



waag society

institute for art, science and technology



make the future workshop toolkit

georgia • egypt • armenia

Contents

1. Introduction	3
2. Preparations	4
3. Make the Future – workshop formats	8
4. Using the Smart Citizen Kit in Egypt	16
5. Results	17
6. Recommendations	23

*All workshop files are available at:
<http://waag.org/undp-toolkit>*



waag society

© 2014, Amsterdam

Edited and designed by Waag Society
Published under a Creative Commons license
Attribution-ShareAlike 4.0 Unported

Waag Society, institute for art, science & technology, develops creative technology for social innovation. The foundation researches, develops concepts, pilots and prototypes and acts as an intermediate between the arts, science and the media. Waag Society cooperates with cultural, public and private parties.

<http://waag.org>



UNDP - Make the Future

United Nations Development Programme (UNDP) is targeting new ways and platforms of engaging citizens and asked Waag Society to contribute. 'Make the Future' is a program to explore methodologies in citizens' engagement. In addition to the Millennium Development Goals citizens all over the world were consulted to envision their future. The idea behind the program is to engage citizens in creating sustainable solutions for social challenges. In 'Make the Future' citizens were given the opportunity to make the future they want.
<http://waag.org/makethefuture>

1. Introduction

The background of Make the Future

UNDP has conducted large-scale consultations (online, meet-ups, questionnaires) with citizens worldwide. The focus of this consultation was to identify ambitions, dreams and expectations that citizens have for the society they live in. The consultations were described in nation specific reports.

These reports are the common ground to start the program 'Make the Future'. The focus of this program is to make and create sustainable solutions for societal challenges, as they were identified in the 'Post 2015 consultations'¹ and 'Spot the Future'². The methodology of making and prototyping is new for UNDP. Based on the outcomes of the program, UNDP could decide to incorporate such methodologies in their scope of activities. This implies that Waag Society is able to transfer the methodologies and tools to the local UNDP teams.

Waag Society was involved for her expertise on creative processes and co-creational design, but mainly on her expertise on applied technology. These technologies stimulate the innovative talents of local groups and citizens. Therefore the sessions, methodology and tools strongly focus on prototyping with technology.

The focus of Make the Future

The main focus for Make the Future is 'design literacy'. Local citizens develop their own 'design thinking' capability, and indeed a level of design literacy, as they learn to transfer emotion and reflection into a structured design process. This new skill enables them to be a valued and active partner with other 'experts' in the design team. When citizens discover their creative capabilities, they are able to create impact and make a difference. Participants in the workshops discovered their personal talents and new ways of collaborating with other people in the community or neighborhood.

During the workshops participants worked on thematic areas, which were based on the outcomes of the 'Post 2015 consultations'. These consultations were formulated as high-level themes, like 'better healthcare' and better 'job opportunities'. To be able to work on sustainable solutions, the thematic areas were translated into cases or topics.

Organizing a public event closed the workshops. The goal of this event was to involve stakeholders in the topics. This could be local or national government, NGOs or entrepreneurs. During the event all teams presented their solutions to the relevant stakeholders and pursued to obtain a sustainable

relation with them. The participants engaged with stakeholders relevant to their topic. For example, an online promotion tool to introduce jobs to teenagers was presented to a representative of the Ministry of Education. The event provides an excellent opportunity for the stakeholders to gain insight in grass roots solutions they can take up.

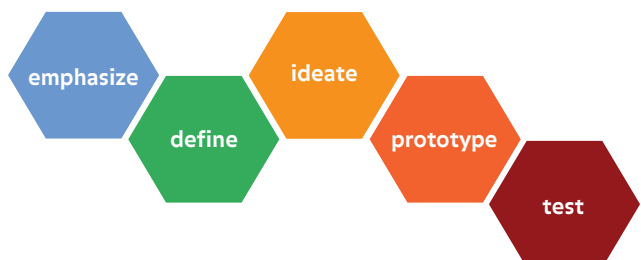
Use of this toolkit

This toolkit contains guidelines, context and background information to implement the process of design thinking further within the UNDP. The format for each day of the workshop is described in guidelines. Also an 'Instructable' and technical drawings for the workshop materials are provided. The section 'Results' shows an overview of all the topics that the teams have been working on, with a description of each team solution. The UNDP-teams in Georgia, Egypt and Armenia are trained to host and implement this process further.

This toolkit can be distributed freely. You can use the complete framework or decide to take some parts of it, all depending on your ambition and goals. For more questions or guidance, please contact Waag Society.

It was a privilege to work with Khatuna, Maria, Gazbee, George and Marina on this program. And of course all the participants in Tbilisi, Cairo and Yerevan. Many thanks!

Waag Society,
Douwe-Sjoerd Boschman
Laurens Schuurkamp
Janine Huizenga
Paulien Melis



1. <http://www.worldwewant2015.org>

2. <http://edgeryders.eu/spot-the-future-about>

2. Preparations

Before executing the workshops some preparations need to be addressed. These enable the organiser to smoothly run the sessions and to ensure an informal, pleasant atmosphere for all participants during the sessions.



Time frame

You need a minimum of two days to be able to create tangible prototypes. The first day is focused on getting to know each other and explore ideas (ideation). The second day is setup to build prototypes. In some cases you can plan an additional day for the prototyping process. The availability of an extra day can boost the output of the teams. Of course, the decision to have two or three workshop days will depend on the availability of the participants and workshop leaders.

After the workshops sessions, meet-up with stakeholders needs to be planned. The meet-up is organized to involve stakeholders and to challenge them to take ownership of the prototype solutions, together with the participants. Ideally the meet-up is organized after the workshops, i.e. the next day. The most essential aspects of the timing of the meet-up is that the key stakeholders

can be present and that there isn't too much time between the workshops and meet-up. The meet-up itself should be a two-hour network event.

Thematic areas

The workshops need to be focused around a set of thematic areas. These areas set the framework for the participants in which they formulate their design challenges. Based on trend reports, consultations or social movements you can identify three to four thematic areas. Describe these areas in an overview. Furthermore specify each thematic area with an inspiring or exemplary case. Both the description of the thematic areas and the case will be presented during the first day of the workshops.

Keep in mind that the thematic areas support the participants in their ideation process. This helps them to formulate their design challenges. For you, as organizer, identifying thematic areas will help you identify the stakeholders that need to be present during the meet-up. If you want to generate impact, the first step is to have the 'right' stakeholders on board.

Participants

The workshops are aimed at young professionals. The reasoning to choose this target group is that young professionals are the future decision makers in a country who already have a skill set, which is useful during the workshops.

Young professionals:

- Have a great willingness to participate
- Are open minded
- Are the next generation politicians
- Can form a strong community
- Have a limited employability among youth (therefore drives migration among well educated young people)

Approximately 25 participants can join the workshops. The invitation should be aimed at appr. 30 people, as there is always the risk of no-show. It's essential to reach people with different backgrounds, i.e. in arts, science or economics. The diversity between the participants will support the quality of the prototypes.

Identify which communication channels are best used to target this population: use Facebook, LinkedIn or other social networks. Adapt your tone of voice to the setting young professionals are used to.

An example of an invitation letter:

Make your future!

Do you have a great idea or solution for a local problem? Are you willing to be in charge of creating a change? This is your chance to participate.

UNDP, in cooperation with [NAME], is inviting you to join in a two-day workshop. In this workshop you will be challenged with other students, young entrepreneurs to create solutions. Solutions to social challenges like illegal waste dump or youth employment. Together with a team you will create ideas and concepts for these problems. And you will build a prototype of your concept. [NAME] will support you during this design process, with hands on formats and tools.

The workshop will be hosted at ...

Details:

date ...

time ...

address ...

The workshops will be closed with a public event (with drinks & food). Each team has the opportunity to share their experiences and present their prototypes to local politicians, entrepreneurs and decision makers.

Join us, and start making your future!

No prior knowledge is required.

Hope to see you @ ...

Ask participants to register to the workshop. Make sure you have some background information on them, i.e. age, education, profession (optional). If possible try to get insight on their motivation to participate as well. The list of participants should be distributed to the workshop leaders to adjust the workshops to the level of the participants.

Materials required

The materials can be divided into tools, that the participants can work with, and



materials like paper, batteries, wood etc. The exact numbers of motors, batteries and lights are described at Instructables.com (<http://www.instructables.com/howto/bristle+bot/>) and are dependent on the number of participants.

Based on the setup of the workshops and formats, as described in this toolkit, the following tools are needed:

- Plywood 4mm
- Scissors
- Soldering irons
- Cutters (or utility knife with replaceable blades)
- Rulers
- Stapler

The used materials are:

- Vibration motors
- Small batteries (cell button)
- Small LED lights
- Paper (card board, A3 size, 200 grams)
- Colored paper (card board, A3 and A4 size, 120 grams)
- Plain white paper or flip chart
- Glue
- Tape
- Permanent markers (in multiple colors)

- Ballpoint pens
- Textiles (yarns, fabrics, buttons)

Setting

Ideally the design thinking workshops take place in a creative space. A space that supports the creative processes and inspires people to start working hands on. The room should be spacious enough to host 30 - 35 people (in total) and have an informal atmosphere. Furniture should be flexibly positioned, with enough tables to work on.

A creative space could be a Fab Lab (Fabrication Laboratory), which has machinery to support prototyping like a vinyl cutter, laser cutter and milling machine. These machines are not necessary but can complement the prototyping process. A 3D printer isn't needed, since the printing consumes too much of the workshop time.

It would be an advantage if the venue also has a (small) restaurant or kitchen to share dinner together. Furthermore all catering like drinks, lunch and dinner should be arranged. Lunch is a great

moment for the participants to share their ideas further and have more informal conversations with each other.

The meet-up (or public event) can be hosted in the same venue as the workshops. Depending on the number of stakeholders a larger room could be reserved.

Pre-workshop A day-in-the-life of...

To get to know your workshop participants in advance and the community you are giving the workshop in, let the participants fill in a 'Day-in-the-life-of...' worksheet.

The worksheet 'Day-in-the-life-of...' can be found on the next page of this document.

A day in the life of...

06:00	15:00
07:00	16:00
08:00	17:00
09:00	18:00
10:00	19:00
11:00	20:00
12:00	21:00
13:00	22:00
14:00	23:00

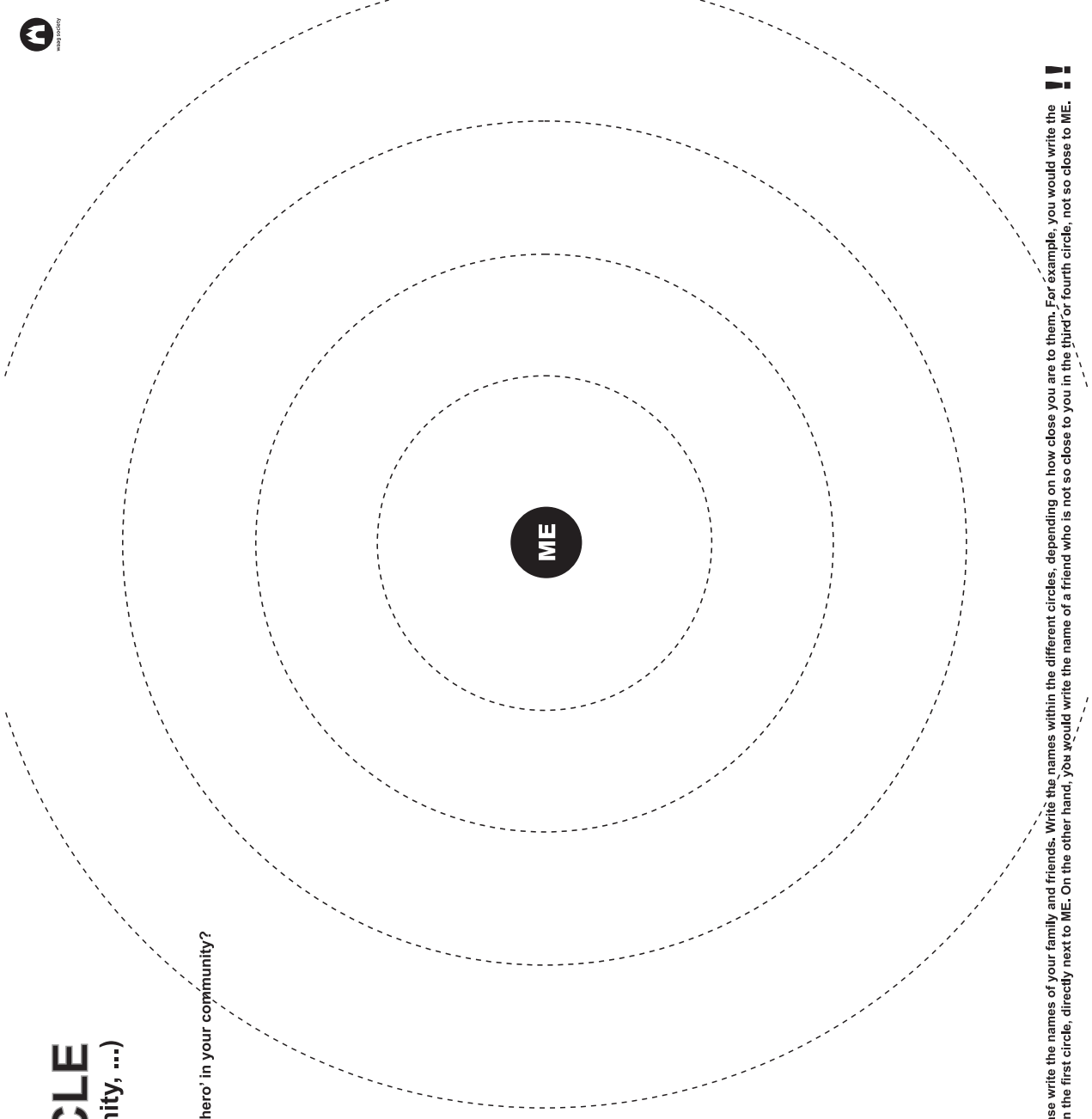
MY SOCIAL CIRCLE

(family, friends, school, community, ...)

Please answer the following questions:

1) Do you know somebody special or do you have a 'hero' in your community?
Why is he/she so special or a 'hero'?

2) Are you active in your community?
Which activities do you engage in?



!! In the map above, entitled MY SOCIAL CIRCLE, please write the names of your family and friends. Write the names within the different circles, depending on how close you are to them. For example, you would write the name of a family member who is very close to you in the first circle, directly next to ME. On the other hand, you would write the name of a friend who is not so close to you in the third or fourth circle, not so close to ME. !!

3. Make the Future – workshop formats

Example Make the Future outline

Day 1 – Design workshop

Participants design the intervention to specific societal challenges within certain thematic areas.

10.00 - 13.00	Opening & introductions, ice breaker, topics & challenges, design thinking & co-creation, inspiration.
13.00 - 13.30	Lunch break
13.30 - 17.00	Divide into groups, value ladder, brainstorm techniques, story concept puzzles, teams present their first project ideas

Day 2 – Make-it-yourself workshop

The participants of the design workshop build a prototype of their intervention.

10.00 - 13.00	Recap, refine concepts, draw persona, draw user scenarios, make prototype plan
13.00 - 13.30	Lunch break
13.30 - 17.00	Prototyping, prepare presentations

Day 3 – Training of Trainers & Public event

Teaching design principles: aimed to train development practitioners and engagement officers. Take the trainers through the same process as the design & prototyping workshop participants in order to give them the same learning experience. In addition point out why the process is organised in this way, in order to transfer the knowledge and values.

10.00 - 13.00	Training of trainers: ice breaker, design thinking & co-creation, value ladder, story concept puzzles
13.00 - 13.30	Lunch break
13.30 - 15.00	Draw user scenarios, rapid prototyping, presentations

Public event (afternoon/evening)

The Make the Future workshops are closed by a public event (with drinks & food). Each team of participants has the opportunity to share their experiences and present their prototypes to local politicians, entrepreneurs and decision makers.

16.00 - 17.30	Public event, presentations, discussion, drinks & snacks
---------------	--

Things to keep in mind...

- *Be flexible*
Be flexible with the time you take for every workshop component. Adapt it to the workflow of the participants and the energy in the group. You want to get the group into a creative process and keep them in a flow. Therefore it works best to have drinks and small snacks available on a table during the workshop, so participants can take tea/coffee/water/juice/cookies whenever they feel like it. And take short 5 minutes breaks whenever you notice it is necessary.
- *Have lunch*
Have a lunch break at a fixed time, this is essential for energy levels and works as a deadline to round things up and start with new creative processes afterwards.

Design workshop: Creative solutions to societal challenges

Opening & Introductions

15/30 min.

- Before formally starting a presentation, while waiting for participants to arrive, try to make contact with those participants that already have arrived. Ask some questions, where they traveled from, what they do or like to do. Tell a bit about your own journey to arrive here. Small talk.
- Introduce the participants to the general activities of the workshop and the motivation for doing this workshop. You can provide a rough time frame.
- Introduce yourself. Who is leading this workshop? What is your professional background, what do you love most about it and why is it you that leads this workshop?
- All participants introduce themselves to each other and to the workshop leaders. A quick round: say your name, study/professional background and what you hope to get out of this workshop.
- Try to encourage the participants to be specific about what they do, so it is clear to you as a workshop leader and to everyone. It matters to all of us what a person spends most of their time on. You try to set the tone that there is space for everyone in the group to be who they are. We are all equal, all citizens.



Ice breaker

You want to let people experience that this is going to be a different kind of workshop than they are used to attend. Not sitting down and listening, but literally hands-on, we're going to make things!

Super animals (15 min.)

To 'break the ice', get the creative side of our brain warmed up and get to know each other in a playful way: everyone draws her/himself as an animal with super powers. This can be a non-existing fantasy animal or combination of several animals.

Hand out small blank cards (size of a postcard) and colorful markers or pencils.

Encourage the participants to let go of all rationality and come up with weird animals and super powers. It doesn't have to make any sense; everyone can 'go wild' with their imagination. Participants write their first name and the special abilities of the animal in words next to their animal. Everyone presents the animal they drew, and the workshop leaders present theirs as well.

This exercise will not only get the participants into a free thinking, creative mood, but allows them to get acquainted with each other in a playful manner. It will also present strong indicators to the workshop leaders what people dream of and aspire to.

Little robots (40/60 min.)

Participants work in groups of 3 to 5 people on a small design assignment with very easy to use electronics (LED Throwies, Bristle Bots or other small 'robots') in order to get things started and to 'break the ice'. The mastering of the simple electronics provides them with a sense of empowerment and self-confidence with regard to their own abilities.

You give each group some batteries, vibration motors and LEDs. These simple electronics they can use to build little creatures or machines, using small construction materials. For example some 'woodcanoo' pieces with bolts, nuts, screws, super glue, etc.

- Bristle bots
(<http://www.instructables.com/howto/bristle+bot/>)
- Woodcanoo
(<http://waag.org/undp-toolkit>)

Try to encourage each participant in every group to get their hands into building mode. Do not discuss what you are going to make, but start to build right away with the materials you have on your table and see what comes out of it. Let yourself be surprised by the ideas that pop up in your head. Within a group several things can be build, it doesn't have to be one big object, as long as the participants work together, within a team they can split into duos if they want.

After 30 to 50 minutes the groups present all their creations, no matter if they work technically or not. Make photos and short videos of the moving 'robots' to show the participants later on in the workshop.

Topics & challenges

15 min.

Present the thematic areas in which the participants will design solutions. Give some specific example cases for possible design challenges within the main topics. Or ask the participants to give an example in a certain area from their own life. What would they want to see changed in their life or community, tomorrow?

Design thinking & co-creation

20/30 min.

Introduce the design thinking & co-creation process that the participants are going to use to come up with creative solutions to societal challenges.

This can be best explained by taking an example of a specific problem case from the group of participants. Then together you go through the steps of the design thinking process to come up with possible solutions. Give enough space for people to ask questions, so everyone gets the chance to really grasp what the iterative process of 'empathize > define > ideate > prototype > test' is about.

The main focus for a Make the Future workshop is teaching design literacy. Local citizens can develop their own "design thinking" capability, and indeed a level of design literacy, as they learn to transfer emotion and reflection into a structured design process. This new skill enables them to be a valued and active partner with other "experts" in the design team. When citizens discover their creative capabilities, they are able to create impact and make a difference.

[Read more about Design Thinking \(PDF\)](#)

[Read more about co-creation: Users as Designers \(PDF\)](#)

Files available at <http://waag.org/undp-toolkit>

Inspiration

15/30 min.

Present 'success stories' showcasing the innovative results of past citizens' initiatives and the possibilities of having a creative space like a Fab Lab.

The inspiration part is very important, something you should not skip or think lightly about. Take some time for this. Just show a varied selection of projects, show little movies, images. No text or long talks, just a slideshow full of visuals. Show inspirational initiatives and projects that other communities and individuals around the world have done. This is proof that things can be changed if we want to, and we take a pro-active stance. We can indeed "Make the Future" and these examples contradict feelings of insignificance and powerlessness. It opens up our minds to think about new possibilities and new connections. It is very hard to think of new creative solutions if we do not feel inspired!

You can make this presentation personal. Present what is inspiring to you, it makes it easier for others to follow. An inspired person is contagious; let's use that humanness of ours. Show your inspired self while leading the workshop sessions. It works like engine oil for the whole workshop.

[Information about Fab Labs:](http://fab.cba.mit.edu/about/faq/)

<http://fab.cba.mit.edu/about/faq/>

Lunch break (30 to 40 minutes)

Divide into groups

The participants are divided in groups of 4 to 5 people, based on their interest to work on a specific topic. These can be the same groups as during a group icebreaker (which functioned as a short team building exercise already).

There can be all women groups, all men groups, mixed. You can spread people that know each other already among those who don't. Decide what makes sense to your group of participants and works empowering for everyone.

Value ladder

15/20 min.

Ask the participants to come up with 5 personal values in relation to the theme, for which they are designing. First each individual defines his/her values, then they form pairs and negotiate together 5 shared values, then they form a group of 4/5 again and negotiate the final 5 group values. They write their group values down on a big piece of paper, in order of importance. These values form a 'touch stone' for their later work.



Brainstorm techniques

Introduce the participants to a set of brainstorm techniques that they will then use in their own brainstorming session, for example the story concept puzzle pieces.

The groups start brainstorming about ideas within their theme of choice, using the techniques that were introduced to them. If necessary they go out in the street to take pictures or perform short interviews with citizens, in order to collect supporting material for their problem case.

Brainstorm: Story concept puzzles

The puzzle pieces with multi-interpretable icons work to get people into a practical mode of laying down a problem on the table and thinking in non-linear ways to solve it.

It encourages people to directly lay out on the table what they are talking about. It facilitates a clear and effective group discussion, unhindered by insecurities about drawing skills: everyone knows what they are talking about at that moment. Ideas don't stay vaguely in the air, but are put in place into the story puzzle.

The visual icons make it a tool that's language independent. Everyone in a group can participate.

Once a societal issue is explained in a story puzzle, it gives you an overview of the scope of the challenge, the parties involved and the different effects it has on the community. It enables you to consciously decide as a team on what parts of the problem you want to focus. By presenting your story to others while going through the puzzle, it gives you insight which areas of your solution need further thinking or explaining.

First use the story concept puzzle pieces to let the participants map a bad solution to a problem. 'Reverse Brainstorming' is a method that uses brainstorming to generate bad solutions to the problem, and then see how those could be transformed into good solutions. The negative thinking allows the participants to perceive solutions that they would otherwise consider unthinkable.

Bad solution (15/20 min.)

These are the five steps in the Reverse Brainstorming Process:

- Identify a design challenge and write it down.
- Reverse the issue. For example, instead of asking "How can I help?" ask, "How can I make it worse?"
- Brainstorm to figure out all possible reverse solutions. Everything is possible: reject nothing!
- Flip the reverse solutions to create real design solutions for the actual issue.
- Evaluate and decide if a real solution can be formed.

Below you can see an example of 'reverse thinking'. Initially the question was: "how can we clear the urban environment of graffiti?" Through reverse brainstorming the design solution was to use all surfaces in the city and cover the city in graffiti. By flipping this outcome around, the designer came up with the idea of 'Reverse Graffiti': temporary images on walls or other surfaces by removing dirt from a surface, either by hand or with a high power washer.



Use it as a short warming-up exercise to let the teams get familiar with the puzzling method and the icons on the puzzle pieces. The teams present their 'horrible' solutions to each other.

The real problem (20/30 min.)

- Use the story concept puzzle pieces to let the groups map the real problem or societal challenge they want to tackle. Encourage the participants to keep putting puzzle pieces on the table while they are discussing. Focus on the doing, the puzzling, instead of on the talking. They can search through the icons on the puzzle pieces to get inspired for new sides of the problem they might not have thought of and later on for new directions for possible solutions. The teams present their story puzzles to each other, explaining the problem situation and receiving feedback from the other groups. Ask questions and point out areas in the puzzle that might need further thinking and explaining.

Connect solutions (20/40 min.)

- Then use the story concept puzzle pieces to let them connect possible solutions to their problem case. Stimulate the groups to brainstorm about conservative, innovative as well as crazy 'undoable' ideas!
- Depending on the time you have for this exercise you let the teams present their solution concepts to each other. After receiving feedback on their idea they go back to the puzzle table and improve their solutions.

Story puzzle pieces at: <http://waag.org/undp-toolkit>
More ideas: <http://diytoolkit.org> by NESTA.

Concept presentations

20/30 min.

The teams present their project ideas at the end of the workshop and receive feedback from the group. Focus on the potential you see in their concept and point out the areas that need their further attention to improve it. While giving feedback to the projects, think about opportunities instead of obstacles.

The focus in the Make the Future workshop lies on the training of the design thinking skills, to empower the participants and let them connect with their creative capabilities. Whether the project results are directly implementable in society is of lesser importance. A good, complete and successful project concept needs much more development time than fits in one day. The workshops are a kick-start for the participants to open up opportunities to the future they want.

Wrap-up

- Close the day with a short wrap up. Summarize what they did today and compliment the participants on their hard work. It's normal that their brains might be exhausted a bit, we're not going to push them any further. Time for a well deserved break.
- Introduce the participants briefly to the plan for the next workshop day: Prototyping of their concepts!

Give yourself as workshop leader a break as well. Have good dinner; submerge in the local culture of the community. For the next day try to already think about how the teams might prototype their concepts effectively. What's the core and strength of every concept? What materials and resources might be necessary for the prototypes? Can you invite more specific stakeholders for the public event now you know the concepts that will be presented? Can you invite specific persons, policy makers or potential project partners to the public event that can take the concepts even further?

Make-it-yourself workshop: Prototype your ideas, become a local hero.

Introduction

Introduce the participants to the activities of the prototyping workshop and provide a rough time frame. This is going to be the real 'make' part of Make the Future. Prepare the participants for an intense few hours of prototyping!

In this workshop we go from abstract project ideas to very tangible concepts that are easy to grasp for anyone. Someone outside on the street, not involved at all in this workshop, should be able to understand and become enthusiastic about what you are trying to accomplish with your concept. At the end of the workshop you have a prototype to communicate your concept in a very physical way, easy to imagine for anyone as if your solution is already there. The process of rapid prototyping forces you to make decisions in your concept and enables you to better understand what will work and what won't. It's a shortcut in the design process to quickly get to substantial and implementable solutions.

Recap design workshop

5 min.

Do a short recap of the design workshop and compliment the teams again for the energy and effort they put in. Show



photos and videos of what the participants did in the previous workshop day. Participants like to see themselves (although most of them won't admit it) and their team's creations, for example from the icebreaker exercises.

Refine concepts

15/30 min.

If you think the concepts need a little extra creative input or craziness before they are prototyped, organize some time for the teams to refine their concepts. For example you can do a group brainstorm and feedback rounds with all workshop participants, to get new fresh ideas.

Draw: Persona

10/20 min.

For a team to make solid design decisions for their societal intervention, it's important that they have a clear picture who they are designing for. Who is their target audience? The team members need a common view on this.

A quick effective exercise is to let the teams draw their target audience in the personification of a fictive person: a persona. The goal of this exercise is to force a team to just make choices, which will help to strengthen and clarify a concept.

- Hand out small blank cards (size of a postcard) to the teams. First the participants in a group decide together what kind of person their persona is going to be. Then one of them draws the persona. It's not about pretty drawings; this visualization is just to give a body to their common understanding of their target audience.
- Things you can stimulate the groups to think about while defining their persona:
 - gender, specific age (no age range), name (fictive);

- education, profession;
- home situation, what country, region, area, city/town;
- economic/social/cultural background;
- hobbies, daily activities;
- formulate a dream your persona has for its future;
- formulate a nightmare scenario the person worries about for their future life.

It can be anything that triggers the team to make it a lively persona in their heads while designing.

- The teams show their drawings and present their personas to each other, as if it's someone they really know. Others can ask questions about this persona, for example 'What's the favorite TV show of your persona?'. When the team members 'know' their persona well enough, they can improvise an answer on the spot.

Draw: User scenarios

30/50 min.

You always design for someone. Your societal intervention will involve human beings; you want them to act in a certain way. Human beings have their own minds, can be quite stubborn, so it's your challenge to get them to change their habits. You need to design this process, to make it convincing that your project will succeed in its goals.

By drawing user scenarios you can turn your abstract concept ideas into tangible solutions, that anyone can envision as being implemented.

- Hand out sheets of paper (A4 or A3), pencils and colorful markers. If you have some time, first let every team member sketch a user scenario individually for their project; then let them merge it into one user scenario per group. Otherwise, make each group draw one user scenario together.

- Let the participants divide their paper into six squares. They start in the first square: Draw the user (your persona) in the current 'problem' situation. Like the persona drawing exercise, this is not about neat, pretty drawing: Just sketch quickly with stick figures.
- When the drawing in the first square is done, they go to the last, square 6 of their scenario. Here they draw the ideal situation they want their user to be in when their project succeeds, the outcome of their solution for the user, the community, the world.
- Then they fill in the steps in between, how their solution gets the user from the current situation to the new situation. Participants will find out themselves what needs to be drawn for their specific project. Though if they get stuck you can suggest what they could draw: for example, the drawing in the 2nd square could illustrate how the user gets to know about their solution. Square 3 their first experience with the product, square 4 the effects, square 5 how their solution is consolidated and reaches more people.
- If teams want to and there is time in the workshop schedule, they can extend their scenarios, using more squares. Or draw several scenarios for different types of users or different types of solutions in their project.
- Try to encourage the participants in a team to all think and draw together, not just let one team member do the whole scenario. Let them draw together on the sheet of paper, finishing the scenario; this will speed up the process and creates ownership of the concept for everyone.
- When a group is done, all squares are drawn: ask them to think about their scenario as being a movie storyboard. Then in every square they write down one word describing the emotion in that scene. This will help people to 'read' their scenario more easily. Emotion words like: Frustration, boredom, excitement, happy, lonely, etc.
- To make the scenario even more clear and effective for the team to really engage with their user: ask the participants to write in every square the question that is in the head of their user, when the user enters that scene. What is their user thinking about at that moment? Doubts, worries, expectations, hopes, etc.
- You can go on endlessly with a user scenario to make it more and more detailed and clear. But at a certain moment it's time to move on and get to the prototyping. Let them do their finishing touches to the scenario and if necessary do a playful count down, 5, 4, 3, 2, 1, pencils down. Done! Great!

All teams present their user scenario and receive feedback.

Why did we draw the scenario and not just write it in text? Drawing a situation makes you empathize with your user in a different way, it forces you to think about the context your user is in as well. Drawings communicate more easily and faster during concept presentations. Plus: it's fun and creative.

Lunch break (30 to 40 minutes)

Prototyping

2 to 4 hours

The prototyping can be a difficult step to take for the participants. How can you quickly make something that illustrates how your complex, life changing project is going to work? In just a few hours?

Again, it is less about the end results of the prototyping, but more about the process the concept goes through when the participants force themselves to 'think with their hands'. When you really start to make something, practical questions about the realization of your project will arise. Questions that need answering by creating a solution on the spot. By prototyping you get to think around a problem, in a physical, spatial sense; you solve things by making things. This is a creative talent of us humans we want to acknowledge and give a platform to. Solving things by easy promises or semi-excuses in your head is not enough. We want to see it, touch it, hold it in our hands. Prototyping brings you new ideas to accomplish your goals.

- As a workshop leader you support the creative process of transforming the project ideas into three-dimensional objects. To find effective ways to prototype an idea, it needs some out of the box thinking. To stimulate that, for inspiration you show the participants images and videos of rapid (paper) prototypes that were created in other design projects around the world.
- You introduce the participants to the materials with which they can work in building their prototypes. The prototypes can be made out of paper, scrap (various recycled) materials and small electronics as used in the 'little robot' ice breaker exercise.
- Let the groups make a plan: what part of their project are they going to prototype, what materials and tools are they going to use and who in the team is doing what? You go around every team and talk it through. When things seem to complex to you, or not feasible within the time frame or resources of the workshop, let them simplify their plan. Can they 'fake' a working prototype? Use paper, pencils and glue, instead of time consuming programming or precise handicrafts?





- To some participants this prototyping exercise might feel 'overwhelmingly undoable'. Notice this as a workshop leader and help them by thinking together. Ask what they are good at, what kind of tinkering or handicrafts they like to do most.
- To create a relaxed working, thinking and prototyping atmosphere you can turn on some background music.
- Give the teams the time to figure things out themselves as much as possible. When they have questions or get stuck, help them to get back on track again, but try not to take over the prototyping. It is important they get the chance to feel that they can make things themselves. Struggling in this is part of the process. You can give a team short mini-lessons in using digital tools as Photoshop or uploading and editing videos for YouTube, so they can use these skills themselves instead of staying dependent on you as a workshop leader.
- Stimulate participants helping each other (also other teams, it's not a competition), they can share ideas and effective ways of prototyping. They can inspire each other.
- You can initiate a short in-between presentation where the teams show what they are working on and what they are going to do next to finish their prototype. Let the teams give feedback to each other. Back to work!
- When certain participants in a team are done with prototyping, they can already work on the final presentation of their project (for the public event). Let them make photos or videos of their prototype and prepare a digital presentation slideshow.

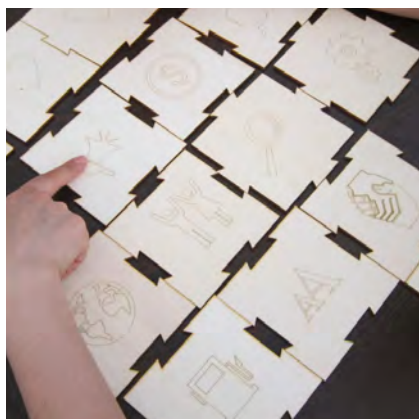
The result of this rapid prototyping session will be a first prototype for a project. This prototype needs testing, that will give you feedback on your project. After the testing you loop back in the design thinking process to empathize again with your user and the problem context. You define what needs changes or improvements, ideate it, adjust your prototype or make a new prototype to test other aspects of your concept.

Prepare presentations for public event

The groups create a final presentation of their project and prototype to show at the public event with stakeholders and decision makers. Depending on when the public event is scheduled, the participants can prepare their team presentations at home as well.

Wrap-up

Some teams might want to go home, others can't stop prototyping. Do a plenary wrap-up of the day so people can leave if they want or stay a bit longer to finish the prototype. Compliment the teams on their hard work. You can do a short closing circle on what they liked about today.



Workshop: Training of Trainers

To create support among your co-workers or community members for implementation of the hands-on design thinking & co-creation process, host a Training of Trainers workshop using this toolkit. It's a little "Droste-effect" (http://en.wikipedia.org/wiki/Droste_effect) that we run into here: To train the trainers to start using this toolkit, use this toolkit. And they become ambassadors and train other trainers to spread this movement of hands-on problem solving.

Through this workshop you can teach these hands-on design principles to everyone, for example to teams of development practitioners, engagement officers of communities as well as policy makers. The most effective way for people to understand the power of design thinking and co-creation, is to let them experience it themselves. Then people really understand what it is about from first hand experience. Not just talk about how people could do things, let them do it as well within the workshop.

- You take the trainers through the same process as the participants of the design- and prototyping workshop in order to give them the same learning experience. You present this toolkit to the trainers and let them experience little parts (compressed in time) of the exercises of the design workshop and if you have time as well the exercises in the prototyping workshop.
- Explain for every exercise why you do it, so people get the reasoning behind it. Ask the participants to think with you why the process is built in this way. Give enough space for questions and discussion, so people get to make the process their own and get ideas how they can implement it in their work.
- To bring the workshop to an end: do a round what they take home from this workshop and want to try out in their current or future projects. Let them think about what resources they would need to really do this and give it a chance.

Public event

To raise attention and awareness for the power of using design thinking in solving societal challenges, you can close the Make the Future workshops with a public event (with drinks & snacks). At this event, the participants of the workshops present their projects and prototypes. The public event is a chance to create impact and extra support for continuation of the projects born in the workshop. Each team of participants has the opportunity to share their experiences and present their prototypes for example to local politicians, entrepreneurs and decision makers.

- During the public event, try to keep the same atmosphere as during the workshops: informal, creative, co-creation, all equal, all citizens.
- You can record the presentations on video, presenting for an audience and a camera makes it a bit more 'official', makes the participants spark and really go for it to communicate their concepts well.
- Create space after each presentation for the audience to react to the project, give comments and ask critical questions to get the concept clear. But not too long, we want to stay in the flow of inspiring, energetic presentations.
- End the event with drinks and snacks and don't forget to do a group photo moment with all the participants.

4. Using the Smart Citizen Kit in Egypt

Citizen air quality sensors cover the places governments can't reach

Projects like Smart Citizen promise a future of cheap, open-source air quality sensors - and a world in which we know what's happening everywhere.

It's the government's job to measure air quality, but the government can't be everywhere at the same time (not that we're aware of, at least). Official monitoring machines cost \$15,000 each, so rolling them out to all neighborhoods would be extremely expensive. In the Netherlands, there are only about 200 fixed stations across the whole country.

Can citizen science fill in the gaps? Perhaps. It's early days, but projects like Smart Citizen, developed in Spain, show the potential of cheap sensors linked to the Internet. Citizens can participate in data collection and even collaborate with cities. Amsterdam has bought and given away 100 Smart Citizen units, and has tested whether home-sensors could be useful sources of information in the future.

It'll be interesting to see how governments work with citizen-sensor technology - whether they embrace it, or see as a threat. At the moment, projects like Smart Citizen don't offer great accuracy or great coverage. But the potential is surely there. One day, citizens may be able to do without official readings altogether.

During the workshop in Cairo, Egypt, the Smart Citizen Kit was introduced. Two example kits were installed in the city, which seems a highly appropriate location to measure the environment. The average Cairene inhales more than 20 times the acceptable level of air pollution every day, according to the World Health Organization. That means that every Cairo resident's daily air pollution intake is akin to smoking a pack of cigarettes.

Industrial plants — especially factories that burn mazut, a heavy, low-quality fuel used in generating plants — are the biggest culprits, as they emit large amounts of greenhouse gases that feed global warming. With much of Egypt being desert, seasonal sandstorms also contribute to lower air quality, and the growing number of vehicles adds to the problem.

The Smart Citizen Kit is a great tool for citizen empowerment offering affordable electronics. The low-cost sensors in the kit measure two toxic gasses in the air (CO and NO₂), the temperature & humidity, the light intensity and noise levels. The kit exists of an open source hardware device based on Arduino board and an ambient board, a website where the data is being collected, an API and a mobile app. The kit can be controlled by the user using open source Arduino IDE software.

By giving individuals the tools to conduct research themselves, an increased involvement in the immediate environment might be the effect. This can create new, dynamic relationships between citizens, scientists and policy makers. And urban issues can be proposed, argued and substantiated from different perspectives.



Read more about the Smart Citizen project:
<http://smartcitizen.me>
<http://waag.org/en/project/smart-citizen-kit>

5. Results

Topics

The topics in the Post 2015 consultations are high-level topics. During the workshops it is essential to narrow the topic or thematic areas down to more exemplary cases to bring the participants to a level of understanding they can start with.

Based on the outcomes of Post 2015 we've drafted a list of high-level topics.

ARMENIA	EGYPT	GEORGIA
Youth (women) employment	Youth employment	Better job opportunities (urban)
Initial inequality	Gender equality – empowerment of women	Freedom from discrimination, gender equality
Active/integrating (social) support for vulnerable groups. develop initiative motivations of individuals	Social welfare: Provision of social & psychological care for youth	Support of people who cannot work
Non-communicable diseases, reproductive health prevention, early diagnosis	Youth health awareness: campaigns, overall framework	Better healthcare
Desertification effectiveness in land-use [cooperatives?], water use management [monitoring tools?] and regulation.	Environmental awareness: education, creation of clubs, societies, NGOs	Clean water (rural)
	Enhancing youth participation in quality governance	Responsive, honest government (urban)

Cases

The UNDP teams formulated cases, based on these topics. The cases evolved from the output of the 'Spot the Future' activities.

Georgia - cases

- In rural areas people draw up illegally dump of waste. The challenge is aimed at inventory the dump sites and influence the decision making process.
- Too few women are working in IT, based on lack of access to data or IT-illiteracy. The challenge is aimed at improving the access to data and stimulating literacy.
- Youth has no or little understanding of different professions. So they lack the information to choose their future career. The challenge is aimed to provide information and improve awareness.

Egypt - cases

- Citizens are confronted with daily power outages. The expectation is that the outages will increase during the coming months. The challenge is aimed at energy efficiency or DIY energy.
- The government will increase the usage of coal to generate power. This will lead to more pollution in the air. The challenge is aimed at detailed measurement of the air quality and ways to communicate the data with the government.

- An increase of air pollution will affect the health of citizens. The challenge is aimed at solutions to detect health problems and improve personal health.

Armenia - cases

- The quality of education doesn't match how citizens value education. The government launched numerous reform efforts to improve the soviet education system. The challenge is aimed at designing inclusive education initiatives or improving learning outcomes for all children.
- The climate change (temperature rises) can have a huge social and economic impact. The potential for economic growth is large, but in the absence of significant adaptation measures climate change could easily impede this. The challenge is aimed to develop smart solutions in water management (irrigation), measurement tools to identify changes.
- The unemployment among youth is high, young professionals don't succeed in getting jobs. The challenge is aimed to help people to find projects that they care about and could have as a job. By involving young professionals in projects they care about, they can lead a more fulfilling work life.

Output teams

Georgia - Tbilisi, 24 - 26 April 2014

These are the prototypes participants designed during the Georgia workshops:

1. "Profession TV - Profesiebis Televizia" education, youth employment



The girls' team created the concept for ProfessionTV: an online channel for high school students to learn about what their possible future profession is really like. By creating a crowd sourced video platform with short 'day-in-the-life-of...' videos, young people get an inside view of what people actually do in their daily work. What do you like about your work? What's difficult? How did you get into this field of work? Based on their current level of education young people can browse through the information on the platform and find out what future professions are within reach for them. Students can post requests on the platform for videos about certain professions. By posting the requests on social media, via-via people can get in contact with people in that work field, to make their day-in-the-life video.

Currently in Georgia the information provided about possible professions is very limited. When young people choose their study many have no good picture of what professions they might be able to do. When we inform our youth better, they can make better choices for their future. Less dropouts, more motivated students, more people that do the work they love.

ProfessionTV is a concept with potential to cooperate with local television stations, do projects with art & media schools to produce short videos, and the ministry of education to connect to programs the government is initiating.

2. "Eco Lesson – make Tbilisi cleaner": Zura Sudadze, Misho Iosava, Iasha Narimanishvili, Soso Gomareli education, environment

From their dream not to sit in a classroom all day, but to learn from home, the boys' team created the concept for Eco Lesson. How can we make learning playful again? Eco Lesson uses game principles to engage students in care for the environment by doing missions and reward the accomplishments.

On the Eco Lesson platform students find missions to clean up illegal waste dumps and litter in Tbilisi parks. They meet with



their teacher on location in the park that needs to be cleaned. Students get instructions and learn about the effects of the waste on the eco system and the life in the neighborhood. In teams the students clean the litter or waste dumps in the park. When they are done they make a group selfie in the clean park and upload the photo to the platform. The teacher gets a notification and can reward the students for their work. Their Eco Lesson marks are linked to the school's grading system and their selfies are posted on the school's intranet.

Citizens in Tbilisi neighborhoods can report illegal waste dumps or litter in the parks. By uploading a photo of the waste to the platform (via the website or Eco Lesson app) and categorizing it by type of waste, teachers can turn these requests into missions for the students. Student teams, classes or even schools can compete with each other, earning points for amount of trash cleaned, missions completed, the difficulty level of cleaning targets and time spent on cleaning.

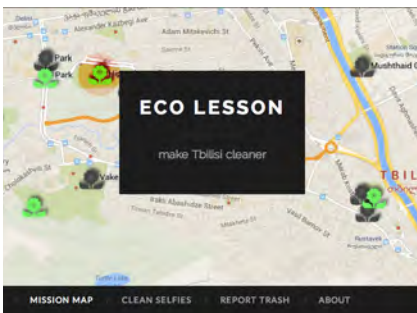
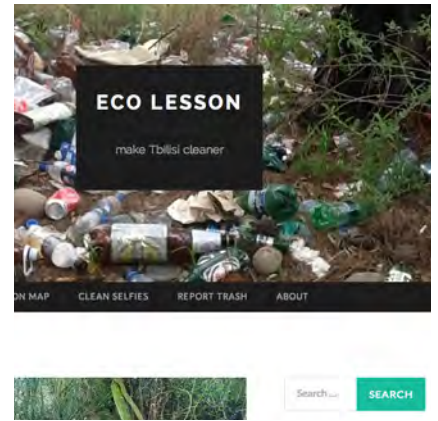
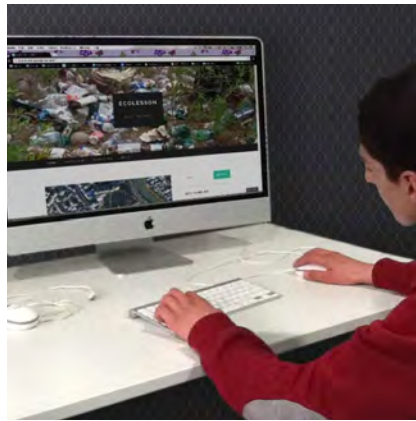
The students are outside, instead of behind their desks, helping the community and learning about the environment in a practical and playful way.

3. "Zebra hunting – keep crossing" road safety, decision maker interaction

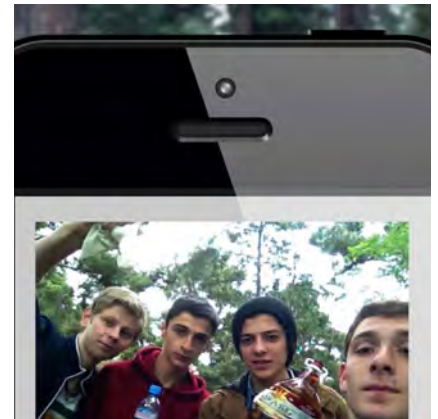
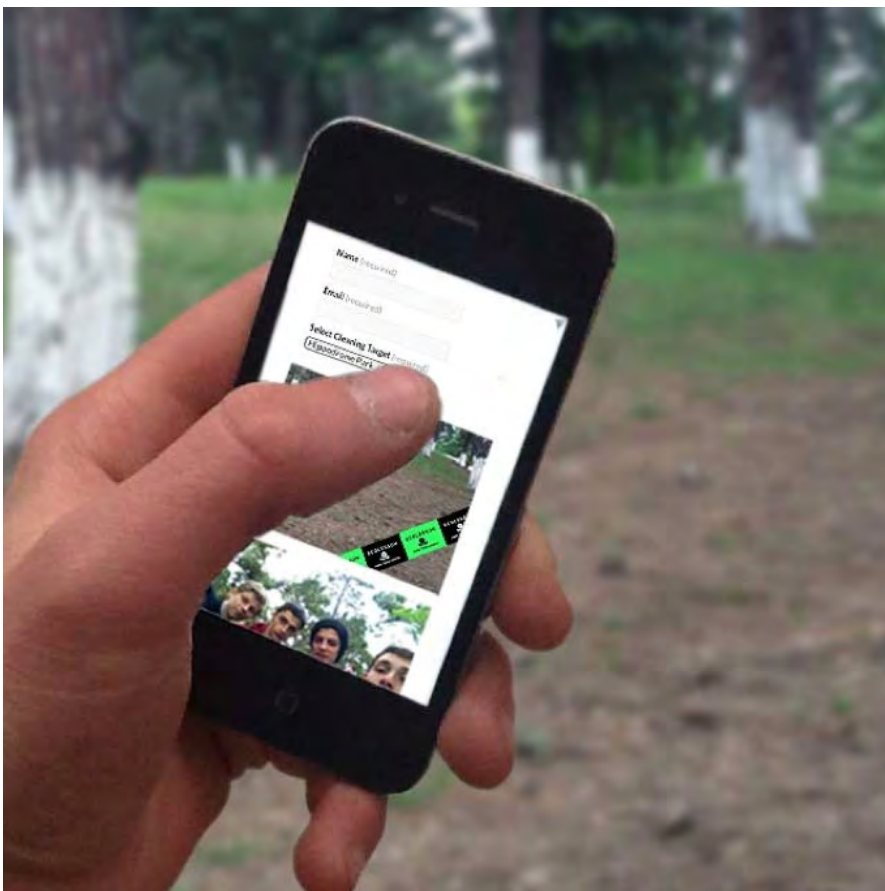
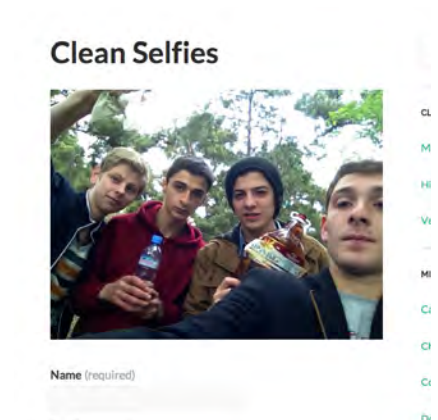


In Tbilisi the awareness of pedestrian rights could use extra attention, to make the streets safer and more pedestrian friendly. A lot of drivers don't stop for pedestrians at zebra crossings. These drivers called 'donkeys' are the targets of the concept for the 'Zebra hunting' guerilla campaign. At zebra crossings pedestrians can use the Zebra hunting app to make photos of drivers and tag them as 'donkey' when they don't stop or as 'zebra' when they do. The results are placed directly on a map of Tbilisi. This data collection gives insight in the risk areas in the city that need extra attention and can be used to help decision makers of the city council to take action, improving pedestrian safety.

Additionally to the 'donkeys' not stopping at zebra crossings, a lot of 'donkeys' park illegally on pedestrian sidewalks as well.



**Example
prototype:
Eco Lesson**
developed in Tbilisi



These can be photographed and put publicly on the online map as well.

Another issue that can be addressed with this campaign is the absence of necessary zebra crossings in Tbilisi. A lot of pedestrians cross the road anywhere, as zebra crossings are scarce. Citizens using the app can point out where zebra crossings are needed.

'Zebra hunting – keep crossing' is a playful and lighthearted way to address serious issues as pedestrian safety. It uses the powerful instrument of crowdsourced data collection as evidence to address an issue to local politicians; empowering citizens to turn frustrations into actions and facts.

Egypt - Cairo, 9 - 11 May 2014

These are the six prototypes participants designed during the Egypt workshops:

1. "Badawi Farm": Asmaa Adel, Mahmoud Abdo, Omar Elhosseiny, Rania Rafie



Badawi Farm is a project which aims to enhance the standard of living of poor Egyptian citizens, living in rural areas around the borders of governorates in Egypt. Badawi Farm is a multiplayer online game which will help fund sustainable farming solutions for those citizens living in isolated areas that lack most of the utilities and services available in city center, such as electricity, water networks and water management systems.

Players all around the world would compete in building Badawi farms in the virtual world using real money for purchasing materials and cultivating the farm. However, all commands entered by the player are then applied in real life to build similar farms in border areas using the gamer's money. For example, one sustainable solution is to supply Badawi people with Solar photovoltaic cells for their houses. The electricity produced is then used to pump unused underground water out for irrigation. Badawi are then capable of planting strategic crops and raising cattle for food and money, which would in turn improve their standard of living. The funding of such solutions will be possible via the game. Gamers can watch the progress of their charity work in the virtual game, while having fun at the same time.

2. "Boss 7awalek Campaign": Marwah Elghobashy, Monica Prisacariu, Mona Makhoul, Mona Risk, Mostafa Hussein, Ulrike Von Ruecker

Boss 7awalek is a campaign aimed at reducing traffic and increasing visibility for local businesses, by utilizing billboards

on the street. The campaign is about raising awareness and promoting behavior change.

The problem is that people are used going to supermarkets or places that are distant instead of looking for alternatives near their homes. The boss 7awalek billboards will flash very simple message such as where are you going? Why are you here? Do you absolutely have to be here? Therefore, these questions will motivate drivers to start thinking about the routes they are taking and to really 'look around them' for nearer options.



Furthermore, vibrations caused by the car's motion generate energy that can be saved and reused to power the billboard. Units below the surface will have the ability to harness, convert and store the energy as moving vehicles pass above them. Boss 7awalek will also have a mobile application containing a directory for the locations of different services with directions, proximities and ratings. This will work on a user contribution basis.

Finally, there is an offline component in the form of a guided exercise that encourages people to explore their neighborhoods, the facilities in their proximity and to compile those for easy reference. The campaign is not a standalone solution to the problem but a contribution to improving the situation.

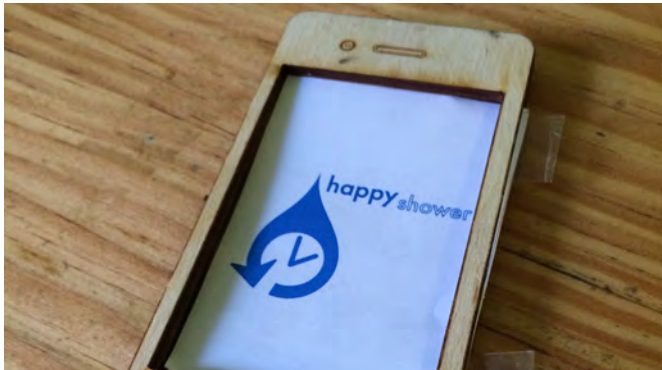
3. "Green Cloud" – Mostafa Amin, Omar El Tokali, Rania Badr



Green Cloud is a mobile application that allows the user to take photos and report polluted locations around Egypt, for example, factories that expel heavy smoke. Green cloud collects the data, sends warning letters to the stakeholders responsible for the pollution and drives a strong social media campaign to raise awareness. By instigating public pressure, Green Cloud aims to encourage responsible parties to change their behavior to a more environmentally friendly approach. Users can also contribute suggestions for reducing air pollution

in Egypt, and at the same time they can play a fun easy game on Green Cloud for entertainment

4. "Happy Shower" - Hayam Mohamed, Dina Amin, Mohamed Fayez, Mohamed Zaytoun



Happy Shower seeks to tackle the issue of water conservation in Egypt. The idea behind happy shower is that large amounts of water are wasted during showers as people tend to use up a lot more time and water than is necessarily needed. Happy shower is made up of two components, a clock and a mobile application. The clock attaches to the shower, and as certain amounts of time pass, lights change color to signify if a person is taking too long. Through the mobile application, the time taken is instantly uploaded to their social media. Hence, users of happy shower can keep track of how much water they are saving in comparison to their friends. Happy shower is a fun and humorous solution to encourage Egyptians to save water.

5. "The Playground": Mohamed Behery, Mohamed Osama, Mostafa Adel, Mostafa Rashad, Sara El-Haddad

The Playground is an unconventional learning space for



youngsters from the age of 10-16. It is simply a place where children can discover their interests, potentials and hobbies. Children will be able to learn more about different subjects ranging from mathematics, sciences, history and literature. Furthermore, they will have the opportunity to improve their soft skills and communication techniques from an early age. This space will also incorporate a tree house which includes a book club and a fabrication lab to enhance their creativity. Basically, the playground will offer alternative education solutions to inspire children and help them discover their goals and objectives in life.

6. "Zapp": Gazbia Sorour, Hossam El Zayat, Nahel Mohamed, Yasmine Asfour



Zapp is a tech-oriented solution for energy conservation in the household which contains three elements; a smart meter, a mobile application and a gaming component. The 'smart meter' connects to the electricity box and measures the electricity consumption within each line.

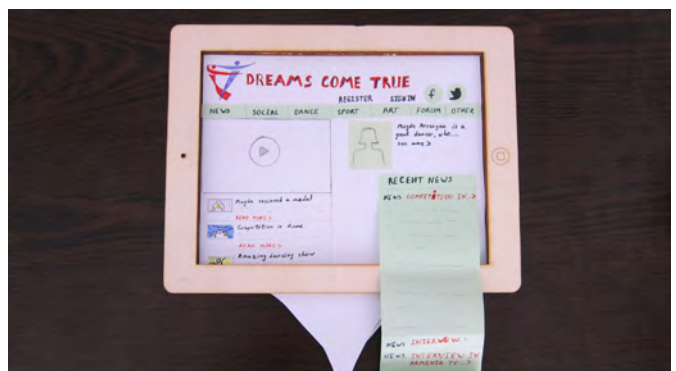
The Zapp smart meter is also linked to a 'Zapp' mobile application, using a 3G connection, that gives you access to four main services, measures overall electricity consumption, allows you to switch different lines on and off remotely, uses the consumption data to analyze trends in consumption and the total points collected for the game.

For the gamification aspect, the idea is that Zapp will also be connected to an already existing popular game for kids such as 'Epic' – a very well-known game based on nature. The more energy you conserve at home, the more 'Zapp points' you will gain to accelerate further in the game. A ranking system will also exist in order to create a positive competitive environment between children. The theory is that children will put pressure on the parents to save energy in order to collect points, they will tell their friends about the game (word of mouth) and at the same time learn about important environmental issues. Zapp's objective is to create positive reinforcement for an important cause.

Armenia - Yerevan, 30 May - 1 June 2014

These are the prototypes participants designed during the Armenia workshops:

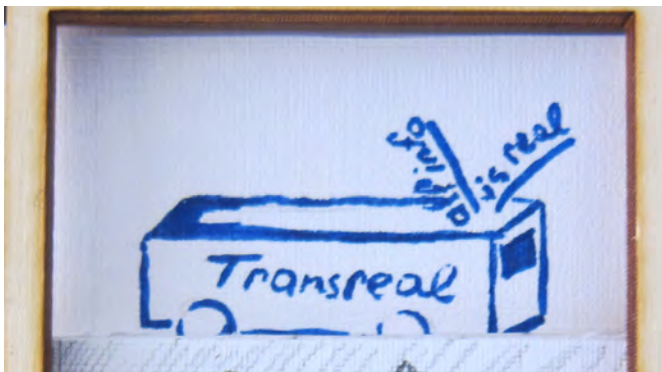
1. "Dreams come true" youth employment



On the current job market in Armenia, for students who recently graduated it is very hard to find a job. Employers ask for work experience, which they don't have yet. Then there's unfair competition in the selection process as well where relatives of the employer get the job more easily at the expense of more qualified persons applying for the job.

To give young adults an instrument to show that they have more experience than their CV mentions, the idea for the 'Dreams come true' platform came into existence. It is a website to promote your skills and experience with videos and short blog stories; a combination of Linked-in, Facebook and YouTube. Everything you post is instantly shared on existing social media sites as well. A self-promotion platform where you show what you do to improve your skills and work experience, voluntary work and activities you do and you keep it up to date. You have to keep producing material to make your interests and skills clear to others and make your dreams come true. Employers can scout on the 'Dreams come true'-platform to find the motivated employees they are looking for. Or like-minded unemployed people with the same dream can connect to each other and start their own business together. Next to this it could grow into a crowd funding platform to help people make their dreams come true, for example to start their own dance studio.

2. "Transreal – all info is real" public transport



'Transreal – all info is real' is a mobile app concept to improve the information about public transport in Armenia and stimulate quality improvement. Buses and minibuses are often overcrowded, in a bad technical state or not as clean or smoke free as one would prefer. By creating a mobile app for passengers to rate the bus lines, buses and their drivers (i.e. on cleanliness, driving style, driving on time and service) crowdsourced data is collected. The app provides real time information about the status and quality of the public transport. The rating by passengers can create a competition between bus drivers to provide good service. Like with restaurant ratings, comments and photos or Tripadvisor badges, busdrivers can become 'the driver of the month'.

3. "Zombie app" education, pre-university exams

In Armenia students need to pass pre-university exams to get into university. Young people study for several months in advance, lock themselves up in their rooms, not able to engage in any social life... they become so called 'zombies', to ensure they can enter university.

The Zombie app will change this: it allows you to connect to



other 'zombies' in your neighborhood, city or social network. It suggests places to meet-up to study together 'outside' in the city instead of alone, isolated in your room. This easy organized meet-up can be open for other 'zombies' to join. These pop-up study groups can get to know each other and do other social things as well to relax their minds. The app is connected to Facebook and other social media.

For non-zombies the app allows them to spot zombies nearby within a certain range. To try to convert these 'zombies' into social human beings again, they can chat and send invites for things to do together or offer their help with studying on certain subjects.

The 'zombies' get rated for the activities they engage in next to their studying (by others and by checking in locations outside at their home). This way they earn badges to see how un-zombified they are. With the Zombie-app young people gain additional experience by living a healthy social life, which is just as important as cognitive knowledge.

Lessons learned

- Try to invite a diverse group of participants. Diversity in age, educational background (economics, design, engineering, journalism) and social group will support the exchange between the participants, stimulate creativity and improve the output of the prototypes.
- Make sure that you have an overview of the participants beforehand. This gives you the opportunity to optimize the formats and presentations to their experience level.
- Keep the presentations at the beginning short and to the point.
- Make sure that the participants have a good understanding of what they will be doing during the workshops. Keep the theoretical background to a minimum, however the participants need to understand the basics.
- The availability of a creative space, like a Fab Lab, supports the prototyping. It's worth trying to search for a workshop space with machines or a Fab Lab to host the workshops.
- The workshop leaders should have a mixed background in design, prototyping skills, conceptual thinking. They should also have a broad experience in leading workshops. Be flexible to adapt to the process of the group: change between formats, put in additional skills to motivate the group or support the thinking and tinkering process if teams are stuck.
- Come together, have a coffee with workshop leaders and organizers before the workshops starts. Discuss local specifics and the plan for the day. This is essential when working in a different culture or society.

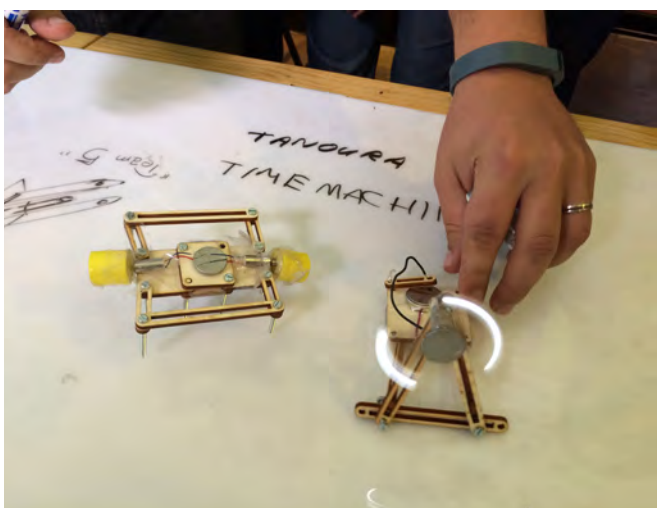
6. Recommendations

Workshop recommendations

1. In an ideal situation, two people lead the workshop: one in the lead, and one assisting, who should also keep an eye on the time schedule and the active involvement of participants.
2. Start the workshop with an introduction about the project, the reason for these workshops and a time line which explains the activities and the role of the participants in these activities.
3. Always start with an exercise to let everybody "get comfortable" with speaking in public. For example, let the participants bring an object that makes them happy. Every participant should be able to explain why he or she feels happy with this object.
4. Try to keep every participant involved. When someone is passive or shy, try to actively engage that person by asking questions or by giving this person a specific role to fulfill.
5. Facilitate discussion among the participants and within teams - can they inspire each other?
6. Every participant should have a specific role in their team.
7. When participants are in doubt or confused, don't ask 'closed-ended'¹ questions but ask 'open-ended' questions² that will slowly lead the participants to the answer themselves. Keep asking questions until they get to the concrete solution.
8. Create an active environment as soon as possible; doing not talking.
9. Ensure that you have the most effective (technical) tools which are available, in order to facilitate the hands-on prototyping.

Strategic recommendations

1. A popular event is the perfect opportunity to create interest in, and draw attention to a Make the Future workshop.
2. Seek partners from the local municipality and engaged community groups as quickly as possible. Through the workshops and these networks, the project will become increasingly visible. This then will result in a virtuous circle: as the project gains visibility, more partners will join, and as the number of participating partners grows, you will gain even more visibility.
3. If possible, identify "community champions" within an area. These are generally very active and committed volunteers within their own community, who can promote and support the workshops.
4. Make links to (local) design and art schools: they can provide students who can help you run the workshop and support the participants in the creative process and the hands-on prototyping. In addition to providing work experience for the students it will also enable them to spread the self-direction methodology throughout their educational and community networks. Such a strategy creates mutual benefits and is an excellent way of quickly and ubiquitously spreading 'the message'.
5. Form a strong group of stakeholders, which is both representative and as diverse as possible, in order to cover the various cultural needs and aspirations within their specific communities (local, business, governmental).
6. Use spaces and buildings which are already being used as "social areas" within the community – community centers, libraries, youth clubs etc. – as venues for the workshops.



1. A 'closed-ended' question can be answered with a simple 'yes' or 'no', or a one word answer. It doesn't require reflection and deeper thought. Example: 'Are you happy?'

2. An 'open-ended' question requires more depth and a lengthier response, and will keep the conversation going. Example: 'What are some of the things that bring you the most joy?'



make the future workshop toolkit

armenia • egypt • georgia

