TRAINING DESCRIPTION Module 3

Training 2 : Innovations and Design Thinking

Number of hours: 3
Module: 3
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General information

Innovations and Design Thinking is a training that focuses on introducing participants to the principles and practices of innovation and design thinking. The program is designed to help participants develop a mindset that is conducive to innovation and creativity and equip them with practical skills and techniques that they can use to create innovative solutions for complex problems.

In the past half-century, the world's population has more than doubled. Yet the amount of material flowing through the economy has more than tripled. The impact of "throw away" culture on the planet and societies is clear: it's destructive. We are living in a time of rampant pollution and waste, resource scarcity, biodiversity loss and warming global temperatures: all of which are linked in some way to our rising levels of consumption. It is essential to find all the tools that will help solve these problems. An important tool represents the design thinking model for the sustainable economy which allow students to explore new ways to create sustainable, resilient, long-lasting value and creative confidence to redesign the world around them.

Assumed knowledge basis for course participation

There are no formal prerequisites for this training program. However, participants should have a basic understanding of business concepts and some experience working in a team environment. However, to manage this training, the general basic knowledge of students from economics and marketing is welcomed.

Aim of the course

The aim of this course is to provide participants with a comprehensive understanding of the principles and practices of innovation and design thinking. By the end of the training, participants should be able to apply these principles and practices to create innovative solutions for complex problems. In addition, the aim of the training is to build problem solving, creative and systematic thinking skills to integrate knowledge among students for preparing them to actively engage in sustainable development and business practices in the future as young professionals.

Learning outcomes

By the end of this training, participants will be able to:

- Understand the principles and practices of innovation and design thinking.
- Apply design thinking methodologies to create innovative solutions for complex problems.
- Use various ideation techniques to generate creative ideas.

- Understand the importance of user-centric design and how to conduct user research.
- Understand the importance of prototyping and how to create effective prototypes.
- Collaborate effectively in a team environment to create innovative solutions.
- Identify elements of sustainable opportunities.
- Understand why designing for the sustainable economy is a positive climate action and can provide new and better solution for the next generation.

Teaching methodology

This training will use a combination of lectures, group discussions, case studies, and hands-on exercises to ensure participants gain a practical understanding of the principles and practices of innovation and design thinking. Also, the theoretical concepts are focused on presenting the main ideas connected to design thinking and sustainability. Case studies are used to illustrate real-world examples of sustainable principles. Participants will work further on a group project where they will apply the concepts learned throughout the course to solve a real-world problem (during Frugal Innovation Projects sessions).

Course outline

- Introduction to Innovation
    - Definition and types of innovation
    - Innovation Process and innovation life cycle
    - Innovation Entrepreneurship and European context
- Introduction to Design Thinking
    - Overview of design thinking
    - Benefits of design thinking
    - Cycle of design thinking
- Empathize
    - User research
    - Creating user personas
    - Identifying user needs
- Define
    - Problem definition
    - Developing problem statements
- Ideate
    - Brainstorming techniques
    - Creative ideation
- Prototype
    - Types of prototypes
    - Creating effective prototypes
- Test
    - User testing
    - Iterative design
- Implement
    - Scaling innovation
    - Launching new products/services
- Design Thinking for sustainability
    - Global challenges and megatrends shaping the economy and our society
    - Frameworks and tools to use design thinking for sustainability

- Case studies to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context.

Students' assessment

TBD

Study resources

Participants will be provided with a comprehensive course manual that includes detailed information on the course topics, case studies, and hands-on exercises. Additionally, participants will have access to online resources such as videos, articles, and templates that they can use to reinforce their learning.

Besides, few references are listed here:

1. Bakker, C. (2022). Design for sustainability survival guide. BIS Publishers, 191 pp. ISBN 9063696396
2. Circle Economy (2022). The Circularity Gap Report. 2022. pp. 1-64. Amsterdam: Circle Economy. Available on: https://circularity-gap.world/2022//Download-the-report
3. Circular lab. (2022). Circular design, what it is? Available on: https://circulab.com/circular-design-what-is-it/
4. Dean, S. (2016). Designing for sustainability. St. Martin's Publishing Group, 370 pp. ISBN 1491935774
5. UNESCO (2014). Education for Sustainable Development. Retrieved 11 January 2021, from: https://edugog.com/education-for-sustainable-development-teacher-guides/