

General information Module 5

<https://view.genial.ly/61fa37c972f1090019d5063d/presentation-chains-overview>

What are CHAINs?

Practical part of the program “Specialist in the circular economy of plastic packaging”.

A novel challenge-based training methodology

Consisting of tutored collaborative teams of students to work on the specific industry challenge for a period of 2 months. During this time you will have two mentors and your mission is to develop innovative ideas to solve the challenge. You will use Design Thinking tools and SCRUM

*Each country has selected challenges identified in the plastic packaging chain. Consult with your mentor

COURSE OBJECTIVES

Understanding and applying innovation methodologies to create a prototype or a solution to a challenge.

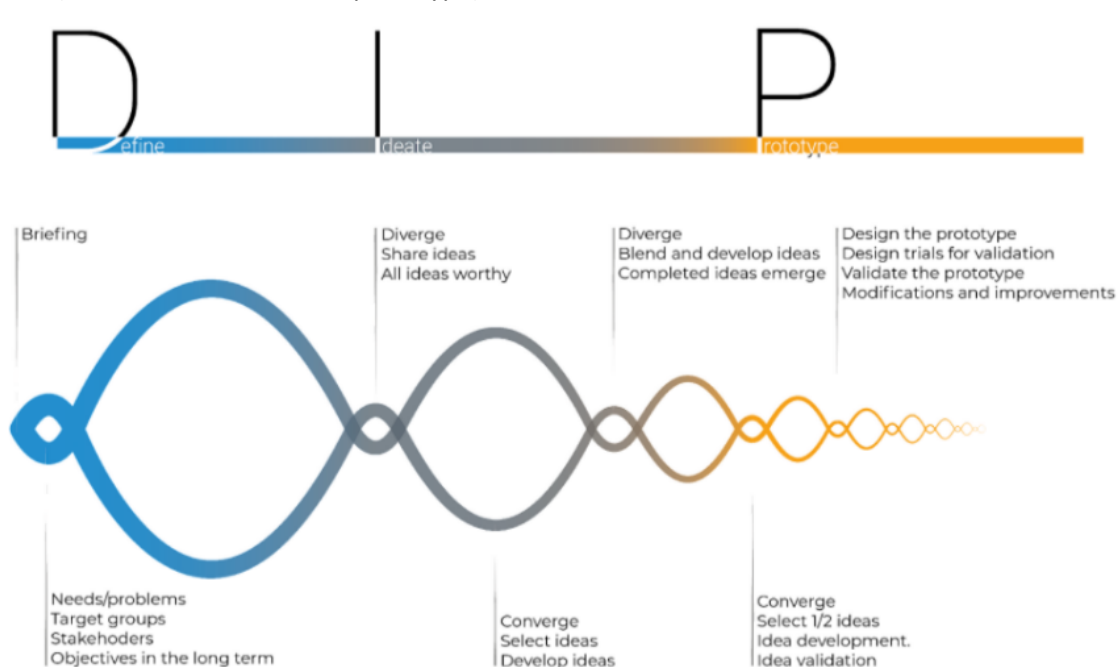
Acquiring the practice to work within companies in the plastic packaging sector.

Acquiring personal development and maturity.

Acquisition of competences for the exercise of professional activities.

Methodology

DIP (Definition, ideation and prototype)



This methodology is based on Design Thinking, simplifying it so that it is easier and above all faster to assimilate and apply. Definition, understanding of the challenge, the problems and the stakeholders. Ideation, idea generation (divergence), idea selection (convergence), development of main ideas (1 or 2 ideas). Prototype, solution design and testing.

Deadlines

This module is divided into three Time phases: definition, Ideation and Prototype.

Module duration is 8 weeks, manage your time to complete each activity and meeting. You will work in groups, communication with your group and mentor is very important.

Definition phase. Fully understanding of the challenge, information gathering, detect problems, identify stakeholders.

Ideation phase. Generation of ideas that try to solve the challenge, based on the problems and needs identified

Prototype phase. Validation and manufacturing or virtual design of the ideated prototype.

Assesment

The evaluation will take into account not only the final product, but the whole process and the ability to present it for specialist and non-specialist audiences.

Journal. Notes, sketches or records of data of interest in the development of the challenge

Prototype. Minimum viable product (MVP) and/or render design.

Final Presentation. The presentation may take diffetent forms (video and/or elevator pitch).

Contact in each country

For information about mobilities write to:

Spain: estudiantes@campusiberus.es

Poland: kulczycka@agh.edu.pl

Finland: students.packall@tuni.fi

Italy: egarofalo@unisa.it

Innovation

Miro

Throughout module 5 you will learn about Miro, a collaborative tool that allows you to have real-time board and editing boards

Students can manually mark this item complete: MiroThroughout module 5 you will learn about Miro:

- [What is Miro?](#)
- [General Miro](#)
- [How to use templates?](#)

What Is Design Thinking?

https://youtu.be/_WI3B54m6SU

***Harvard Business Review, 2022. The Explainer: What Is Design Thinking?. [video] Available at: <https://youtu.be/_WI3B54m6SU> [Accessed 20 March 2022].

Design Thinking by Tim Brown

In the following reading you will learn more about design thinking, its beginnings and people-centered requirements.

Brown, the CEO and president of the innovation and design firm IDEO, is a leading proponent of design thinking—a method of meeting people’s needs and desires in a technologically feasible

and strategically viable way. In this article he offers several intriguing examples of the discipline at work.

Brown, T., 2008. Design Thinking. [online] Harvard Business Review. Available at: <https://hbr.org/2008/06/design-thinking>

Design thinking starts

Explore the website: www.designkit.org

In it you can learn more about the creative methodology.

The Human-centered design kit released by IDEO includes more than 50 design methods to address these moments. Ideo is an international design and innovation firm, pioneers of creative thinking.

Explore the website: www.designthinking.services/en/tools-design-thinking

In it you can learn more about comun tools for design thinking.

Define phase

In this section you will find all the material for the 1st week and the Define phase.

1st week overview, general information about the content of the first week.

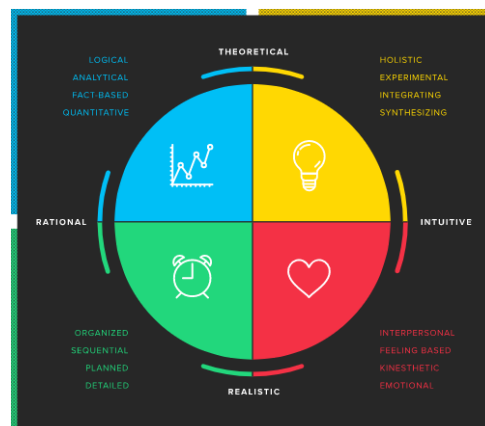
- The Circular Lab, company information
- DIP methodology, CHAINs process
- HBDI Forum, taking the HBDI test and sharing results.
- Delivery of activities, after completing the dynamics of the week you will upload your evidence*:
 - Answer to the dynamic "Aircraft accident".
 - Blind drawings
 - Make a map
 - Start at the end Assignment
 - Target and Buyer Person
 - Group Map and Key concepts

*This topic will help to have the information for the final journal.

Forum HBDI

Instructions:

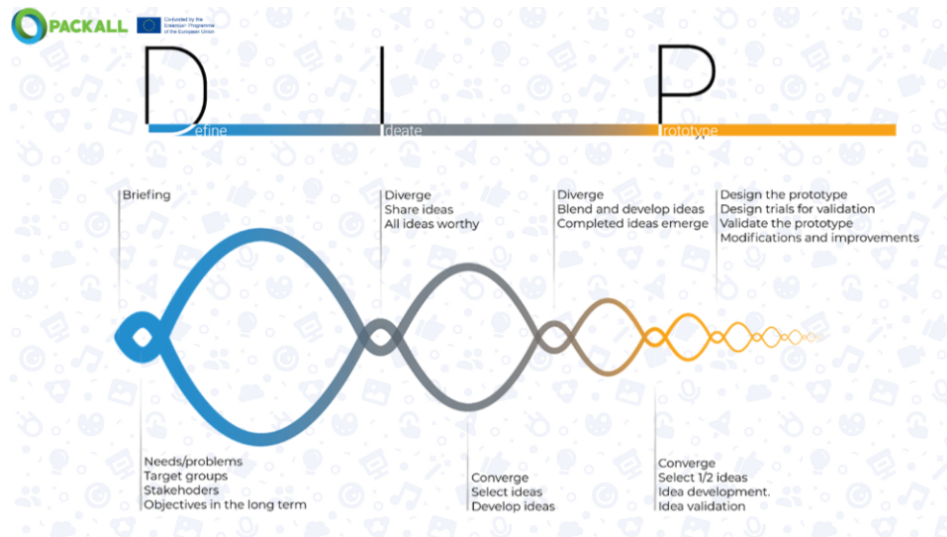
1. Review the 12 questions of the HBDI test.
2. Take the test and record your answer for each question.
3. Consult the points and get your dominant quadrant
4. Share your HBDI test results: which is your dominant quadrant?



Herrmann Global LLC, 2022. The Whole Brain Model. [image] Available at: <https://www.thinkherrmann.com/hubfs/core-idea-1.svg> [Accessed 20 March 2022].

DIP Methodology

<https://view.genial.ly/6239ea71f23ac2001add3171/learning-experience-didactic-unit-dip>



Define

This first stage of the DIP and the base of the methodology begins when the challenge is presented to the team. Understanding of the challenge is achieved by identifying the needs and users. There are different techniques for this, so the group should define the lines of interest to individually perform a documentary search (video, yearbooks, publications...). Once the user (stakeholders) has been defined, the areas of opportunity in which solutions can be offered are identified.

KEY QUESTIONS

- What is the problem?
- Who is involved?
- Why is it important?

Duration

One week: 28/03/2022-01/04/2022

Synchronous sessions

Three sessions

Inputs

Challenge

Objective

- General understanding of the challenge by the team.
- The target group to which the team and the stakeholders considered most influential will be directed.
- Small list of the main problems / obstacles of the project

Ideate

Once the challenge is understood, the next step is to define the problems to be solved. This stage is creative and requires establishing rules so as not to "kill creativity". A large number of ideas are generated through different group activities. Once the ideas are generated, they are filtered and prioritized to define those with the greatest potential to provide a solution to the challenge.

Key points

Do not kill creativity

All we are creative

Open mind

Duration

Four weeks: 04/01/2022-30/04/2022

Synchronous sessions

Nine sessions

Inputs

- Well-defined information search lines understood by the entire team.
- Keys to boosting team creativity.

Objective

- Generate solution ideas for the challenge.

Prototype

This is the last stage, where the idea is materialized.

A functional version or the indications of the product or service is created.

KEY POINTS

Define how the idea should be validated/tested

Test of concept

Be quick

Duration

Three weeks: 02/05/2022-20/05/2022

Synchronous sessions

Seven sessions

Inputs

Solution idea and its development

Objective

- Create the minimum viable product of the challenge solution.

Overview 1st week

<https://view.genial.ly/620a9331b65dd900191a1e85/interactive-content-overview-define-phase>

The Circular Lab presentation

Your Ecoembes company mentor, will introduce you to:

- Ecoembes, mission, vision and values.
- Hub's team and their areas.

To learn more about the innovation department (TheCircularLab), you can explore the following website: <https://www.thecircularlab.com/>

Challenge

- Your academic mentor will explain the DIP methodology of work.
- Your company mentor will explain the challenge: target and deliverables.

Rules

It is necessary to establish the rules of the challenge:

- Communication, together with your mentors will define the means of communication (Moodle, mail, whatsapp).

- Meetings, your mentors will establish the frequency and duration of the sprint meetings.
- Collaborative work, together with your mentors and teammates will define the platform for collaborative work (Moodle, Onedrive, GoogleDrive, others).

Group Activities

- With your mentor, you will carry out dynamics to get to know the members of your group.
- The convergence moment refers to the sharing of the researched information.

Personal activities

- Individually, you will make your own understanding of the challenge.
- Remember to use trusted sources and

Class material

- Review innovation material and tools
- Remember to do your journal and complete the week's activities.

Define

- By the end of the week you will have fully understood the challenge and have done the information gathering.

Blind drawings

Individual work

After the dynamic:

1. Upload a photo of each of the drawings you made.
2. Write a reflection of maximum 280 words.

Aircraft accident

Team work

Work with your team and:

1. Analyze the exercise
2. Reach a consensus as a team
3. Hand in the list of numbered objects (1 the first to be thrown, 15 the last)

*If not all members collaborate please let me know by sending an e-mail to circulartalentlabs@ecoembes.com and alberto.navajas@unavarra.es.

PlaneCrash.pdf

Start at the end

Team work

In this exercise we will simulate having two hats, the optimist and the pessimist.

Creates a document with the information:

1. Optimistic hat , the long-term objective defined as a team.
2. For the Pessimistic hat, list the problems, imepditions and/or risks detected.

Make a map

Individual work

Follow your mentor's instructions in synchronous session

1. Upload the map (screenshot or pdf) created with potential users in mind.
2. Upload the map (screenshot or pdf) created with stakeholders in mind.

Target and Buyer Person

Team work

Use the Miro board and in team completes:

1. Fill in the "Buyer Persona" template indicating the selected target.
2. Place the names of the members in the upper right corner.
3. Upload the completed template (screenshot or pdf).

Group Map

Team work

1. After the convergence meeting and the sharing of concepts develop a group map/scheme in Miro Board to reflect the understanding phase.
2. The map/scheme should contain:
 - The main concepts studied and their interrelation.
 - The problems identified.
 - The identified areas of opportunity.
3. Share the link and the printscreen

Idea phase

Timeline Ideation

<https://view.genial.ly/624ef2b9678b540013b042f5/interactive-content-ideationtimeline>

Activities per week and hits:

1. Generation: With different dynamics in team and individual work, you will generate a lot of ideas.
2. Selection: Join and complement ideas, vote and select the best ones.
3. Development: Identify how to realise the idea, its strengths and weaknesses, does it solve the challenge?
4. Final ideas: Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Presentation: Present your ideas to the company, receive feedback and be able to make adjustments.

Idea Selection

Review the information about selection ideas:

Bundle Ideas

Bundling Ideas Bundling Ideas takes you from strong individual concepts to solutions of substance. Think of it as a game of mix and match, with the end goal of putting the best parts of several ideas together to create more complex concepts.

<https://www.designkit.org/methods/30>

Now How Wow Matrix

This is referred to as the 'convergent stage' where ideas are evaluated, compared, ranked, clustered and even ditched in an attempt to pull together a few great ideas to act on
https://elearning.campusiberus.es/pluginfile.php/5811/mod_page/content/1/now-wow-how-matrix.pdf

Top Five

This simple exercise gives you a break from the deep thinking and simply asks, what are the top five ideas or themes sticking out to you right now.

<https://www.designkit.org/methods/top-five>

Activities 1st week

You are creative, whether you know it or not

<https://ed.ted.com/on/xjKtiVDQ>

The system marks this item complete according to conditions: You are creative, whether you know it or not

1. Watch the video
2. Reflect on it
3. Answer the questions in Guided Discussion (click on)

Tips for ideas

<https://youtu.be/mtn31hh6kU4>

How do you generate ideas?

This short talk by Richard St. John discusses how ideas come about

Crazy ideas

In this phase you generate a lot of ideas, it's all part of the process!

- Everyone thinks differently and that is our best tool.
- Ideas are not final destinations but learning directions. One should not be afraid of generating crazy or absurd ideas.
- An idea may seem crazy or absurd at the beginning of the creative phase and become the solution to the problem once it has been worked on.
- Crazy or absurd ideas have a function: to encourage others to get excited and contribute ideas, to get away from the problem, to generate different conversations, etc.
- The positive mood makes the process easier.

Mind Map

Team work

After the first Ideation meeting, work in group map in Miro Board,

1. In team selects between 6 to 10 problems that you considered the most important.
2. Think about the opportunities for the challenge .
3. The mind map should contain:
 - Per problem, central concepts- phrases in circle.
 - General ideas to solve the problems (minimum 4 for problem), each one of them will be inside another circle connected with a central concepts- phrases. Example: How

might we get people to be critical at news consumption (central phrase) -> Trough education (general idea), Banning fake news (general idea)).

- Detail a little bit the idea in one sentence. E.i. How might we get people to be critical at news consumption (central concepts- phrases) -> Trough education (general idea) - > Educating kids in the school creating workshops (detail in one phrase), Creating a filtering service for Elder people (detail in one phrase).

4. Write yours name and share the link and upload the printscreen

Crazy 8

Individual work

Follow the dynamic in synchronous meeting:

1. Upload a photo of each of the 8 drawings/ideas you made.
2. Shared with your team

***If you cannot attend follow the video: <https://www.youtube.com/watch?v=ccOuPN-Z8Is>

Solution sketch

Please, you have to add to this activity your solution to the Sketch. If the solution has been obtained by a group, please, put the name of the members.

SWOT

Please, you have to add to this activity your solution to the activity. If the solution has been obtained by a group, please, put the name of the members.

Prototype phase

Journey map

Team work

After the progress and feedback session:

1. Create a document where you explain the Journey Map of the application. It should contain images of your work in Miro,
2. Upload document in pdf