Design Thinking
TOOLKIT

Iniciativa TCU coLAB-i Laboratório de inovação e coparticipação

Parceiro técnico TELLUS ESCOLA DE INOVAÇÃO EM SERVIÇOS PÚBLICOS

TCU of Brazil has generously agreed to share this toolkit with the INTOSAI Community, and the IDI has made it available in English.


Phase 1
EMPATHY
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(RE) DEFINITION
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Design Thinking

TOOLKIT

para Governo

EMPATHY

Actors Map | Desk Research | HCD Matrix | Empathy Map
User Journey | Fly on the Wall | Insight Cards
The 5 Whys | Shadow | Analogy Research

The purpose of the **Empathy Phase** is to understand the context of problems, as well as to identify the needs and opportunities underlying the development of solutions to such problems. This phase consists in delving deeply into the living environment of the relevant actors and the themes to be dealt with. The focus is centered on the human being, the aim being to obtain four types of information.

1. What do people talk about?
2. How do people act?
3. What do people think?
4. How do people feel?

The idea is to identify extreme behaviors and correlate these with their corresponding patterns and latent needs. The research is qualitative and does not intend to generate exhaustive knowledge about consumption segments and behaviors; however, by tapping into opportunities from extreme profiles, specific solutions can be developed that on many occasions span more than one group. These solutions would not have been found had the focus not been centered on differences.

Actors Map

Objective

To identify the actors involved in a public service development or redesign project.
This way, efforts can be directed in such a way as to obtain commitment from everyone in the process. By mapping the actors involved and keeping them close, we generate a relationship of cooperation and trust, which, in turn, leads to a feeling of belonging and appreciation, impacts results, and helps the team manage potential conflicts of interests.

Time

Preparation: Print out or draw the map.
Execution: Up to 1 hour.

Team

At least 2 people.

Materials/resources

A3 or larger template; Post-its and pens.

Point of attention:

If other actors come into play as the project is underway, the map will need to be updated. It is extremely useful to be in contact with all the actors involved in the project.

Step by step

1. List the stakeholders on individual Post-its, classifying them into direct, indirect, and main stakeholders.
2. Prioritize those stakeholders who are most relevant to the service, contemplating a set of criteria that the team can adjust and apply as it finds most appropriate:

    - Impact
    - Proximity of the relation
    - Influence
    - Power
    - Urgency or tension
    - Representation
    - Differentiated viewpoint

3. Post the Post-its on the template, organizing them according to the priority criteria defined.
4. Once all the actors are in place, check whether any audiences are missing, and the order established makes sense. Make changes as necessary.
5. Take photographs and digitize the Actors Map.

Desk research

Objective

To understand the project's context by means of Internet searches, articles, printed media, etc. This information will provide the team with feedback to better understand the challenges posed by the project, helping it conduct a thorough research and prepare more effective interviews and field studies. Over the course of the project, the research scope can expand as needed, in line with the higher refinement of the search level. As used in all project phases, desk research can cover several functions and approaches. Inspirational research, as its designation indicates, is a quest for creative references that contribute and inspire new ideas for the project. The co-creation phase marks the beginning of the search for suppliers and collaborators in implementation actions.

Time

Preparation: 5-20 minutes, for defining the research scope.
Execution: 30-8 hours, depending on the scope and progress of the project.

Team

Everyone involved in the project.

Materials/resources

Computer, Internet, magazines, books, Post-its, flipchart, whiteboard.

Point of attention

As research is undertaken, one theme habitually leads to another. This ramification may in turn bring about enlightening findings. However, care should be taken not to get lost amid so much information. Set limits by establishing a timeframe for the task.

Step by step

1. Assess what information is relevant for understanding the project and conduct a search using the Internet, social networks, articles, magazines, newspapers, and any other available resources.
2. Collect relevant data, images, texts, and videos. Read, study and separate this material, renaming it to facilitate its subsequent organization and search.
3. In many cases it is worth printing the material out, depending on the type of research to be conducted; the most important step here is to visualize the information so that it can be analyzed by and shared among everyone.
4. Using the data at hand, select the most significant information and write down the top insights on Post-its, or use a whiteboard or mural for this purpose.
5. When several consultants/team members address different themes, it's important that a presentation should be prepared where the results from the research conducted by each consultant can be shared on the mural, with each consultant/team member being responsible for one or more chapters of the research. Once the presentations are finished, all participants together work on the clustering, cross-checking and analysis of the material.
6. Take note of and organize the main insights.

HCD Matrix

Objective
To compile all the hypotheses, certainties and doubts the team may have regarding the project challenge. All team members have the chance to share their knowledge and adopt a holistic view of the matter.

Time
Preparation: none.
Execution: 30minutes-1 hour.

Team
Preferably all team members, or at least 2 members.

Materials/resources
Post-its, flipchart or whiteboard, and pens.

Point of attention
The HCD Matrix is usually employed in the beginning of the project, prior to the research stage, and can be implemented during the EMPATHY or (RE)DEFINITION phases. This tool is used to raise awareness among team members; it motivates them to share everything they know about the matter and provides instruments for seeking and validating assumptions and doubts. People should feel comfortable to express their points of view, which enriches the discussion.

Step by step
1. Divide the flipchart sheet or whiteboard surface into three sectors and name them "Assumptions", "Certainties", and "Doubts".
2. Next, everyone should express his or her opinions by writing them down on Post-its and posting these in one of the sectors. The more Post-its are posted, the more value the reflection on the matter acquires.
3. During workshops, encourage groups to look for new points of view, providing examples when deemed necessary; one idea leads to another, which enhances the discussion.
4. Once the theme discussion is exhausted, elaborate on "Doubts" and "Assumptions", which can, for example, be relocated to certainties.
5. Upon completion of the HCD Matrix, clusters (groups organized by affinities) can be formed using all the Post-its, regardless of their being "Assumptions", "Certainties", or "Doubts". This way, the team will have in place groups organized under related themes.
6. Once these macro themes have been organized, arrange and divide the categories among team members, so these can conduct the relevant research.

Empathy Map

Objective

To identify and understand user or actor profiles in a visual, tangible manner, thus achieving a higher degree of proximity and empathy. To formulate clear assumptions regarding the needs and behaviors of groups of people. This tool can be utilized for either internal team activities or workshops.

Time

Preparation: 5 minutes for printing the template.
Execution: 15-30 minutes.

Team

At least two members.
In workshops: 1 facilitator.
An average of 5 participants.

Materials/resources

Template printout, post-its and pens.

Point of attention

The empathy map is drawn based on real stories; however, care should be taken not to devise a profile that reflects a single interviewee description only. The map should portray the main common characteristics shared by users with similar profiles. For this purpose, it is important for participants to have been previously involved in other user-understanding activities, such as in-depth interviews. This way, participants will able to share their experiences and observations.

Step by step

1. Print out the template and post it on a mural. The map should be built collectively. The directions given apply to both internal team activities and workshops. In general, everyone writes down his/her points of view on post-its and sticks them to the corresponding template sector.
2. In a workshop context, the facilitator should help the group define the profile to be mapped.
3. The map is divided into 7 sections. To facilitate the task, follow the “key questions” listed beneath each section title. It is suggested to begin with the general characteristics of the profile to be mapped, including name, age, socio-economic characteristics, etc. With this initial information, move on to the following sections. There is no predefined order for this.
4. Once the template has been completed, elicit some reflections, for example: “What needs have been observed?”; “What insights …?” This way, participants will gain a better understanding of the challenges to be explored during the CO-CREATION phase.
5. The group then submits all the analyses and conclusions about the tool application. When utilized in either internal activities or workshops, the results of empathy maps assist in the creation of personas.

User journey

Objective

To map all interactions and contact points between users and services, as well as the difficulties and opportunities involved in this experience.

Time

Preparation: none.
Execution: 1-3 hours, depending on the complexity of the service.

Team

At least 2 people.

Materials/resources

Post-its, pens, and a space where the journey can be organized. Participants can use a whiteboard, a flipchart or the mural.

Point of attention

Some projects can contemplate the organization of journeys for other actors, for example, public servants, who are key protagonists in the effective operation of services. Usually, journeys are organized after in-depth interviews and field studies, at which point teams have more information about the service.

Step by step

1. The information required for organizing this kind of journey may originate in field studies, in-depth interviews and desk research. It is important to identify the barriers experienced by users, because, as these manifests themselves, the likelihood that users avoid using the service increase, which in turn correlates with the factors stimulating the adoption of the service, and the resources required to achieve engagement.
2. In order to facilitate the design of this journey, we can divide it into 5 stages. For example: How did you learn about...?, First contact, While using the service, Exit and maintenance. The division can be adapted according to the project. These stages and their usage periods are arranged horizontally. On the vertical axis, map the main contact points, actions, factors, resources, and barriers. Use the references (in the “Ref” folder of this material) as a model for the team to organize its own journey.
3. Once the journey is ready, the team can have a macro view of the service and understand the critical and opportunity points. A critical point can be, for example, the waiting period before users were provided assistance, which is a source of frustration for users. It is recommended that these points be highlighted with an adhesive round sticker or a color Post-it to facilitate their visualization.
4. The journey is an excellent tool to show customers how the service works, and to reveal the circumstances detracting from user experience, therefore interfering with the level of service loyalty. It can give rise to insights and disclose challenges not previously considered, and thus become excellent guidance for cross-checking information with interviews, parallel scenarios, empathy maps, and other tools used during the EXPLORATION phase. The journey can, for example, be used with users during ideation workshops.

Fly on the wall

Objective

This technique is used to observe the interaction flow with the service/product, or the execution of a task or procedure, eliminating the risk of abiding by biased assumptions and statements from users, as well as by the researcher's own preconceptions.
Fly on the Wall is a very efficient technique for observing the operation of a service and the interaction among users in a real-life context, without interference from external agents.

Time

Preparation: up to 1 hour.
Execution: 1-8 hours, depending on the service, action or procedure. The break has a variable duration.

Team

1-3 people.

Materials/resources

Template, if there is one already prepared; paper and pens, cameras and accessories (e.g.: GoPro, tripods, etc.).

Point of attention

During the Fly on the Wall practice, the researcher only observes without interacting with users. If the service forms part of the observer's routine, he or she should look for a new standpoint to capture details. On the other hand, if the observer has no previous knowledge about the service, it is important that he/she has a prior understanding of the macro actions to be observed.

Step by step

1. Define the situation to be observed and, when necessary, schedule an appointment with the relevant persons/organization.
2. Visit the premises to have an understanding of the situation that will occur, and plan for the execution accordingly. Is there a place where a camera can be installed? Are there any security cameras? What would be the best location for the researcher? What is the duration of the activity? What actions should be observed?
3. Prepare the recording material. Many times a plan of the premises, even a draft one, may be a good template for taking notes.
4. If cameras are used for recording purposes, these should be installed before the service starts operating. Observe flows, contact points, behaviors, processes, difficulties, conversations, periods of time, etc. These elements vary depending on the action observed. Take adequate notes and records. Photographs are always welcome but be discrete so as not to intimidate people.
5. It is advisable that the process be carried out by at least two team members, a researcher who has already been on the field and another one who has not, from whom an unbiased perspective can be obtained. Check all records and notes and discuss and write down insights.
6. After going over everything, review the insights recorded and reorganize these, if necessary.
7. Prepare a presentation about the insights and research analysis to be shared with the whole team.

Insight cards

Objective

To elicit reflections based on actual data, collected during the Immersion phase and recorded on cards, which facilitates rapid query and handling processes. After all, insights are discoveries, unexpected things that arouse the attention. They enable us to extrapolate broader truths from individual stories, as well as to view the strategic challenge in a different light.

Time

Preparation: none.
Execution: at the discretion of participants.

Team

At least 1 participant.

Materials/resources

Cards, pens, paper, and/or Post-its.

Point of attention

Cards generally contain a title that summarizes the finding, and the original text compiled during the research, in addition to the source. They can include other items (like the place of collection; stage of the relevant product/service life cycle; etc.) that facilitate analysis.

Step by step

1. At any stage of the project, identify an important theme and record the main finding on a card.
2. During the field study, cards are usually prepared once researchers have returned from their procedures and reviewed what they have seen and heard. At this point, they record the themes that have most strongly drawn their attention.
3. Insights can also be obtained throughout the Immersion phase, during the project team debriefing meetings, where experiences contributed by different researchers are reviewed and patterns and opportunities are identified. It is important that insights be recorded as soon as they are identified so as to avoid leaving them out.

5 Why

Objective

To identify the "root-cause" of one or more problems.

Time

Preparation: up to 5 minutes for printing out the template.
Execution: 5-40 minutes, depending on the number of problems to be discussed.

Team

At least 3 participants. This is an excellent tool for application with the Innovation Team. When teams are very large, split them up.

Materials/resources

Printed out template.
Post-its, papers, and pens.
Participants can use the mural, a whiteboard, a flipchart, or a Google Docs template.

Attention points

It is important that efforts be made to reach the "root-cause", without stopping at highly recurrent situations, for example, "Missing Physician". Delve into the matter with an aim at identifying what lies beneath the issues.

Step by Step

1. Print out the template and post it on the wall. List the structural problems discovered through research and ask questions.
2. Write down on Post-its one of the structural questions. Turn each answer into another "why". Repeat this procedure five times and post on the template the questions written down on Post-its, organizing them from top to bottom, down to the deepest cause. For example:
   - Why does the employee render users an inadequate service? He/she is uncooperative.
   - Why is the employee uncooperative? The working conditions are terrible.
   - Why are the working conditions terrible? Defective maintenance of the equipment required.
   - Why is the equipment required is not adequately maintained? Lack of annual planning culture in the unit.
   - Why is an annual planning culture lacking in the unit? The coordinator does not do annual planning.
3. Proceed with the other structural questions and complete the "5 whys" one at a time, like in the previous example.
4. Once all the questions have been asked, analyze all the root causes and identify the relations among these. If necessary, reorganize and rewrite the questions and answers.
5. Subsequently, the root-causes can be extrapolated, for example, into in-depth interviews or desk research. It is also possible to use them in ideation rounds, as a basis for solutions.

Shadow

Objective

To attentively observe real situations in which a service is used, for a certain period. To attempt to understand the way people behave within a certain context. This method can help understand what people really do, as opposed to what they say they do.

The researcher does not intervene in the situation observed.

Time

Preparation: 1 hour to plan the search.

Execution: up to 6 hours, depending on the duration of the service subject to research, and the number of "shadows" done.

Team

1 person per "shadow". Other "shadows" can be done simultaneously, depending on the number of researchers available.

Material/resources

Template; a plan of the premises, even a draft version of the plan, which may be a good space to take down notes; paper, pens, and a camera.

Point of attention

During the experience, the researcher only observes without interacting with the user. In the event the service forms part of the observer's routine, he or she should look for a different viewpoint to capture details. On the other hand, if he or she has no previous knowledge about the service, it is important that he/she has a prior understanding of the macro-actions to be observed.

Step by step

1. Define the area or service and plan the way in which the research will be conducted. Visit the premises and get an understanding of the situation to be observed.
    - What is the scope of the observation and the items to be observed?
    - What are the best days and hours to carry out the observation?
    - What is the profile of the user or employee that will be considered?
    - What is the best way to witness the activity while going unnoticed?

2. Prepare the recording material. A plan of the premises under research may be good to take notes. Take a camera in case you need to record something, always remembering to act discretely.
3. After the user goes through all the previously defined stages, if the researcher considers it appropriate, he or she can approach the user to clarify potential doubts about the user experience. Bearing in mind that this approach would only be taken after the conclusion of the journey under observation. The main insights are written down and organized. The teams share what has been learned.
4. The results can be compared with what users said during the in-depth user interviews, and this helps to build the user journey.

Analogy research

Objective
Look for examples, metaphors, situations or challenges that are like the ones under research. By doing this, the team, in addition to broadening its understanding and view of the topic, can derive inspiration from good examples of solutions to similar challenges.

Time
Preparation: up to 30 minutes for organizing the research.
Execution: up to 2 hours, depending on the topic and the quantity and quality of the material subject to research.

Team
1 to 3 people.

Material/resources
Computer and Internet access. Paper and pens.

Points of attention
Depending on the challenge, there may be either insufficient or excessive information. When there is plenty of information, the researcher should try to concentrate on the most important one. If references are scarce, a subject matter professional or specialist may be sought and interviewed to obtain more relevant information. Whenever possible, look for more than one research source for the same case, and check whether the information is consistent. If, necessary, seek more sources for a higher degree of precision in the research.

Step by step
1. Define the theme to be researched and establish the search timeline.
2. Collectively determine the research methodology and the themes to be addressed.
3. Discuss and write down all possible metaphors and analogies related to the challenge.
4. Divide the research areas so that each researcher/team member can take care of his or her part.
5. Once searches have been completed, each researcher/team member shares the lessons and conclusions from his or her research with colleagues. Together, they perform the clustering, cross check the information and discuss the material.
6. The main insights are written down and organized.

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(RE) DEFINITION

Affinity Diagram | Problem (Re)Definition Matrix
In-Depth Interview | Personas | How can we...

During the **(Re)definition phase**, the challenge will be analyzed in depth. Often times, the problem initially identified is only a consequence of facts still unknown. Only after having gone through the first Design Thinking phase (the empathy or immersion stages) is it possible to truly comprehend the problem causes and detect where such causes lie.

It is first necessary to know what should be solved and consider the opportunities for taking action. According to Einstein, if he had one hour to solve a problem, he would spend 55 minutes thinking about it, and 5 minutes thinking about the solutions to it. This is because the more one thinks about a problem, the more effective its solution will be.

The first step is to express the problem in the form of a challenging question to the group, beginning with “How might we...?”

To get to the core of the theme to be solved, it is necessary to ask many questions, having people take a step back and reconsidered long-established practices to shed light on hidden or overlooked information, which can lead to valuable insights and help solve the problem in unexpected ways.

Affinity diagram

Objective

Upon identifying the patterns in the data contained on insight cards or Post-its, this material is arranged in a diagram (for example, an organization chart or process flow chart) based on affinities, similitudes, dependencies or proximities, with a view to helping understand the problem. The affinity diagram helps define the challenges to be addressed, their subdivisions and interdependencies, connections between themes, and opportunities for the project.

Time

15-20 minutes.

Team

The whole group.

Materials/resources

Post-its, Insight cards, pens, whiteboard markers in different colors, and A0 paper (or paper roll).

Point of attention

Suggestion: the data organization process can be repeated on other occasions by different groups of people, depending on the complexity of the theme and the volume of data. Attention should be paid to recording each stage and its results, to contribute to understanding the problem. Additionally, the affinity diagrams will be useful for stimulating the generation of solutions in the Ideation phase.

Step by step

1. Bring the Post-its containing the data compiled in the Empathy phase together with the Insight Cards, considering the most important findings made during this step.
2. Organize the material (Post-its and Insight Cards) based on affinities, similitudes, dependencies or data proximity, representing these relations through visual elements (for example, arrows or circles for delimiting groups).
3. Draw diagrams to explain the relations existing among data, as well as their subdivisions and interdependencies.
4. Explore connections with other topics.
5. Identify challenges and work opportunities.
6. If necessary, repeat the activity some other time, with the same team or with different people, if the volume of data so requires.
7. Record the result(s) of the activity carried out, which will serve as a basis for the Ideation phase.

Problem (re)definition matrix

Objective

This tool serves for both segmenting a problem and examining it from various angles, as a help to examine the problem's broader context and associated themes. It is designed for structuring the analysis of a specific problem in a way that optimizes time.

Time

20 minutes-1 hours.

Team

The whole group.

Materials/resources

Post-its, pens, whiteboard markers, matrix (attach file) and flipchart or cardboard sheets.

Point of attention

Suggestion: this activity may lead to redirecting a problem initially oriented in another direction. For example, what would happen if instead of observing the needs of senior people you focused on their capacities?

Step by step

1. Use the Problem Definition template individually or in groups, exchanging ideas while writing down your notes (on Post-its). The goal of this step is to capture, compare and discuss different points of view about the problem.
2. Review the notes and discuss them with the team members, checking whether the same factors are being considered, and elements are being focused identically:

   - What is the main theme to be discussed and why is it important?
   - Who is this a problem for?
   - What is the benefit intended to be provided?
   - What social/cultural factors impact on this problem?
   - Can you think about this problem in another way? Can you redefine it?

In-Depth interview

Objective

To enable interviewees to share relevant information about their experience. This is the time for listening to what users have to say and delving deeper into their universe to understand their behavior, difficulties, perspectives, and desires. In addition to users, experts can contribute more technical and objective information.

Time

Preparation: 1-2 hours.
Execution: 40 minutes-1 hour 30 minutes.
Process: to be processed each interview takes on average twice the time it was held.

Team

2 people, one of them to conduct the interview and another one to write down the most relevant information. The presence of more than two interviewers can inhibit the interviewee.

Materials/resources

Take clipboards and pens for writing down notes; also take a recorder, a video camera, and a photographic camera.

Point of attention

After the first few interviews, it is important for the team to corroborate whether the initial plan and the activity (if any) have worked out. If necessary, make adjustments to enhance the efficacy of future interviews. In each interview, the pair of interviewers take turns asking questions and taking notes.

Step by step

1. After selecting the users to be interviewed, call them up to schedule a date and time for the interview. Consider the project timeline and coordinate the most suitable dates with the team. The decision on the number of interviewees varies in accordance with the project scope, the research time required, and the size of the team. Do not leave out the time required for information processing. Take into account that this type of interview takes energy and dedication; the team should conduct not more than 3 interviews a day.
2. Prepare for this conversation by drafting a script containing questions relevant to the objective of the research. Discuss with the team the themes that will be addressed. How can these people contribute to understanding the challenge posed by the project? What do we want to know about them? What are the items we intend to elaborate on? Once the themes have been defined, ask open questions like “Please tell me about an experience...”; “What is the worst difficulty to...?” Motivate the stories and search for extremes, “Which was the best time you...?” “And the worst...?” Avoid yes or no questions and be very careful to avoid leading questions.
3. Using the list of questions, organize a structure that helps the researcher conduct the interview. One technique consists in creating cards that contain themes, something the interviewee can visualize. This may break the formality and make the person more comfortable. A simple activity can be useful to make the interviewee more at ease or to address specific topics. The format of this activity is free and defined according to the objective of the research.
4. Equipped with the list of questions, activity cards, cameras and recorders, the pair of researchers goes to the place of the interview as scheduled. It is important to define who will conduct the

interview and who will write down insights, keep track of time and take photographic/video records. Think of this interview as an informal conversation, it is important to set up linkages and make the environment as comfortable as possible; a conversation before the start of the interview may be in order. Observe the environment, the decoration, if the person has pets; these and other details convey information about the person.

5. To begin with, say who you are, what the research is about, and inform that audio and photographic records will be taken. Leave the cards with the topics that will be discussed in a visible place. Begin by asking questions that are easy to answer. Elaborate on what the person feels, his or her frustrations and hopes. During the conversation, explore topics related to the challenge. Do not worry about the order of the questions, you will feel when the time is right to ask them. If necessary, go back to some questions and elaborate on them. Keep the conversation flowing and make use of conversation hooks. Let the person speak, tell stories, but also guide them toward the issues that need exploration. Beware not to lead answers.
6. At the end of the interview, stress the importance of the person's participation, and make yourself available for any doubts. Participants usually receive a reward at the end of the interview: a souvenir, a voucher, or some service.
7. Once you have completed the interview, when everything is still fresh on your memory, devote some time to talking about the interview, sharing each other's impressions and arranging the main insights on the project mural using Post-its and photographs. Templates can also be used. Processing the information in segments will be key to compiling and analyzing the interviews. In the event you have any doubts, go back to the conversation audio file.
8. Visualizing all the interviews after they have been completed facilitates the exchange of insights and information. This analysis can be combined with other techniques, transforming these, for example, into material for use with presentations for customers. This will also help in the creation of personas and user journeys.

Personas

Objective

To create fictional characters exhibiting characteristics, behaviors and mental models that represent the profiles of groups of users of the service under consideration.

Time

Preparation: 10 minutes for printing out the template.
Execution: 30 minutes-2 hours. Depending on the number of personas created.

Team

At least 2 people.

Materials/resources

Template, Post-its, paper, pens, whiteboard, flipchart.

Points of attention

It is recommended that personas be created based on concrete information drawn from in-depth interviews, observations, demographic data, etc. Personas can also be created in workshops, as an activity where groups can visualize the profiles of service users and develop people-focused solutions.

Step by step

1. Print out the template and complete it collaboratively. With Post-its and pens at hand, each team member should present his or her idea. If the idea makes sense to the group, write it on Post-its and stick these to the template. Make up names, ages, academic backgrounds, hobbies, dreams, a date, etc. These pieces of information can be modified as needed for the project.
2. The creation of personas requires that the team be mindful of what people feel, their behavior, routines, preferences, motivations, etc.
3. The information obtained from interviews enables the identification of different types of users. Using a real person as a model can facilitate the process, particularly in a workshop, but do not stick to this method. Look for common characteristics in a group of people. The number of personas varies depending on the groups using the service. Once the personas are ready, it is possible to map the various needs of each group of people, and consider solutions meeting their expectations.

How might we...

Objective

To help formulate the challenging question by defining what will be done, who for, and what the objective will be. This can also give rise to questions for starting the brainstorming exercise, contributing to the generation of insights, perceptions and, subsequently, ideas.

Time

Preparation: none.
Execution: 30-2 hours. It is important to devote time to this tool, as the questions formulated here will guide the continuation of the project.

Team

At least 3 people.

Materials/resources

Template, post-its, paper sheets (optional), whiteboard (optional) and pens.
Surveys with illustrations, materials, and videos relating to the theme addressed can also help in the formulation of the questions.

Point of attention

The challenging question is developed after delving into and understanding a scenario; this way, the question can be formulated at the end of the DIAGNOSIS and EXPLORATION process. The challenge will guide the entire idea-generation process. The challenging question can also be used during the CO-CREATION stage, in a period devoted to generating solutions, with an aim at bringing forth reflections, insights, and ideas. Beware of the challenge scope. If it is too broad, the discussion loses direction, if it is too narrow, the possibility of creating new ideas is diminished. The challenge should have a simple format and be formulated in a straightforward manner.

Step by step

1. Three basic questions should be answered in connection with the challenging question:

   WHAT IS IT?
   What is the action intended to be carried out? For example: We want to improve on the Urgent Care admission service.

   WHO FOR?
   Who will be affected by the action? What is the target population? Example: Patients.

   WHAT IS THE OBJECTIVE?
   What do we want to achieve with this action? Example: Quality assistance.

   The challenging question is: How might we improve the Urgency Care admission, so that patients receive quality assistance?

2. Thus the formulation of the challenge should take account of the project's target population, the main objectives of the challenge, and some guiding concepts.

   For the generation of ideas:

   - Faced with a complex challenge, the team will have to cope with the multiple layers of a problem. Divide the layers into smaller problems, and write them down on Post-its, a whiteboard, a billboard or a sheet of paper.
   - To elicit solutions to these problems, use the "How might we...?" question with an aim at spawning several ideas.
   - In a workshop, for example, the facilitator can use this approach to motivate the group.

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IDEATION

Brainwriting | Swap | Fast Idea Generator | “The Worst Possible Idea” | Brainstorming | What if... | Analogies
The World Café | Clustering| Future Scenarios

The objective of the Ideation phase is to generate innovative ideas aimed at solving problems. In this case, it is essential that what needs solution should have been established in the previous phase and have been duly understood by the team.

Since attitudes, thoughts, and willingness to cooperate among people are influenced by the environment, it is important to ensure an inspirational setting that promotes the generation of ideas, facilitates the exchange of such ideas in a free, balanced, and nonjudgmental manner, and, ideally, is separated from the daily routines of the participants.

In this phase, the team should be comprised of representatives from the various groups of actors mapped during the Empathy phase, to ensure a diversity of viewpoints and experiences on the theme.

Participants are invited to "think out of the box". For this purpose, a set of tools can be used which should be selected according to the characteristics of the team.

In order to ensure the success of an idea-generation session, a number of rules should be observed, including:

- Stay focused on the theme!
- Do not block ideas! Go for quantity!
- Be visual, sketch your ideas!
- Avoid critical postures, even in a nonverbal way! Do not be judgmental!
- Encourage unusual, uncommon, peculiar ideas!

At the end of this phase, the group should compile, categorize, refine, and select the best, most practical or most innovative ideas among the ones generated.

Brainwriting

Objective

Brainwriting is a variation of Brainstorming. The strength of this method lies in the application of multiple contributions to the construction of ideas. It is a good starting point for a session aimed at generating and sharing ideas, where participants are encouraged to build upon the ideas of others. This way, everyone contributes to the development of ideas, which end up having several "owners".

Time

30-45 minutes.

Team

From 5 to 15 participants (including representatives of the actors identified during the Empathy/Immersion Phase).

Materials/resources

Cards or Post-its, pens (preferably permanent ink, black, medium point ones), a whiteboard, mural, or flipchart where the cards/Post-its can be posted and voting stickers (round adhesive stickers).

Point of attention

A brainwriting session, conducted in silence, enables the generation ideas without these being subject to criticism and facilitates a space for co-creation. Since it draws on writing as the means of expression, it facilitates the participation of people who do not feel comfortable presenting their ideas orally, thus ensuring that everyone is "heard" and contributes to the creation of innovative solutions.

Step by step

1. On a surface visible to all participants, write or sketch the theme about which ideas should be generated, presented in the form of a challenging/motivational question, like in the "How might we...?" model.
2. Distribute the cards or Post-its to all the participants and then ask them to silently come up with ideas related to the theme and write them down on the cards.
3. Once a participant has written down an idea on a card, he or she should pass it on to the next person on his or her right.
4. Inform participants that they should read the card received in silence and consider it a "stimulus for an idea". Then, they should add an idea inspired by the one written down on the card or improve on the latter.
5. Carry on this procedure by passing the card on to the next person on the right until the card containing each idea has gone around the whole group, or until several ideas have been written down on each card.
6. Upon completing the "brainwriting" process, collect the cards and post them on the mural around the theme sketched or written down.
7. Invite the participants to approach the mural to review the ideas and group these according to their affinity.
8. Ask the participants to vote on the idea(s) that is(are) best suited for the challenge (provide three voting stickers to each participant).

SWAP

Objective
This is a great practice for generating and sharing ideas. Participants are encouraged to build on the ideas of their colleagues, depersonalizing these. The fact that writing is used as the means of expression in the first phase of this activity stimulates everyone to contribute ideas, as the participation of both the extroverted and the more reserved ones is balanced.

Time
70-110 minutes.

Team
12 to 20 people.

Materials/resources
Cards or Post-its, papers, color pens, crayons, paper, scissors, etc.

Point of attention
This activity necessitates the participation of 4 to 8 users (people related to the theme discussed or the service being designed, preferably interviewed during the Empathy Phase).

Step by step
1. Make sure the group is comprised of 4 to 8 users (people related to the theme discussed or service being designed, preferably interviewed in an earlier stage).
2. Divide the participants into groups comprised of 1 to 2 users per group; then include project team members in each group.
3. Provide the groups with the materials required (paper, color pens, crayons, paper, scissors, etc.) to enable them to apply their creativity to the generation of ideas.
4. Reveal the challenge: "How might we [create something] that helps people [do something better, get rid of pain, achieve what they want...]?" For example: "How might we devise a travel service that helps people plan their trips collectively?"
5. Give participants 10 minutes to individually generate as many ideas as possible and write down each idea on a card/Post-it. They should write down the largest possible number of ideas without wasting time.
6. Subsequently, each participant will have 1 minute to explain only one of his or her ideas to the group, which in turn will have 10 minutes to work collectively on the idea put forward with an aim at improving on or raising the level of the idea.
7. Select one of the participants to keep track of the time allocated to the practice.
8. Once the time established for presenting and improving on the first idea is up, the next participant clockwise should repeat the procedure until the group has collaboratively developed the ideas put forward by all the participants.
9. After each round is completed, all ideas should convey the impression that they belong to the group as a whole, and not to a specific participant.
10. After the ideation phase, the group will have 15 minutes to finish and prepare a presentation, addressing each concept developed.

11. Next, each group will have from 2 to 5 minutes to present their final concepts. Only users (the people related to the theme discussed or service being designed, preferably interviewed during the Empathy phase) can make presentations. Presenters should undertake to stand behind the ideas they put forward, while the other participants should take on a critical, skeptical role, formulating questions intended to challenge the ideas.
12. This “crossfire” practice is a great method for the project team to gain knowledge. As they observe users themselves criticizing or advocating their ideas, the team can get valuable insights about what these people really value.

Fast Idea Generator

Objective

To help conceive new ideas for potential solutions, and enhance services or products currently being offered by challenging these through different approaches. Out of the seven approaches or challenges proposed, the team should select the ones considered most suitable for elaborating on the theme. This tool can also be used as a primer for the development of the discussion.

Time

20 minutes.

Team

The whole group.

Materials/resources

Matrix (attach file); Post-its; pens (permanent ink).

Point of attention

Suggestion: in order to apply this tool effectively, the starting point (existing problem, opportunity, idea-concept or proposal) should be clearly defined.

Step by step

1. Start with an existing concept, problem or opportunity.
2. Apply the 9 challenges suggested on the template:

    - Inversion: invert the roles, invert the common practice upside down.
    - Integration: integrate the offer with other offers.
    - Extension: extend the offer.
    - Differentiation: segment the offer.
    - Addition: add a new element.
    - Subtraction: take something away.
    - Translation: translate a practice associated with another field.
    - Grafting: graft on an element of practice from another field.
    - Exaggeration: push something to its most extreme expression.

3. Review the ideas and select the best ones to subsequently develop viable innovations.

Worst possible idea

Objective

To stimulate participants to “think out of the box”. This dynamic helps break the initial tension existing among people and create an environment that stimulates the generation of ideas. The purpose of this activity is not to embarrass people or create winners and losers, but to build confidence and make people feel at ease within the group, paving the way for a mindset conducive to the generation of ideas.

Time

15 minutes.

Team

At least 4 people.

Materials/resources

Paper and pens

Point of attention

The “Worst possible idea” technique is not restricted to a practice exclusively aimed at breaking the ice, since the insights obtained from very bad ideas can be applied to the generation of great ideas.

Step by step

1. Ask participants to either individually or in groups come up with as many bad, awful, disastrous ideas as they possibly can.
2. Ask them to explore the attributes that make these ideas really bad.
3. Ask them to search for the opposite of these attributes.
4. Or consider taking away the bad attributes, replacing them with something else.
5. Or blend and combine different bad ideas and see what comes out.

Brainstorming

Objective

To explore people's creativity, especially while carrying out ideation tasks in groups. This method can be used to address both minor challenges and complex problems.

Time

Preparation: 1-2 hours.
Execution: 15 minutes-2 hours.

Team

Workshops including 1 facilitator (who can participate in the exercise or not) and at least 3 participants.

Materials/resources

Post-its, pens, paintbrushes, a flipchart or whiteboard, adhesive tape, a watch, and a Tibetan bell. Computer with Excel software.

Point of attention

Participants need to be aware of the basic rules of brainstorming for the organization of internal activities or workshops. In workshops, the facilitator should explain and present the brainstorming rules. The role of the facilitator is to motivate the group with questions, to keep it productive and organized. Additionally, the facilitator should ensure that everyone is given the time to present his or her points of view and ideas.

Step by step

1. Define the challenge for which you wish to generate ideas.
2. Invite people and resort to diverse profiles to enrich the idea-generation process. Those people who are not immersed in the project daily, and are not experts on the matter, may come up with unconventional ideas.
3. Formulate questions intended to guide the generation of ideas.
4. Prepare the materials and the workspace (wipe the table and whiteboard clean or place the flipchart in front of the mural where Post-its will be posted).
5. Once the group is assembled, explain the challenge and the brainstorming exercise rules, and place these where all participants can see them. These rules include:

   - One conversation at a time.
   - Go for quantity. Aim for as many ideas as possible.
   - Build on the ideas of others.
   - Encourage wild ideas.
   - Be visual.
   - Stay focused on the proposed theme.
   - Avoid criticism and judgments.

6. Pay attention to the activity and think about new questions that can enrich and stimulate the generation of ideas.

7. Once the brainstorming session is finished, it is time for the group to select, categorize, group together and prioritize ideas. Jointly establish parameters and criteria for this procedure to occur in an assertive manner.
8. Subsequently, the ideas selected can be further developed and prototyped. Create the template containing the ideas selected and categorized.

What if...

Objective

To generate ideas and stimulate creativity in co-creation sessions organized as both internal team activities and workshops.

Time

Preparation: none.
Execution: co-creation sessions not exceeding one hour.

Team

At least 2 people.
For workshops: 1 facilitator and at least 4 participants.

Materials/resources

Printouts, a mural or whiteboard, flipchart sheets, pens and scripto pencils, Post-its.

Point of attention

Be creative, keep the group engaged, and be mindful not to lose focus. Keep track of time and monitor rounds.

Step by step

1. Use “What if...” questions to draw out new ideas when the group gets stuck.
2. Elicit situations trough “What if...” questions, complementing someone else’s idea. For example: What if a robot provides the service? What if there was no bureaucracy? What if we had available resources? What if the situation took place in another country? What if we knew the expectations from the service?
3. Record the ideas that are most stimulating for the group. Draw connections between wild ideas and adapt these to real-life situations.

Analogies

Objective

To conceptualize and think about problems differently, connecting the ludic with the intuitive to achieve a definition of the challenge. This can be done before defining the challenge's final phase or in a brainstorming session.

Time

Preparation: 5 minutes to prepare papers and pens and give instructions and examples.
Execution: 15-30 minutes, depending on the number of people.

Team

All the members.
In workshops: 1 facilitator **Participants:** 5.

Materials/resources

A5 or A4 sheets or a printed-out template, scripto pens, a table or clipboards.

Point of attention

In workshops, it is essential that the facilitator should explain what an analogy is. To facilitate understanding, give examples like these:

- receiving proper assistance in a hospital is like winning a football match; this can only occur when you have a very united and passionate team.
- Renting a house is like walking 5 kilometers with a pebble in your shoe. You know you must finish, but you feel like quitting halfway.

Step by step

1. In an internal activity, every team member should be aware that this is a convergence movement towards a new challenging question. This can be a challenging process, as it takes leaving out some elements and making decisions concerning the progress of the rest of the project. As is the case with workshops, it is the role of the facilitator to clarify the objective to the participants, giving examples of analogies and the respective challenging questions arising from this process.
2. Either as an internal team activity or in a workshop, for 5 minutes the group should write down in silence the largest number of analogies to the initial challenge they can come up with, without filters or "correct" / "incorrect" options. In a workshop, if the group is stuck, the facilitator should provide more examples and give them a few more minutes.
3. Everyone should share the analogies he or she has written down, without discussing these extensively, though; it is easy to lose focus while working with analogies. Ask them to write down which of these analogies make more sense for the project.
4. The group should choose the analogy that best represents the situation. If necessary, make some adaptations, but without building a "patchwork quilt" just to please participants. The main thing here is that the analogy resonates with all participants.

5. In the end, one of the participants should write the selected analogy on a bigger sheet of paper. In a workshop, each group shares its analogy with the other groups.

The World Café

Objective

The objective of the World Café as a tool is to provide a structured dialog process that can be applied to different situations; from the discussion of a theme aimed at understanding the points of view of a group, to the co-creation of solutions to complex challenges.

Time

Preparation: 2-3 hours.
Execution: 2 hours.

Team

At least 2 people.

Materials/resources

Tables (round ones, if possible), chairs, color crayons, bell, chronometer, a flipchart stand per table or another vertical structure to which a blank poster can be attached, if possible.

Point of attention

SUGGESTION: Prepare a flower vase and some sweets and leave these on each table. The secret to this activity is to formulate good questions promoting dialog and disclosure. First, try the question with a colleague, if it generates new ideas, you are on the right path.

Step by Step

1. Before anything else, it is important to explain that the World Café activity includes four very important roles:

    - Facilitator: the person responsible for facilitating the activity. This person will lead the process, presenting the questions and giving participants the cue for switching tables.
    - Ambassador of meaning: this person will participate in the activity and randomly move around tables during each round of questions, always seeking to interact with groups formed by different people. The ambassador of meaning is responsible for carrying the ideas conceived in one table to other tables for discussion.
    - Host: this participant will remain seated at each question table, and will be in charge of receiving new participants, intertwining all conversations, writing down ideas and discussions on the blank poster, and finally, sharing the results from all discussions with groups. This person can be designated before or during the activity.
    - Logistics person: It is important to have in place a person responsible for the logistics of the process (e.g., making photographic/video records), who also assists the facilitator during the process.

2. Before the event:

    - Choose a name for the Café. For example: Health Innovation Café

- Send out invitations to the participants.
- Prepare the questions.
- Define who will be the table host. Hosts can also be selected among guests during the event.

3. During the event:

- receive the guests and seat 4 to 5 people at each table.
- Explain the activity: the facilitator will bring up the first question, and each table will have around 20 minutes to prepare the question. At the end of the 20-minute period, the facilitator sounds the bell and people switch tables, trying to seat with different people on each round. The host is the only person who remains at the same table throughout the activity.
- Ask the questions sequentially within the predefined time. Ideally, there should be 3 rounds of questions of 20 minutes each. When the time is up, sound the bell to signal that people should switch tables. Encourage the host or the ambassador to record ideas through drawings made or words written on blank posters. In the last round, people can go back to their initial tables to summarize their ideas.
- Once the questions part is completed, it is time to share the results with the whole group. Having witnessed all discussions, the hosts of each table are responsible for sharing the information.

Clustering

Objective

To process information obtained from research, workshops, interviews, etc., and classify large quantities of insights, information or ideas into clusters (groups) of similar themes to facilitate understanding and analysis.

Time

Preparation: 10 minutes for organizing the information.
Execution: 1 hour. Time varies depending on the quantity of information to be processed, or even the complexity level of the topic to be addressed.

Team

Ideally, at least 3 people should participate in this process. If used in a workshop, the number of participants will depend on its purpose. However, ideally, each group should be comprised of no more than 7 persons, with a facilitator to help during the process.

Materials/resources

Post-its, crayons, A2 sheets, or mural.

Point of attention

It is important that ideas, observations, information, and insights should not be restrained. Everyone should be at liberty to put forward their observations without any of these being rejected. The team should compile all the material containing information obtained from interviews, workshops, and research, and make this material available. Adequate space should be allocated to posting the Post-its or writing, thus enabling the sharing of information

Step by step

1. Using different Post-its, write down all ideas or information concerning the theme under consideration without classifying the same. Post-its should be posted within a frame, on a wall, on a table, or someplace else that enables their visualization.
2. Next, ideas should be grouped together by themes, which facilitates the organization and identification of each theme.
3. Name the clusters (groups). For example, in the education area, groups with the following designations can formed: barriers, teachers, students, country context, etc. This varies according to the theme under discussion. Humorous names can be used to make the activity more dynamic and cheer up the group.
4. Analyze the information and cross-check it against other clusterings obtained through another technique applied to the research. For example, collect information from in-depth interviews, what people said, and compare this against field-study results.
5. Clustering extends across the project since it involves the capacity to connect dots and identify themes, concepts, and ideas.

Future scenarios

Objective
To bring in new perceptions and opportunities through an appreciative view of the challenge. This also helps plan future actions in complex environments.

Time
Preparation: up to 3 days.
Execution: 4-hour session.

Team
At least 2 people for a co-creation session.

Materials/resources
Mural or whiteboard, flipchart sheets, color pens and Post-its.

Point of attention
Observe whether all team members are participating in the scenario building and counteract any personal interests that may constitute a bias to the group.

Step by step
1. Before starting, explore the main insights obtained during the research. Do not omit to highlight the possibilities of the challenge under an appreciative view.
2. Try to collectively understand the essence and purpose of the service. With this level of clarity, it is easy to make forward-looking projections and generate ideas that can bring about improvements.
3. Show world images and cases that inspire new possibilities for the service. Encourage the group to make drawings of and narrate service experiences that stimulate creativity. Make phrases or narrate stories with a view to realizing the scenarios developed. Drawings are welcome.
4. This is an internal activity; future scenarios facilitate generating ideas and envisaging the long-term evolution of a service as well as determining future steps.

Design Thinking

TOOLKIT

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PROTOTYPING

New User Journey | Storyboard | Volumetric or Scale Model | Role-Play | General Prototyping

During the **Prototyping phase**, prototypes are created to help think realistically about the way in which people will interact with the projected concept. Building models contributes to the visualization of ideas as something real and tangible, as well as to a fast iteration of solutions. Creating different prototypes, that reveal diverse aspects of the product or service, enable people to get honest feedback and avoid premature decisions.

A prototype can give someone a sensation before the solution actually exists.

Prototypes should be built in the quickest and simplest possible manner, go for “quick and inexpensive”.

A prototype should answer questions about concepts like, for example, desirability, usefulness, ease of use, viability or possibility. The following considerations should be taken into account:

- What are we prototyping this for?
- What do we want to know?
- What do we want to prove?
- What do we want to discover?

New user journey

Objective

To simulate material artifacts, environments or interpersonal relations representing one or more aspects of a service, so as to engage users and place them in the context of the solution proposed.

Time

Variable, depending on the complexity of the journey.

Team

Project work team.

Materials/resources

Post-its and scripto pens.

Point of attention

When intending to simulate the abstract aspects of services to corroborate understandings and sensations at each contact point, each item should be projected, and user interactions should be managed with a view to designing a transforming solution.

Step by Step

1. Take note of the moments that define the service.
2. Define the intents for each service moment. In other words, select the main items users may desire while interacting with the service; focus on “What”.
3. Define the facilitators for each user intent. These can be persons, processes, channels, digital manifestations or objects; focus on “How”.
4. When an intent meets a facilitator, an interaction occurs.

Storyboard

Objective
The storyboard is a set of drawings arranged in chronological order where the main stages of and actions in a service are displayed. These visual items, regardless of their simplicity, contribute to the visualization and understanding of the whole activity of the service proposed. The Storyboard is a fast and economical way of prototyping an idea, which can subsequently be presented through an animation.

Time
Preparation: at least 1 hour to consider the main solutions for the service, which will be presented through the storyboard scenes.
Execution: 3-8 hours to design the main stages of the service**.**

Team
It is enough to have one person who can draw, so the drawings follow a standard / a single language. However, there are no limits regarding the number of persons who can define scenes/stages.

Materials/resources
Design tools, including paper, pencils and pens, or even graphic software, like Illustrator of Photoshop.

Point of attention
It is important for the design to illustratively reflect the stages of the process.

Step by step
1. Select the main stages of the service solutions that will be represented in a design.
2. Consider the best strategy for designing the service stages, with an aim at facilitating their understanding to any persons who wish to know them.
3. Draw the service stages in chronological order to assess the main solutions.

Volumetric or scale model

Objective

To build a physical model of a product that enables the three-dimensional visualization of a concept. This calls for criticism from users, with the consequential refinement of the concept.

Time

60 minutes.

Team

At least 1 person.

Materials/resources

Paper, pens, various types of materials at hand.

Point of attention

The level of fidelity may range from low, with just a few details, to high, presenting the appearance of a final, although still not functional product.

Step by step

1. Take note of the materials required to build the prototype.
2. Build a model using different types of materials or applying unusual combinations.
3. Share ideas to find out whether these make sense, or there are new ideas that can be incorporated.

Role-play

Objective

To simulate a journey, normally used for presenting a challenge or solution.

Time

Preparation: 30 minutes.
Execution: 5-10 minutes for each group.

Team

4 to 8 people.

Materials/resources

Prototyping materials (pens, paper, play dough, Lego pieces, scissors, EVA foam, toothpicks, adhesive tape, etc.). These will be used to build stages, characterize personas, etc.

Point of attention

Stimulate the participation of all group members and bear in mind that this exercise does not involve a presentation but a role-play.

Step by step

1. Divide participants into 4-8 people groups.
2. Ask each group to present a dramatization of a journey – challenge or solution.
3. As the exercise develops, indicate the time left before the activity is over.
4. When the time is up, ask each team to present its role-play.

General prototyping

Objective

Prototyping makes possible for ideas to be tested and reiterated before implementation. This favors the identification of improvement areas before energy and resources are spent on the implementation of an idea. It can also be used as a resource for materializing a customer service.

Time

Preparation: 10 minutes-1 hour. This may vary depending on the type of resources used.
Execution: 20 minutes-1 hour.

Team

Depending on the prototype, this may take from 2 to 8 people.

Materials/resources

Lego pieces, paper, color pens, stationery in general, a camera.

Point of attention

There are various ways of and resources for creating a prototype: a theater with a stage, Lego pieces, paper, a video record, building a product. It is important that the solution to the challenge be as clear as possible.

Step by step

1. Define the prototype to be built and its objective. For this purpose, take the following into account:

    - the degree of proximity to the original idea: the first prototypes can be simpler and more economical, then, as the idea is refined, prototypes can be built that are closer to reality.
    - The time available for the test: some prototypes can be built in a few minutes while others, like a stage, can take days.
    - People: some prototypes can require more people, like, for example, when building a theater.
    - Financial resources: there are very simple and economical options, like a paper prototype, and other very elaborate and expensive ones, like the construction of a setting that is very close to reality.

2. If the construction of the prototype takes more than one day, devise a workplan.
3. During the project, some prototypes can be built by service agents themselves. The test should preferably include actual customers of the product or service.
4. Observe the user experience with the prototype, obtain feedback, and repeat as necessary; that is, improve the prototype and re-run the test until the solution is validated or ruled out.

Design Thinking TOOLKIT para Governo

TEST

Wizard of Oz | Context Inquiry | Test/Iteration
Feedback | Project Mural

The **Test phase** is the last stage of the Design Thinking approach and, therefore, it is essential for the success of a project. Now the ideas will be tested for validation by product/service users and in the real world.

Prototypes not only materialize ideas, they are also vehicles to achieve the objective of putting the ideas to the test, receiving feedback, discovering problems, and adopting alternative approaches to solutions. Therefore, tests form part of the prototyping process, which includes accelerated solution-creation cycles and verifying whether such solutions measure up to their potential. During the test phase, solutions should always be enhanced and refined up to the point where all issues have been dealt with or improved up to the point where there remain no more values to be added to the scope and context of the project.

During the prototype testing phase, the empathy phase should be revisited. Moreover, some of the tools used during the empathy phase could be applied again, including empathy maps, user journeys, etc., to compare feedback received from users. This is a demonstration of the iterative nature of Design Thinking. Another dynamic that can be tapped into consists in enhancing a solution and testing it repeatedly in a set of iterations, which can also lead to the identification of new areas for improving and innovating on existing ideas.

Throughout the Design Thinking phases, consideration should be given to the possibility of taking a step back, or even redeveloping the whole process. Consequently, records should be kept of those ideas that were not initially prototyped, because at some point they can be totally or partially reconsidered. It is most important that the team always should be receptive to learning from the mistakes committed in previous iterations, and to pushing ahead towards a satisfactory solution to the challenge in question.

Wizard of Oz

Objective

The Wizard of Oz tool makes possible to directly observe users, watch the way they interact and receive first-hand feedback.

This is a user-driven testing procedure, which contemplates an interaction between the participants and the system/product. During this interaction, the project team watches the situation from behind a screen or another hidden place.

Time

Undetermined.

Team

At least 1 person.

Materials/resources

Paper and pen.

Point of attention

The test team can immediately make changes or provide the system with feedback in response to user actions, creating the impression that users are interacting with a fully functional, real system.

Step by step

1. Identify a situation that requires observation. Normally, we intend to observe the way users interact with one another, the service agents, or the equipment.
2. Prepare the premises to enable the researchers to observe users from a hidden place. It is a common practice to use one-way mirrored rooms where one can watch from the inside only. It is important for researchers to find a place from where they have a good view of the faces and gestures of all users observed.
3. Watch the interaction among users and their movements. Where do users look at? Who do they talk to? Do they exhibit certainty or doubt?
4. Write down usual and dissimilar actions and behaviors that draw your attention. Often times, extreme users, who act differently from most, provide the best insights.
5. Interact with the other researchers to compare notes and define insights.
6. Write down insights on insight cards.

Contextual Inquiry

Objective

The crucial test for a solution is its implementation in the real world and within a context. This provides the highest levels of insight about the areas of a problem, or the changes required to improve the efficacy of solutions. It also enables the occurrence of unforeseen situations and interferences, which would be unlikely to occur in controlled test environments.

Time

Undetermined.

Team

At least 1 person.

Materials/resources

Paper and pen.

Point of attention

This level of inquiry requires that the solution should have a level of fidelity sufficiently high as not to distract users from the commitment required from them and the solution experience.

Step by step

1. Identify the participants in the test.
2. Find and reserve the premises where the test will be conducted.
3. Define some questions that need to be answered through the test.
4. Prepare the questions formulated for the test.
5. Write down the steps that will guide the participants through the test.
6. Allocate time and set the dates for the test.
7. Document everything that happens during the test, using photographic and video records, if possible.
8. Refine the prototypes using the insights collected during the test up to the point where all problems have been solved.

Test / Iteration

Objective

The objective of this tool is to create the conditions for ideas to be refined and improved on based on the feedback received after prototyping. This tool is used after the prototyping process. Ideally, both processes should be dealt with in the same workshop.

Time

Preparation: 30 minutes is the minimum time required for facilitators to prepare the graphic material for the evaluation /collection of feedback from prototypes.
Execution: at least 1 hour. The execution time may vary depending on the method selected for the prototype. This time will be allocated between feedback and iteration.

Team

One person responsible for preparing the graphic material. All participants in the prototyping exercise will also work on the feedback, and finally on the iteration steps. There is no limit as to the number of participants involved.

Materials/resources

Graphic material: one sheet divided into four sectors to be filled in with: strengths, weaknesses, doubts, and ideas for improvement. Pens, Lego pieces, paper, scrap material (for the iteration).
Card printouts using the tools selected. Tibetan bell and chronometer.

Point of attention

Encourage people to provide constructive feedback. It is important that those who will collect the feedback should be receptive and willing to listen and change their ideas, if necessary.

Step by step

1. Prepare and print out the feedback guidance sheets and distribute these to the groups.
2. Upon completion of the prototyping exercise, the groups should test the prototypes. While one group runs the tests, the other ones observe and write down their feedback. Other groups may participate in tests as product/service users, or just observe.
3. Once the test is completed, the groups will share their feedback.
4. After all the presentations, the groups go back to reconsidering their ideas based on the feedback received, and propose iterations aimed at improving the product or service.
5. The feedback contributes valuable insights/information that help create relevant and significant solutions for users, the purpose being to give credibility to the project. The evaluation/feedback and the iteration take place after the prototype presentation.

Feedback

Objective

To empower and motivate each person, so he or she grows beyond their professional circle, thus contributing to the team relationships and synchronization.

Time

Preparation: None.
Execution: 1-2 hours.

Team

The whole team.

Materials/resources

Notebooks and pens.

Point of attention

This is a tool that profoundly stirs up emotions. One should be very careful with the way one expresses him/herself, while trying to be both frank and sensitive at the same time. Please notice that feedback sessions need not to be carried out when a team has implemented the practice of solving sensitive problems immediately as they arise. Adhere to this practice as a team.

Step by step

1. There are many formats available, a suggestion would be: Plan the activity one week or more in advance. This will make possible for all team members to observe their colleagues and prepare their comments.
2. During this practice, ask everyone to think about:
   - Strengths (characteristics we like, admire; strong values; occasions when the person excelled; etc.).
   - Aspects each participant needs to improve (characteristics we dislike or make us sad; situations connected with the person that have made us feel upset, uncomfortable, worried, etc.).

   Notice: the closer to real cases and practical examples, the easier it will be for the person to understand the message. For example: When you did this (bring up a practical example), I felt (explain your emotion), because... (explain the reason). If you had done that, I would have felt differently (make a suggestion).

3. Then, we apply the hot-seat method. The first round is about aspects that need improvement. One participant is selected, and everyone addresses this participant. When everyone is finished with the aspects to be improved on about this participant, the next one takes his or her place. After everyone has received their feedback, move on to the next round: strengths.

   Notice: The listener just listens. Do not give answers at this time. Do not respond. Only receive. Sometimes, what people most strongly dislike hearing, is what they need most.

Project Mural

Objective

To publish the information and knowledge generated by the project in a visible place to make it easier for participants to update and other people interested in knowing more about the project.

Time

Preparation: 4 hours for designing and producing the slides.
Execution: 1 hour 30 minutes; use the panel.

Team

1 team member. If necessary, other team members can cooperate.

Materials/resources

Printout on A3 and A4 sheets, Post-it holders, Post-its (76 x 76 mm), crayon, 3 or 4 foam paper panels, and double contact tape.

Point of attention

The place where the panel will be located should be highly visible.

- In some places, it may be necessary to request authorization to put up the panels and signs.
- Some people will interact with the mural by posting Post-its with information or drawings that have nothing to do with the project or may even be offensive. It is necessary for the team to constantly monitor what is being posted there.
- The contents of the mural should be relevant to the people who watch it.
- As the project moves forward, the contents of the mural can be updated. Normally, new questions and contents will be posted every 15 days. These can include insights, lessons, achievements, etc.
- Creativity in the formulation of good questions and content is very welcome!
- When defining designs for displaying the information consider using .ppt files. PowerPoint is a great tool because of its ease of use and editing capabilities. You will prepare several kinds of material as the project moves forward.
- Depending on the wall, fixing the panel can be difficult. It can collapse. It is important to ensure that the panel is securely fixed! But you do not want to damage walls either!

Step by Step

1. First, collect information about the following themes contemplated in the project: what the institution is about, who is the team (photographs), and what the Mural is. Present the project's timeline, objectives, challenge, steps, and status.
2. Define a good layout to display the information and print everything out on A3 sheets.
3. Divide the printouts into three parts:
    - 1st Fixed, concerning the project and people.
    - 2nd Variable, concerning new knowledge generated during the project phases.
    - 3rd Interactive, enabling people to contribute ideas and suggestions.

4. Stick all the sheets to the foam paper panels. Start with the "Fixed" panel, then proceed with the "Variable" panel, and lastly, use the "Interactive" panel. On the last panel, attach the container where crayons and Post-its will be stored so people can use them as needed. Ready! Just take a photograph and manage it!

Design Thinking TOOLKIT para Governo

DYNAMICS

Check-out | Balloon tower | The marshmallow challenge
Egg dropping | Transit | Similarities and differences
Systemic body | Halfway meeting | Redefining an object
Dictionary | Story telling – Yes, and ... | Check-in
Green and red cultures | Human camera | String weaving

The **Activity** phase includes activities aimed at breaking the ice, integrating participants, energizing the group and exemplifying concepts.

Workshops can begin with a check-in exercise, followed by an integration activity. After the lunch break, a movement-oriented dynamic can help energize participants and get their commitment for the afternoon activities. Throughout the day, activity enable the implementation of concepts and the reflection on the contents addressed.

Check-out

Objective

The check-out is a useful tool for taking stock of the project workday, checking on the completion of tasks, and identifying what people's expectations and emotional states are at the end of the day. This exercise can be carried out in an internal activity, a workshop or a meeting.

Time

Preparation: 0-5 minutes, depending on the size of the circle, movement needs, and participants familiarity with the tool.
Execution: 5-20 minutes.

Team

At least two people. When there are more than 20 participants, it would be ideal to divide them into at least two groups.

Materials/resources

The object of speech.

Point of attention

It is not recommended that a check-out be conducted using only one word, as this would turn out to be an extremely superficial exercise and may fall short of meeting the objective of the tool.

The object of speech can be something ludic, such as a ball or a doll. However, particularly when it comes to external groups and workshops, beware of what the object represents, as well as its appropriateness for the group participating in the interaction. For instance, in a workshop organized for a group of senior people, do not use anything that can be offensive.

Step by step

1. Participants should form a circle, placing the object of speech in its center.
2. The basic question for the tool is: "What do you take home after working here today?" In the context of a workshop, explain to the group the way in which the interaction should take place, and guide them using some questions like: "Please, tell someone something about what you learnt from the tool today." You, in your role as facilitator, should determine the duration and depth of the interaction by giving examples and guiding the participants. Whenever necessary, ask the participants to be more objective.
3. One by one, participants address the object of speech and make their check-out. They should tell how they feel, what their expectations are, etc. Meanwhile, the rest of the participants should just listen.
4. The object of speech can be handed over to someone else, like the person standing next to the participant, or it can be returned to the center of the circle so that the order in which participants speak can be free and spontaneous, subject to the participants' will.

Balloon tower

Objective

To motivate and integrate participants through a reflection about planning versus implementation, availability of resources, creativity and goals.

Time

Preparation time: 5 minutes for distributing the balloons and adhesive tape to each group.
Execution: 15 minutes.

Team

At least three members.

Materials/resources

An even and ideally smooth floor to prevent balloons from bursting. A flipchart or .ppt slide where the conditions for success are exhibited; 25 standard party balloons per group, one roll of adhesive tape (for instance, Scotch Tape) per group, one measuring tape.

Concepts

Planning, creativity, integration and error.

Point of attention

Some balloons can burst after being distributed; however, the facilitator should not replace them! The group should use only such resources as are available at the outset.

Step by step

1. Invite participants to take part in a challenge where they will be architects and builders. Divide them into teams comprised of not more than 7 participants each.
2. Explain the following rules (and lay them down in writing): teams will have 8 minutes to build the tallest tower possible under the following conditions:

    - Resources per team include 25 balloons and adhesive tape.
    - The tower should stand on the floor and be self-supporting.
    - At the time it is being measured, the tower should keep upright for at least 10 seconds.

3. Give the go signal and stay with the participants, reminding them of the time left before the end of the exercise.
4. After the exercise is over, announce the height of each tower. Ask the groups about what the exercise was like for them, and how they felt. Ask the following questions if they have not already been addressed by the participants: “What was the planning-to-execution ratio?” “What was it like to make do with scant resources?” “Was there any rule preventing you from combining the resources to build one single tower?”

The marshmallow challenge

Objective

The marshmallow challenge is a powerful tool for evaluating the concept of “thinking with your hands” and showing that assumptions should not be validated without supporting evidence.

Time

Preparation: 15 minutes.
Execution: 18 minutes for building the towers and 20 minutes for debriefing.

Team

4-6 members.

Materials/resources

20 spaghettis, 1 meter of masking tape, 1 meter of string, 1 plain marshmallow for each team.

Point of attention

Structures should be self-supporting, built on even surfaces, and cannot hanged from the ceiling. No additional materials can be used, including scissors, staplers, glue, etc.

Step by step

1. Divide the participants into teams of 4-8 members.
2. Each team should occupy a table, with only the materials to be used for the challenge on it.
3. Instruct the teams to build in 18 minutes the tallest structure possible, using only the materials they were provided with.
   The structure should be self-supporting, and the marshmallow should remain in one piece and be located on the topmost section of the structure.
4. Give the go signal and keep track of time, indicating the time left to finish the exercise. Walk around the room and comment on the progress of the challenge, making an announcement every time a team manages to build a structure, with an aim at creating a feeling of friendly competition among groups.
5. Once the exercise is over, measure the structures, from the shortest to the tallest ones, announce their heights, and identify the winning team. Ask for a round of applause for the winners.
6. Explain that this challenge has been conducted thousands of times, always with identical results: the teams that manage to build the tallest structures are the ones that spend more time doing than planning. In fact, children are normally the ones who build the tallest structures, while business school students are the worst performers. Suggestion: if there is time available, show the TED video *Tom Wujec – Build a tower, build a team*.
7. The marshmallow challenge illustrates the need to validate assumptions and subject them to testing. Normally people think that as the marshmallow is light and soft it can be easily supported by the spaghettis. However, once the structure is built, the marshmallow turns up not to be so light. It is necessary to review people’s actual needs and run tests promptly, to make the relevant corrections.

Egg dropping

Objective

To encourage participants to adopt risk attitudes and demonstrate the importance of a prototype.

Time

Preparation: 5 minutes.
Execution: 20 minutes for building the structure and 15 min for debriefing/ questioning.

Team

4-8 participants.

Materials/resources

2 eggs, 20 plastic straws, 1 masking tape roll per group, 50 newspaper sheets for covering the floor, and paper towels for each team, should any emergencies occur.

Point of attention

No additional materials should be used. This exercise is more fun when using raw eggs; however, if the room may not be soiled, boiled eggs will do.

Step by step

1. Divide the participants into teams of 4-8 members.
2. Instruct each team to occupy a table with only the materials available for the challenge on it. While you explain the activity, the assistants should prepare the airstrip covering and area of the floor with newspaper sheets and masking tape.
3. Instruct the teams to build on the floor a structure for cushioning the falling eggs, which will be dropped from nose-height, the purpose of the structure being to prevent eggshells from cracking. Explain the teams that they will have 20 minutes to build the structures and can use one of the eggs for a test. The other egg will be used in the official challenge.
4. Keep track of time, informing the time remaining to finish the exercise. Walk around the room making comments on the progress made by the teams in coping with the challenge, with a view to fostering healthy competition.
5. When the time is up, organize the presentation of the structures. Ask each team to drop their egg on the platform. Creating an atmosphere of heightened suspense, check whether eggs remain intact, and encourage participants to acknowledge the efforts made by each team with a round of applause.
6. Ask each team to explain the process applied to build the structure, emphasizing the importance of the prototype used for the test with the first egg. Only by trial and error is it possible to know what must be done to make improvements.

Transit

Objective

To set the group in motion and highlighting the importance of respecting different views in a process involving the resolution of complex problems.

Time

Preparation: *5 minutes for arranging the chairs in a circle.*
Execution: 15-25 minutes.

Team

At least 10 members.

Materials/resources

Chairs.

Attention point

Clear, mindful facilitation with a view to achieving the established objective. If the reflection on the activity begins hesitantly, then the facilitator should ask questions and make remarks.

Step by step

1. At the beginning of the activity, participants should be sitting in a big circle, to enable eye contact between all of them. Remove any empty chairs from the circle.
2. Next, the facilitator should explain that an activity will be done the purpose of which is to set the group in motion. This exercise is divided into three rounds. To make the most of the activity, it is important that participants should be very attentive to what they observe in the room, as well as to the other participants, and be aware of their feelings.
3. Please explain that during the first round, participants should stand up and switch chairs. However, before sitting down again, they should make eye contact with at least another three participants.
4. At the end of the first round, with all the participants having taken seat, allow some time for sharing. Ask participants about what they felt, whether there were any differences when making eye contact with one person as opposed to another, whether any eye contact lengthened or, on the contrary, broke rapidly, how they felt looking and being looked in the eye, etc. Still, another interesting theme is the perception of space, for example, a participant who was facing the chairs is now facing the windows. This is how things work in real life: the scene you are seeing is not the same as the one someone else is seeing.
5. Pleased with the shared experience, now move on to the second round. Ask participants to switch chairs again, but before sitting down again, they should touch another three people.
6. At the end of the second round, allow some time for sharing. Prior themes can be elaborated on, and a new one can be brought up: whether the touch was heartfelt or seemed too strained, whether eye contact accompanied the touch, or the way the interaction varied from eye contact to touch.
7. Satisfied with the experience-sharing exercise, start the new round. Ask participants to switch chairs for the third time. However, this time, before sitting down again, participants should hug at least another three people. At this point, the environment usually feels much more relaxed,

with laughter and jokes being exchanged among participants. This is one of the strengths of this exercise.

8. Tap into the energy generated to talk about empathy, that is, to be able to stand in someone else's shoes, to allow for connecting with others. This is also a good time to ask participants about what has changed for them, how they felt past the last round. After this, conclude the exercise by thanking the participants for their involvement.

Similarities and differences

Objective

To promote a better understanding among participants and stimulate empathy.

Time

Preparation: none.
Execution: 10-15 minutes.

Team

5-8 members.

Materials/resources

None.

Point of attention

Normally, people find it difficult to begin this exercise, mainly because this is often the first exercise of the workshop. Giving examples will help a lot. It does not make sense to be too obvious in the context of a group. For example, in a group of dancers, dancing cannot be the shared feature.

Step by step

1. Divide participants into teams of 5-8 members.
2. Instruct the team to use 10 minutes to find a feature every participant has in common with the rest, and a feature each participant possesses that the rest of the group do not. Once all the teams are finished, the features in question are shared with all participants. Each person describes his or her unique features, and the last member of each team, in addition to describing his or her distinctive feature, also informs what everyone has in common.
3. Explain that all people are different, but they also have much in common, and that to truly understand the needs of users, one should get to know them and be able to stand in their shoes.

Systemic body

Objective
To show how the interests of the various agents in a network process impact on the micro and macro contexts of the systemic body.

Time
Preparation: none.
Execution: 20-30 minutes.

Team
10-40 members.

Materials/resources
None.

Point of attention
This activity requires a space where people have room to move.

Step by step
1. With all participants standing up together in a circle, explain the exercise: each participant should select another two participants and take a position equidistant from these.
2. Participants should not reveal who their two references are.
3. Given that all participants will be simultaneously trying to position themselves in relation to other participants, the group will move for a while, until a balance is finally reached. Set the pace with prompts. It can take a little time, but balance will eventually be reached. When everyone is finally standing still, you should ask two or three people to change places, and everyone to reposition themselves.
4. Once everybody has stopped moving again, ask the group about the experience of trying to keep and equidistant position from their references.
5. Explain the power of network activity, where everything is interconnected and contexts are influenced by the interests and movements of all agents, even the external ones.

Halfway meeting

Objective

To show that there is always a middle-of-the-road path, a solution that accommodates very different interests.

Time

Preparation: none.
Execution: 15 minutes.

Team

Two members.

Materials/resources

None.

Point of attention

This exercise requires the use of examples. A pair of participants, preferably already familiar with the exercise, should complete one or two rounds to show how it works.

Step by step

1. Ask the participants to form pairs.
2. Explain that they should count to three and then say any word at the same time. The words will most probably be different.
3. Again, each participant should say a word simultaneously with his or her colleague, trying to find a connection between both words. For instance, if one of them says “vehicle” and the other says “red,” both may be thinking about a Ferrari. If one of them says “house” and the other says “notebook,” both might be thinking about school.
4. If words do not match, the pair should try twice more, counting one, two, three before saying a word. After three attempts, stop the exercise and count the number of pairs that managed to come up with the same word.
5. Finally, start the last round, where the process is repeated until all pairs manage to come up with the same word.
6. Note that there is always the possibility that a common solution may be reached, even from very distant starting points.

Redefining an object

Objective

To stimulate creativity among participants and identify alternative value propositions.

Time

Preparation: none.
Execution: 20 minutes.

Team

The whole group.

Materials/resources

An unusual item, for instance a yerba mate gourd.

Point of attention

It is necessary to stimulate creativity among participants. The more persons suggest uses for an object, the more difficult it gets to find a new use for it; however, perseverance paves the way for creative ideas. Do not let the group get discouraged.

Step by step

1. Arrange participants in a big circle.
2. Introduce an object, suggest a potential use for this object and hand it over to the person on your right. Go on like this until all participants have found a different use for the same object.
3. Once the exercise is finished, suggest that participants should take note of how the task became increasingly difficult; however, you should also point out that perseverance made it possible to come up with new uses, and that all participants eventually managed ascribe a diversity of values to the object.

Dictionary

Objective

To stimulate curiosity and creativity among participants.

Time

Preparation: 15 minutes.
Execution: 15 minutes.
Debriefing: 15 minutes.

Team

4-8 members.

Materials/resources

Dictionary definitions of pre-selected words. Each word should be printed out on a sheet of paper.

Focus point

An adequate selection of words is essential for the success of this exercise. To enable the generation of creative solutions it is advisable to avoid very specific definitions. Some good choices could be *tower*, *projector*, *syringe* or *telescope*.

Step by step

1. Divide the participants into teams of 4-8 members.
2. Give each team a definition of a word without showing the word itself. Ask the teams to build an object or system matching the definition. The teams have 15 minutes to complete this activity.
3. Throughout the activity, please remind participants of the time remaining to finish the exercise.
4. At the end of the exercise, ask each team to show all participants the word definition and the object built. Ask the other groups about the object. Then, after all presentations have been completed, reveal the word.
5. Wrap up the exercise by observing that, just like the groups that found innovative solutions for the definitions provided, so can project teams find innovative solutions to real issues.

Story telling – Yes and...

Objective

To motivate and integrate participants. For this activity, all participants should tell a story together, with each participant contributing a small fragment of the story.

Time

Preparation: 3 minutes for explaining the tool.
Execution: up to 15 minutes.

Team

At least four members.

Materials/resources

None.

Concepts

Integration, creativity, cooperation and error.

Point of attention

The story should be comprised of an exposition, a development and a resolution. Pay attention to those participants who tend to speak either too little or too much. Clarify that the floor should be given to the next participant in a climactic moment. Independently of who begins (facilitator), the narrator should always begin with “yes, and...”

Step by step

1. Arrange the participants in a circle and describe the activity.
2. The facilitator introduces the first fragment of the story. On reaching the first climactic moment, the floor is given to the next participant.
3. Each participant should, in clockwise order, contribute something to the story, the floor always being passed at the climactic moment. Ideally, sitting to the left of the facilitator should be someone familiar with this activity.
4. Complete at least two rounds before finalizing the story.
5. After the activity is finished, the facilitator should ask the participants to discuss the activity. What did they feel like while performing the activity? What is the connection between the activity and a project? What is it like to deal with unexpected circumstances?

Check-in

Objective

The check-in exercise spans all states of mind, moods main actions or tasks, and expectations of the participants for the day. It is recommended in an internal activity, a workshop, or a meeting.

Time

Preparation: 0-5 minutes, depending on the size of the circle, whether participants need to move or not, and their familiarity with the tool.
Execution: 5-15 minutes.

Team

At least two members. For more than 20 participants, it is desirable to form at least two groups.

Materials/resources

Object of speech.

Point of attention

It is not advisable to perform the check-in exercise using a single word, because the activity becomes extremely superficial, and the objective of the tool may not be realized. The object of speech may be a ludic item, like a ball or a doll. However, when working with external groups or in workshops, make sure that what the object represents is appropriate for group involved in the interaction. For example, in a workshop organized for a group of senior people, do not use something that can seem offensive.

Step by step

1. Participants should form a circle, with the object of speech in the center.
2. The tool's basic question is: "How do you arrive?" Explain the interaction while guiding the group by asking some questions like: "What are your expectations for today?" Determine the timing for and depth of this interaction by giving examples and providing guidance to the participants. When necessary, ask people to be more objective.
3. In turn, each participant takes the object of speech and does the check-in, telling how he/she feels, his/her expectations, etc. While a person is speaking, the rest of the people just listen.
4. The object of speech may be handed over to the next participant, or when a participant stops speaking, he/she can take it back to the center of the circle.

Green and red culture

Objective

To express different views and lifestyles and explain the need to exercise empathy with a view to achieving good communication and coexistence.

Time

Preparation: 10 minutes for organizing participants in pairs, distributing the previously prepared cards with guidance on culturally driven behavior, and explaining the activity.
Execution: 10 minutes.

Team

Two members.

Materials/resources

Cards with information on culturally driven behavior. Consider that one half of the group will receive *green culture* cards, and the other half will receive *red culture* ones.

Point of attention

This activity can be completed effectively only if each member of the pair does not know what is written on the culturally driven behavior card of the other member. Ask them to keep the contents of the cards to themselves.

Step by step

1. Divide the participants in the workshop into pairs.
2. Distribute the culturally driven behavior cards to the participants so that that each member of the pair receives a different card.
3. Ask the participants to keep the card contents to themselves, without sharing these with their counterparts.
4. Explain that each member of the pair should follow the instructions in the card, then ask the participants to start the exercise.
5. Wait 10 minutes before announcing that the activity is over.
6. Ask the participants about the way they felt while performing the activity, whether it was difficult or easy, and if they felt any uneasiness.

Also ask them about what they learned from the activity, and what they could have done to feel more comfortable. Conclude by talking about the differences between people, and the need for empathy and looking for communication alternatives.

Red culture

Directions: over the next few minutes, you will interact with your colleagues, acting in accordance with the following habits and behaviors:

- Try to look into somebody else’s eyes, nodding as a sign of acknowledgement and attention as the other person speaks. Ask various questions about the person and his/her experiences. Try to understand his/her past to comprehend his/her present.

- For the person to feel listened to and welcome, you should try to be near him/her, keeping at least one-arm's length distance.
- Normally you take a brief pause after the other person has finished speaking to make sure that the he/she does not have anything else to say. This is regarded as a sign of respect.

Summary:

- Look into the other person's eye.
- Nod to indicate that you are listening to him/her.
- Try to understand his/her past.
- Stay near the other person, keep at least at one-arm's length distance.
- Remember that, although this is a role-play, the relationship with the other person is real; therefore, try to be honest and listen carefully (what is and what is not being said).

Green culture

Directions: over the next few minutes, you will interact with your colleagues, acting in accordance with the following habits and behaviors:

- Do not make eye contact with the person you are talking with. This way you give the person time to think and express him/herself clearly, without pressure. Show that you are concentrated on what is being said by looking down or into the distance, as opposed to directly at them.
- Speaking about yourself for long time is impolite; therefore, try to focus on asking questions about the other person, trying to get to know him/her first.
- To respect his/her space and privacy, always try to keep at least two-arm's length distance from the person you are interacting with. You should provide that space so as not to seem invasive or "pushy".

Summary:

- Do not look the other person in the eye.
- Look down or into the distance.
- Do not speak too much about yourself. Try to understand the other person in the first place.
- Keep at least to arm's length distance from the other person.
- Remember to be frank and listen thoroughly.

Human camera

Objective

Stimulate creativity, practice communication skills and showcase different viewpoints.

Time

Preparation: 10 minutes for participants to form pairs and explain the activity.
Execution: 30 min.

Team

Two members.

Materials/resources

None.

Point of attention

The exercise is much more fun if participants can go outside the room to "take pictures" of different things, but emphasis should made of the importance of coming back to the workshop at the agreed time.

Step by step

1. Divide the participants into pairs.
2. Explain the exercise: one participant will be the photographer, while the other will be the camera. The photographer takes a walk in the surroundings together with the camera, looking for 4 to 6 interesting scenes to photograph, selected in such a way that they can together form a story. The camera should keep his/her eyes shut; when the photographer asks, the "camera" should open his/her eyes and take a "photo" of the scene. Once all photographs have been taken, the photographer and the camera should go back to the workshop.
3. When everyone is back, ask the cameras to relate to their photographers the story of the photographs taken. Then the photographer should relate the story he/she had imagined, and both should discuss the differences and similarities between the stories.
4. Once all the pairs have discussed their stories, ask two or three pairs to describe what the photograph-taking process was like, and if any similarities were found between their stories.
5. Ask the group about what they think this exercise intends to teach and conclude by talking about different viewpoints and the need to strive to understand and communicate with other people.

String web

Objective

To introduce and promote integration among the members of the group.

Time

Preparation: 5 minutes for explaining the activity.
Execution: 60-90 minutes.

Team

Two members.

Materials/resources

1 extra-large string roll.

Point of attention

The questions in this activity are adaptable to the objectives of each group. Questions can be about the participants' hobbies, the sports they practice, the instruments they play, their favorite teams, the number of hours they work, the time they spend working together, etc.

Step by step

1. Arrange the group in a big circle.
2. Explain the first part of the exercise. Each person holding the string roll should tell something about him/herself; for example, their name, hobby, etc. Next, holding the end of the roll, he/she throws the roll to someone else. The game continues with each participant winding the string around his/her hand then and throwing the roll to another person, and so on. The process continues until everyone has spoken, and a web has been woven with the string.
3. Be the one who speaks first to stimulate the group, then hand the string roll over to someone on the other side of the circle.
4. Once all the participants have thrown the roll of string, stop the activity and ask them to observe the web woven; then check if they can identify a geometric shape or a pattern that reminds them of something.