



EDUCATION  
ARCHITECTS

# Good Practices



Co-funded by  
the European Union



SYNTHESIS  
CENTER FOR RESEARCH AND EDUCATION

INSPIRE<sup>®</sup>  
CONSULTING

All results are made available free of charge under a licence:

[Creative Commons Attribution 4.0 International, CC BY 4.0, Deed](#)

Publication prepared as part of the project "Education Architects" No 2022-1-PL01-KA220-VET-000088892

All photos and graphics used in this publication are sourced from free resources and/or were created using Canva.

Co-Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Foundation for the Development of the Education System (FRSE). Neither the European Union nor FRSE can be held responsible for them.



**Co-funded by  
the European Union**



# Index


<u>Introduction</u>	<u>04</u>
<u>Key features shared between projects</u>	<u>05</u>
<u>Guide to key questions for adapting practices</u>	<u>06</u>
<u>Examples of good practices</u>	<u>09</u>

# Introduction

The Education Architects project is dedicated to promoting the use of Design Thinking (hereafter abbreviated as DT) in education, highlighting its potential to raise awareness and inspire. To support this mission, we've created this comprehensive collection of 30 successful DT projects that bridge the gap between education and other sectors.

This compilation shows how versatile and effective the DT method can be when applied to vocational and social education. Each of the initiatives described addresses different needs - ranging from personal development and soft skills to social and civic engagement and solving professional challenges in specific industries.

More than just a showcase of successful projects, these examples offer replicable inspiration for working with the DT method in everyday teaching. Each refers to specific phases of DT and shows how to guide students through the process of empathising, defining problems, generating ideas and testing solutions in real-life settings.



This collection demonstrates how the DT method can serve as a versatile framework for creating, testing and refining educational tools. The projects combine a user-centred approach - focusing on students, teachers and local communities - while embracing iterative product development in both formal and informal learning environments, and an emphasis on empathy, creativity and testing solutions in practice.



## Key features shared between projects



Grounded in empathy: understanding the user, yourself and social needs is the first and most important step in the process.



Students as creators and researchers: students should always take responsibility for identifying problems and creating solutions.



Prototyping and real-world testing: most initiatives culminate in tangible outcomes, such as interventions, events, or prototypes



Integrated competences: internships develop social, technical, reflective and professional skills simultaneously.



Adaptation to the context of students and schools: projects are adaptable to different types of schools, industries and environments.

# Guide to key questions for adapting practices

How do these DT practices align with my educational setting and student needs?

Are there any specific practices that directly address the challenges faced by my students or institution?

What resources - such as time, materials and training - are needed to implement these practices?

Do I have the necessary support and infrastructure to adapt them effectively?



How can these practices be adapted to foster greater student engagement and ownership?

What professional development or training might I need to effectively facilitate these practices?

How comfortable am I with iterative, student-centered approaches, and what support do I need?

Which elements of these practices can be tailored to suit my teaching style or curriculum?

How flexible are these practices for different age groups, subjects, or learning environments?



How can these DT practices complement or enrich my current teaching strategies?

What potential barriers might I encounter when adapting these practices?

Are there ways to integrate these practices into existing project-based or inquiry-based learning models?

How might this approach contribute to my professional growth and teaching philosophy?



# Design Thinking (DT) Challenge: ZARA



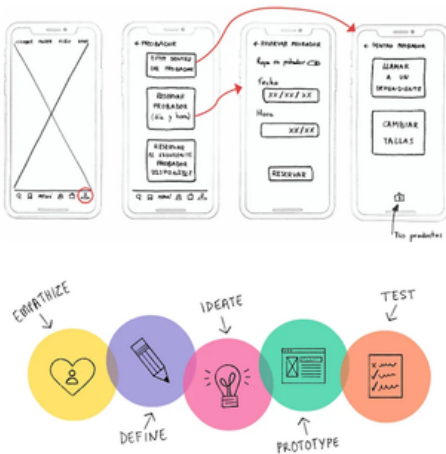
## Participants / recipients

Zara's in-store customers, particularly those aged 20 to 40, who regularly visit stores and use the fitting rooms.

## Context

Problem addressed: Inditex observed that most Zara customers only use the fitting rooms once per visit. If an item doesn't fit, they rarely return with a different size, resulting in missed sales opportunities. To address this, the company aimed to improve the in-store shopping experience through a digital solution that could boost sales by 10%, leveraging technology and mobile apps.

DT solution: to tackle this challenge, Zara applied the DT methodology to enhance customer convenience and engagement, improving the overall shopping experience



## DT exercises used:

1. Empathy: interviews and observations were conducted with Zara customers to understand customer frustrations and needs during the fitting room experience.
2. Problem: findings were synthesised to identify the core problem - customers only use the fitting rooms once, leading to missed sales opportunities when items don't fit.
3. Ideation: a starbursting brainstorming session generated a variety of solutions, such as installing buttons to request assistance in fitting rooms and integrating these features into the Zara app for easier size changes and payments.
4. Prototyping: preliminary versions of these ideas were developed - such as app features and fitting room enhancements - to visualize and test the ideas.
5. Testing: plans were made to test these ideas with users to assess their effectiveness in improving the customer experience and achieving business goals.

## Design Thinking (DT) Challenge: ZARA



### Comments

The DT approach effectively addressed a real business challenge for Zara by focusing on client experience in physical stores, particularly in the fitting rooms. The combination of empathy-driven research, practical prototyping, and digital integration (like app enhancements) provided innovative, customer oriented solutions.

A key insight is how technology can simplify in-store experiences, bridging physical and digital channels. The proposed solutions, like automatic garment detection and real-time app integration, showcase Zara's efforts not just to enhance convenience, but to create a seamless and personalized shopping journey for customers.

Additionally, the focus on clients' behaviour - whether customers shop alone or with someone else - helped identify critical moments where support is needed, such as assistance with sizes in fitting rooms. Overall, the project illustrates how DT can help retail brands enhance both customer satisfaction and sales performance through innovation.

The DT approach improved Zara's in-store client experience, especially in fitting rooms, by integrating empathy-driven research, prototyping, and digital enhancements.

Key solutions, like automatic garment detection and real-time app integration, simplified the shopping journey and provided personalized support.

This project demonstrates how DT can boost customer satisfaction and sales through innovation in retail.



Discover more

## Design Thinking (DT) Challenge: ZARA



### Project results

This DT project for Zara led to several innovative solutions aimed at improving the in-store customer experience:

1. **Fitting room enhancements:** proposals included adding a button in fitting rooms to request assistance with different sizes or items.
2. **Zara App integration:** customers could use the app to request different sizes, select colors, or view similar items directly from the fitting room. The app would sync with the store's inventory and allow for queueless, mobile payments.
3. **Improved efficiency:** features like automatic garment detectors and advance fitting room reservations were introduced to reduce wait times and improve customer flow.

### Summary

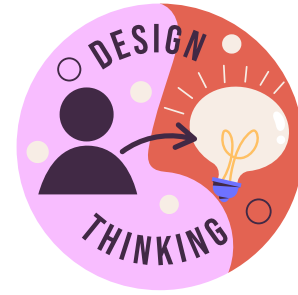
This case study addresses Zara's goal of enhancing the in-store customer experience, particularly around fitting room use, through DT. The problem identified was that customers generally use the fitting rooms only once, leading to lost sales opportunities when items don't fit, as they tend not to return for a different size.

Using DT, the team followed a process starting with user interviews to empathise with their needs, defining issues like limited space, lack of staff assistance, and long queues. In the ideation phase, they proposed digital innovations such as allowing customers to request size changes via an app, using automatic garment detectors in fitting rooms, and enabling fitting room reservations through mobile devices. These solutions aimed to make the shopping process more convenient and engaging, with a target of a 10% increase in sales.

The results underlined the importance of integrating digital tools with the in-store experience to provide a seamless, personalized shopping journey. While the proposed ideas showed potential, further testing and refinement were needed to ensure they addressed customer needs and added value without making the process too complicated.



# Workshop: Design Thinking for Innovation



## Participants / recipients

Educators, architects, designers, innovation consultants, marketing and advertising experts



## Context

Participants explored the broader challenge of using DT methodology as a tool to generate empathetic and user-centered innovations for a group whose experiences they had little direct experience with. This involved considering both practical and emotional aspects of care for the elderly.

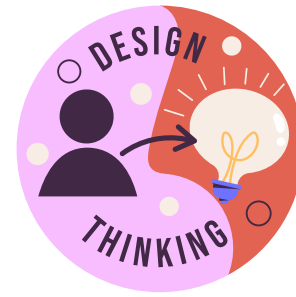
The challenge was to understand the emotions, needs, frustrations, and desires of older generations who live in nursing homes or may enter into one in the future. The goal was to create innovative solutions that could enhance their overall experience.

## DT exercises used:

1. **Journey map:** mapping of the decision-making process and step by step experience.
2. **Observation and interviews:** gathering real-world insights through field research.
3. **Prototyping:** creating physical models to visualise and test solutions.
4. **Collaborative brainstorming:** generating ideas collectively through group discussions.
5. **Analogies and metaphors:** using conceptual models to inspire innovative solutions.
6. **Empathy-building:** encouraging participants to gain a deep understanding of users' emotions and experiences.



# Workshop: Design Thinking for Innovation



## Comments

- This workshop appears to be highly effective in promoting creativity, empathy, and collaboration among participants from different backgrounds.
- Using DT methodology, the workshop allowed participants to engage with real-world challenges on a deeper level, facilitating the improvement of elderly residents' experiences in nursing homes.
- The balance between theory and hands-on practice was particularly impactful, with the first day focused on explaining principles and the second on applying them in practice.



[Discover more](#)

## Project results

- **Deep empathy and understanding:** participants developed a deep understanding of the emotional and practical challenges faced by elderly individuals in nursing homes. This was achieved through observation, research, and the use of empathy-building techniques.
- **Collaborative solutions:** the workshop fostered collaboration between participants from various fields, inspiring innovative ideas for developing different approaches when designing the nursing home experience.
- **Prototyping creativity:** the prototyping activity sparked creativity, allowing participants to visualise and refine their solutions in a tangible way. The open-ended prototypes encouraged discussion and exploration of further possibilities.
- **Innovative frameworks:** teams created the new conceptual models, for instance using analogies and metaphors, which helped to define and differentiate their solutions for improving the elderly care experience.
- **Conversations and insights:** the process of building journey maps and discussing prototypes generated deep conversations, leading to surprising discoveries and insights that could be turned into opportunities for innovation

## Summary

This DT workshop gathered 21 participants from various fields including education, design, and marketing to explore DT methodology as a tool to generate innovations and promote creativity. On the first day, the focus was on explaining the methodology's core principles, while the second day was dedicated to their practical application, with participants tackling the challenge of redesigning the experience of living in a retirement home.

Participants were encouraged to gather insights beforehand by observing and interviewing elderly individuals. The workshop emphasised the balance between understanding and observation, using tools like Journey Maps to enhance empathy and inspire innovative solutions. Prototyping played a key role, sparking creativity and stimulating discussions.

# Design Thinking for Entrepreneurs (CEIN, Pamplona)

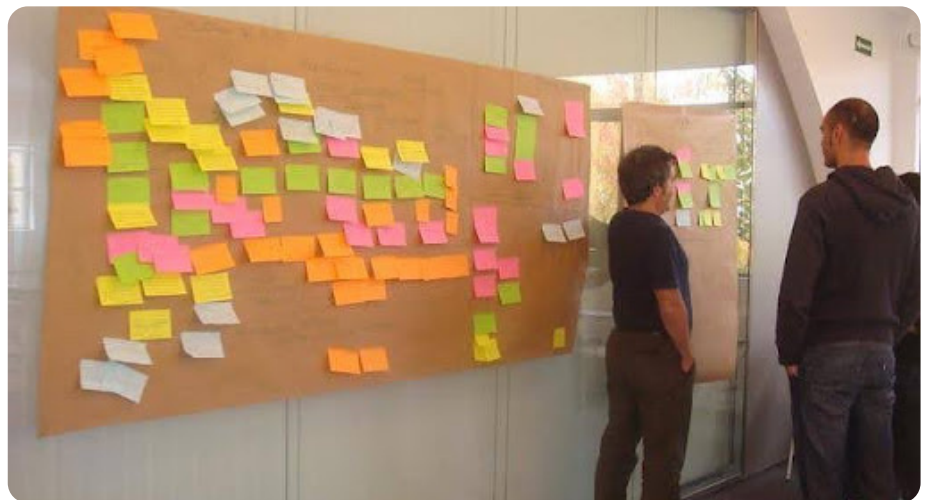


## Participants / recipients

Entrepreneurs

## Context

Workshop on DT held on October 24 and 25, 2011 at Navarra Factori for entrepreneurs



## DT exercises used:

1. **Empathy mapping:** to help participants understand their target audience by identifying customer needs, pain points, and motivations.
2. **Ideation (brainstorming):** to generate innovative ideas for business models, products, and services through open and creative thinking.
3. **Prototyping:** to build quick, simple models or versions of business concepts to help visualise solutions and test feasibility.
4. **Business model canvas:** to map out the key components of a business model, including customer segments, value propositions, channels, and revenue streams.
5. **Customer journey mapping:** to visualise the steps customers follow when interacting with the business, allowing entrepreneurs to identify opportunities for improvement.

These exercises help entrepreneurs to create user-centric solutions and develop sustainable business models.

## Design Thinking for Entrepreneurs (CEIN, Pamplona)



### Comments

- The Design Thinking for Entrepreneurs workshop provided a valuable hands-on experience for participants.
- By focusing on market research and business model prototyping, entrepreneurs learned how to better understand customer needs and refine their ideas.
- The use of DT exercises like empathy mapping and rapid prototyping facilitated innovative problem-solving and real-time feedback, resulting in stronger business concepts and clearer strategies, giving entrepreneurs a solid foundation to build and scale their ventures with confidence.

### Summary

The workshop aimed to equip participants with essential tools for innovation and business development. The workshop emphasised market research and business model prototyping techniques, using DT principles to help entrepreneurs better understand customer needs, generate creative solutions, and refine their business concepts. Through hands-on activities like empathy mapping and prototyping, attendees learned how to develop innovative ideas and test them in real-world contexts, ultimately strengthening their business strategies.



[Discover more](#)

### Project results

1. **Clear customer insights:** entrepreneurs gained a deeper understanding of their target audience, needs, and pain points through empathy mapping and personal development.
2. **Business model prototypes:** participants created early versions of their business models or products, providing a tangible starting point for further development and iteration.
3. **Practical problem-solving skills:** through the DT process, participants improved their ability to think creatively, identify problems, and generate innovative solutions.
4. **Improved collaboration and communication:** entrepreneurs developed skills in teamwork, brainstorming, and communication, which are essential for business success.
5. **Actionable feedback:** through rapid testing and feedback, entrepreneurs were able to identify weaknesses in their models or prototypes and make improvements.
6. **Increased confidence:** by applying these methodologies, entrepreneurs gained confidence in their ideas and approaches, helping them take the next steps in launching or scaling their businesses.

# Workshop: How to Make Banking More Human with Coaching



## Participants / recipients

Students of the educational startup UXER School

## Context

The challenge addressed by this case of DT use was how to make banking more human and customer oriented.



## DT exercises used:

- 1. Empathy building:** understanding the needs of banking customers was a central step. Participants focused on how to make banking more human, especially for different user groups, such as travellers and the less tech-savvy.
- 2. Problem definition:** participants defined specific challenges such as how to improve travellers' user experience (BBVA travelling with you) and how to make banking accessible at home for low-tech users (home banking).
- 3. Ideation:** during the workshop, participants brainstormed various solutions to address these challenges. Many creative solutions were proposed during this phase, including the "panic button" for emergencies, "home banking" with smart TVs, and the "financial butler".
- 4. Prototyping:** ideas were transformed into prototypes, for instance the addition of features to the BBVA app like the "BBVA te acompaña" tool and the financial assistant.
- 5. Testing:** the inclusion of real-world experts and the iterative nature of the process meant that participants were able to validate their ideas based on user needs and feedback.

## Workshop: How to Make Banking More Human with Coaching



### Comments

This case study **highlights the benefits the Design Thinking method can offer when addressing complex challenges**, such as attempting to humanise banking services. By involving participants in a structured process of problem-solving – empathy, ideation, prototyping, and testing – the workshop encouraged creativity and user-oriented innovation. The three key ideas that emerged show how technology can enhance the customer experience while adapting to diverse user needs, such as the low-tech solutions proposed for elderly or less tech-savvy users, and the *panic button* for travellers.

Moreover, BBVA's approach in partnering with UXER School highlights the importance of external collaboration to drive innovation. Student involvement brought fresh perspectives, helping BBVA to remain aligned with current user expectations. Overall, this example **underscores the value of integrating Design Thinking into organisational strategies** to create more relevant, user-focused services. This method not only speeds up the development process but also fosters collaboration and reduces risk by offering early validation of concepts.

The case study demonstrates the benefits of DT in addressing complex challenges like humanizing banking services, fostering creativity and user-oriented innovation through a structured problem-solving process.

BBVA's collaboration with UXER School highlights the value of external partnerships for fresh perspectives and alignment with user expectations. Integrating DT into organizational strategies creates more relevant, user-focused services, accelerates development, fosters collaboration, and reduces risk.



## Workshop: How to Make Banking More Human with Coaching



### Summary

BBVA Next Technologies partnered with UXER School to organise a design sprint focused on improving the customer experience in banking by developing solutions that better address users' needs. The participants were tasked with proposing ideas that would make banking more accessible and personalised, tackling specific scenarios such as enhancing services for travellers, integrating banking functions into smart TVs for use at home, and creating virtual financial assistants. The overarching aim was to make banking more intuitive, efficient, and user-friendly.



[Discover more](#)

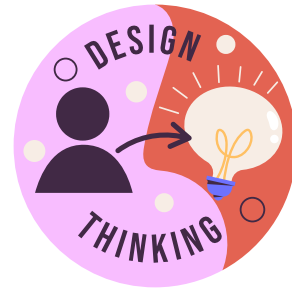
### Project results

The DT workshop resulted in several innovative ideas aimed at humanising banking services for BBVA customers. Key outcomes included:

- 1. BBVA Te Acompaña (BBVA is with you):** A feature within the BBVA app designed for travellers, allowing users to access services like currency exchange, replacement card requests, and installment payment options for trips. The standout feature was a panic button for emergencies, enabling immediate assistance in case of card theft or loss, via chat, phone call, or video call.
- 2. Home Banking via Smart TVs:** a solution tailored to low-tech users, enabling banking transactions - like bill payments or transfers - using voice commands on their smart TVs, offering a more comfortable experience for those less inclined to use mobile banking apps.
- 3. Virtual Financial Butler:** an always-available virtual financial assistant integrated into the BBVA app, designed to offer personalized financial advice, recommend investment timings, and help manage users' finances using clear, accessible language.

These ideas focused on enhancing the accessibility, convenience, and personalisation of banking services, leveraging technology to create a more human-centric experience.

## Creativity training for Axel Springer Spain



### Participants / recipients

Employees and creative teams at Axel Springer España



[Discover more](#)

### Context

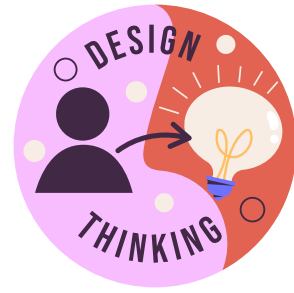
This training program was designed to foster innovation and creative thinking within Axel Springer España, a leading media company. The initiative aimed to empower staff to approach challenges from fresh perspectives and develop innovative ideas relevant to the digital media landscape.

### DT exercises used:

The program included a variety of DT exercises, including empathy mapping, brainstorming sessions, and rapid prototyping, alongside creative ideation techniques to stimulate divergent thinking and innovative problem-solving.



## Creativity training for Axel Springer Spain



### Comments

This initiative shows how DT methodologies can transform corporate training, not only by strengthening creative skills but also by fostering a culture of continuous innovation and cross-departmental collaboration.

### Summary

This training used DT methodology to boost creativity and innovation in a corporate environment and culture. By engaging employees in interactive and hands-on exercises, it resulted in practical ideas and strengthened the company's commitment to fostering an efficient, inspiring and agile work environment.

### Project results

The training significantly enhanced participants' creative skills and capacity for innovative thinking, resulting in a range of ideas aimed at addressing current challenges. It also played a key role in fostering a more collaborative and agile work culture within Axel Springer España.



## Applying DT in teaching Spanish



### Participants / recipients

Teachers and students (including adult students) of Spanish classes



### Context

This case addresses the challenge of making Spanish language education more personalised, engaging, and effective through the application of the DT method. The problem was how to adapt the teaching process to suit individual students' needs, learning styles, and motivations. Through DT, educators sought to develop tailored materials, innovative learning environments, and more interactive lessons. The approach focuses on understanding students' difficulties and needs – such as low motivation or difficulty retaining vocabulary – and developing creative, practical solutions like games or social interactions to enhance learning outcomes.

### DT exercises used:

1. Empathy: understanding students' needs, motivations, and challenges through interviews, observations, and other research methods.
2. Define: using insights from the empathy phase, clearly define the key problems faced by students, such as lack of motivation or difficulties in retaining new vocabulary.
3. Ideation: conducting brainstorming sessions to generate creative solutions, such as incorporating games, music, or social interactions into vocabulary teaching.
4. Prototyping: creating simple prototypes, such as vocabulary games or interactive activities, to test with students in real learning scenarios.
5. Testing: gathering feedback from students, observing their engagement and any difficulties encountered, in order to refine the approach.
6. These exercises helped to create a more student-centered, engaging, and effective language learning experience.

## Applying DT in teaching Spanish



### Comments

- Using DT in language education fosters a culture of innovation by encouraging the continuous testing and refinement of new ideas. Its flexibility makes it adaptable to any classroom setting, enabling teachers to approach challenges with creativity.
- It helps students develop key skills such as problem-solving and empathy, equipping them to face challenges that go beyond language learning alone.



[Discover more](#)

### Summary

This case study explores the application of DT in language education, with a particular focus on teaching Spanish. It highlights the method's user-centered approach, which enables educators to identify and address students' individual needs and challenges. By employing techniques - empathy-building, problem definition, brainstorming, prototyping, and testing - teachers can design personalised learning experiences that enhance engagement and effectiveness. The result is a more personalised, engaging, and effective educational experience, that promotes creativity, active participation, and critical thinking. It enables students to address real life issues, retain knowledge better, and apply language skills innovatively.

The implementation of DT not only fosters creativity and collaboration among students but also encourages active participation. While there are challenges, such as the need for specialised training and time investment, the potential benefits include improved learning outcomes and better student motivation.

### Project results

1. **Personalised learning:** the approach enabled the creation of customised learning materials and activities tailored to each student's needs, leading to more effective and engaging learning experiences.
2. **Increased student engagement:** by focusing on student preferences, motivations, and using creative methods - such as games or music-, students became more actively involved and motivated in the learning process.
3. **Improved problem-solving and creativity:** students were encouraged to think creatively and apply their knowledge in real-life scenarios, fostering critical thinking, collaboration, and innovation.
4. **Enhanced learning outcomes:** the iterative process of prototyping and testing helped refine learning techniques, resulting in improved retention of new vocabulary and concepts.
5. **More collaborative classrooms:** the use of DT techniques promoted teamwork among students and teachers, improving interaction and communication.

# MTP: Success story in innovation through Design Thinking



## Participants / recipients

Employers of MTP



## Context

The problem addressed in this case was how to help MTP, a Spanish tech company, foster a culture of continuous innovation, in order to remain competitive in a rapidly changing environment. MTP wanted to adopt new methods that would enable their teams to consistently think of ways to improve internal processes, enhance customer satisfaction, and drive organisational growth.

## DT exercises used:

1. **Empathy:** understanding users' needs through observation and interviews.
2. **Problem definition:** synthesising insights to clearly define the problem.
3. **Ideation:** generating a wide range of ideas to solve the problem.
4. **Prototyping:** creating tangible solutions to test ideas.
5. **Testing:** evaluating the prototypes with users to gather feedback and make improvements.

Among other tools, the following mental maps were used:

- **Actors map:** to identify all the stakeholders involved in the project, such as users, customers, partners, and other relevant parties. It helps visualise the relationships and interactions between these actors, providing a clear picture of who is involved and how they are connected.
- **Impact map:** to plan and strategise by visualising the potential impacts of the project. It answers key questions like Why?, Who?, How?, and What?, ensuring the project team is aligned and that the goals are clear and achievable.
- **Motivation matrix:** to understand stakeholders' motivations. It typically categorises motivations into different quadrants, such as Must Have, Should Have, Could Have, and Won't Have. This helps prioritise features and actions according to their importance to different groups.

# MTP: A Success Story in Innovation Through Design Thinking



## Comments

- **Sustained innovation culture:** MTP offers a strong example of how embedded DT as a core practice can foster a culture of continuous innovation across all organisational levels.
- **Employee empowerment:** the approach empowered employees to take ownership of creative problem-solving, enhancing both collaboration and engagement within the company.
- **Scalability of results:** the creation of dedicated committees for innovation and transformation is a scalable approach that ensures long-term impact, as they work continuously towards specific objectives and monitor progress.
- **Broader application:** MTP successfully integrated DT across diverse domains - including customer experience, employee satisfaction, and internal processes - demonstrating its versatility and effectiveness in tackling diverse challenges.

## Summary

MTP, a Spanish technology company, successfully implemented the DT method to foster a culture of continuous innovation. Through tailored training sessions, employees learned techniques such as empathy, ideation, prototyping... Following the training, dedicated innovation and transformation committees were created, focusing on improving internal processes, employee satisfaction, and customer experience. As a result, MTP achieved greater collaboration, increased customer and employee satisfaction, and measurable improvements in productivity, cost efficiency, and profitability. The company's commitment to innovation has transformed challenges into opportunities.



[Discover more](#)

## Project results

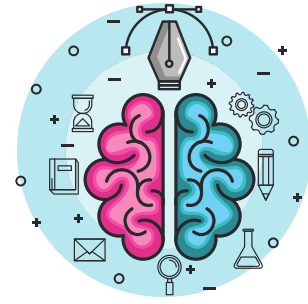
The results achieved by MTP after implementing DT:

1. **Fostering a culture of Innovation:** MTP integrated innovation into its daily operations, encouraging teams to continuously think about improvements.
2. **Increased employee and customer satisfaction:** surveys showed near-maximum results in both areas after adopting DT practices.
3. **Operational improvements:** the company observed concrete benefits such as improved deadline compliance, increased productivity, cost reduction, and higher profits.
4. **Creation of innovation and transformation committees:** these committees, led by top management, focus on internal and external improvements, driving continuous innovation across the organisation.

Overall, DT helped MTP transform its approach to challenges, turning potential problems into opportunities for growth and success.

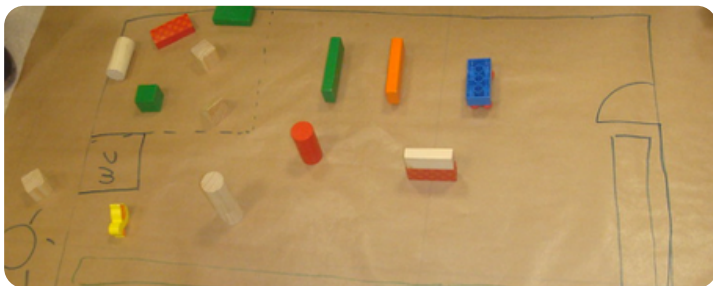
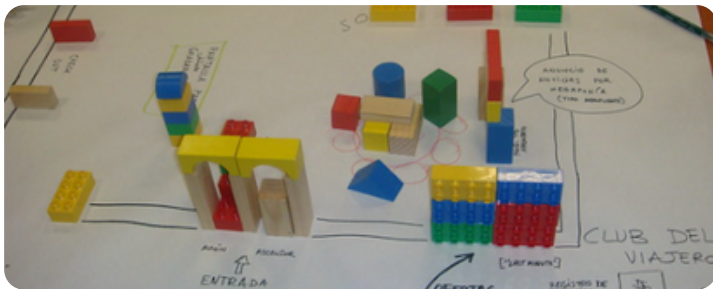


## Workshop in Bilbao with the ED Foundation: “Design Thinking for Innovation”



### Participants / recipients

Employers of ED foundation



### Context

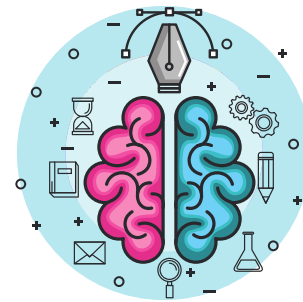
The challenge addressed in this DT workshop was to redesign the book-buying experience. Its aim was to develop innovative bookstore concepts by placing the user experience at the centre and prioritising empathy throughout the process. Participants engaged in hands-on prototyping to visualise and test their ideas.

The participants were encouraged to reimagine bookstores by prioritising the needs and experiences of book lovers and readers, rather than focusing on technology or profitability. This customer oriented approach sought to deepen empathy towards users and enhance every stage of the purchasing journey, making it more enjoyable, engaging, and meaningful.

### DT exercises used:

- **Empathy mapping:** participants focused on understanding the needs, feelings, and behaviors of bookstore customers by observing, conversing, and empathising with them, a key step in creating user-centered solutions.
- **Defining the problem:** teams worked on framing clear design challenges, using the Point of View (POV) technique. This involves framing a problem statement from the perspective of the user, with the focus on the user's needs and insights, guiding the creation of innovative solutions that address real issues.
- **Ideation:** participants engaged in brainstorming sessions to generate a wide range of creative solutions for redesigning the bookstore experience. They explored different ways to enhance customer interaction and service.
- **Prototyping:** using materials like clay, Lego, markers, and cardboard, teams built tangible prototypes of their bookstore concepts. This exercise helped visualise abstract ideas and test how they might function in practice.
- **Testing:** through prototyping and feedback, participants evaluated their ideas, refining them based on insights from discussions with other teams and the facilitator.

## Workshop in Bilbao with the ED Foundation: “Design Thinking for Innovation”



### Comments

- How user-oriented approaches can foster creative problem-solving. Participants focused on understanding end-user needs and employed practical exercises like empathy mapping and prototyping to move from abstract ideas to concrete solutions.
- The workshop emphasised the importance of empathy and human behavior in innovation, highlighting that it's not just about technology but creating meaningful experiences for people.
- Prototyping enabled quick testing and refinement, showing the value of iterative design and visualisation in driving conversations and developing impactful solutions.

### Summary

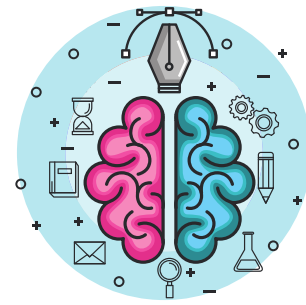
The workshop brought together participants for an intensive 8-hour session focused on **applying Design Thinking techniques to reimagine the bookshop experience**. The event emphasised hands-on learning, with participants moving from understanding the problem towards generating creative solutions, building prototypes, and testing them.

Participants explored how to "humanise" the process of buying books by focusing on their users – bookstore customers. Through DT exercises such as empathy mapping, problem definition, ideation, and prototyping, they created innovative concepts aimed at enhancing the customer experience. Teams developed tangible prototypes of their ideas, which included redesigning customer interaction with bookstores by incorporating technology, such as virtual assistants or smart devices, and personalizing the shopping experience.

A key insight from the workshop was the importance of integrating user perspectives into innovation processes and the value of prototyping as a tool to explore and refine ideas. The collaborative and dynamic environment, combined with practical design challenges, allowed participants to experience the full potential of DT as a tool for generating solutions to real-world problems.

Through the application of DT methodology, innovative bookstore concepts were developed with the aim of enhancing the user experience. By prioritising empathy and understanding readers' needs, participants proposed new ways to make the book-buying process more engaging and enjoyable.

## Workshop in Bilbao with the ED Foundation: “Design Thinking for Innovation”



### Project results

- **Innovative bookstore concepts:** the participants developed new bookstore models focusing on enhancing the user experience. By concentrating on the needs and desires of readers, they proposed ways to make the book-buying process more engaging and enjoyable.
- **Empathy-driven solutions:** the emphasis on understanding the customer led to a shift from technology and profitability to prioritising empathy. Participants highlighted the importance of designing services around the users’ emotional and practical needs.
- **Prototyping as a key tool:** the prototyping phase, using materials like clay, Lego, and markers, allowed teams to visualise their ideas and create tangible representations of their bookstore concepts. This approach facilitated deeper discussions and generated more concrete solutions.
- **Improved problem-solving skills:** by applying the POV technique, participants learned to clarify their design challenges by focusing on the target user, identifying their specific needs, and drawing on key insights to guide their innovation efforts more effectively.
- **Greater collaboration with the humanities:** the workshop underscored the value of integrating insights from fields such as anthropology, sociology, and history, emphasizing that innovation should be grounded in a deep understanding of human needs and behaviours.



[Discover more](#)

# Smart Cart: Transforming the Retail Experience through DT



## Participants / recipients

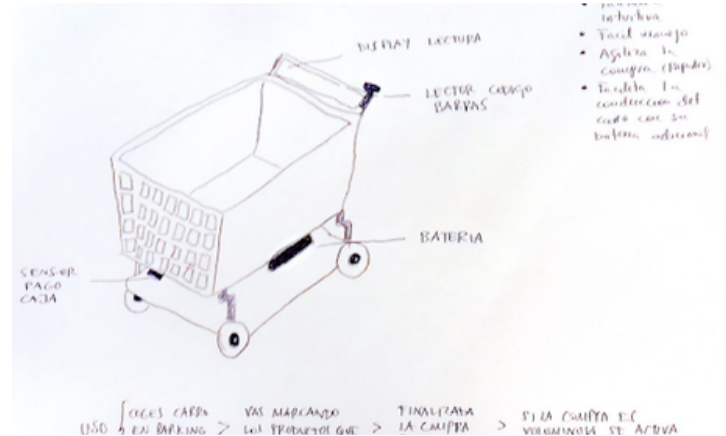
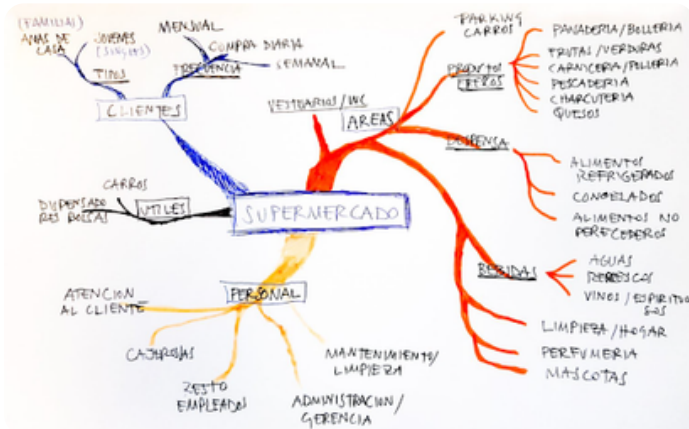
Dinngo team in the framework of the "Design Thinking en Español" project for retail stores and customers

## Context

Application of DT methodology to improve the shopping experience by developing a smart cart solution for supermarkets involving user-friendly innovative technologies. This initiative addressed common usability issues in traditional shopping carts, aiming to enhance the overall retail experience through innovative design.



[Discover more](#)

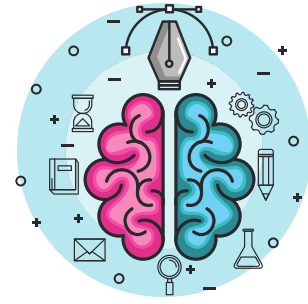


## DT exercises used:

- **Empathy:** to uncover user key insights and better understand shopping habits
- **Brainstorming:** to generate creative and practical solutions.
- **Prototyping:** to develop tangible models of the smart cart concept.
- **Testing:** to refine the design based on user feedback.



## Smart Cart: Transforming the Retail Experience through DT



### Comments

This is a compelling example of how a human-centered design process can turn everyday challenges into opportunities for innovation. It underlines the importance of empathy, creative collaboration, and continuous iteration in developing solutions that are truly aligned with users' needs.

### Summary

Smart Cart showcases the power of DT methodology in transforming a common retail tool into an innovative, user-friendly solution. By engaging users through empathy, ideation, prototyping, and testing, the project has set a benchmark for how design can drive change in customers' everyday experiences.

### Project results

The Smart Cart project validated its innovative approach by producing a prototype that effectively addressed key user insights and showed strong potential to enhance retail operations. Positive user feedback laid the foundations for further development and potential market implementation.

## The Global Program in Innovation & Entrepreneurship (GPIE), the GIPPIE method



### Participants / recipients

Students of Navarra University

### Context

University course on development of entrepreneurial competencies and skills for students using DT methodology



[Discover more](#)



[Discover more](#)



[Discover more](#)

### Herramientas y habilidades TOP.

Los estudiantes **trabajarán** sus **habilidades emprendedoras** y utilizarán las **metodologías** propias del ámbito emprendedor: Design Thinking, Lean startup o Agile, entre muchas otras.



### DT exercises used:

- The Global Program in Innovation & Entrepreneurship (GPIE) at the University of Navarra, led by Innovation Factory, incorporates key elements of DT methodology into its training programs, particularly focusing on ideation and prototyping. These exercises are designed to develop creativity, collaboration, and the practical application of entrepreneurial skills.
- Through ideation, GPIE students—referred to as #Gippies—engage in brainstorming sessions to generate innovative ideas to solve real-world problems. This process encourages them to think outside the box, explore different possibilities, and focus on the most promising ideas.
- The prototyping phase allows students to bring their ideas to life by creating models or simulations. This hands-on process helps them see what worked, make adjustments, and improve their concepts according to feedback received.

## The Global Program on Innovation and Entrepreneurship (GPIE), the GIPPIE method



### Comments

The Global Program in Innovation & Entrepreneurship (GPIE) is a dynamic and influential educational initiative that sets itself apart through its strategic use of DT. By focusing on **ideation** and **prototyping**, the program motivates students to develop entrepreneurial skills while fostering creativity, problem-solving, and leadership – preparing them to navigate and shape the future with confidence.

**Design Thinking**, as applied in the GPIE programme, encourages students to engage in a creative process that goes beyond traditional learning. The programme stands out as an innovative educational initiative by integrating DT into its methodology. With a strong focus on ideation and prototyping, DT fosters creativity, critical thinking, and practical problem-solving, equipping students with entrepreneurial skills needed to tackle real-world challenges. This approach encourages students to go beyond traditional learning, engaging in hands-on processes that build adaptability and innovation.

By personalising the learning journey through Human AI, GPIE enhances engagement, tailoring experiences to individual socio-emotional traits.

This thoughtful integration of AI with **Design Thinking** not only cultivates an entrepreneurial mindset, but also nurtures soft skills like empathy, adaptability, and collaboration, which are key competencies for success in any innovative field. These benefits demonstrate the power of DT to prepare students for leadership and success in complex, innovative environments.

### Summary

The Global Program in Innovation & Entrepreneurship (GPIE) is a degree offered by the University of Navarra, directed by Innovation Factory, the university's Center for Innovation and Entrepreneurship. It is the first university entrepreneurship program designed to enable students to lead large-scale projects and develop new entrepreneurial skills, preparing them for a top-level future profile.

The personality and socio-emotional competencies (SES) of all GPIE students, referred to as #Gippies, are evaluated using Human AI, an Artificial Intelligence tool. By analysing expressions, speeches, and text from the students, whether pre-existing or composed of several fragments, the program gains deep insights into each learner. This enables the customisation of each student's educational experience according to their unique socio-emotional abilities, personality characteristics, and specific learning needs.

## The Global Program on Innovation and Entrepreneurship (GPIE), the GIPPIE method



### Summary

GPIE's entrepreneurship and innovation programs provide students with hands-on experience in developing entrepreneurial skills. Through interdisciplinary collaboration, they create business plans, address real-world social challenges, and apply cutting-edge methodologies to bring their ideas to life.

In summary, the GPIE program's use of DT provides students with critical tools for creativity, innovation, and problem-solving. It offers a comprehensive learning experience that prepares graduates to thrive in a competitive, fast-changing world, equipping them with the necessary skills to lead large-scale projects and address social and business challenges.

### Project results

- The program's emphasis on Design Thinking has enabled students to develop not only entrepreneurial skills, but also critical thinking, teamwork, and adaptability. GPIE graduates have gone on to launch successful startups, lead large-scale projects, and contribute to solving complex social problems, demonstrating the program's impact on both their personal and professional growth.
- By combining innovative methodologies with personalised learning through Human AI, GPIE ensures that students are well prepared to thrive in dynamic environments, making them highly competitive in the global job market.
- The program ensures a personalised learning experience that adapts to each student's learning style. Through cross-disciplinary collaboration, the development of business plans, and engagement with social challenges, GPIE students leave equipped with the entrepreneurial mindset and practical skills needed to lead large projects and innovate in a fast-evolving world.

**Words hurt. Words have power.**



## Participants / recipients

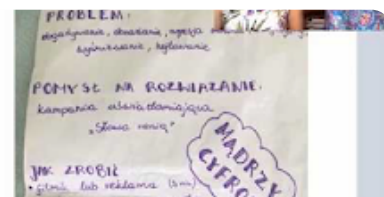
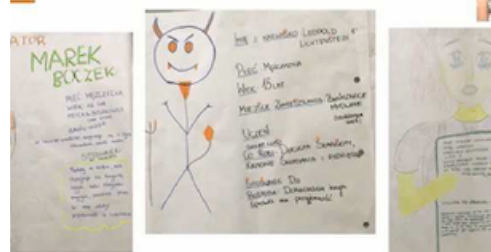
Pielgrzymowice School,  
Poland

## Context

A project carried out by pupils from Pielgrzymowice School is an example of how the DT method can be used to solve real social problems in an educational setting. Its aim was to combat verbal aggression, gossip, hearsay and the tendency to judge others based on appearances.

na Kółkowy. Kampania z myślą o promowaniu świata - konferencja online dla edukacji

patyzacja - badanie użytkownika projektu



## DT exercises used:

**At the end of the summer holidays**, the coordinators (teachers) conducted a week-long workshop using the DT method for 16 eager Year 8 pupils.

Here's how the workshop went and what the objectives of the campaign were:

### 1. Presentation of community project examples

To kick off the workshop, the students were shown examples of other community projects. This helped motivate the group to take action and demonstrate that they can have a real impact on their surroundings - if they choose to get involved.

### 2. Empathising: understanding the problem and looking at the situation from different perspectives

This stage involved empathising and analysing the problems of peers.

#### • Activities:

- Students reflected on what bothers them and their peers. They asked the questions: *What problems do we face? What situations hurt us?*
- They created **empathy maps** and **personas** for individuals involved in situations of verbal aggression: the perpetrator, the victim and the observer.

Empathising helped the students to see the problem from multiple perspectives. This was an important step in really understanding why difficult situations occur and how to respond to them.

**Words hurt. Words have power.**



#### **DT exercises used:**

### **3. Defining the problem and selecting the challenge**

Together, the students defined the problem they wanted to solve: ***How can we make people aware of the fact that words can hurt?***

- **Teacher statement:** *"We gave space for it to be their ideas, their decisions. The teacher just guided the process by asking good questions."*

**Why is this important?** Because the pupils were responsible for choosing the problem and looking for solutions, this strengthened their sense of ownership of the project, making it more authentic and close to their reality.

### **4. Ideas generation**

Students began to look for creative ways to solve the problem.

- **Activities:**
  - Brainstorming: everyone was free to suggest ways to raise awareness about the consequences of verbal aggression.
  - They developed concepts based on education and action, e.g.: posters, social media campaigns or activities in the local community.

This stage allowed for open-minded thinking and the exploration of different, often unusual ideas. Each participant was able to speak freely, present his or her idea and feel that their contributions were genuinely valued and influential in shaping the activities.

### **5. Prototyping and testing**

The students' ideas began to take shape.

- **Activities:**
  - Students created prototypes of their solutions, such as posters and campaign slogans.
  - They tested their ideas on school staff, management, and residents of Pielgrzymowice. They collected feedback that helped to improve the designs.

Prototyping and testing allowed improvements to be made and ensure that the ideas actually worked in practice.

**Words hurt. Words have power.**



### **DT exercises used:**

#### **6. Implementation and execution of the campaign**

The whole school year was dedicated to testing and developing the social campaign.

- **Activities:**

- Students implemented their ideas at school and in the community.
- They made regular modifications based on feedback received.
- The main slogans of the campaign: **"Words have power", "Words hurt"**, emphasised the power of language to build or destroy relationships.

Students had the opportunity to evaluate the effectiveness of their actions on an ongoing basis and adapt them to the needs of their audience. It was a real-life lesson in responsibility for social change.

#### **Outcomes of the "Words have power" campaign**

1. **Raised awareness:** both students and the local community were made more aware of the great impact that words can have on human relationships.
2. **Development of key competences:** students learned about cooperation, communication, creative thinking, and problem solving.
3. **Behaviour change:** the campaign encouraged reflection and promoted a change in attitudes towards heckling, gossiping, and verbal aggression.
4. **Strengthening the role of the school:** the project has shown that schools can be a place where young people initiate and drive social change.



[Discover more](#)



**Words hurt. Words have power.**



### Comments

Observations from the project coordinators:

*"The project has stimulated reflection in many areas."*

*"Things are not necessarily as we see them at first glance. It is worth **stepping outside the box**, outside the comfort zone and outside the point of view of the ordinary teacher."*

*"It is worth investing in **stimulating creativity** and creative thinking in order to facilitate young people's conceptual work."*

*"Intense collaboration on **an important topic** changed participants' attitudes significantly."*

*"It is a good idea to run projects **in teacher pairs** - you can share the workload and take better care of the group process, so that everyone feels safe and listened to."*

*"It is important to **ensure** that in the group there is **reflection and exchange of insights** about the work together and what happens during the next stages of the process carried out."*

*"If we are convinced by the method, it is crucial to **act consistently**, even if the feedback is negative at first."*

### Summary

The week-long DT method workshops conducted by the coordinators for the students were an effective tool in developing key skills among young people. Through the use of DT methodology, pupils learned to identify problems, create innovative solutions and test them in practice. The project brought numerous benefits, not only by enhancing students' competences, but also by making a positive impact on the local community.

It is recommended that similar initiatives be continued, with particular emphasis on nurturing empathy and self-reliance in students. These qualities are key to enabling young people to lead future creative, meaningful, and community-driven projects that respond to real challenges they face. By comprehensively analysing the process, context, outcomes, and reflecting on effectiveness and opportunities for further development, others can learn from these experiences and implement similar practices.



**Words hurt. Words have power.**



## **Project results**

### **Split between online and offline activities**

The 'Words have power' project was implemented by students throughout the school year and included comprehensive activities in both online and offline spaces. Thanks to the extensive involvement of young people, the campaign raised public awareness of the problem of verbal aggression and its consequences.

#### **Online activities**

Students used social media and digital platforms to promote the campaign and reach a wide audience.

##### **1. Setting up and running a Facebook fanpage:**

Students independently set up and managed the campaign's Facebook page. The fanpage was updated regularly and became a space to publish content promoting the campaign's message, and interact with the target audience.

##### **2. Production and publication of campaign videos:**

- **"Words Hurt":** a film showing how negative words can hurt others.
- **"Words have power":** a video promoting positive messages, demonstrating the power of good words in building relationships. Both videos are available on YouTube, accessible to a wide range of viewers.

#### **Offline activities**

The campaign also included a number of direct community-based activities that allowed for relationship building and direct audience engagement.

##### **1. Campaign stalls**

- In the school community: a stall in the school offered a place to hold discussions with students and teachers about the campaign, its objectives, and the importance of the issue.
- During the family festival: a stall dedicated to families and local community residents. By talking about the project and its results, it was possible to attract the attention of festival-goers and spread awareness about the consequences of verbal aggression.

**Words hurt. Words have power.**



## **Project results**

### **2. Surveys and prospect research**

The students conducted surveys among different social groups, analysing a variety of perspectives on the problem of verbal aggression and obtaining data to help them better understand the phenomenon.

### **3.Meeting with parents**

During the event at the school, students presented the problem of verbal aggression and the results of their actions, while encouraging parents to reflect and support their children to make positive changes.

### **4.Presentations at other schools**

Pupils were invited to other educational establishments where they gave presentations on the problem of verbal aggression and their campaign, inspiring their peers to take similar action.

### **5.Bookmarks**

Pupils prepared bookmarks with quotes related to the campaign's theme to promote reflection on the power of words.

### **6.Action with biscuits and wrappers**

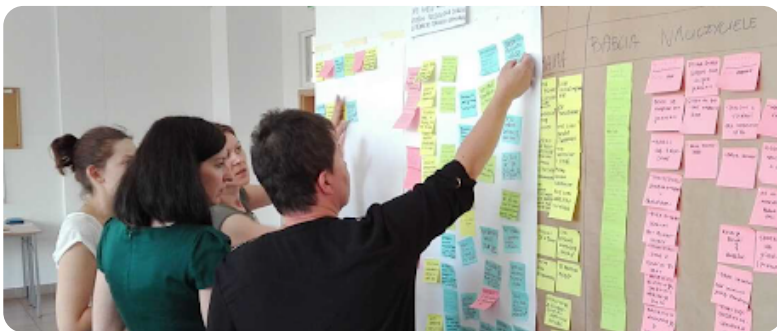
Students handed out cookies in two types of packaging: beautiful boxes and ugly ones with illustrations of cockroaches. The action was intended to show how appearances can affect the judgement of something that is essentially the same - analogous to judging people by appearances.

## Educational tools: How to teach preschoolers about quality food



### Participants / recipients

Institute for the Dissemination of New Technologies and Solutions of Olsztyn (IUNTIR) and Olsztyn kindergarten staff.



### Context

1. Develop ideas for educational tools on increasing knowledge of quality, traditional and regional foods among early childhood children.
2. Preparation of prototypes of selected ideas.
3. Pre-testing of new solutions in preparation for implementation.

### DT exercises used:

A 2-day workshop was held, attended by representatives of the Institute (IUNTIR), the Group of Catering and Food Schools in Olsztyn, Olsztyn City Hall, the University of Warmia and Mazury in Olsztyn, and people involved in the production and promotion of healthy food.

### The flow of DT workshops within the various phases of the process:

#### 1. Empathy

During the research and empathy stage, participants 'stepped into the shoes' of the recipients of their ideas during field observations. They interviewed people influential in food and nutrition education for preschoolers. **The study** included parents, grandmothers, caregivers, a nursery intendant, teachers, children and a dietician. Participants worked in 2 parallel teams.

Through commitment and hard work, the participants generated **more than 100 ideas**, six of which progressed to the first prototyping phase and two of which were tested with audiences in and around a nearby kindergarten. Based on the feedback collected, participants developed **2 solution concepts** with an overall implementation plan.

## Educational tools: How to teach preschoolers about quality food



### DT exercises used:

#### 2. Analysis and generation of ideas

After organising the information obtained and discussing the findings, the participants identified **the main problem areas**. They then identified the food and nutrition education needs of preschoolers.

During the idea generation stage, participants in a two-stage inspired brainstorming session came up with ways to meet the diagnosed learning need. More than 50 were generated in each group. Each team then selected three ideas for further work and evaluation.

#### 3. Testing

##### a. A selection of ideas to test

From the initial pool of proposals, the most promising and potentially impactful ideas were selected for testing:

- **Survival school without crisps** – creative activities to promote healthy eating habits in a fun format.
- **Workshop series with Captain Carrot** – interactive workshops with a character who motivates children to eat healthily.
- **Platform for the exchange of experiences between authorising officers** – a tool to facilitate collaboration and the sharing of good practices in the field of nutrition in educational establishments.

##### b. First verification

Each team prepared a presentation of their idea and shared it with the other groups in a cross-assessment format. Following the presentations, feedback and suggestions were collected from the other workshop participants.

##### c. Second phase of prototyping

Based on the feedback gathered, two proposals were selected for the next stage. Teams developed physical prototypes of selected solutions, such as educational materials, lesson plans, and app/platform models.

##### d. Testing in practice

The prototypes were tested with children, parents and teachers in the kindergarten. The tests included observing children's reactions to the activities, and collecting feedback from parents and teachers on the usefulness and attractiveness of the ideas.

## Educational tools: How to teach preschoolers about quality food



### Summary

#### Benefits of carrying out DT activities

##### 1. Creative and innovative approach

- With the DT methodology, participants were free to generate ideas and go beyond the usual patterns.
- Unusual but practical solutions have been developed, such as the *Workshop series with Captain Carrot* or the *Survival school without crisps*, which combine education with fun.

##### 2. Understanding the recipient

- The DT process helped to enable a better understanding of the needs and perspectives of children, their parents, and teachers.
- As a result, solutions have been tailored to real challenges, such as low parental awareness and differences between kindergartens and schools.

##### 3. Involvement of different stakeholder groups

- The DT methodology enabled the active involvement of children, parents, teachers and even authorising officers in the process of developing and testing solutions.
- This involvement has increased acceptance and enthusiasm for new ideas.

##### 4. Effective iteration and testing

- The iterative approach enabled rapid prototyping and testing of ideas in practice.
- Feedback from test participants allowed the concepts to be refined and improved before implementation.

##### 5. Focus on practical outcomes

- The DT method allowed the diagnosed problems to be translated into concrete, tangible solutions (e.g. workshop and platform prototypes).
- Each stage of the project had a clear purpose and led to tangible results.

##### 6. Building awareness and cooperation

- The DT process has increased public awareness of healthy eating and its importance.
- Working together on ideas integrated different groups of participants, which is conducive to better implementation of activities in the future.

##### 7. Flexibility and adaptation

- DT allowed the approach to be modified on an ongoing basis and the solutions to be adapted to the needs and test conditions.

This has reduced the risk of misguided actions and increased the efficiency of deployments.

## Educational tools: How to teach preschoolers about quality food



### Project results

Two solution concepts were developed to promote healthy eating among children by actively involving their immediate environment:

#### 1. Active time with education on healthy eating

- Organising interactive workshops and activities that engage children, parents and teachers in topics related to healthy eating. One example is the series of workshops with the character *Captain Carrot*, through which children explore the value of nutritious food in an enjoyable and educational way.
- **Implementation plan**
  - Creation of lesson plans, teaching materials and props needed for the workshops.
  - Training of animators and teachers on how to conduct interactive activities.
  - Setting dates and venues for workshops in kindergartens and schools.
  - Collect participant feedback and monitor educational outcomes.

#### 2. Inspiration to eat healthy food

- Provide a platform for preschool and school authorising officers to share recipes, healthy meal ideas and best practices in child nutrition.
- **Implementation plan**
  - Development of an intuitive and functional website or mobile application.
  - Gathering and developing materials such as recipes, articles and guides on healthy eating for children.
  - Encouraging authorising officers, dieticians and other professionals to actively participate in the platform.
  - Provide ongoing technical support and moderate user-published content.



## Code for Green Socially Responsible Students

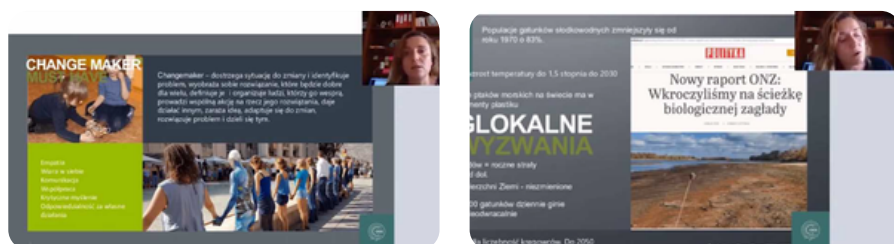


### Participants / recipients

An original programme developed by the Forum for Social Initiatives Foundation, carried out jointly with the Poznań University of Technology and Adam Mickiewicz University, with the support of the terre des hommes Foundation and the Volkswagen Belegschaftstiftung. The initiative involved eight VET schools from Poznań, Września and Polkowice, and was aimed at young people aged 13-17.

### Context

The project's backdrop was the threats posed by human impact on the environment, including climate change and the erosion of the Earth's biodiversity, among others. To prepare young people for life in a changing world, it is essential to develop their skills in technology, sustainability, empathy, self-responsibility, collaboration, and communication.



### DT exercises used:

**As part of the project, the initiators developed modern approaches to teaching and problem solving, such as:**

- 1. Teacher education:** Teachers learn the methods they will later use with their students, including DT. The focus is on understanding DT tools, why and how to use them, rather than relying on ready-made scenarios. In this way, teachers become creators of educational processes rather than mere implementers. The design approach is crucial.
- 2. Use of innovative labs:** Modern learning spaces foster creativity and innovation. They include not only space for design work, but also relaxation areas that promote open thinking and regeneration.
- 3. Project work with students:** Teachers guided students through real-world problem-solving processes, engaging them in challenges close to their communities. The projects focused on real-world challenges, which motivated students to take action and develop their practical skills.
- 4. Technology and programming as tools:** Technology was regarded as a means to solve problems, rather than an end in itself. Students learned how to apply technology practically within the context of real-world challenges.

## Code for Green Socially Responsible Students



### DT exercises used:

**An example of a challenge posed to students during the DT method process was: *How can we help municipalities increase biodiversity, improving the environment and the quality of life for residents?***

- **In-depth understanding of the subject**

Environmental workshops, observations, field research – students learned what biodiversity is and its importance for their environment.

- **Technology and skills set**

Workshop on programming, automation and robotics – students learned about technologies that can help solve environmental problems.

- **Local theme**

The students conducted interviews, research, and observations in their communities, which gave them a deeper understanding of local issues and their contexts.

### Examples of solutions

1. **Mosquitoes in cities:** installation of swift nesting boxes to help significantly reduce mosquito populations.
2. **Healthy food production:** creation of community gardens where young people can plant and harvest fruit and vegetables together.
3. **Sensory gardens:** for blind people, allowing them to touch and feel vegetation, enabling them to get in touch with nature.

## Code for Green Socially Responsible Students



### Comments

Project team observations:

- "Are we at school (...) giving children the kind of skills that allow them not only to solve problems, but to solve the problem properly? And that proper problem-setting is to see the needs that these problems create or arise from."
- "In the design thinking process, where empathy is very important, we open up education and the young person to the needs of others."
- "We can see from the inside how a Polish school can function if we change a little bit the way we think and define the goal."
- "Groups of people who have the potential to be social leaders - change makers, who are needed to bring about change (...) are people who are not only able to see the situation of change and identify the problem, but who are able to empathise with the other person precisely through, among other things, empathy (...)."
- "Not everyone will be a change leader, but if they have the right awareness and competence, they will be able to join the group and work with the change leaders."

### Summary

Outcomes and Achievements: The projects implemented by the young people brought tangible benefits to the local communities, improving the quality of life of residents and increasing environmental awareness among students. DT methods helped students develop critical thinking and collaboration skills.



[Discover more](#)

### Project results

Educating young people on how they can solve environmental and social problems in the future with technology and programming using DT.

Benefits of the DT approach

- **Developing key competences:** students learned teamwork, creativity, critical thinking and problem solving.
- **Involving the local community:** projects connected students with their local community, fostering a sense of responsibility for community issues.
- **Practical effects:** the students' actions led to tangible benefits, such as environmental improvements and enhanced quality of life for residents.
- **Inspiration for further development:** students saw that their work mattered, which motivated them to continue taking initiative.

## Map yourself. Designing your life - career guidance



### Participants / recipients

The target audience includes female students leaving secondary school and young women who seek to consciously shape their career path.

### Context

**Problem defined:** Many girls finishing secondary school face significant difficulty in choosing a future life path. They often experience pressure from those around them to make a decision that feels final and potentially life-defining.

The aim of the **Map Yourself** programme is to support young women in planning their next steps by helping them discover and design a personalised life path after school. The programme encourages participants to take ownership of their futures by actively shaping their own journeys.

Encouraging the design of one's own life.

### Assumptions:

- To overcome fear concerning the future, it is essential to develop self-awareness.
- Even the biggest decisions can be approached as a series of smaller, manageable steps.



## Map yourself. Designing your life - career guidance



### DT exercises used:

DT in workshops for young women:

Why was DT used?

#### 1. Empathy as a key element

- DT emphasises understanding the needs and feelings of the user. In the young women's workshop, this empathy was self-directed.
- Participants were invited to explore their own values, needs, and aspirations, which formed the basis for further work.

#### 2. Openness and exploration

- The DT approach encourages a broad, exploratory mindset. Participants were supported in discovering a wide range of personal and professional development paths. .
- This approach encouraged creative thinking, allowing out-of-the-box solutions to be considered.

#### 3. Experimenting and testing

- Participants learned to approach life and career choices as an experiment, allowing them to test different possibilities without fear of failure.
- This enabled them to quickly assess what was working and what needed further adjustment.

What was DT used for?

The young women's workshop was designed according to the five stages of the DT process, which allowed for smooth transition between each:

1. Empathy: understanding yourself.
2. Diagnosis: exploring your interests and values.
3. Generating ideas: creating development pathways.
4. Prototyping: selection of concrete actions.
5. Testing: experimenting on a small scale.

### Stages of the DT workshop:

#### 1. Empathy and diagnosis phase

- **Question:** Who am I?

Participants created a map of themselves called a 'backpack of experiences':

- They filled it with their skills, values, interests and past experiences.
- The process helped them identify what is important to them and what resources they already have.
- **Goal:** To consciously understand one's potential and needs.

## Map yourself. Designing your life - career guidance



### DT exercises used:

#### 2. Generating ideas

- **Question:** What can I do and what do I want?

The workshop in this phase focused on creative exploration of possibilities. Optimistic brainstorming - participants generated ideas for professional development without worrying about limitations. They explored what makes them happy, what interests them and where they can develop.

- **Aim:** to inspire the exploration of different professional and personal pathways.

#### 3. Prototyping and testing

- **Question:** How do I do this? How do I find out what is right for me?

The participants moved on to practical work:

- Filtering of ideas: consideration was given to ideas that were feasible and cost-effective.
- They reflected on what the labour market might pay them for, what might give them satisfaction, and what they might be good at.
- Planning experiments: participants learned how to test their ideas on a small scale - e.g. by participating in volunteering, internships or short-term projects.
- **Aim:** To gain early experiences in a safe environment and to quickly validate ideas.

Results of using DT in workshops

#### 1. Awareness and self-acceptance

Participants gained a better understanding of their own needs and potential, which helped them build confidence.

#### 2. Exploring new opportunities

Through exploration and ideas generation, participants found paths to development they had not previously thought of.

#### 3. Practical actions

Participants learnt how to make changes step by step, testing different options in the real world.

#### 4. Flexibility and openness to change

The workshops taught the young women to treat life as an experiment, which reduced their fear of decision making and risk taking.



## Map yourself. Designing your life - career guidance



### Comments

- Mutual support – women's solidarity, building a community of women
- Focus on young women's personal resources and needs, self-awareness
- The labour market – opportunities and constraints for women

The narrative is framed as a journey. There is a map, we have a backpack and we prepare for the expedition. The responsibility is on the participants. They are offered a process – exercises to work through, but it is up to them to fully commit and bring their whole selves to the experience.

Unlike formal education, in life there is no such thing as one correct answer, nor does it define outcomes in terms of failure. The authors instead speak about experiments from which lessons can be drawn and learned.



[Discover more](#)

### Summary

- The process of mapping yourself can be successfully applied **at different ages and stages**. It is not just for graduates.
- More mature trainees are more **ready for action** after the workshop, e.g. changing jobs after discovering their new path.
- The **space** in which the workshop takes place is important.
- In school-based settings, facilitators must work through students' ingrained thought patterns and previous educational experiences.
- In the project authors' space (workshop rooms), participants are more open to entering the process, **sharing their thoughts honestly and experimenting freely**.
- Participants express a need to be heard in a safe environment – one where they can talk openly about their fears and challenges, and **realise they are not alone**.

### Project results

Solution developed

- Programme and implementation of workshops for young girls
- Training by the authors of **Map Yourself** – a toolbox for career counsellors
- Toolbox – a set of exercises to help young girls gain self-awareness.

The use of DT in the young women's workshops helped to create an educational process that was both inspiring, practical and effective. Participants not only had the opportunity to better understand themselves, but also to try out different development pathways in a safe and supportive environment.

## Adulthood course



### Participants / recipients

Students, people who are entering adult life



### Context

The Course in Adulthood project was carried out by three students from Toruń, as part of the Zwolnieni z Teorii (Exempt from Theory) Olympiad. The aim of the initiative was to facilitate young people's entry into adulthood by providing practical information on choosing a university, dealing with official matters, and renting a flat. The project included the creation of a podcast, activity on social media, and a dedicated website.

Initiatives also featured the creation of an ebook, a lecture, informative social media content, and an educational game. More than 60% of lecture attendees reported having learned something new. The project was awarded both the Bronze and Silver Wolf awards, presented as part of the olympiad, for outstanding social projects carried out by young people.

### DT exercises used:

The project is based on **Design Thinking** methodology, which promotes a creative and effective approach to problem solving.

The stages of the project were planned in line with the key phases of DT: empathising, problem definition, ideation, prototyping and testing. Each of these steps is appropriately tailored to the specifics of the project and its audience.

The project was divided into four stages:

#### 1. Initiation (empathising and defining the problem):

- At the beginning, participants selected the project format (e.g. a social media campaign, social media activities, posters, flyers or educational videos on YouTube).
- The team identified the problem by gathering evidence of its existence.
- The project name and logo were created.
- Participants learned the basics of project management and took quizzes on a learning platform as part of an interactive and engaging approach to learning and absorbing practical information about entering adulthood. From the outset, the quizzes captured the attention and engaged young people who may have initially been less interested in the topic of entering adulthood. The quiz format is interactive, fun and less formal, making young people more willing to participate and engage.

## Adulthood course



### DT exercises used:

#### 2.Planning (ideation and prototyping):

A detailed action plan was developed, which included:

- The specific number of people to be reached by the project. The team analysed the target group (e.g. students, young adults) and how best to reach them.
- Division of tasks within the team: Each team member was assigned roles and responsibilities to avoid chaos and to ensure efficiency. To this end, the team often used a mind map, which is a visual tool to help illustrate all tasks, priorities and responsibilities.
- Setting SMART objectives: Objectives were formulated in a specific, measurable, achievable, realistic and time-bound manner. An example of a SMART goal might be: *We will reach an audience of 1,000 in three months through social media and online lectures.*
- Identifying partnerships and budget: The team identified potential partners (e.g. schools, companies, organisations) that could support the project and analysed the available financial resources, planning a budget for materials, advertising, and other needs.
- Justification of the project's relevance: The team gathered at least five pieces of evidence that demonstrate a genuine need for the project. This may include statistical data, research results, surveys, expert opinions, or needs identified by potential target groups.

#### 3.Implementation (prototyping cont. and testing):

- The team implemented the project as previously envisaged, with flexibility to adapt to changing conditions.
- Particular emphasis was placed on scheduling and sharing the results in the media (points are awarded for media outreach).

#### 4.Conclusion (summary and evaluation):

- The project concluded with a summary of outcomes and key takeaways, as well as a formal account of the activities.

Delivered as part of *Exempt from Theory*, the project enabled participants to gain practical design and management skills while contributing to positive change in their community.

## Adulthood course



### Comments

The project targeted young people who face the fear of adulthood to help them better understand and prepare for the challenges of adult life.

Beyond introducing young audiences to key aspects of adult life, the initiative also enabled its creators to gain hands-on experience in designing social impact projects and working as a team. By applying the Design Thinking methodology, participants were able to achieve their goals effectively while developing creative and organisational competencies.

### Summary

The Adulthood Course aims to support young people in making a confident transition into a new stage of life. **"Everything you need to know that they won't teach you at school, you'll find right here with us!"**

The project aims to help young people understand that adulthood – although often seen as daunting and stressful – is a natural stage of life that can be navigated successfully. Its goal is to challenge the perception that adulthood is inherently problematic, and instead demonstrate how its challenges can be approached with confidence and resilience.



[Discover more](#)



[Discover more](#)

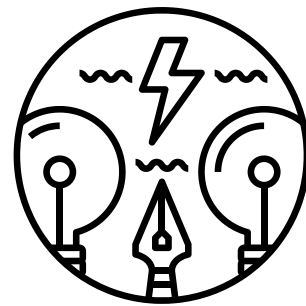
### Project results

The project included the creation of a podcast, activity on social media, and a dedicated website.

Initiatives also featured the creation of an ebook, a lecture, and content for social media, which reached an audience of over 30,000 followers, as well as an educational game.

One example was a lecture on insurance and business, attended by more than 60 people. More than 60 per cent of participants reported that they had learned something new.

## How do we encourage young people to get involved and participate in workshops?







### Participants / recipients

Copernicus Science Centre - a place of learning, inspiration and development for children, young people and adults.

- Secondary school students (high schools, technical schools, trade schools, and others) - representatives of the project's target group
- Copernicus Science Centre staff
- Experts
- NASK staff (Scientific and Academic Computer Network - National Research Institute)

### Context

Problem defined: developing a strategic and programmatic framework for a series of dialogue events—regular meetings aimed at helping young people expand their knowledge, share experiences, find inspiration, and foster personal development.

	Oliwia	Marysia	Celina	Maciek
				
Kim jest Persona?	16 lat, 2 klasa liceum,	18 lat, uczennica LO, klasa maturalna,	18 lat, uczennica LO, z rodziny wykształconej	18-19 lat, uczeń klasy maturalnej w LO
Motywacje:	<ul style="list-style-type: none"> <li>• chcę się czegoś nowego, praktycznego dowiedzieć, zdobyć nowe, praktyczne umiejętności</li> <li>• chcę się dobrze bawić, mieć satysfakcję z samego procesu, nie tylko z wyników</li> </ul>	<ul style="list-style-type: none"> <li>• zdobywanie wiedzy</li> <li>• wymarzone studia</li> </ul>	<ul style="list-style-type: none"> <li>• uczenie się przez zabawę</li> <li>• rzeczy praktyczne</li> <li>• osobiste doświadczenia</li> </ul>	<ul style="list-style-type: none"> <li>• Lubię brać czynny udział w zajęciach, nie tylko słuchać teorii</li> <li>• W przyszłości moja docelowa praca bez wątpienia wiązać się będzie z obecnością technologii</li> </ul>
Frustracje:	<ul style="list-style-type: none"> <li>• Frustracje: mało czasu, tematy zajęć nie są zbyt precyzyjne, nie wiadomo na co się idzie</li> <li>• warsztaty online, na których była wszystkie zawody jego oczekiwania</li> </ul>	<ul style="list-style-type: none"> <li>• nudne i monotonne lekcje - dynamika pracy</li> <li>• brak ćwiczeń praktycznych</li> </ul>	<ul style="list-style-type: none"> <li>• traktowanie jak jako, niepowinno</li> <li>• niekompetentny prowadzący</li> </ul>	<ul style="list-style-type: none"> <li>• Ciężko dyskomfort związany z faktem, jak dużo czasu poświęcam technologii i elektronice na co dzień</li> <li>• Praca przy komputerze po 7/8 godzin tenz podczas zdalnego nauczania ma swoje negatywne skutki uboczne. Ciężko się skoncentrować, kiedy np dużo dzieje się w domu</li> </ul>
Ulubiony rytm	„Dobra zabawa i nowa wiedza, to coś czego szukam na co dzień”	„Temat, który mnie interesuje. Coś nietuzinkowego. Żeby to nie była wiedza, którą znajdziemy w internecie szukając przez piętnaście minut”	„Przestań gadać, zróbmy to”	„Uważam, że w przyszłości sztuczna inteligencja będzie miała ogromne zastosowanie w każdej dziedzinie naszego życia”

### DT exercises used:

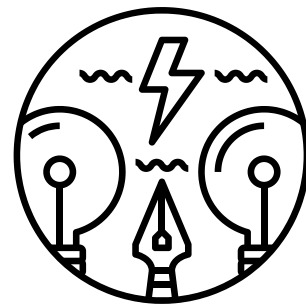
#### Design Thinking workshop: how to engage young people in scientific and educational events?

The project was organised in the form of three inspiring online workshops that brought together participants from a variety of backgrounds - scientific, artistic, public institutions, as well as students. Through the use of DT methodology, it was possible to develop innovative solutions to meet the needs of young people as an audience for educational and scientific events.

#### Getting started: hypothesis formulation and desk research

To better understand young people as a target group, the first step was to formulate hypotheses about their needs and expectations. This allowed the team to structure their assumptions and prepare for the research work. This was followed by desk research, which provided valuable information on young people's preferences - their ways of acquiring knowledge, their relationship with authority figures and their approach to education.

## How do we encourage young people to get involved and participate in workshops?



### DT exercises used:

#### Target group interviews: getting to know the voice of young people

A key element of the workshop was to conduct interviews with representatives of the target group. Their aim was to explore the needs, challenges and motivations of young people. The interviews allowed workshop participants to verify their hypotheses and confront assumptions with real-world insights. The findings revealed that young people are indeed eager to acquire knowledge and participate in engaging events – provided they perceive them as valuable.

For example, the initial assumption that young people were afraid to engage in new experiences was disproven. It became clear that the crucial factor is whether the events are attractive, practical, and capable of making a tangible difference in their lives.

#### Creative techniques for generating ideas

During the workshop, participants used a variety of creative thinking techniques, such as:

- **Analogies** – generating ideas based on solutions used in other industries, e.g. Netflix or IKEA.
- **Associations** – creating concepts inspired by the images and objects presented in the slides.
- **Change of perspective** – an attempt to look at the problem through the eyes of innovators such as Walt Disney and Steve Jobs.

#### Effects of the workshop

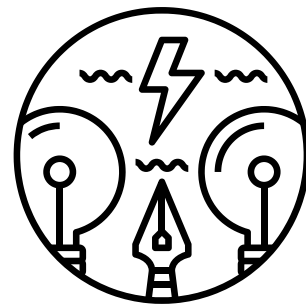
Workshop participants created suggestions for activities that could make educational events more engaging for young people. The key question proved to be as follows: *How can we help young people see the value in educational events so that they feel their time has been well spent?* The responses to this question became the foundation for designing solutions that combine education with enjoyment, relevance, and the practical application of knowledge.

#### A new look at education

The workshop showed that young people are open to participating in scientific and educational events as long as they are well designed, attractive and provide tangible benefits. Conducting the workshop using the DT process allowed not only for a better understanding of young people's needs, but also the development of creative solutions that could transform the way educational events are organised in the future.



## How do we encourage young people to get involved and participate in workshops?



### Comments

Each of the selected solutions was described in detail in the form of concept sheets, enabling further analysis and possible implementation. This process resulted in innovative ideas that can significantly impact the positive experience of young participants at science events.



[Discover more](#)

### Summary

The project was of great value to young people, who often had to step outside their comfort zone, overcome their resistance to discussion and establish an intergenerational dialogue. The meetings were also an inspiration for the experts, who were able to see reality from a different perspective through their relationships with the young people.

The most important outcome of the project was the implementation of the developed solutions during subsequent editions of dialogue events, which contributed to increasing the involvement of young people and enriching the educational offer of the Copernicus Science Centre. The project has served as an inspiration to continue activities promoting intergenerational dialogue and scientific development among young people.

### Project results

Through an online workshop organised using DT methodology, participants generated dozens of proposals aimed at increasing youth involvement in science events. From these, five solutions with the greatest potential were selected using categorisation and selection techniques.

The selected concepts addressed various aspects of event organisation, such as:

- **Communication methods:** leveraging modern tools and platforms to effectively communicate information and promote events to young people.
- **Educational content:** designing programmes tailored to the interests and needs of young audiences, with an emphasis on interactivity and practical application of knowledge.
- **Programme of events:** integration of modern technologies such as Big Data, virtual reality, artificial intelligence, and chatbots to enhance the content and form of presentations.
- **Involving experts:** from different fields who can inspire and motivate young people to deepen their knowledge.

## Serfenta Foundation - an Innovative Model for Craft Revitalisation

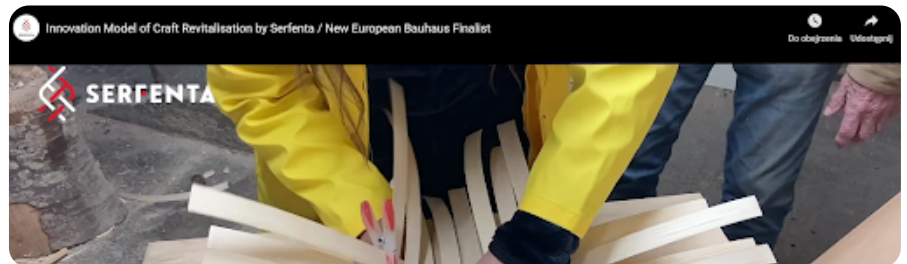


### Participants / recipients

- Artisans specialising in traditional braiding techniques and other dying trades.
- Designers and entrepreneurs who would like to use traditional techniques in modern design and commercial products.
- Representatives of local communities for whom crafts may have become a source of income and an element of cultural identity.
- Students, researchers and craft enthusiasts looking for inspiration and opportunities to learn more about crafts.

### Context

The Serfenta Foundation identified several key challenges related to traditional crafts: their disappearance due to a lack of intergenerational transmission, a limited market due to their failure to adapt to modern needs, teaching methods that were unattractive to young people, and the need to integrate crafts with modern design and business. To address these challenges, it implemented the Design Thinking methodology, systematically analyzing problems, developing solutions with artisans, and applying modern business tools.



### DT exercises used:

1. **Empathy** - survey of users and their needs Serfenta began the process with an in-depth exploration of the needs of artisans and potential customers. Activities included:
  - One-to-one interviews with artisans to understand their motivations, challenges and existing working methods.
  - Workshops with local communities to learn about their approach to traditional crafts and how they might be revived.
  - Market analysis - exploring which handicraft products are likely to sell and how they can be adapted to meet the needs of today's customers.
  - Research trips - the foundation has carried out research trips to countries such as Germany, Iceland, Norway, Japan and South Korea, to compare the ways in which crafts are preserved in different cultures.
2. **Defining the problem:** Based on this insight, the decision was made to implement an innovative model for craft education and promotion that would combine traditional techniques with modern design and business acumen.

## Serfenta Foundation - an Innovative Model for Craft Revitalisation



### DT exercises used:

3. **Generation of ideas:** creative workshop with craftspeople, designers, marketing experts, business representatives, people interested in handicrafts. Together, they developed ideas for modern products based on traditional techniques.

These include:

- Craft workshops for companies and individual customers
- New product collections inspired by tradition, but adapted to the market
- Mentoring programmes connecting artisans with young artists

### 4. Prototyping

- Pilot workshops for individuals and companies to test whether participants were interested in handicrafts and saw their market value.
- Initial modern artisan product lines, combining traditional techniques with contemporary design aesthetics.
- New sales models, including an online shop and collaborations with art galleries and interior designers.

5. **Testing:** collected user feedback at every stage of implementation. As a result:

- Workshop formats were adapted
- Sales models were adjusted
- Marketing communications were improved

### Comments

- Artisans need support to develop their business and marketing skills.
- Modern customers expect products adapted to current trends.
- Craft workshops can be an effective tool for promoting crafts.

### Summary

The use of Design Thinking made it possible to combine tradition with modern design, increasing the value of crafts in the market and



[Discover more](#)



[Discover more](#)

### Project results

- Increased interest in crafts – more people started attending workshops.
- Modern craft products found a market.
- Integration of tradition with modern business, which helped craftspeople to promote and sell their products.
- Improved entrepreneurial skills for craftspeople.

## Helping Hand - Community Services Exchange Platform



### Participants / recipients

- Residents of Gdansk looking for support in their daily tasks
- Persons willing to provide assistance in the form of individual assignments
- Local community members seeking to strengthen links and cooperation

### Context

The team noticed that many residents of Gdansk need help with everyday activities such as shopping, minor repairs or caring for animals. At the same time, there was a group of people willing to provide such support, but there was no platform to connect them effectively. To address this gap, the team used the DT method.

gdansk school of  
engineering



Pre-finałowe prezentacje projektów

### DT exercises used:

#### 1. Empathy - understanding user needs

- Interviews and surveys: interviews were conducted with Gdansk residents to identify their needs for daily assistance and their willingness to offer support to others.
- Observations: the team observed social interactions in local communities, noting existing forms of support and their limitations.

Conclusions: There is a clear need for a platform that connects those who need help with those who want to help. It should be simple and easy to use.

2. **Defining the problem.** Based on the data collected, the team formulated the main problem as follows:

- How can we create an intuitive platform that effectively connects Danzig residents in need of help with those willing to help, while strengthening community ties?

3. **Generation of ideas.** The team generated a variety of ideas to address the problem, including the creation of the following:

- Mobile app: enabling rapid reporting of needs and offers for assistance.
- Website: with an interactive map showing existing offers and needs in the area.
- SMS notification system: for older people less proficient with modern technology.

## Helping Hand - Community Services Exchange Platform



### DT exercises used:

4. **Prototyping.** The team created a prototype of a mobile application called 'Helping Hand'. It included features such as:

- User registration: with the possibility to specify whether they want to offer help or need help.
- Overview of available assignments: list of current requests for assistance, filterable by category and location.
- Rating and commenting system: enabling greater trust between users.

### 5. Testing

- User testing: the prototype was tested by the target group, which provided valuable feedback on the functionality and intuitiveness of the application.
- Iterations: based on feedback, improvements have been made, such as simplifying the registration process and adding a chat function between users.

### Summary

Team skills development: project participants gained practical experience in applying the DT method and in developing technological solutions for real social needs.



### Project results

- **Creation of a functional prototype:** the Helping Hand app was positively evaluated by testers and has the potential to be implemented on a wider scale.
- **Strengthening community ties:** The project has helped to raise awareness of mutual aid in the local community.



## Reinforcing the Professional Competence of Construction Students



### Participants / recipients

- Students of the technical construction school, training to become construction technicians
- Teachers of vocational subjects related to construction
- EU project partners supporting the development of vocational education

### Context

**Project:** "Homo ecologicus – an alternative pathway for the development of professional qualifications and competences, a key to labour markets in a united Europe".

**Partner:** Department for the Promotion of Vocational Training of the Berlin-Brandenburg Construction Industry Association

As part of the implementation of EU projects, the Technical School Complex in Nysa has sought to improve the practical skills of its students and better prepare them for the requirements of the modern labour market. Cooperation with international partners, such as the Vocational Training Promotion Unit of the Construction Industry Association of Berlin and Brandenburg, enabled the exchange of experience and insights into effective teaching methods. It was noted that **Design Thinking** methodologies can be an effective tool to support practical training among technicians, better adapting curricula to the real needs of the labour market.





## Reinforcing the Professional Competence of Construction Students



### DT exercises used:

#### 1. Understanding user needs

- **Labour market analysis:** research was carried out to determine which competences are most desired by employers in the construction industry.
- **Interviews with entrepreneurs:** meetings were held with local entrepreneurs in the construction sector, who identified the most common skills gaps among vocational school graduates and expectations of future employees.

**Conclusions:** There is a need to strengthen students' practical skills and better prepare them for the realities of working in the construction industry.

#### 2. Defining the problem

Based on the data collected, a number of key challenges were identified:

- **Lack of practical vocational skills:** students often did not have the opportunity to practically apply theoretical knowledge in real working conditions.
- **Difficulties in the transition from school to work:** graduates faced barriers in adapting to labour market requirements and standards.
- **Insufficient cooperation with companies:** limited opportunities to implement internships and apprenticeships in real work settings.

#### 3. Generation of ideas

A workshop with students, teachers and EU project partners developed proposed solutions:

- **Vocational simulations in school classrooms:** creating realistic scenarios of professional tasks that students could carry out in a school setting.
- **Integration of theoretical teaching with real projects:** collaborating with local companies to carry out real-life construction projects as part of school classes.
- **Increasing the number of internships and apprenticeships:** development of internship programmes grounded in a problem-based learning method, where students would solve real professional problems.

## Reinforcing the Professional Competence of Construction Students



### DT exercises used:

#### 4. Prototyping

Pilot initiatives were implemented:

- **Vocational simulations:** students carried out tasks commissioned by local companies in a classroom setting, allowing them to put the knowledge they had acquired into practice.
- **Mentoring scheme:** a programme was introduced whereby students were supported by teachers and experts from the construction industry, enabling them to benefit from valuable guidance and experience.

#### 5. Testing

- **Project evaluation:**
  - An evaluation of ongoing projects by students and business partners was carried out.
  - Companies pointed to improvements in the practical preparation of students and their greater awareness of professional standards.
  - Students reported greater confidence and a better understanding of the working process.
- **Curriculum adaptation:**
  - Based on the feedback collected, **additional training modules** were implemented that better reflected the realities of working in the construction industry.
  - The mentoring model has been improved, increasing the number of consultations between students and experienced industry professionals.
  - More practical educational scenarios have been introduced into the standard vocational curriculum.

## Reinforcing the Professional Competence of Construction Students



### Summary

The use of the Design Thinking method has allowed the school to better align the vocational training process with the real requirements of the labour market. Thanks to cooperation with businesses and the introduction of vocational simulations, students have gained practical skills and the school has become a more attractive place of learning for future professionals.



[Discover more](#)

### Project results

#### Improving students' practical skills

- The students were better able to cope with actual professional tasks.
- They have increased their preparedness for employment immediately after leaving school.

#### Strengthening cooperation with local businesses

- Companies have begun to engage with the education process by providing realistic challenges for students.
- The number of places offered for apprenticeships and work placements has increased.

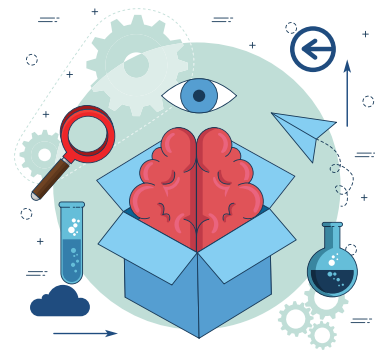
#### Improving teaching effectiveness through a hands-on approach

- Learning has become more engaging and aligned with the real needs of the labour market.
- Students were more motivated to learn new skills.

#### Better preparation of students for internships and work in factories

- The introduction of problem-based learning has increased the effectiveness of teaching.
- The school's graduates were better prepared for the rapidly changing labour market.

## School's civic budget

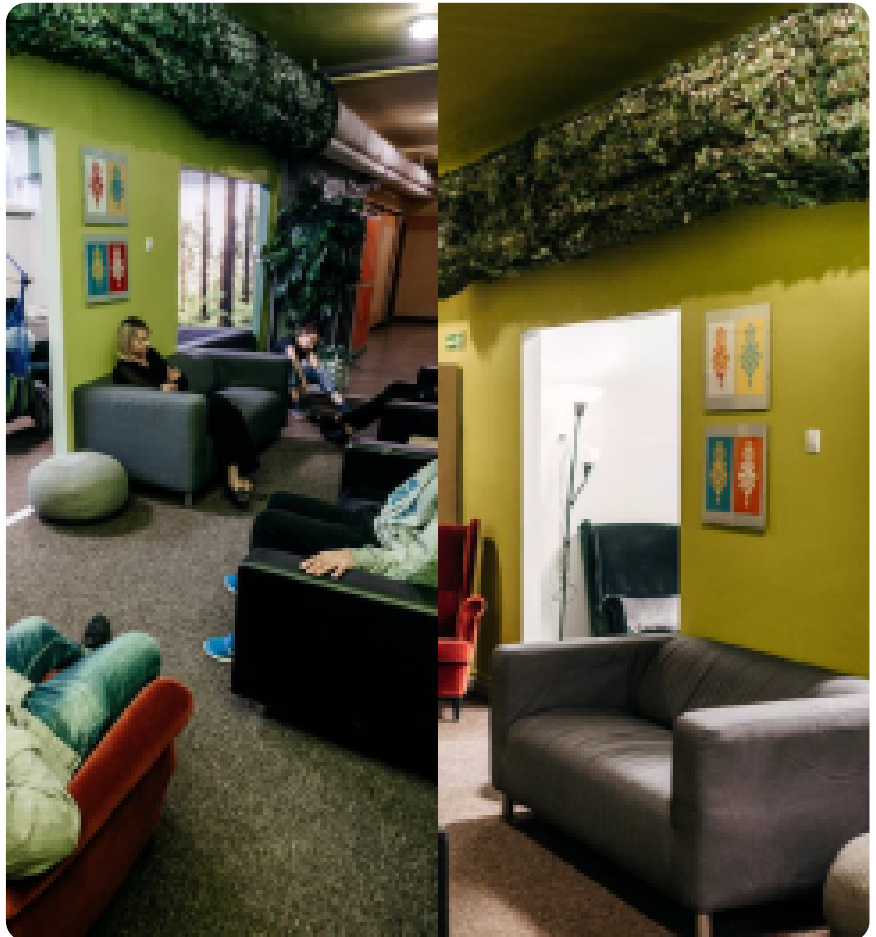


### Participants / recipients

Students of the Zamość school

### Context

Pupils were given the opportunity to propose and implement changes within the school through initiatives carried out as part of the school's citizens' or civic budget. They developed their own ideas, prepared cost estimates, and designed implementation plans, while also gaining an understanding of how participatory budgeting and voting systems work.



### DT exercises used:

The process of implementing DT in the context of student involvement in the School Civic Budget can be outlined using the key phases of the DT method. This practical, hands-on approach helped students develop essential competencies such as creativity, collaboration, and civic responsibility.

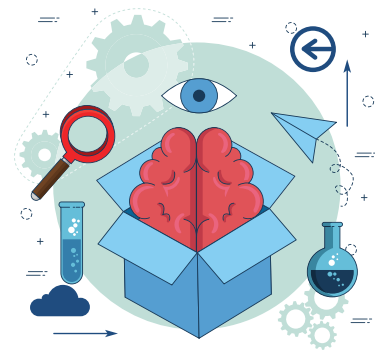
#### 1. Empathy – understanding needs and expectations:

The first step was to gather information about the students' needs.

- **Activity:** students interviewed their classmates, asking questions such as:
  - What would you like to change about the school?
  - What space or initiative would make your time at school more enjoyable?

**Aim:** To understand what is important to students and what motivates them to create a space that fits their needs. Pupils acted as 'users' of the changes, ensuring that the project would respond to real issues.

## School's civic budget



### DT exercises used:

#### 2. Defining the problem – identifying the key challenge:

Once the information had been gathered, students analysed the interview responses to identify the main needs of the school community.

- **The challenge:** How can we make the school space more welcoming and conducive to relaxation and integration?
- **Example:** One of the ideas to come out of the interviews was a 'quiet zone' – a place for relaxation where students can take a break from the daily hustle and bustle of school.

#### 3. Generating ideas:

Students worked together to brainstorm different ideas and solutions.

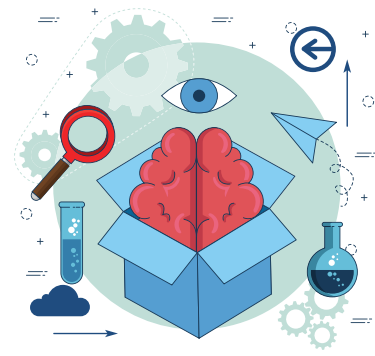
- **Activity:** creative workshops were organised, during which students:
  - proposed different concepts for the use of the school space
  - created lists of necessary resources , e.g. furniture, decoration, equipment
- **Aim:** to generate as many ideas as possible that could be implemented as part of the school's civic budget.

#### 4. Prototyping – planning and design:

Selected ideas were developed in detail and prepared for implementation.

- **Action:**
  - Prepare visualisations of ideas (drawings, mock-ups, descriptions).
  - Prepare cost estimates based on real product prices.
  - Plan logistics activities: what to buy, how to organise the space and what steps to follow.
- **Aim:** practical preparation for project implementation, including budget and resources.

## School's civic budget



### DT exercises used:

#### 5. Testing and feedback collection:

Students presented their ideas to their peers and collected feedback.

- **Action:**

- Present projects to the school.
- Discuss the merits and limitations of individual ideas.
- Make improvements based on the feedback received.

- **Purpose:** to verify ideas and refine details before voting.

#### 6. Implementation and voting – project implementation:

The final stage involved the democratic selection of the projects to be implemented.

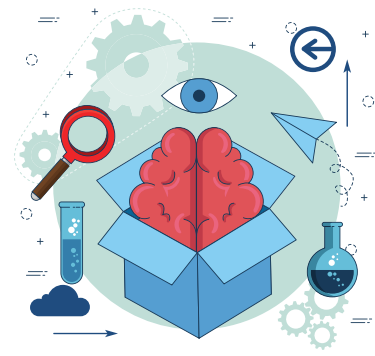
- **Action:**

- Organise a vote among students.
- Select the projects with the most support.
- Implementation of winning projects by students, with the support of teachers and school administration.

**Aim:** for students to learn about the civic budget decision-making process, gaining practical knowledge and a sense of empowerment.



## School's civic budget



### Comments

During the process, students had to learn how to design the space according to the needs of all students. The winning proposal in the vote was the 'Quiet Zone', which has been very popular so far. The students learned about design, active listening, budgeting, and how citizen budgets work.

### Summary

The students learned about DT through a practical approach. They were given tools that they will be able to apply in their future projects, and they made changes in their immediate environment.



[Discover more](#)

### Project results

The project not only resulted in the creation of a physical 'Quiet Zone' and other initiatives, but also led to:

- **Soft skills development:** creativity, collaboration, negotiation and project management skills.
- **Civic education:** students learnt about how a civic budget works, deepening their civic awareness.
- **Greater involvement:** Pupils felt a shared responsibility for driving change in the school, which increased their motivation and integration.

The DT process in this case proved to be an excellent tool to engage students in the life of the school, develop their practical skills and make real changes tailored to their needs.

# Design thinking for social entrepreneurship

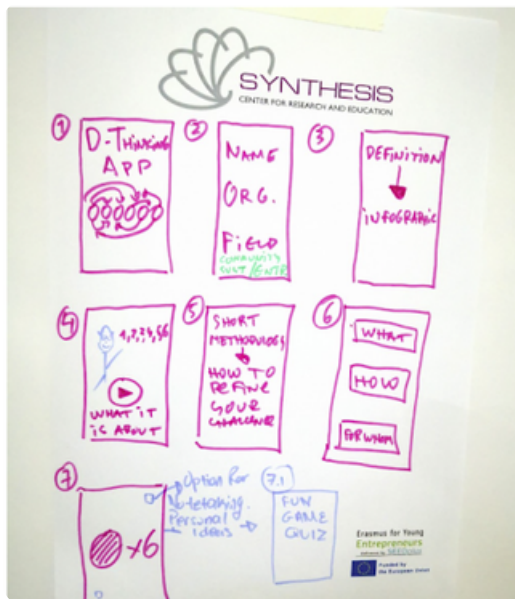


## Participants / recipients

Marketing Manager,  
Stakeholder Analyst,  
Product Development  
Specialist, Customer  
Service Representative, E-  
Commerce Manager,  
Finance and Accounting  
Specialist, and Data  
Analyst.

## Context

Cross-compensation is a concept where a portion of profits from specific products is used to support social or environmental causes. An online store wanted to explore and redefine this concept in a way that connects with their customers on a human level, evoking inspiration and emotion. They decided that the best way to do this would be through the DT process. An external DT facilitator was invited to take part.

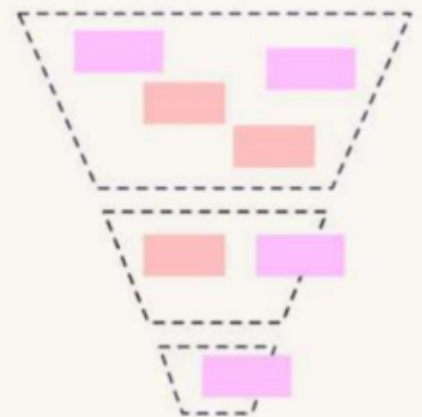


## Idea Funnel

Related to user need

Feasible

High Impact



## DT exercises used:

**Empathise:** The team began with a semantic analysis exercise to gather participants' definitions and assumptions about the subject. They conducted interviews, online surveys, and observed user behaviour on the online store. Desk research was also carried out to find out more about similar businesses.

## Design thinking for social entrepreneurship



### DT exercises used:

**Define:** Information from surveys and recorded interviews was sorted and clustered. Observations were noted on sticky notes and displayed on a wall. Based on the information collected and sorted, the team developed three different personas, which were used to formulate problem statements as points of view (POV).

**Ideate:** The POV statements were reframed into How Might We (HMW) questions. The team focused on generating different ideas through multiple brainstorming techniques, including the Idea Train. They then split into teams of three and explored the negative brainstorming and the idea shopping techniques. An idea funnel was drawn on the wall for each of the three HMW questions. Each original team then selected one idea to take forward into the prototyping phase.

**Prototyping:** The three teams all decided to use the Paper Wireframe. The three groups presented their prototypes to the whole team and following each presentation a discussion and feedback were provided. The team decided to create a voting system on their website showcasing the first two ideas.

**Testing:** to engage as many customers and future customers as possible, the shop created a social media campaign to encourage everyone to vote for the best idea.



[Discover more](#)

### Comments

This case study demonstrates the practical application of DT in real-world business scenarios. It highlights the importance of collaborative problem-solving, user-centered research, and iterative prototyping – all of which are essential skills for students in fields like business, marketing, sustainability, and entrepreneurship. The use of creative brainstorming tools (Idea Train, Negative Brainstorming, Idea Shopping) and visual techniques (sticky note clustering, paper wireframing) provides engaging, hands-on learning methodologies that can be adapted to various vocational training contexts. This case study underscores how DT can foster innovation, adaptability, and critical thinking – all key competencies for today's workforce.

## Design thinking for social entrepreneurship



### Summary

EcoForU, an online eco-friendly store, leveraged DT to develop a meaningful cross-compensation model that connected with customers on an emotional level. Through workshops facilitated by a DT expert, the team engaged in semantic analysis, customer research, and competitive benchmarking to understand key challenges. They created three customer personas - Emma, Brian, and Isabella - each representing different sustainability-driven motivations and financial limitations. Using brainstorming techniques like Idea Train, Negative Brainstorming, and Idea Shopping, they generated and refined solutions, ultimately selecting three prototype ideas: a loyalty program, a referral program, and a special product line for community impact.

To validate their concepts, EcoForU launched a customer voting system on their website, promoted through a social media campaign with free product samples. The referral program, which rewarded customers for bringing in friends while contributing to social causes, emerged as the preferred choice and was immediately implemented. By following the DT process, EcoForU successfully crafted a customer-centric initiative that aligned with its mission, ensuring a tangible social impact while fostering stronger consumer engagement.

### Project results

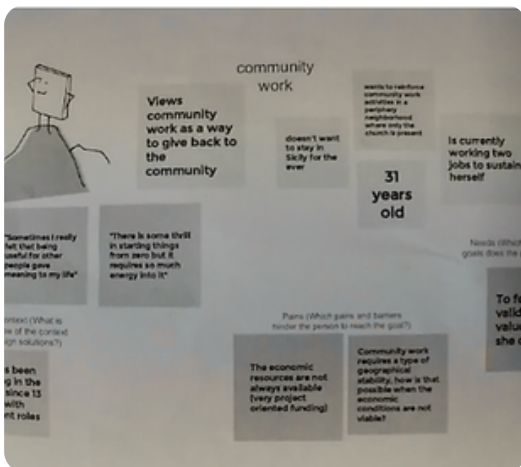
Through application of the DT approach, **EcoForU** successfully implemented a referral program that not only incentivised customers but was also in line with its mission towards achieving sustainability and social impact. By engaging users in the decision-making process through surveys, interviews, and a voting system, the company ensured that the final solution resonated with its target audience. The structured prototyping and testing allowed EcoForU to validate ideas before investing in large-scale changes, reducing risk and enhancing customer engagement.

## The DT process as a way to increase sustainable management in housing institutions, Denmark



### Participants / recipients

Five residential staff members



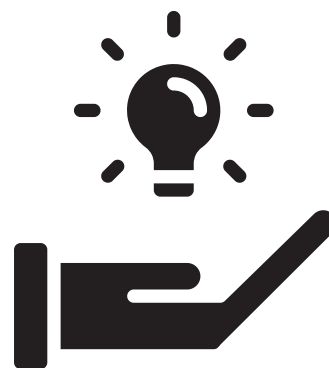
### Context

Problem addressed: Fonden Skovhaven' is a residential and day programme for young adults on the autism spectrum or with Asperger's. While sustainability had already been informally discussed among staff - mainly in terms of food supply and ecological practices - the institution aimed to take a more structured and holistic approach. Their goal was to broaden the conversation to include all three pillars of sustainability: environmental, social, and financial, and to explore practical examples.

### DT exercises used:

1. **Inspiration:** The team began with two rounds of brainstorming. After the first, they introduced key concepts such as sustainability management and inner sustainability. The Idea Train tool was used. The second tool was a pop-up session, allowing for free-form brainstorming around key topics and questions. During this phase, they also began identifying key stakeholders who could provide **relevant insights**. Two primary stakeholder groups were selected for interviews, and a survey was circulated among colleagues to gather broader input.
2. **Define:** the group developed a persona to represent a typical employee at the organisation.
3. **Ideation:** Using a How Might We (HMW) question, the team brainstormed potential solutions. All ideas were organised through an idea funnel, gradually narrowing the options. The two final concepts selected were a Pixi book and a themed day for employees.

## The DT process as a way to increase sustainable management in housing institutions, Denmark



### DT exercises used:

**4. Prototype:** Each team member sketched their own version of an idea dashboard. Although starting from the same premise, they all touched upon different aspects of the Pixi book – such as content, visual design, and section structure.

**5. Testing:** The team formulated specific questions about what they wanted to learn and why. They also decided how best to gather that feedback. All responses were collected on sticky notes and organised using an evaluation grid.



### Comments

Facilitators play a key role in DT to regulate the process and help participants focus on each phase. Here, two facilitators were involved and had a meeting with the management team beforehand.

The activities were spread over a period of one and a half months, consisting of four sessions lasting three hours each. The selected participants were employees working in the kitchen, they knew each other and shared the same opinions on the subject. In hindsight, involving a more diverse group with differing perspectives would have added greater value to the process



## The DT process as a way to increase sustainable management in housing institutions, Denmark



### Summary

Through the DT process, Fonden Skovhaven successfully developed a Pixi book as a practical tool to enhance awareness and common understanding of sustainability (both environmental and inner sustainability) within the organisation. By engaging employees in brainstorming, prototyping, and iterative feedback, the project ensured that the final outcome was not only relevant but also aligned with the real needs of staff. The participatory approach empowered team members to take ownership of the topic, transforming them into ambassadors for sustainability within their workplace. The process also highlighted the importance of knowledge-sharing and interdisciplinary collaboration in fostering meaningful organisational change.

This case study serves as a real-world example of how DT can be applied in a professional setting, showcasing how structured problem-solving techniques can be used to enhance workplace learning, knowledge management, and organisational development. The project illustrates key methodologies such as semantic analysis, persona development, iterative prototyping, and user-centered feedback, all of which are valuable tools for vocational education. It also emphasises the role of sustainability as a multi-dimensional concept (social, financial, and environmental), which is increasingly relevant in various vocational fields, including social care, business, and hospitality. By integrating such methods into VET curricula, educators can help students develop critical thinking, teamwork, and problem-solving skills that are essential in modern workplaces.

### Project results

The DT methodology proved highly successful for the team. As they explored the topic in depth throughout the process, their awareness and understanding of sustainability management grew significantly. The participants are now regarded as ambassadors for sustainability within their organisation. A key takeaway from the project was the importance of equipping participants with sufficient background knowledge on the subject in order to generate relevant outcomes.

## Using DT to solve a local environmental problem



### Participants / recipients

17 civil engineering students – water treatment class

### Context

Civil engineering students used DT as an approach for solving a local environmental problem. They were tasked with solving a water quality issue in a nearby rural community, where the water supply contained a higher than normal concentration of arsenic.

The students were divided into two groups, one group was tasked with finding solutions using the traditional technical approach to problem solving, while the other group was instructed to follow a DT process.

Table 1: Main themes identified through content analysis of interview responses

Questions	Stages	Emergent themes
What questions did you encounter during this stage?	1	<ul style="list-style-type: none"> <li>- Typical engineering approach group</li> <li>- Design thinking approach group</li> </ul>
	2	<ul style="list-style-type: none"> <li>- Defining the problem takes time.</li> <li>- Tendency to go directly to a solution.</li> <li>- Many difficult concepts to learn.</li> <li>- Hard to associate them to solutions.</li> <li>- Rather quick stage.</li> <li>- Find the solution to fit the concepts.</li> </ul>
	3	<ul style="list-style-type: none"> <li>- Requires adaptability and open mind</li> <li>- Importance of empathising with user</li> <li>- Solutions will be better since they will come from expressed user needs.</li> <li>- Multiple solutions are generated.</li> <li>- Solutions can be non-technical.</li> <li>- Inspiration plays a big role.</li> </ul>
	4	<ul style="list-style-type: none"> <li>- It is important to validate solution ideas with users (simple vocabulary).</li> <li>- Validation process can take time.</li> </ul>
What challenges do you encounter at this stage?	1	<ul style="list-style-type: none"> <li>- Lots of information to process.</li> <li>- Many terms and concepts to learn.</li> <li>- Understanding the many technical concepts involved takes time.</li> <li>- Finding written documentation to support concepts integration.</li> <li>- Environmental problems can require solutions not usually seen.</li> </ul>
	2	<ul style="list-style-type: none"> <li>- Consulting the user takes time.</li> <li>- Lots of logistic considerations.</li> <li>- Managing the information (concepts and consultations) takes time.</li> <li>- Being open to original solution ideas</li> <li>- Respecting user input (needs).</li> </ul>
	3	<ul style="list-style-type: none"> <li>- It takes time to produce various prototypes and solution models.</li> <li>- Inspiration for solutions comes from user needs and concerns.</li> <li>- Easier to define the problem after consulting users.</li> <li>- Leads to a diversity of solutions.</li> <li>- Leads to better solutions, which were</li> </ul>
	4	<ul style="list-style-type: none"> <li>- Analysing technical needs helps to better define the problem.</li> <li>- The problem becomes clearer with more research on concepts.</li> <li>- Offers opportunity to use AutoCAD and other technical tools.</li> </ul>
What are the key aspects or points of age, in your view?	1	
	2	

### DT exercises used:

1. **Inspiration:** The group was tasked with applying the DT process by conducting ethnographic surveys to build empathy for the people affected by the issue, as well as for the problem they were experiencing. Users were observed daily in order to understand their aspirations and needs.

2. **Define:** The problem was then defined and redefined through an iterative process in order to learn about different perspectives and information surrounding the issue. The findings were then briefly summarised into a succinct problem statement so everyone could work towards the same goal.

3. **Ideation:** many ideas were proposed, some of which were kept and others discarded.

4. **Prototype:** prototypes were created quickly to help assess which ideas worked best.

## Using DT to solve a local environmental problem



### Comments

The DT group reported finding it easier to define the problem by speaking to the people they were designing solutions for. This helped them to better understand the needs and concerns of those affected by the problem.

Most interestingly, the students from this group stated that DT led them to generate more ideas and, ultimately, to produce more diverse possible solutions which were more feasible and based on real needs.



[Discover more](#)

### Summary

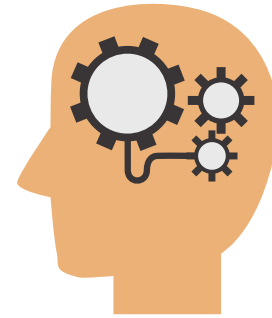
This case study explores how DT can foster innovative and sustainable solutions to environmental challenges, specifically in water treatment. The workshops focused on solving a real-world issue: a rural community's water supply contaminated with arsenic. By dividing students into two groups - one using a traditional technical approach and the other applying DT - the study aimed to compare the effectiveness of each method. DT proved to be a relevant approach because it emphasised empathy, iterative problem definition, and user-driven solutions, addressing the complexity of environmental engineering challenges in a more holistic manner. The process included ethnographic surveys to understand community needs, iterative problem reframing, brainstorming, rapid prototyping, and testing. The study concluded that students applying DT methods displayed greater creativity and a deeper appreciation for user needs, thus demonstrating how this approach can complement traditional engineering education.

### Project results

The study concluded that the DT group showed greater creativity, and developed an appreciation for the users' needs, which is something that isn't currently taught in traditional engineering training.

The study found that using DT more often to solve civil engineering problems, especially environmental ones, can lead to more innovative solutions that are typically difficult to address because of their complexity and scope.

## Design Thinking implemented in an NGO to support social work



### Participants / recipients

Technology professionals, programme professionals with different skills, responsibilities and specialisations, managers, young graduates

### Context

This practice is particularly relevant for VET teachers working in the social field, as it aims to support social workers and educators in their daily mission of supporting families. Using the innovative DT approach, they learn how to improve their practice.

Objective: As part of its digitalisation strategy, the organisation's IT department was looking for ways to harness the power of technology to achieve greater impact. SOS Villages d'Enfants International is a non-governmental organization operating in 136 countries, dedicated to improving the lives of children and families at risk.

The organisation focuses on building family environments for children in need, helping them shape their futures, and contributing to community development.

DT solution: to enhance their impact, SOS Villages sought to digitise their processes, exploring innovative ways to streamline operations and better serve their beneficiaries.



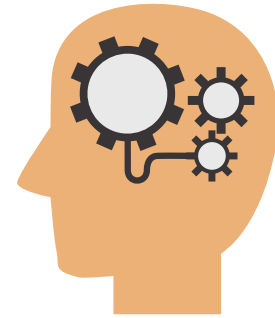
### DT exercises used:

A 2-day workshop was held with international participants. Concept used: DDD (Dream, Design, Deliver) from Microsoft.

### DT Workshop Progress

**1. Inspiration:** During the workshop, SOS Village considered new concepts by evaluating their feasibility, potential impact and costs, and created high-level roadmaps for their implementation. At the end of the workshop, the selected ideas were presented to senior management, laying the groundwork for decision-making regarding the project's technical design and implementation.

## Design Thinking implemented in an NGO to support social work



### DT exercises used:

**2. Empathy:** To ensure success during the empathy phase, the workshop organisers invited not only technology professionals, but also programme staff with different skills, responsibilities and specialisations, as well as representatives from top level management and young graduates from SOS Children's Villages.

The aim was to tackle the issues from perspectives, and of course to have representatives of the end-users in the room. Through discussions and interviews with participants, including end-users, the team focused on the challenges they could address, and envisaged four personas designed to give care workers (SOS mothers and educators) and social workers the confidence, skills, mentoring and vision they need.

**3. Define:** With the personas clearly established, the next step was to **define the core challenges**. For instance, using the persona of *Purnima*, an SOS mother, the team worked through:

User: represented through empathy maps and persona profiles.

Need: the user's primary needs.

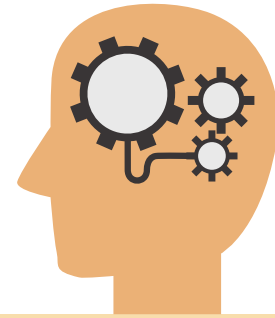
Insight: the synthesis of findings to open up design avenues.

**4. Ideate:** Based on the well-defined problem, discussion groups were formed to **generate as many ideas as possible**. Over two days, more than 100 ideas were generated in response to the four issues identified. In response to the problems encountered by the persona, their chosen solution was called "Auntie Annie" – a voice-controlled assistant designed to provide multiple services to SOS mothers. This device can be controlled through simple vocal interaction, enabling SOS mothers to interact easily with the device.

**5. Prototype:** Given that prototyping in DT must be simple, quick and inexpensive, SOS Children's Villages opted to use storyboarding in order to prototype the chosen solution within the workshop. **Storyboarding consists of dividing an idea into smaller, more detailed pieces**, which help describe the end user and the context in which they might use the solution.

**6. Testing:** Once the prototype had been produced and accepted by the users and workshop participants, the team produced another **clickable prototype to test the concept in a practical setting** with more end-users and in real-life conditions, to be able to then refine the solution.

## Design Thinking implemented in an NGO to support social work



### Comments

During the workshop, the DT approach was used with a large group of international participants, so as to ensure a user-oriented approach and out-of-the-box creative thinking.

The workshop was also great fun and kept everyone's energy levels up for two long days. By involving stakeholders throughout the process, the organisation fostered a sense of ownership and acceptance of the new digital tools. However, attention to training and support for users adapting to the new digital processes would be essential to maximise benefits following its implementation.



[Discover more](#)

### Summary

The DT process at SOS Villages d'Enfants International focused on enhancing their digital transformation to improve service delivery for children and families. The workshops centered on understanding the daily challenges faced by social workers, caregivers, and beneficiaries, ensuring that digital solutions addressed real needs. Through user research, participants engaged in empathy exercises, mapping pain points, and defining precise problem statements.

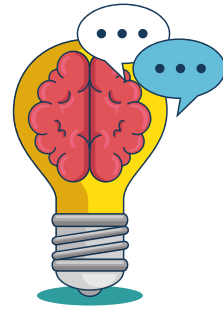
DT provided a relevant approach because it ensured that technology adoption was driven by user needs rather than imposed top-down solutions. The ideation phase encouraged diverse perspectives through brainstorming and collaborative sketching sessions, leading to creative yet practical solutions. Prototyping and iterative testing allowed teams to refine the digital tools, ensuring they were user-friendly and effective. Notably, tools such as user journey mapping and rapid prototyping were instrumental in visualising challenges and co-creating solutions. This project example highlights how DT fosters innovation by placing end-users at the center of problem-solving, making it a valuable framework for VET educators to teach adaptable, user-driven approaches to digitalisation and process improvement.

### Project results

Through the DT process, SOS Villages d'Enfants International successfully developed innovative digital solutions that streamlined their operations and enhanced service delivery. The digitisation efforts led to more efficient processes, improved communication among stakeholders, and better support for children and families. They developed some truly new and innovative approaches to empowering workers in the field, and also convinced management to allocate a strategic budget for the development of prototypes.



## Good Design Thinkers make great managers



### Participants / recipients

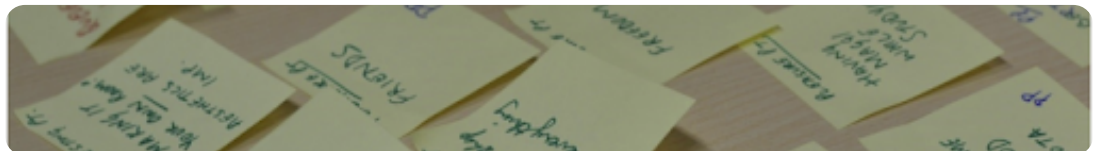
240 MICA MBA  
students



### Context

Recognising the importance of innovation capabilities for MBA students, TinkerLabs conducted an intensive DT workshop for 240 MICA MBA students. The programme offered a hands-on immersion into the process to help students grasp the nuances and relevance of DT in both professional and personal contexts.

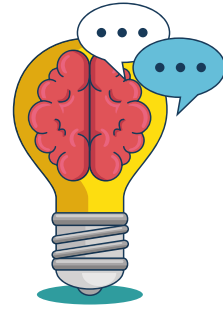
Problem addressed: Each team was assigned a challenge modelled around the UN Sustainable Development Goals. These included questions such as how to relax effectively in a physical and mental sense amid constant activity and social media; how to take charge of a situation involving discrimination; and how to be the environmental champion you aspire to be.



### DT exercises used:

1. **Empathise:** students interviewed their peers and reflected on their own past experiences.
2. **Define:** once they had gathered insights about common challenges, the students were taken through some creativity exercises where they mapped out a range of possible ideas in response to each.
3. **Ideate:** each team came up with 70–80 ideas to choose from.
4. **Prototype:** the chosen ideas were developed into live service prototypes to be implemented and tested on campus. Students took full ownership of their projects, proactively seeking out resources, people, and contacts to bring their solutions to life.
5. **Test:** the teams presented their prototypes, collected user feedback, and iterated on their designs. This provided a complete, hands-on experience of the DT process from start to finish.

## Good Design Thinkers make great managers



### Comments

The workshop aimed to cultivate future managers with a strong command of DT tools, capable of solving complex business challenges with innovative solutions. As the challenges were not classroom-based, students gained practical experience that they could apply beyond the academic setting. It was heart-warming to see students explore ways to manage both professional and personal aspirations using a DT approach.



[Discover more](#)

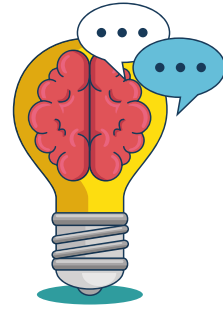
### Summary

The MICA program harnessed DT to prepare future managers to address complex business and social challenges aligned with the UN Sustainable Development Goals (SDGs). The workshops emphasised real-world problem-solving, with students engaging in hands-on activities to explore human-centered solutions.

DT proved to be a relevant approach because it helped students move beyond traditional analytical frameworks, encouraging empathy, creativity, and iterative experimentation to solve pressing global issues. The process involved immersive research with stakeholders, problem definition exercises, brainstorming sessions, rapid prototyping, and real-world testing to refine solutions.

Key tools such as stakeholder mapping, journey mapping, and co-creation workshops allowed students to gain a deep understanding of user needs and generate practical solutions. By integrating DT into management education, this initiative demonstrated how future leaders can be equipped with adaptable problem-solving skills, making it a valuable model for VET educators aiming to teach innovative and user-driven approaches to real-world challenges.

## Good Design Thinkers make great managers



### Project results

The teams came up with sets of solutions to the DT challenges. In answer to the question: how to relax effectively in a physical and mental sense amid constant activity and social media, one team had a very interesting approach. During their empathy research they found that immediately after a lecture or activity, many of their peers would reach for their phones and scroll through social media, even if they had already done so just 30 minutes earlier. In response, they devised a creative solution inspired by the mechanics of *Pokémon Go*. They proposed an app that would allow users to seek out fellow students on campus based on shared interests or hobbies. Instead of catching Pokémon, users would find and connect with their “hobby-sake”. The idea stood out for its originality, as it was rooted in real students’ lives and behaviours.

The students came up with another creative solution in answer to the question: how to be the environmental champion you aspire to be. They designed a concept for a mobile dating app inspired by *Tinder*, where users could view the carbon and plastic footprint of potential matches. The idea was that users would swipe right or left based on this data. To bring their concept to life, the team even performed a humorous skit, which was met with enthusiasm by their peers. Although the idea was intentionally provocative and far-fetched, it captured the spirit of DT by encouraging students to push boundaries and explore unconventional solutions.

## Learning User Experience (UX) with Design Thinking



### Participants / recipients

Students from the UX Master's course

### Context

This exercise offered students the opportunity to practice and learn UX in a non-textbook manner, by applying DT to solve a specific problem: home storage.

One student presented his work with a DT approach, in collaboration with 5 other students. The aim of this exercise was to focus on the end users' needs and develop a tailored solution by using the DT process.

### DT exercises used:

1. **Empathise:** the student prepared a set of questions related to home storage and conducted one-on-one interviews with each of the group members.
2. **Define:** he compiled a list of storage problems identified during the interviews.
3. **Ideate:** the student used the "Crazy 8" technique, which is a popular design sprint exercise to come up with 8 solutions for a problem within 8 minutes. Through this method, he produced 47 potential solutions. From these, he shortlisted the top three ideas, explaining his reasoning.
4. **Prototype:** from the final 3 ideas, the student chose the most promising concept to prototype: foldable & movable stairs. This solution addressed a key issue shared by all users - the difficulty of reaching upper shelves in storage spaces.
5. **Testing:** the student asked the group for user feedback on the prototype.
6. **Iteration:** After reviewing the feedback, the student made adjustments to his prototype.

## Learning User Experience (UX) with Design Thinking



### Comments

#### Comments on the empathy phase

The student conducted interviews on a video call. He tried different methods to test his note-taking ability. He interviewed one user recording the video and another user without recording the video. The student carried out continuous self-assessment to ensure focus on the user during the interviews.

#### Comments on the design phase

The student emphasised the need to focus on different things here:

- Not getting into the solution, but rather just focusing on problems
- Finding out the *why* behind every problem faced by the user

#### Comments on iteration

It is not necessary to act on every piece of feedback. It's important to distinguish between what's essential and what's not, because you won't be able to meet every user's needs. The student focused on the feedback that addressed the most critical issues.

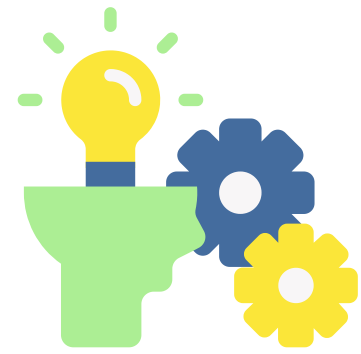
### Summary

In the case study "A UX Case Study Using the DT Process" by Jeganathan C, the author explores the application of DT to improve the user experience (UX) of a digital product. The project was launched to address specific user challenges identified through research, with the aim of developing a more intuitive and user-friendly interface.

This approach illustrates how the DT approach can be taught in a practical, hands-on manner.. Students can learn by solving a specific problem using the DT process.

Through this iterative process, students learn to empathise with users, define problems, brainstorm creative solutions, build prototypes, and gather feedback to refine their designs, ultimately developing user-centered solutions.

# Learning User Experience (UX) with Design Thinking



## Project results

After completing the DT process, the student identified several important insights:

- I am not the user – this became the biggest lesson learned from the entire project. Initially, the student assumed that cleaning was the only problem with home storage, but by the end of the project, his whole perception had changed.
- Let go of perfectionism.
- Find the why behind every problem, because that's where a great product is born.
- Always remain open to new ideas.

At the end he was able to create a prototype that responded to user needs. This case study illustrates the power of DT in developing effective, user-centered solutions. For VET teachers, it serves as a strong example of how structured creativity can enhance both teaching strategies and student engagement.



[Discover more](#)

**Parul Patnaik**

Age : 25  
Occupation : Architect  
Nativity : Gurgaon

- She doesn't have any specific storage rooms - integrated with other rooms.
- Storage places: Cupboard, Under the bed, Kitchen overhead cabinets, Winter clothes - stored in top shelves, Two rooms - Have top shelves. Big coteries, Not used coteries are stored in above shelves.
- Common things she stores: gifts, cutlery, maybe using in future kind of things. Storing inside the bed - Clean type of beds.
- Rice bags etc., have space in kitchen. Stored below the shelves using the containers. Nothing will be visible outside.
- Closed door system.
- No category of storage area But they store some things based on the usage. E.g. Winter clothes are stored in specific place. Because it will be used every year.
- She mostly don't remember things she stored in storage area.
- They Arrange everything in the storage area. Because there storage space is small and compact. So she has to arrange everything to store everything.
- She never cleaned the storage area. Because that storage areas are closed. So there is no need to clean that area.
- She didn't used any DIT things because of her compact space.
- They spent money to buy the cupboards to store the things.
- Many times she bought something and kept that aside in SA.
- Lighting: No separate lights inside the cupboard. But she can manage.

Things she expecting from the storage space:

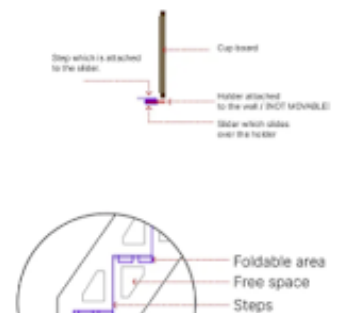
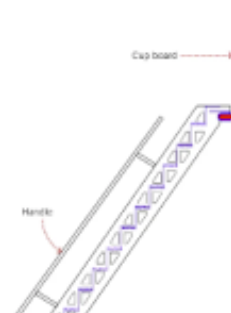
- Need more space.
- Should more accessible. Should be in such good height.
- Specific room.
- Hierarchy need: Big boxes, small boxes.

Dream storage area:

- Specific room.
- No need to climb ladder.
- Or stable step kind of system - Easy to climb.

Oops

- Need ladders to get anything from shelf. Its unsafe bcz parents are old.
- Also need another man if there is to get some bigger thing from the shelves.
- Spiders - Inside the bed storage may be problems. Cupboards are closed so there is no problem there.
- Difficult in cleaning - Have to remove everything to clean.
- To get anything deep inside the cupboard the available light is not enough to see clearly. When she stands in the ladder she blocks the light.





## NGO uses Design Thinking to upskill volunteers



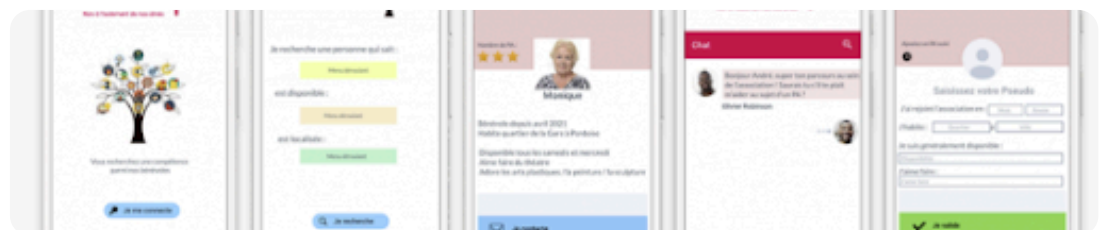
### Participants / recipients

NGO workers, volunteers, people interested in volunteering, volunteer coordinators.

### Context

Problem addressed: the NGO recognised that managing volunteers was a crucial part of effectively running an association. In response, they proposed to strengthen volunteer skills within the organisation's structure.

DT solution: the process was used to address the issues concerning volunteer integration in the organisation, skills recognition, and understanding volunteer expectations. The goal was to build better relationships with volunteers.



### DT exercises used:

The following DT techniques and exercises were used:

**Empathise:** The team conducted interviews with 14 individuals, including association staff, current skills-based volunteers, potential volunteers, and volunteer managers. This comprehensive research provided in-depth insights into the experiences, expectations, and challenges faced by each stakeholder group.

**Define:** Based on the findings, the team developed personas to represent typical stakeholders. For instance, one persona was Olivier, a former firefighter seeking meaningful ways to contribute his skills post-retirement. The central problem statement was formulated as follows: How might we identify Olivier's competencies to effectively utilise them within the association?

## NGO uses Design Thinking to upskill volunteers



### DT exercises used:

**Ideate:** Brainstorming sessions generated two main ideas: creating a comprehensive skills matrix to map the capabilities of all volunteers, and developing a platform for volunteers to connect and discover each other's competencies. These ideas were combined into a single, cohesive solution.

**Prototype:** The team developed a digital application called *L'arbre de compétences* (The Skills Tree). This platform enables volunteers to list their skills, view those of others, and build connections based on shared interests or needs.

**Test:** The prototype was tested with members of the association. Feedback was overwhelmingly positive, with users praising the digital tool's potential to enhance collaboration. However, some suggested a physical version for local use, especially for those less comfortable with technology, although it was pointed out that maintaining the accuracy of a physical version could be challenging.

### Comments

The project effectively applied DT by prioritising user needs through in-depth interviews, leading to a tailored solution that addressed real challenges. The creation of personas such as Olivier helped to define the problem clearly, making the solution more relevant.

The *Skills Tree* platform was an innovative outcome, enhancing collaboration and offering a scalable model for other organisations. Testing and user feedback played a crucial role in refining the tool, highlighting the need for a non-digital alternative to accommodate all users. While the project excelled in user-centered innovation, integrating a hybrid model and a system for updating skills data could further improve its long-term impact. This case study demonstrates how DT can foster empathy, structured problem-solving, and continuous improvement, making it a valuable approach for VET educators.

## NGO uses Design Thinking to upskill volunteers



### Summary

The project addressed the challenge of optimising skills-based volunteering within the NGO by improving the identification and utilisation of volunteer competencies. The core issue was the difficulty in matching volunteers' skills with organisational needs, which hindered efficient collaboration. Using DT, the team conducted stakeholder interviews, defined user personas, ideated potential solutions, and developed a prototype – a digital platform whose name translates as The Skills Tree, which was tested and refined based on user feedback.

The outcomes included improved visibility of volunteer skills, enhanced collaboration, and the development of a scalable tool that could be adapted to similar organisations. The project's success within the DT framework lies in its strong emphasis on user empathy, iterative refinement, and practical, user-centered innovation. However, integrating a non-digital alternative for those less comfortable with technology and ensuring regularly updating skills data would enhance its effectiveness.



### Project results

The DT approach allowed for the creation of a tailored solution that met the association's specific needs. The "Skills Tree" app:

- It provided a clear overview of the volunteers' competencies, making task assignment easier.
- Communication and collaboration among volunteers improved.
- It serves as a scalable tool and can be adapted to other organizations with similar needs.

## Using the DT approach to create innovative agricultural design



### Participants / recipients

Farmers, agricultural specialists and design professionals

### Context

Problem addressed: the project entitled Les Souterraines (the underground) addresses the critical issue of agricultural land destruction due to urban expansion and commercial development.

DT solution: the initiative aims to preserve this land by creating an innovative underground market that celebrates local produce and brings consumers closer to agriculture.



### DT exercises used:

1. **Empathise:** the team conducted in-depth research to understand the crisis affecting agricultural landscapes and the disconnect that exists between consumers and producers.
2. **Define:** they identified the core challenge as finding a solution that preserves agricultural land while fostering a closer relationship between consumers and local agriculture.
3. **Ideate:** brainstorming sessions led to the concept of an underground market, utilising subterranean spaces to create a unique shopping experience that immerses consumers in the world of farming.
4. **Prototype:** a detailed model of the underground market was created using materials like rice paper and wood to convey the concept's essence and functionality.
5. **Test:** the prototype was presented to farmers, agricultural experts, and design professionals to gather feedback on feasibility and impact, leading to iterative refinements.

## Using the DT approach to create innovative agricultural design



### Comments

This case study is a good example of how TD fosters innovation by enabling a deep understanding of users' needs and constraints. The team identified key stakeholders (farmers, consumers, and urban planners) and ensured that the solution balanced economic, environmental, and social factors.

The project's strength lies in its ability to reimagine existing infrastructure for new purposes, a skill highly relevant in any profession, from sustainable construction to entrepreneurship. Nevertheless, practical considerations such as accessibility, cost, and ongoing maintenance present challenges that will require further refinement. VET teachers can use this case study to show students how DT requires both creativity and critical analysis to turn ambitious ideas into viable solutions.



[Discover more](#)

### Summary

The project effectively applied development technology by prioritizing user needs through extensive research, ensuring a solution that directly addressed the challenges of agricultural land conservation and consumer engagement. Defining the problem through stakeholder input enabled a relevant and impactful response, culminating in the innovative concept of an underground market that reimagines urban spaces for sustainable food distribution. The prototype successfully demonstrated how design can address environmental concerns while also generating economic and social benefits, offering a scalable and adaptable model. Testing and user feedback played a crucial role in refining the concept, highlighting potential challenges such as accessibility and cost, which require further exploration. While the project excelled in creative problem-solving and sustainability-focused innovation, the integration of feasibility studies and practical implementation strategies could further enhance its real-world impact. This case study demonstrates how DT fosters innovation, critical analysis, and iterative refinement, making it a valuable model to inspire solution-oriented learning.

### Project results

Through DT, the project successfully generated a creative yet practical concept that responds to the dual challenge of land preservation and reconnecting consumers with agriculture.

The underground market model presents a sustainable alternative to traditional markets by repurposing urban spaces, reducing food waste, and promoting local economies.

By following an iterative design process, the team ensured that the concept was both visionary and grounded in real-world needs. For VET teachers, this highlights the importance of guiding students to approach problem-solving with an adaptable mindset, emphasising that innovation is not just about generating new ideas, but refining these ideas through user feedback and feasibility assessments.

## Reconnecting generations through DT



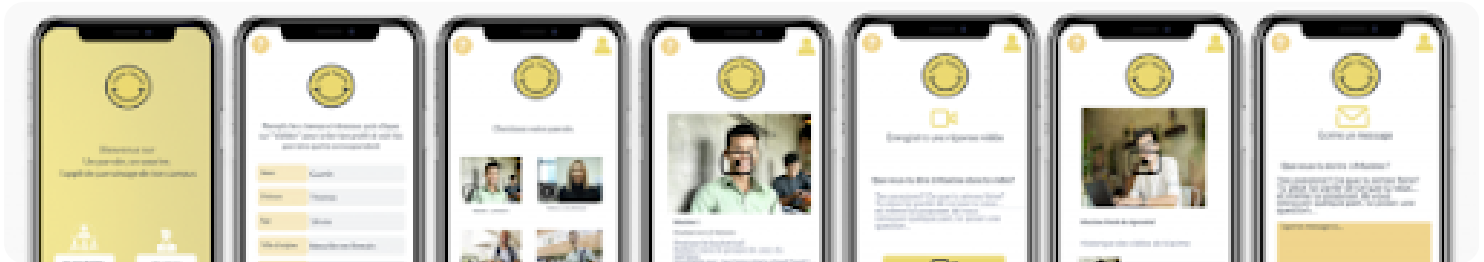
### Participants / recipients

Alumni from the academy, young people living in isolation, potential writers and senders and the organisation's liaison officers.

### Context

**Problem addressed:** The organisation realised that the health crisis has intensified social isolation in France. It is not only the elderly who are affected, newly vulnerable populations, such as students, have also emerged. In response, the NGO launched an initiative to collect kind letters through its website and distribute them to isolated elderly people.

**DT solutions:** Using the DT process, the team explored how to tackle isolation and reconnect generations. The goal was to explore innovative solutions that could bridge generational gaps and help alleviate loneliness.



### DT exercises used:

- 1. Empathise:** The team conducted interviews with 15 individuals, including young people experiencing isolation, potential letter writers, and liaison agents from the association. This research provided insights into the experiences and needs of each group.
- 2. Define:** Based on the insights gathered, the team developed personas to represent typical users. For example, Thomas, a young individual feeling isolated. The central problem statement was formulated as follows: How might we encourage Thomas to engage in a way that helps him overcome his solitude without feeling like a victim?
- 3. Ideate:** Brainstorming sessions led to the generation of numerous ideas, with the help of tools such as the What If card game and the Crazy 8 exercise, helping to foster creativity. The team aimed to generate a wide range of solutions to address the defined problem.
- 4. Prototype:** The team developed a digital application called *Un Parrain, Un Sourire* (one Sponsor, one Smile). The platform enables 15-second video exchanges between association members, creating a modern version of letter writing that incorporates visual and personal elements.
- 5. Test:** The prototype was tested with members of the association to gather feedback on its functionality and impact. Observations and user opinions were collected to identify strengths and areas for improvement.



## Reconnecting generations through DT



### Comments

The project's strength lies in its innovative approach to modernising communication between generations. By leveraging digital tools, the team created a solution that resonates with both younger and older users. However, considerations for accessibility, especially for individuals less comfortable with technology, would be essential for broader adoption. Additionally, ensuring data privacy and providing support for users unfamiliar with digital platforms could enhance the project's effectiveness.

### Summary

A Letter, a Smile (Une Lettre, Un Sourire) is a compelling example of how DT can be effectively applied to address social challenges intensified by the pandemic. For VET educators, this case study highlights the importance of empathy, creative problem-solving, and iterative development in designing innovative solutions. By integrating DT methodologies, educators can inspire students to approach challenges with a user-centered mindset, fostering skills that are essential for the dynamic problem-solving that is required today.



[Discover more](#)

### Project results

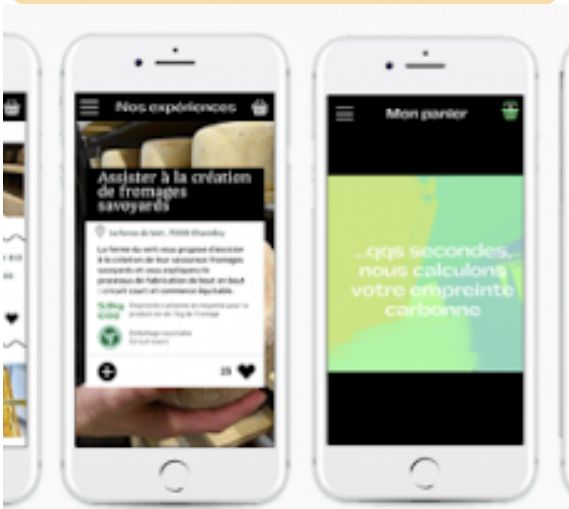
The DT process resulted in the creation of an innovative digital platform that modernizes traditional letter exchanges. The "Un Parrain, Un Sourire" app offers a dynamic and engaging way to connect isolated individuals with volunteers through short video messages, enhancing emotional connections and making interactions more personal.

## How can we use DT to develop sustainable gift ideas?



### Participants / recipients

Potential customers: retired people, young people and students (aged 16–25)



### Context

Challenge: Ethi'Kdo, is the first company to offer a multi-brand, ecological, and socially responsible gift card. The aim is to tackle the consumerist culture behind gift-giving, where people tend to give random gifts that may never end up being used. The academy invited alumni to collaborate with the company on the basis that it is becoming increasingly difficult to give a gift that is both sustainable and meaningful. There is also a growing concern that many gifts may be irrelevant or go unused. The core challenge posed by the association was how to rethink the experience of gift-giving in order to support a more responsible world?

### DT exercises used:

- 1. Empathise:** The team conducted interviews with potential users, including active professionals with varying degrees of ecological awareness, retirees, and young people aged 16–25. This research provided insights into their expectations for personalised gifting experiences, the desire to support local economies, and the importance of zero-waste options.
- 2. Define:** Based on the insights gathered, the team developed different fictitious personas, for example Arnaud, a 48-year-old wine salesman who enjoys gastronomy. The central problem statement was formulated as follows: How might we propose a new shopping experience for Arnaud to discover the circular and responsible economy with local merchants, artisans, and creators?
- 3. Ideate:** Brainstorming sessions led to the concept of organising thematic visits focused on sustainable development, circular economy, and responsible consumption, in collaboration with local merchants, artisans, and creators.
- 4. Prototype:** The team developed a mobile application called Green Trip. The app enables users to build tailored itineraries that feature experiences and accommodation options offered by partners in the sustainable economy, while also raising awareness of the carbon footprint generated by each journey.
- 5. Test:** The prototype was tested with potential users and local stakeholders who might offer their services on the application. Feedback was gathered to refine the solution.

## How can we use DT to develop sustainable gift ideas?



### Comments

The project's strength lies in its user-centered approach, addressing the need for personalised and meaningful gifting options that align with ecological values. By facilitating direct engagement with local artisans and promoting zero-waste options, the solution encourages responsible consumption. However, considerations for user adoption, scalability, and the integration of diverse local partners are essential for the project to achieve a broader impact.



[Discover more](#)

### Summary

The Ethi'Kdo serves as a compelling example of how DT can be used to tackle contemporary challenges related to overconsumption and sustainability. For VET educators, this case study underscores the value of empathy, creative problem-solving, and iterative development in designing innovative solutions that promote responsible consumption. By embedding DT methodologies into their teaching, educators can equip students with the user-centred mindset and practical skills essential for navigating today's complex and rapidly evolving challenges.

### Project results

The DT process led to the creation of an innovative mobile application that enhances the gifting experience by promoting sustainable and responsible consumption. The Green Trip app offers users the opportunity to discover and support the circular economy through curated experiences with local partners, fostering a deeper connection between consumers and sustainable practices.



Co-funded by  
the European Union



SYNTHESIS  
CENTER FOR RESEARCH AND EDUCATION

INSPIRE<sup>®</sup>  
CONSULTING