

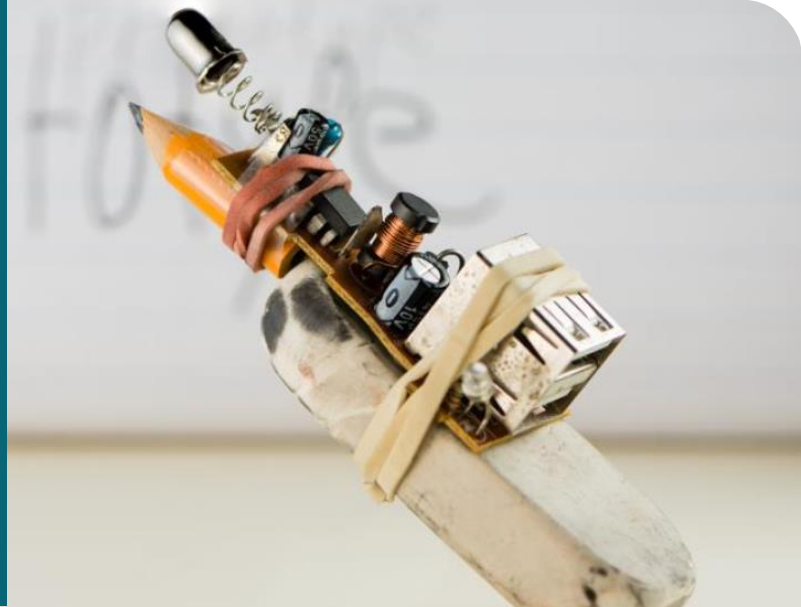
04

Prototype



This section will support practitioners in the **fourth stage** of the **Design Thinking for Social Change model: prototype.**

In the previous stages the community need have been collected (Empathize), well focused (Define) and hypothesis of social change identified (Ideate).



Now it is time to create a preliminary version of the solution that can promote the social change. **The prototype phase is an iterative phase. In this step a new idea can be born and can bring you back to the ideation phase again.** A prototype, which can be a paper model, a rendering of an innovative learning space, a storyboard, wireframe, or cardboard box, allows designers to quickly envision and pick the best answer among multiple alternatives. It is a rapid approach to convey a concept. It makes no difference how accurate the prototype is. During this phase, the designer is prepared to create an early version of the solution.

Prototyping helps the social change makers to determine whether or not the design (or revisions) work as planned before they are released into the world/community and into the hands of people. Prototyping enables the social designers to assess feasibility, improve quality, effectively present ideas to decision makers, lower risk factors, and iterate at a lower cost.



“They slow us down to speed us up. By taking the time to prototype our ideas, we avoid costly mistakes such as becoming too complex too early and sticking with a weak idea for too long.”



Activities	Tools to Use	Deliverables
1. Artificial Intelligence Social Space prototyping	<ul style="list-style-type: none"> • DALL-E 	<ul style="list-style-type: none"> • Virtual prototype
2. Sketching	<ul style="list-style-type: none"> • Pen, pencil, paper, color 	<ul style="list-style-type: none"> • Sketches and Diagrams
3. Paper construction	<ul style="list-style-type: none"> • Paper, pencil, color pencil, paper cutouts 	<ul style="list-style-type: none"> • Wireframe
4. Storyboarding	<ul style="list-style-type: none"> • Paper, pencil, pen 	<ul style="list-style-type: none"> • Storyboard
5. Role-playing	<ul style="list-style-type: none"> • Props 	<ul style="list-style-type: none"> • Roleplay
6. Physical Model construction	<ul style="list-style-type: none"> • Paper, cardboard, clay, foam 	<ul style="list-style-type: none"> • Three-dimensional model
7. Lego prototyping	<ul style="list-style-type: none"> • Lego bricks 	<ul style="list-style-type: none"> • Three-dimensional model/system



Type Of Prototypes

01 Low-fidelity prototyping

Low-fidelity prototyping is the more fundamental of the two categories. The model developed may be incomplete or just include a subset of the features that the final result would have. Low-fidelity prototypes are frequently not built of the same material/methodology as the finished result, but rather of wood, paper, or plastic. These prototypes are either inexpensive and simple to make, or they are essentially visual representations of the final result.

02 High-fidelity prototyping.

High-fidelity prototyping are significantly closer to the final result. For example, a high-fidelity prototype could be a 3D plastic model with moving parts that allow people to feel the prototype function. This would be considered high-fidelity rather than low-fidelity since it would deliver a more immersive experience to the people than a block of wood. This prototype style is more engaging but takes time and skilled social designers to produce.

01

Artificial Intelligence Social Space prototyping (*face to face/online*)

An example of prototype for social change could be an innovative learning space co-designed by a local community. Thanks to the description provided by the local community, the AI Algorithm will visualize the learning space showing a visual model of it on which further discussions can be developed. DALL-E. DALL-E is an artificial intelligence tool that allows users to visualize concepts from a text description. The program generates images of realistic and unrealistic objects, from short phrase-like natural language prompts. In the case of design thinking

for social change one of the possible use of DALL-E is the creation of new innovative learning spaces. For examples, giving a description like: "sustainable school, open space, project-based-learning, Scandinavian design" we can immediately visualize a new school space that combines different ideas collected through the previous Design for Social Change phases.

A **virtual space prototype** will be the deliverable of the artificial intelligence social space prototyping activity.

02

Sketching (*face to face*)

Sketching, the most basic kind of prototyping, requires little work and does not necessitate aesthetic drawing talents. Sketches can be used to kickstart the process of envisioning and constructing a new solution, and they can be

shared with community and stakeholders for more ideas and conversations. **Sketches and diagrams** will be the deliverable of the sketching activity.

03

Paper Construction (*face to face*)

Paper interfaces are useful for early-stage prototyping of digital products. Designer can create paper interfaces or draw and cut out functional components of a user interface, such as a drop-down menu or text field. Some

designers prefer to design their wireframes by hand, while others prefer to use software like as Invision or Balsamiq. **Wireframe** will be the deliverable of the paper construction prototyping activity.

04

Storyboarding (*face to face, online, blended*)

Storytelling is one of the powerful tools of design thinking. Storyboarding is a fantastic method for conveying stories and directing targeted stakeholders and community members. Storyboards are a strategy for early prototyping that allows you to envisage how people will experience an issue or social change and convey

it in a series of drawings or sketches. Stories assist us in gathering knowledge about people, objectives, and goals while invoking new ideas through cooperation with other designers. A **storyboard** will be the deliverable of the storyboarding prototyping activity.



05 Role-playing (face to face)

Role-playing, or experiential prototyping, allows designers to examine situations within the system they are targeting physically. Role-playing best captures and acts out a people's experience with a social issue or social change. Consider mimicking their experience to get an empathic

knowledge of community members. Designers can employ props, objects, and audio simulations to simulate a real environment. A **roleplay** will be the deliverable of the role-playing prototyping activity.

06 Physical Model Construction (face to face)

To create a prototype for testing a social solution, you can utilize a wide range of materials. Physical models are frequently created with paper, wood, cardboard, clay, foam, or by repurposing existing things. A physical model transforms an intangible notion into a physical, three-dimensional form. This

allows for considerably better testing and can spark debate about the proposed social change solutions or issues. A **three-dimensional model** will be the deliverable of the physical model construction prototyping activity.

07 Lego Prototyping (face to face)

Lego can be an excellent tool for making ideas a reality. Lego bricks are extremely exact and consistent plastic things. The use of Lego bricks enables the designer to swiftly produce a physical result from an idea. The entire procedure is quick. Many design utilize Lego to

quickly create a 3D scientific or system prototype. In comparison to other types of 3D prototyping approaches, Lego prototyping helps generate a tangible vision and is also easy to alter. A **three-dimensional model** will be the deliverable of the Lego prototyping activity.