? 1.53. Write down a concrete problem statement!</p> <p>The focus should be on institutional challenges. Examples could include:</p> <p>1.54. Lack of coordination between departments when implementing new software. 1.55. Limited resources for sustainability initiatives. 1.56. High administrative workload reducing time for strategic tasks.</p> <p>They can also conduct searches on the internet etc. to gain a deeper understanding. Important: They should only define the problem, not look for solutions. In the end, they should have a clear problem statement that they present to the other groups</p> <p>Slide: presentation of results (40 minutes)</p> <p>1.57. The groups are asked to present their problem statement. 1.58. The audience should take notes during the presentations. 1.59. Afterwards, all participants are asked to summarize the presented problem using the following sentence: <i>"Users need to ... because of ..."</i></p> <p>1.60. The groups then decide which sentence best represents their problem. 1.61. Problem statements should be phrased in terms of institutional needs. <i>Example: "Employees need clearer communication because of overlapping responsibilities between departments."</i></p>	
	<p>Coffee Break</p>	

<p>14.30 – 15.00</p>	<p>Using design thinking to address a chosen social, ecological, or digital challenge – Ideating and Prototyping</p> <p>Slide: Design Thinking</p> <p>After the empathizing and defining phase, we now enter the ideating phase in which we brainstorm as many possible solutions to the identified problem as possible.</p> <p>Slide: Creativity exercise (5 min)</p> <p>Task: Find as many examples as possible for what a brick can be used for.</p> <p>Instead of only the “brick” exercise, facilitators may also ask: “Think of a common office object (e.g., a stapler, a whiteboard, or a digital tool), what new uses could you imagine for it?”</p> <p>Slide: Creativity</p> <ol style="list-style-type: none"> 1. Fluency: Defined by the number of creative ideas that you have. 2. Originality: Defined by the number of creative ideas you share with other people (probability of an idea). <p>Slide: Ideation/Creativity</p> <ol style="list-style-type: none"> 1.62. Many people think that they are not creative at all 1.63. Creativity can be learned. Ideas are not coincidences but often emerge from a structured process and the use of creativity tools. 1.64. A creative idea is something new and useful. 1.65. New ideas often result from connecting already known elements in a new way. 1.66. Example: combining two familiar concepts to generate a solution. <ol style="list-style-type: none"> 1.67. Combining digital tools with administrative workflows. 1.68. Merging teaching and support services into new formats. <p>Slide: A creative idea...</p> <ul style="list-style-type: none"> - needs time. - combines several already known things. - is not a coincidence. - needs feedback. - does not come by sitting still and thinking! <p>So don’t select your favourite idea from the start! Good ideas benefit from an open mindset.</p> <p>Slide: Exercise Ideation: 4-3-2 (gathering stage) – 10 minutes</p> <p>In their groups of 4, participants write down three ideas to solve their problem on a sheet. He/she then hands this sheet of paper over to the person sitting on her</p>	<p>SAP scenes PowerPoint ...</p>
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	<p>left side. They can then add to the ideas of their group members. The sheets will circulate around for two rounds</p> <p>Encourage participants to think of <i>ideas that could realistically improve workflows, cooperation, or services in their institution.</i></p> <p>Slide: Exercise – VIP (10 min)</p> <ul style="list-style-type: none"> - Form groups of 3–4 members. - Choose a VIP/celebrity all group members know. - Collect ideas on how this VIP would solve your problem. <p>1.69. Present your ideas to the other groups.</p> <p>Instead of celebrities, participants may use <i>inspirational leaders, innovators, or role models from higher education, administration, or public service</i> (e.g., a university rector, a change manager, or a sustainability leader).</p> <p>Slide: Exercise (within groups): Selection – Post it comparison (10 minutes)</p> <ol style="list-style-type: none"> 1. Select the best idea of the list on the sheet of paper that lies in front of you 2. Write this idea on a post-it 3. Align the post-its of all group members on the table 4. Compare the first idea with the second one and agree which idea is better according to your team’s means 5. Swap the ideas if necessary 6. Continue to rank order all ideas, by comparing one by one <p>Slide: Presentation of results: Explain why you selected your idea</p> <p>Participants are asked to present their chosen idea and explain why they decided to take this idea with a special focus on their KSAOs and networks.</p> <p>Explain <i>how the idea could realistically be implemented in their institution and which colleagues, resources, or networks would be crucial to make it work.</i></p>	
	<p>Lunch Break</p>	
	<p>Using design thinking to address a chosen social, ecological, or digital challenge – Prototyping</p> <p>Slide: Application - Prototyping</p> <p>Slide: Design Thinking</p>	

	<p>We now enter the phase of prototyping. The goal is to develop a first version of a solution to the identified problem that can be tested.</p> <p>Slide: Prototyping</p> <p>Prototypes are first examples of an idea (product, service, ...) from which all later forms are developed.</p> <p>Prototypes can be <i>new workflow diagrams, drafts of improved communication processes, mock-ups of digital dashboards, service blueprints for staff or student support, or pilot checklists for administrative tasks.</i></p> <p>Slide: Examples</p> <p>The trainer shows examples for prototypes to show how different they can look like (e.g., click dummies, paper, videos, cardboard tinkering, comics,...)</p> <p>Examples could include:</p> <ul style="list-style-type: none"> 1.70. New workflow diagrams 1.71. Drafts of improved communication processes 1.72. Mock-ups of digital forms or dashboards 1.73. Service blueprints for staff or student support 1.74. Pilot guidelines or checklists for administrative tasks <p>Slide: Exercise Prototyping (60 minutes)</p> <p>Participants are asked to develop a first version/prototype to solve the chosen challenge</p> <p>The participants can use different materials (see list on the right).</p> <p>They are given 1 hour. After that, they shall present their prototypes in the plenary and get feedback.</p> <p>Important: Participants are asked to think back to the previous sessions – what KSAOs do they have that they can use to address this challenge? Which institutional contacts or units would they need to involve for testing or implementation?</p> <p>Slide: Steps for developing your product/service</p> <p>The trainer highlights the following steps the participants should follow while developing their prototypes. This slide should be shown during the 60 minutes of prototyping. The groups should also address these points in their presentation of their prototype</p> <ul style="list-style-type: none"> 1. What is the benefit of your prototype for your institution or stakeholders (e.g., students, staff, external partners)? 2. In what way does your prototype fit the needs of your organization or work unit? 	<p>Different materials for building prototypes:</p> <ul style="list-style-type: none"> Papers Pencils Lego Clay Glue/Tape Scissors
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	<ol style="list-style-type: none"> 3. In what manner is your prototype new or innovative compared to already existing processes or services? 4. Is your idea realistic / feasible within your institutional context? <p>Why does your prototype match your team's means (skills, resources, networks)?</p>	
15.15 – 17.15	<p>Presentation of the approaches developed for the selected challenges and discussion</p> <p>Depending on the number of participants – each group/participant has between 5 to 10 minutes to present their prototype and explain it to the other participants.</p> <p>Other participants are asked to provide feedback on the prototype regarding the following evaluation criteria:</p> <ol style="list-style-type: none"> 1. Value proposition 2. Target market fit 3. Innovativeness (compared to current practice) 4. Feasibility (can it be realistically implemented?) 5. Match to team's means (skills, resources, networks) <p>++ means 3 points, + 2 points, and ~ 1 point à for each category, points are counted and added to a total score. The team with the highest score wins.</p> <p>The different prototypes/solutions are discussed in the plenary regarding the question how they solve/address the chosen challenge.</p> <p>Reflection on most important vision for own career</p> <p>After the presentations, participants are asked to reflect on their most important vision for their <i>role, team, or institution</i>.</p> <p>They are asked to use insights from the previous sessions (KSAOs, networking, prototyping) and to write down:</p> <ol style="list-style-type: none"> 1.75. What is my most important vision for my work or institution? 1.76. What initial steps could I take to approach it? <p>Focus less on "career planning" and more on practical steps for institutional development, service improvement, or personal role development.</p>	<p>Prototypes</p> <p>Cards with the signs ++, +, ~ for the evaluation</p>
17.15 – 17.45	<p>Feedback and Closing.</p> <p>The trainer summarizes shortly the different steps and learnings of the workshop:</p> <ul style="list-style-type: none"> • Knowledge Entrepreneurship • Start with your means: KSAOs 	<p>Slide</p>

- Networking
- Societal, ecological and digital transformations
- Design Thinking: Empathizing
- Design Thinking: Definition
- Design Thinking: Ideation
- Design Thinking: Prototyping

Participants are asked to give feedback on how they liked the workshop, whether their expectations from the morning were met and whether they have missed something.

Participants are additionally invited to reflect on what concrete ideas or practices from the workshop they could try out in their own department or team within the next 3 months.

At the end, participants are asked to fill out questionnaire 2 for scientific purposes and are thanked for their participation.

Detailed Workshop Description – 2 Day Workshop

Day 1

Time	Content	Materials
9.00 – 9.30	<p>Welcome and procedure</p> <p>Trainer welcome participants and explain that the workshop starts with a short introduction of both trainer and participants. They introduce themselves, their backgrounds, and explain why they are conducting this workshop.</p> <p>If participants have not yet filled in the questionnaire on Knowledge Entrepreneurship, they are kindly asked to do so now (by showing a slide with the link and QR code to the questionnaire).</p> <p>Then, participants are asked to shortly introduce themselves by saying their name. They are asked the following questions:</p> <ol style="list-style-type: none"> 1) How long have you been working in your current role/at your institution? 2) What is your professional background? 3) How certain are you about your professional development plans at the moment? <p>Then, the trainer hands out pens and moderation cards. Participants are asked to write down what should happen during this workshop so that they'd say afterwards it was a good one (expectations)</p> <p>The written expectations are collected by the trainer and stuck to a wall or pinboard. The expectations should be sorted by the trainer into different categories.</p> <p>The trainer can react to the different expectations and say whether and if yes, how they might be addressed during the workshop.</p> <p>After the introduction of the participants, the trainer presents the schedule of the next two days and explains shortly what is planned for each section of the workshop. The schedule can either be shown as a slide or be written on a flipchart.</p>	<p>Slides with background information and workshop schedule.</p> <p>(Flipchart with schedule)</p> <p>Moderation cards</p> <p>Pens</p> <p>Adhesive tape OR Pinboard and pins</p>
9.30 - 10.00	<p>Knowledge Entrepreneurship – what is this?</p> <p>Short definition and introduction</p> <p>Participants are asked to brainstorm on the term "Knowledge Entrepreneur(ship)". They are asked to write down their first thoughts and their ideas</p>	<p>Mentimeter.com – word cloud</p> <p>OR</p> <p>Moderation cards</p>

10.00 –
11.00

Introduction to Effectuation

Slide:

Developed by Prof. Dr. Sara Sarasvathy

- Sarasvathy, S. D. 2001. Causation and Effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency, *Academy of Management Review*, 26(2): 243-288.
- Derived from research at Expert-Entrepreneurs

Effectuation =

Entrepreneurial thinking and acting as a proactive, creative, flexible and yet controlled in the face of uncertainty

Slide:



Causation = following established processes (Recipe X → Result Y).

Effectuation = creatively combining available resources and contacts (A + B + C → Result Z).

Adaptation for employees: Instead of recipes, think of established

- *Causation in institutions = following established processes, workflows, project guidelines, or administrative routines.*
- *Effectuation in institutions = creatively using available resources, knowledge, and networks to develop new solutions for organizational challenges.*

Slide:

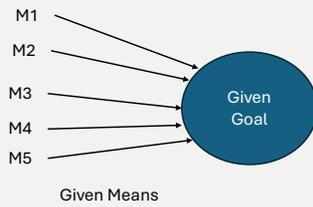
Causal vs. Effectual Reasoning

Slides

Paper, Pens

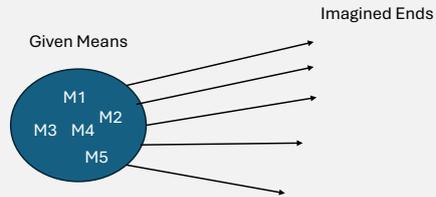
Managerial Thinking (Causal)

Distinguishing Characteristic
Selecting given means to achieve a pre-determined goal



Entrepreneurial Thinking (Effectual)

Distinguishing Characteristic
Imagining a possible new end using a given set of means



The trainer explains the distinction between **means-driven** and **goal-driven** approaches. Focus should be on what is already available and known.

Why goals alone can be problematic:

- Big goals do not provide guidance on *how* to achieve them.
- Small goals can be too narrow and limiting.

Recommendation:

Focus on existing means without ignoring goals.

Example:

- Instead of only setting the goal *“digitize all workflows by 2028”*, focus on today’s available tools, expertise, and networks that can already be used to make step-by-step progress toward digitalization.

Exercise: Effectual Thinking (15 Minutes)

Individual work:

1. What is your next step in your role or professional development within your institution?
2. How could you act effectually – using your current resources, networks, and knowledge – to move toward this step?

Pair work:

3. Share and discuss your notes with a partner (5 minutes each).

11.00 –
11.15

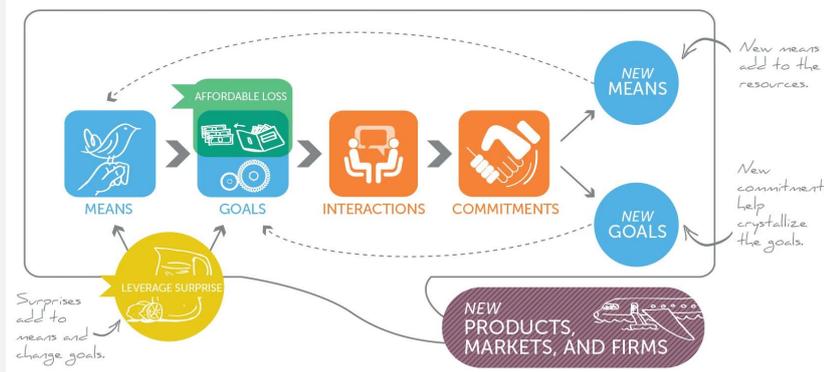
Coffee break

11.15 –
13.00

**Knowledge, Skills, Abilities, and Others (KSAOs) -
Reflection of one's own knowledge, abilities, skills, and interests**

Slide: Effectuation Circle

Slides



Picture Source: <https://creativebusinessmodels.com/2019/05/a-creative-entrepreneurial-process/>

Slide: Introduction of the effectuation principle "Start with your means."

3 categories which should be the basis for all considerations:

- 1) Who am I? Traits, skills, tastes, ...
- 2) What do I know? Training, education, specific knowledge, ...
- 3) Who do I know? Social and professional networks

The combination of these three categories leads to opportunity development and goal development.

In this part of the workshop, the participants will focus on the first two categories, the third will be in the focus of the next part of the workshop (Networking).

Slide: Knowledge, Skills, Abilities, and Others (KSAOs)

Knowledge à declarative and procedural knowledge, the amount of information and knowledge that a person possesses; learnable

Skills à set of skills, capabilities, characteristics that can be learned in order to master a specific task; learnable

Abilities à basic characteristics (e.g. intelligence) that cannot be learned or are difficult to learn, in order to cope with a whole range of tasks (Aamodt, 2010)

Other characteristics à interests, motives, attitudes, values; difficult to learn

Slide: Examples for KSAO

K: Knowledge about *institutional processes, compliance rules, digital tools, project management* ...

S: *institutional processes, compliance rules, digital tools, project management*

...

	<p>A: Organizational skills, analysis of situations, communication</p> <p>O: <i>Professional values (e.g., sustainability, openness to change, service orientation), interests related to workplace engagement</i></p> <p>Handout – KSAO Workshop</p> <p>Participants are asked to fill in the Handout KSAO (Attachment 1) (10-15 Minutes)</p> <p>Slide: Exercise: Learning milestones and interview (40 Minutes)</p> <p>The trainer asks participants to form pairs. Each writes down situations when they failed or succeeded and learned something from it on moderation cards.</p> <p>For orientation, participants may think of typical work situations, such as introducing a new digital tool, managing a time-critical project, resolving a conflict within the team, or successfully completing an audit or accreditation process.</p> <p>These cards are placed on the floor. With their partner, participants are asked to stand at one of the cards. Then they ask each other:</p> <ul style="list-style-type: none"> • What did you learn at this point? • How do you know that you have learned something? <p>à Handout Milestone and KSA (Attachment 2)</p> <p>After 20 Minutes, participants should change the roles.</p> <p>Participants are asked to write down new findings on their handout and specify the KSAs of their partner on the respective handout.</p> <p>Then, participants reflect in the plenary whether this exercise helped them to come up with new insights.</p> <p>Slide: Reflection on exercise</p> <p>Then, participants reflect in the plenary whether this exercise helped them to come up with new insights.</p> <p>Guiding questions: How was the exercise? How did you identify the KSAOs of your partner? What do you now know about your own means?</p> <p>Each pair should briefly share something.</p>	<p>Handouts "KSAOs"</p> <p>Handout Milestone & KSA</p> <p>Moderation cards</p> <p>Pens</p>
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Slide: Vision Journey (10 minutes)

The trainer now leads the participants to the vision journey. This should be done carefully to allow the participants to feel comfortable with the idea and do not dismiss it as unrealistic.

Text of the vision journey:

“We start the Vision Journey and jump a few years into the future: Your initiative as a knowledge entrepreneur within your institution has turned out better than you could have ever imagined.

What exactly happened to make the project so successful? Let your imagination run wild, you are not bound by probabilities.

You are working on the project:

- What are you doing?
- Where are you?
- What does your workplace look like?
- What do you see, what do you hear, what do you feel?

Now you have a team meeting:

- What does it look like?
- *What is your role in making this the best team you've ever worked in?*

Now your working day is coming to an end. You go out and meet a colleague or partner you haven't seen for a while. They ask you about your work and you talk about how everything went *really well*.

- What exactly do you talk about?
- What is most important to you?

Back home you get the news that a major magazine has written about your project and your work. Full of anticipation you click on the article – *what does it say about the contribution of your institution and your role in it?*

Finally, ask yourself:

- What is your basic feeling?
- Listen to yourself and try to find some terms that describe your feelings well.”

Paper, Pens

	<p>Slide: Your future as a knowledge entrepreneur exercise</p> <p>After the vision journey, participants are asked to note down the most important points of their vision:</p> <ul style="list-style-type: none"> • What do you still remember? • What was important in relation to your initiative or project within your institution as a knowledge entrepreneur? • Did you identify any specific insights for improving your workplace, organizational processes, or collaboration? 	
<p>15.00 – 15.15</p>	<p>Coffee break</p>	
<p>15.15 – 17.15</p>	<p>Networking strategies</p> <p>Slide: Exercise – Network!</p> <p>Participants are asked to write down 3 questions nobody has ever asked them before. Then, they walk through the room and when they meet someone, they ask each other these questions. They then exchange one of their cards. The participants should talk to everyone at least once. The exercise takes approx. 15 minutes</p> <p>The questions should relate to <i>professional challenges, organizational change, or collaboration across departments</i> (e.g., "What is one small change that would make your daily work easier?" "Which resource would help your team most right now?").</p> <p>Slide: Effectuation principles</p> <p>Means (bird in hand) – 3) Question = Who do I know? Social and professional networks</p> <p>Slide: Networking</p> <p>Networking is building relationships before you need them. Then when you need them, you will know whom to call and he or she will want to help you." (Darling, 2003)</p> <p>Emphasis on <i>cross-departmental collaboration, cooperation with administrative units, and external stakeholders (partner universities, municipalities, NGOs)</i>.</p> <p>Slide: Exercise</p> <p>What is a past situation, in which you networked successfully?</p>	<p>Slides</p>

Encourage participants to think of *examples from their workplace or institution*, such as:

- successfully finding support from another department,
- solving a problem by activating a professional network,
- initiating cooperation with external partners.

Slide: Example: Paula is an app developer in the area of health management

This slide is use as an example for how networks can look like. The trainer explains the different types of networks and how these could be used by Paula.

Slide: Exercise: Who is in your network concerning your vision as knowledge entrepreneur?

Participants are asked to fill out the handout "Networking" (Attachment 3) asking them who they know:

- Colleagues and managers within their department
- Contacts in other departments or administrative units
- External partners (e.g., municipalities, companies, NGOs, partner universities)
- Professional associations or communities of practice
- Serendipitous acquaintances in their professional life
- Where are the gaps in their networks?

This should take approx. 10 minutes.

Slide: Exercise: Interview (10 + 10 minutes)

Participants should build pairs. They are then asked to take a photo of the questions and take a walk together. During this walk, they should ask each other the following questions regarding their networks:

- Who are the people in your network?
- Who is important for your *professional vision or initiative in your institution?*
- Why is this person important?
- How is the current contact?
- What is your goal concerning future contacts? (*Who is still missing in your professional network?*)
- What have you already done to get in touch with these people?
- What could still be done to strengthen or establish this contact?

Handout Net-
working

	<p>After 10 minutes, they should change their roles.</p> <p>Slide: Reflection of exercise</p> <p>The trainer discusses together with the participants how they experienced the exercise, which gaps they identified in their networks, and what their strategies are to close the gaps.</p> <p>Slide: Networking – steps to establish new contacts</p> <ul style="list-style-type: none"> ▪ Identify a goal (e.g., why do you want to get in touch with someone/ in which way can he/she be useful?) ▪ Get to know your counterpart (ask questions and present yourself) ▪ Establish a relationship (e.g., similar interests) ▪ Take your time - contacts need to grow ▪ Offer added value to your interlocutors ▪ Communicate your concerns openly – be authentic ▪ Maintain the contact (e.g., find follow up reasons) <p>Focus should be on <i>developing sustainable professional relationships across departments and with external stakeholders such as municipalities, NGOs, or partner universities.</i></p> <p>The trainer also collects tips and experiences from the participants.</p> <p>Slide: Exercise (10 minutes):</p> <p>In the end of this part, participants are asked to set a specific goal to adapt a networking strategy. They are invited to think about <i>a concrete project, responsibility, or process in their workplace</i> that is important to them. Then, they reflect on possible contacts they might need (inside or outside their institution) and how to involve them in their network.</p>	
<p>17.15 – 17.45</p>	<p>Conclusion and preparation for Day 2</p> <p>The trainer summarizes shortly what the participants have learned/trained today:</p> <ul style="list-style-type: none"> - KSAOs - Information seeking - Networking <p>The trainer emphasizes how these elements are connected to <i>institutional development, cross-departmental collaboration, and improving everyday processes and services.</i></p>	

	<p>They ask the participants whether they have any feedback for Day 1.</p> <p>Then, participants are asked to think about a social, ecological, or digital challenge for the next day that they would like to address and prepare a short presentation for this challenge.</p>	
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Day 2

Time	Content	Materials
9.00 – 9.30	<p>Welcome and Procedure</p> <p>Trainer welcome participants and tell them what the schedule for Day 2 is. Then they remind them of the task they had given them on the end of the first day and of the expectations that the participants had at the start of the first day.</p> <p>The trainer asks whether there are any questions regarding the previous workshop day or the schedule for this day.</p>	<p>Slides (Flipchart)</p>
9.30 – 10.00	<p>Introduction to social, ecological, and digital challenges and transformations and introduction to design thinking</p> <p>Mostly input by the trainer. However, you can also leave room for discussion about the presented thoughts and challenges.</p> <p>Slide: Design Thinking: Process of flexible thinking to develop solutions for a specific problem</p> <p>The trainer shortly introduces the design thinking approach. The main focus should be on the divergent and convergent thinking during the different phases of the process.</p> <div data-bbox="363 1263 1209 1532" data-label="Diagram"> </div> <p>Slide: Design Thinking</p> <p>Now, the trainer explains that design thinking is an agile approach that can be used to solve problems in a variety of contexts. It always starts with empathizing = talking to other people, to learn about their problems</p> <ul style="list-style-type: none"> • In an institutional setting, empathizing means listening carefully to colleagues, administrative staff, students, or external partners. • The aim is to understand their needs and challenges in organizational processes (e.g., digital workflows, cross-departmental communication, sustainability requirements). 	<p>Slides</p>

Slide: Empathize

In this workshop, the focus is on transformations that are either societal, ecological, or digital

Slide: Examples of societal transformations

- Globalization and global trade (economic relation, e.g., role of China and Europe)
- Changes in social roles (e.g., gender roles, demographic change in the age distribution)
- Social conflict (migration, war)
- urbanization
- Workplace transformations (e.g., hybrid work models, diversity and inclusion requirements, demographic change in staff)

Slide: Examples of ecological transformations

- Environmental protection (transportation, circular economy)
- Climate change (extreme weather events, floodings)
- Change in nutrition behavior
- Sustainability initiatives in institutions (e.g., reducing paper usage, energy-efficient buildings, waste reduction on campus)

Slide: Examples for digital transformations

- Ubiquitous computing → physical and digital spaces are merging (e.g., Chat GPT)
- Partial replacement of existing structures with computer-based or fully digital processes
- Implementation of new digital administration systems (e.g., exam management, HR software, research data platforms)
- Expansion of hybrid learning and working infrastructures

Slide: Exercise: Empathize and identify problems

- Participants are asked to get together in groups of 3-4.
- They should brainstorm as many problems as you can think of that are linked to current social, ecological, or digital transformations.
- The focus should be on challenges within their institution, for example:
 - Fragmented communication between departments.
 - Inefficient or incompatible digital tools.
 - Limited resources for sustainability initiatives.
 - Increased staff workload due to digitalization.
- Participants are asked to write down keywords only.

Flipchart, Pens

	<p>Slide: Gallery walk</p> <ul style="list-style-type: none"> • Groups are asked to review the ideas collected by the other groups. • Where possible, broader categories should be built and connections drawn. 	
<p>10.00 – 10.45</p>	<p>Defining challenging transformations</p> <p>Slide: Design Thinking</p> <p>After the empathizing phase, we now enter the defining phase in which we aim at defining the challenges more precisely.</p> <p>Slide: Exercise: Define challenging transformations (30 minutes)</p> <p>The groups are asked to define 1 of the identified challenging problems more precisely. They should specify:</p> <ul style="list-style-type: none"> • Who is involved in this problem? • What are the needs of these people? • <i>What organizational or structural factors cause the problem?</i> • Why does this problem persist? • Write down a concrete problem statement! <p>The focus should be on institutional challenges. Examples could include:</p> <ul style="list-style-type: none"> • Lack of coordination between departments when implementing new software. • Limited resources for sustainability initiatives. • High administrative workload reducing time for strategic tasks. <p>They can also conduct searches on the internet etc. to gain a deeper understanding. Important: They should only define the problem, not look for solutions. In the end, they should have a clear problem statement that they present to the other groups</p> <p>Slide: presentation of results (15 minutes)</p> <ul style="list-style-type: none"> • The groups are asked to present their problem statement. • The audience should take notes during the presentations. • Afterwards, all participants are asked to summarize the presented problem using the following sentence: <p><i>"Users need to ... because of ..."</i></p> <ul style="list-style-type: none"> • The groups then decide which sentence best represents their problem. 	

	<ul style="list-style-type: none"> • Problem statements should be phrased in terms of institutional needs. <p><i>Example: "Employees need clearer communication because of overlapping responsibilities between departments."</i></p>	
10.45 – 11.00	Coffee break	
11.00 – 12.15	<p>Using design thinking to address a chosen social, ecological, or digital challenge – Focus on Ideation</p> <p>Slide: Design Thinking</p> <p>After the empathizing and defining phase, we now enter the ideating phase in which we brainstorm as many possible solutions to the identified problem as possible.</p> <p>Slide: Creativity exercise</p> <ul style="list-style-type: none"> • Participants are asked to write down as many examples as possible for what a brick can be used for. • Alternatively, they may brainstorm possible uses for an everyday office item (e.g., a paperclip, a sticky note, or a meeting room). • The collected solutions should then be discussed in the plenary. <p>Slide: Creativity</p> <p>Fluency: Defined by the number of creative ideas that you have</p> <p>Originality: Defined by the number of creative ideas you share with other people (probability of an idea)</p> <p>Slide: Ideation/Creativity</p> <ul style="list-style-type: none"> • Many people think that they are not creative at all • Creativity can be learned. Ideas are not coincidences, but often emerge from a structured process and the use of creativity tools. • A creative idea is something new and useful. • New ideas often result from connecting already known elements in a new way. • Example: combining two familiar concepts to generate a solution. <ul style="list-style-type: none"> • Combining digital tools with administrative workflows. • Merging teaching and support services into new formats. 	<p>Slides</p> <p>Paper, Pens</p>

	<p>Slide: A creative idea...</p> <ul style="list-style-type: none"> • needs time. • combines several already known things. • is not a coincidence. • needs feedback. • does not come by sitting still and thinking! <p>Slide: Exercise Ideation: 4-3-2 (gathering stage) – 10 minutes</p> <p>In their groups of 4, participants write down three ideas to solve their problem on a sheet. He/she then hands this sheet of paper over to the person sitting on her left side. They can then add to the ideas of their group members. The sheets will circulate around for two rounds</p> <p>Encourage participants to think of <i>ideas that could realistically improve workflows, cooperation, or services in their institution.</i></p> <p>Slide: Exercise: VIP – 10 minutes</p> <p>Again using the chosen problem, participants are asked to think about 1 VIP/celebrity they are all familiar with. They should then collect ideas how this person/character would solve their problem. These ideas are written on a flipchart and later presented to the other groups.</p> <p>Instead of celebrities, participants may use <i>inspirational leaders, innovators, or role models from higher education, administration, or public service</i> (e.g., a university rector, a change manager, or a sustainability leader).</p> <p>Slide: Exercise (within groups): Selection – Post it comparison (10 minutes)</p> <ul style="list-style-type: none"> • Select the best idea of the list on the sheet of paper that lies in front of you (Criterion: idea fits to your means) • Write this idea on a post-it • Align the post-its of all group members on the table • Compare the first idea with the second one and agree which idea is better according to your team's means • Swap the ideas if necessary • Continue to rank order all ideas, by comparing one by one <p>Slide: Presentation of results: Explain why you selected your idea</p> <p>Participants are asked to present their chosen idea and explain why they did decide to take this idea with a special focus on their KSAOs and networks.</p>	<p>Paper, Pens</p> <p>Flipcharts, pen</p> <p>Post-its, pens</p>
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	Explain <i>how the idea could realistically be implemented in their institution and which colleagues, resources, or networks would be crucial to make it work.</i>	
12.15 – 13.15	Lunch break	
13.15 – 14- 45	<p>Using design thinking to address a chosen social, ecological, or digital challenge – Prototyping</p> <p>Slide: Design Thinking</p> <p>We now enter the phase of prototyping. The goal is to develop a first version of a solution to the identified problem that can be tested.</p> <p>Slide: Prototyping</p> <p>Prototypes are first examples of an idea (product, service, ...) from which all later forms are developed.</p> <p>Prototypes can be <i>new workflow diagrams, drafts of improved communication processes, mock-ups of digital dashboards, service blueprints for staff or student support, or pilot checklists for administrative tasks.</i></p> <p>Slide: Examples</p> <p>The trainer shows examples for prototypes to show how different they can look like (e.g., click dummies, paper, videos, cardboard tinkering, comics,...)</p> <p>Examples could include:</p> <ul style="list-style-type: none"> • New workflow diagrams • Drafts of improved communication processes • Mock-ups of digital forms or dashboards • Service blueprints for staff or student support • Pilot guidelines or checklists for administrative tasks <p>Slide: Exercise Prototyping (60 minutes)</p> <p>Participants are asked to develop a first version/prototype to solve the chosen challenge</p> <p>The participants can use different materials (see list on the right).</p> <p>They are given 1 hour. After that, they shall present their prototypes in the plenary and get feedback.</p>	<p>Different materials for building prototypes:</p> <p>Papers</p> <p>Pencils</p> <p>Lego</p> <p>Clay</p> <p>Glue/Tape</p> <p>Scissors</p> <p>SAP scenes</p> <p>PowerPoint</p> <p>...</p>

	<p>Important: Participants are asked to think back to the previous sessions – what KSAOs do they have that they can use to address this challenge? What colleagues or contacts would they need/use?</p> <p>Slide: Steps for developing your product/service</p> <p>The trainer highlights the following steps the participants should follow while developing their prototypes. This slide should be shown during the 60 minutes of prototyping. The groups should also address these points in their presentation of their prototype</p> <ol style="list-style-type: none"> 1. What is the benefit of your solution for your <i>institution, colleagues, or stakeholders</i>? 2. In what way does your solution fit the needs of your <i>workplace or institution</i>? 3. In what manner is your solution new or innovative in comparison to existing practices? 4. Is your solution realistic / feasible? 5. Why does your solution match your team’s means (skills, resources, networks)? 	
<p>14.45 – 15.00</p>	<p>Coffee break</p>	
<p>15.00 – 16.00</p>	<p>Presentation of the approaches developed for the selected challenges and discussion</p> <p>Depending on the number of participants – each group/participant has between 5 to 10 minutes to present their prototype and explain it to the other participants.</p> <p>Other participants are asked to provide feedback on the prototype regarding the following evaluation criteria:</p> <ol style="list-style-type: none"> 1. Value proposition 2. Fit to institutional needs 3. Innovativeness 4. Feasibility 5. Match to team’s means (skills, resources, networks) <p>++ means 3 points, + 2 points, and ~ 1 point à for each category, points are counted and added to a total score. The team with the highest score wins.</p> <p>The different prototypes/solutions are discussed in the plenary regarding the question how they solve/address the chosen challenge.</p>	<p>Prototypes</p> <p>Cards with the signs ++, +, ~ for the evaluation</p>

<p>16.00 - 16.30</p>	<p>Reflection on most important vision for own career</p> <p>After the presentations, participants are asked to reflect on their most important vision for their <i>role, team, or institution</i>.</p> <p>They are asked to use insights from the previous sessions (KSAOs, networking, prototyping) and to write down:</p> <ul style="list-style-type: none"> • What is my most important vision for my work or institution? • What initial steps could I take to approach it? <p>Focus less on “career planning” and more on practical steps for institutional development, service improvement, or personal role development.</p>	<p>Paper Pens</p>
<p>16.30 – 17.00</p>	<p>Feedback and closing.</p> <p>The trainer summarizes shortly the different steps and learnings of the workshop:</p> <ul style="list-style-type: none"> - KSAOs - Networking - Social, digital, and ecological challenges - Prototyping - Future vision for workplace and institution <p>Participants are asked to give feedback on how they liked the workshop, whether their expectations from the first morning were met and whether they have missed something.</p> <p>At the end, participants are asked to fill out questionnaire 2 for scientific purposes and are thanked for their participation.</p>	<p>Slide</p>

Attachment 1

Knowledge, Skills, Abilities & Others (KSAOs)

What do you know?	What do you know?	Who are you?	Who are you?
Your prior knowledge and professional education		Tastes, values, and preferences	
Knowledge from your work and job		Passions in your role, motivation drivers	
Knowledge from your workplace practice (processes, tools, institutional know-how)		Hobbies	
Informal learning (trainings, voluntary tasks, side projects)		Interests	

Attachment 2

Exercise: Learning milestones and interview

Time: 40 min (20 + 20)

Step 1: Interview

- What happened in this situation?
- How did you act in this situation in order to solve the problem?
- What was the result?
- What did you learn at this point?
- Which ability, knowledge, or professional experience has been helpful in order to solve the situation?
- If you would encounter the same situation for a second time, would you change something to be more successful?
- Don't ask questions that can only be answered with yes or no -> instead: Why, what, how!
- Summarize what you understood and ask if it was correct

Attachment 2

Optional Reflection Questions – Moderation Cards for Situation Narration

- What are your strengths? Why?
- How do you determine that this is a strength in your workplace context?
- What are you particularly good at (in terms of skills and competencies)?
- What knowledge can you use to solve problems in your institution or team?
- What are your development areas (weaknesses)? Why?
- How do you determine that this is a weakness?
- Which values are particularly important to you in your life?

Step 2: Specify the means of your partner!

KSAs	
<p>Knowledge</p> <p>(declarative and procedural knowledge)</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> • <i>Knowledge about administrative processes (e.g., HR, finance, student services)</i> • <i>Knowledge about laws, regulations, compliance</i> • <i>Knowledge about digital systems (e.g., SAP, Moodle, internal data-bases)</i> 	
<p>Skills</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> • <i>Project management</i> • <i>Facilitation of meetings or workshops</i> • <i>Use of digital tools (e.g., Excel, PowerPoint, data visualization)</i> • <i>Language skills for international cooperation</i> 	
<p>Abilities</p> <p>(cannot be learned)</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> • <i>Analytical thinking</i> • <i>Organizational awareness</i> • <i>Communication skills in complex settings</i> • <i>Problem-solving under pressure</i> • <i>Strategic foresight</i> 	

Attachment 3

Networking - Contacts

Who do you know?	Who do you know?
Your rolodex, LinkedIn, Plaxo, Facebook, ...	
Colleagues, managers, cross-departmental contacts.	
External partners (e.g., municipalities, NGOs, partner universities, companies)	
Serendipitous encounters <i>in professional life</i>	
The strangers in your life	