

# 4.1 Creativity Tools

There are plenty of creativity tools. Here we provide a selection of creativity tools suitable for the application in the university setting.

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# Amplifier

<b>Field of application</b>	Problem Analysis
<b>Resume / Brief description</b>	<p>Game to expand knowledge before ideating</p> <p>A good trick to increase the quantity and quality of ideas on an ideation work, is to expand the knowledge everyone has about the problem, the users, the already existing solutions or the different viewpoints on the situation. To expand knowledge is to expose the brain to new realities and new thinking frameworks. It means to supply the brains with stimuli to generate ideas which, normally, they had not thought about. The Amplifier takes the team into an exploration, investigation and research activity that open possibilities to understand and reframe the problem. It works by following directives or questions shown in the Amplifier format. The activity can be executed in a competitive mode where each team tries to find important things that other teams missed.</p> <p><b>Category:</b></p> <ul style="list-style-type: none"><li>• Problem reframing</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	The ideal size of the team is 2 to 5 people. Multiple teams can be using the tool simultaneously
<b>Objectives</b>	To increase the understanding of the problem in order to have enough elements to define possible solution routes.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Amplifier format</li><li>• Pens, pencils, colors.</li><li>• Access to internet</li><li>• Digital board showing the Amplifier format (It can be Google Jamboard, Microsoft Board or other)</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 120 minutes</li></ul>
<b>Implementation - Overview</b>	<ol style="list-style-type: none"><li>1. Challenge definition</li><li>2. Research</li><li>3. Problem reframing</li></ol>



<p><b>Implementation - Guidelines</b></p>	<ol style="list-style-type: none"> <li>1. The activity starts with the Challenge definition. The facilitator must communicate the problem to solve and be sure that all participants understand it.</li> <li>2. The facilitator breaks the group into teams and gives a format to each one.</li> <li>3. The team must write down the challenge in the designed space on the format. Now all teams are ready to start to research.</li> <li>4. The teams start to answer the questions. However, to answer each question the team must do an "Expansion" exercise in order to have new elements that, if possible, other teams doesn't have. This expansion of knowledge can be done by different methods as searching available information on the internet or calling experts. The four directions to amplify the knowledge are:</li> </ol> <p><b>Research</b> What is being done somewhere else to solve this problem? What research or development is there on the issue? What similar situations have been solved before?</p> <p><b>Direct observation</b> What uncomfortable or emotional conflictive situations are users presently going through at the time of usage (even though they themselves are not conscious of them)?</p> <p><b>Interviews and interaction</b> What do users and experts say about the situation? What needs do they state?</p> <p><b>Involvement</b> If I go through the experience as a user, what problems do I experience?</p> <ol style="list-style-type: none"> <li>5. Using the new knowledge collected, each team can reframe the original problem.</li> <li>6. Each team presents its new vision about the challenge to solve and the new facts that support it. If possible, a team must present exclusive "evidence" collected during the exercise.</li> </ol> <p>The final result is not to have a winner but to have a more deep understanding of the problem and all the circumstances around it. Now the innovation team can advance to the ideation phase.</p>
<p>Example of application:</p>	<p>This tool had proved to be very useful in real innovation proceses. A hospital was trying to improve its processes and used the Amplifier tool to find ways to do it. The teams involved in the process carried out an excelent work of Amplification of knowledge with the result of a document containing several possible routes to work on. In this case, the process took an entire week. Each day the teams received one of the four directions to amplify. The participants made a great job researching, talking with people, observing, taking pictures, living the experience by themselves, looking for formal research, spying to other hospitals (and other organizations far away from the health business), etc.</p> <p>As a result a good deal of new useful knowledge was added to the one already present in the group. This allow the organization to identify powerful elements to innovate.</p>
<p>Templates, Graphics for download</p>	<p><a href="#">Amplifier Format</a></p>



# Stop

<b>Field of application</b>	Ideation Creativity skills development
<b>Resume</b>	This "brain warming" game can be used also as an ideation tool. Its a short game where players compete to generate ideas as fast as they can. Can be used in the classroom as a creativity exercise or in innovation processes as a way to generate new ideas. Each participant uses the STOP format to write its ideas trying to be the first to fill all the blank spaces. Its a very funny game (Laughs alert) Category: Brainwarming
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	This game can be played by teams of 1 to 6 people. The minimum number of teams is 3 and the maximum 10.
<b>Objectives</b>	Generate new ideas to solve a problem or improve a situation while having a good time.
<b>Requirements</b>	<b>Material:</b> <ul style="list-style-type: none"><li>• STOP format</li><li>• Pen</li><li>• Inspirational images. You can use decks of cards with images or clippings of magazine pictures. Also is possible to use a projector or TV Set to show images from the internet.</li><li>• A digital board (Jamboard, Microsoft board, Miro or similar) with the STOP format as background. The participants can fill the format spaces using the Write or the Post-it tool. The image search tool from any search engine can provide the images needed for the game.</li></ul> <b>Time:</b> <ul style="list-style-type: none"><li>• 30 minutes</li></ul>
<b>Implementation - Overview</b>	Once each team has its own format, the facilitator presents the image to be used as inspiration and gives the signal for every team to start writing, as fast as possible, the ideas for each category in the forma, inspired by the image shown. The first team to finish calls "STOP" and everybody must stop writing. Then the facilitator asks each team to read its ideas to validate them and assign a point for each one. The game can last for three to five rounds before defining the winner. The winner will be the team with the most points.



<p><b>Implementation - Guidelines</b></p>	<p>1. Preparation: The STOP format must be adapted to facilitate the purpose of the exercise.</p> <ul style="list-style-type: none"> <li>- Define how many categories the format will have. Between 5 and 8 would be good.</li> <li>- Define the name of each category. This name is the type of idea each participant must write on the respective column. For example, a category can be: "A way to ask someone to marry" or "A new marketing strategy". Every player will need to figure out how to answer the title of each column using as inspiration the image. For example, if the image is a chair, the player must think of a way to ask someone to marry her using a strategy inspired in a chair. It's not necessary to use the object depicted in the image. In fact is desirable that each participant get inspiration from the object but avoid using it. In the case of the chair, the participant can imagine a "four step strategy" (As the chair has 4 legs). A good way to distribute the categories is to mix "serious" with "playful" ones. The serious categories are those relate with the real problem we want to solve.</li> </ul> <p>2. Print all the formats needed and give one to each team along with one or several pens (As a good strategy a team can decide to have several teammates writing simultaneously)</p> <p>3. The facilitator (or a participant) picks and shows the image for the round</p> <p>4. The facilitator gives the signal for all the teams to start writing to fill all the spaces in the format.</p> <p>5. Once a team finishes completely all the spaces on the line (at least one idea for each category), can call "STOP" out loud. This is a signal for all the teams to stop writing and go to the next phase.</p> <p>6. Starting with the team who called STOP, the facilitator reads aloud all the ideas written and validates them. If the idea answers the question (the category) and seems to be inspired by the image, the team receives one point. The best way to do this is to review all the ideas proposed by the teams for one category before going to the next. Its important for the facilitator to be flexible enough to allow "weird" explanations about the way the team took inspiration on the image to find the idea. Remember that the final objective is to find new and valuable ideas no matter the real origin. Usually this is a hilarious phase, which is good for creativity.</p> <p>7. The teams can use the next line on the format to play the next round using a new image.</p>
<p><b>Example of application</b></p>	<p>A big chemical company embraced the new marketing strategy of being closer to its distribution chain in several countries. As a result, the company started a series of innovation sessions in order to help some of them to create strong competitive advantages in their own markets. The WakeUpBrain team was hired to facilitate these sessions. Having constraints of time as each 2 hour session must end with an action plan including three to five initiatives, the facilitation team had to think of a way to "warm brains" and start ideating simultaneously. In this situation, the STOP tool was selected as the first activity to be executed on each session.</p> <p>The categories for the STOP were:</p> <ul style="list-style-type: none"> <li>- The title for a new thriller book</li> <li>- A way to understand better</li> <li>- A game to entertain 20 children in a party</li> <li>- A way to accelerate the launching of new products</li> <li>- A joke</li> </ul> <p>To get the inspiration image the facilitation team provided a deck of WakeUpBrain game cards.</p> <p>Being distributors of different sizes, the working groups ranged between 8 and 25 people. As the reading phase can take too much time, the amount of teams was set to be 4 in every case. Too many teams would have made the activity too long.</p> <p>The facilitator gave the instructions and ran two rounds of STOP. Once read, the formats were placed on the wall as an initial set of ideas to work with.</p>
<p>Templates, Graphics for download</p>	<p>STOP Format</p>



# Fast combination

<b>Field of application</b>	Ideation Idea improvement Product design Service design Process design Creativity skills development
<b>Resume</b>	Combination is one of the ways in which the creative mind works. To find new solutions or improve the actual services or products offered by a company, using Fast combination can be a good way to find new ideas. This game works very well as a training and development tool too. As a demanding creative game, the participants can learn about their own creative capacities and the way on which creativity works. In this game, participants try to create new solutions through the combination of attributes found on different elements. The result is a collection of new ideas, some a little crazy and some very promising.
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	Teams of 1 to 6 people. The minimum number of teams is 3 and a maximum of 5.
<b>Objectives</b>	Increase mental flexibility and get the group ready for an ideation session.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Set of things to combine. If you are going to play the "Brain vertigo" version you will need a set for each team. You can use:<ul style="list-style-type: none"><li>- A deck of cards showing different elements.</li><li>- A collection of real objects in a bag</li></ul></li><li>• Paper and pen to write down the ideas</li></ul> <p>You can play the game online showing physical cards on your camera or sharing a presentation showing two cards with the elements to combine. For each player: Paper and pen (physical) or a digital board (Google Jamboard, Microsoft Board, Miró, Mural or other)</p> <p>Time:</p> <ul style="list-style-type: none"><li>• 15 to 20 minutes</li></ul>
<b>Implementation - Overview</b>	<p>This fast game follows these steps:</p> <ul style="list-style-type: none"><li>• Time setting</li><li>• Teams take pair of concepts to combine and generate ideas</li><li>• Idea counting</li></ul>



<p><b>Implementation - Guidelines</b></p>	<p>The facilitator explains that every team will be searching for new ideas on a special subject. This subject can be:</p> <ul style="list-style-type: none"> <li>• A new business concept</li> <li>• A new product or new service</li> <li>• Other subject adapted to the particular situation</li> </ul> <p>The game can be played in two different versions:</p> <p>Version 1: Brain vertigo In this version, each team has its own set of elements to combine.</p> <ol style="list-style-type: none"> <li>1. The facilitator gives the starting signal and each team takes two elements of the deck and try to build 1 to 3 ideas following the subject designated.</li> <li>2. Once the team has written down the ideas, must take another pair of elements and repeat the process</li> <li>3. When the time is over, the facilitator gives the finalization signal and all the teams stop writing.</li> <li>4. The facilitator validates the amount of ideas written by each team to find the winner.</li> </ol> <p>Version 2: Brain confrontation In this version all the teams are using the same pair of elements. This version is not a competitive game but a playful experience around creativity. The process goes as follows:</p> <ol style="list-style-type: none"> <li>1. The facilitator takes a couple of elements from the set and show them to everybody</li> <li>2. All the teams try to imagine combinations of those elements to accomplish the subject defined.</li> <li>3. After some time (30 seconds to 2 minutes will be a good amount of time) the facilitator change the elements and all the teams must start using those new elements to ideate.</li> <li>4. After the amount of pairs defined (5 to 8 would be a good quantity) the facilitator ends the game.</li> <li>5. The facilitator compares the solutions depicted by each team and make comments about the originality and potential of each solution.</li> </ol>
<p><b>Example of application:</b></p>	<p>An innovation manager of a company was trying to find the reason for the low level of creativity shown in the ideation sessions carried out in the last months. Suspecting that the participants were in the wrong mood or mental state as they came thinking about their own problems, the manager looked for a way to move them to a more creative attitude.</p> <p>The Fast combination game accomplished the goal beautifully. After the game, the participants showed more flexibility and originality, and enjoyed the session much more.</p> <p>The manager played the Brain confrontation version and used elements present in the meeting room to carry out the game. Each time, he picked elements from the room and asked the participants to imagine new inventions combining attributes, parts or functions coming from each of the elements.</p> <p>Playing the first round, the teams experienced difficulties finding solutions for the combination proposed. But on the next rounds their brains got warmer and more creative and great ideas appeared more easily.</p> <p>The participants really appreciate the warming game. As a matter of fact, the Fast combination game become one of the favorite activities to start meetings all around the company.</p>
<p>Templates, Graphics for download</p>	<p>N/A</p>
<p>Additional format/references</p>	<p><a href="https://thinkjarcollective.com/tools/creativity-technique-relevant-today/">https://thinkjarcollective.com/tools/creativity-technique-relevant-today/</a></p>



# Expansion

<b>Field of application</b>	#Ideation #Creativity skills development
<b>Resume / Brief description</b>	This is a brain warming up game that tests people's ability to explore and identify the relations that can be constructed from a specific concept. This capability is fundamental at the time of bringing up ideas. It is one of the bases for something we know of as Inspiration. The game ask the participants to write as many words related to a image, as they can. It's a joyful exercise that helps to move the attitude of the participants towards a more flexible and open one.  Category: Brainwarming
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	1 to any number of participants.
<b>Objectives</b>	Increase mental flexibility and get the group ready for an ideation session.
<b>Material Required (Physical version)</b>	Material: <ul style="list-style-type: none"><li>• Printed Expansión format</li><li>• Pens</li><li>• Cards for inspiration. These can be the Toolbox deck of cards, a set of WakeUpbrain game cards or a collection of pictures depicting an object or person.</li><li>• A word processor. Each participant can also have its own personal paper and pen.</li><li>• Digital version of the set of inspiration cards. The images can be shared using the sharing function of the communication or collaboration platform used.</li></ul> Time: <ul style="list-style-type: none"><li>• 4 minutes</li></ul>
<b>Implementation - Overview</b>	The steps are: <ul style="list-style-type: none"><li>- Preparation: Everybody ready to write</li><li>- Instructions. The facilitator explains the challenge and sets the time assigned.</li><li>- Presentation of the inspiration image</li><li>- Word writing by participants</li><li>- Counting and winner definition</li></ul>



<p><b>Implementation - Guidelines</b></p>	<p>1. Preparation. Everyone must have its own paper and pen or word processor ready. For the physical version, the Expansion format is a good help.</p> <p>2. Instructions: The facilitator explains the scope of the activity: to test the mental speed and flexibility of the participants. Although this is not really a test, this presentation generates a kind of expectation and joyful attitude. The basic instructions are:</p> <ul style="list-style-type: none"> <li>- Everyone will have 1 minute to write as many words as she can in the paper.</li> <li>- Everyone will see an image. Once the image has been presented, the time will start.</li> <li>- All the words must be related in some way to the image presented</li> <li>- Participants can write sentences, but they will count as just one word, so...</li> </ul> <p>3. If the session is being conducted physically, each participant can take its own imagen or card and, without looking at it, place it, face down, in the middle of the page. The Expansion format has a special space for it. For the digital or virtual version, the facilitator can share the same image to all the participants. Having the same image to play adds an extra element of competition, as the difference between the amount of written words cannot be assigned to the image being more or less inspirational.</p> <p>4. Once everybody has their card, explain that they will have 1 minute to place the card upside in the center of the paper sheet and write around it the largest number of words they can, related to the image.</p> <p>5. Once time is over, ask them to count the number of words. The sentences count as just one word.</p> <p>6. The game can be repeated later to take a look at the evolution in their capability to expand or connect concepts.</p> <p>Now you have a group of people ready to generate ideas and use creativity in a more effective way.</p>
<p>Example of application:</p>	<p>The teacher of a class in an Innovation Máster program used the Expansion game to "warm" the students' brains.</p> <p>The teacher hands out a Expansion format to each student and puts the WakeUpBrain deck on its desk. He instructed the students to come to her desk and take a random card and, without turning it, to place it in the format. Once every student has her card, the teacher explains the exercise: They will have a minute to write down as many words related to the hidden image as they can. They will have to wait for the signal to turn the card and start writing.</p> <p>Once finished the activity, the average count was 13 words. The game allows the teacher to talk about how ideas are born and the capacity that every brain has of finding relations and connection between concepts.</p> <p>Interestingly, the teacher repeated the game three times more along the semester. The average on the final game was 22 words.</p>
<p>Templates, Graphics for download</p>	<p>Expansión format Toolbox cards WakeUpbrain digital game cards</p>



# Brainstorming

<b>Field of application</b>	#Ideation #Creativity skills development
<b>Resume / Brief description</b>	<p>Brainstorming is a popular technique to generate a great amount of ideas to solve a problem. But, despite its popularity, this tool is not always used the right way. Its more clear advantage is its capacity to produce many ideas in a short time, allowing the participation of all members of the team.</p> <p>The technique was introduced and explained by Alex Osborn in its book "Applied Imagination" in the thirties. Its recommended when:</p> <ul style="list-style-type: none"><li>- You need a big quantity of ideas to work with</li><li>- Creativity and new ways of thinking are required</li><li>- We want to encourage all the participants to collaborate.</li></ul> <p>The Brainstorming technique divide the process of search for solutions into two parts:</p> <ol style="list-style-type: none"><li>1. The generation of lots of non-analyzed ideas. This part focuses on the quantity of ideas.</li><li>2. The analysis of ideas. This part focuses on selecting the better ones.</li></ol> <p>Taking the analysis out of the ideation process makes easy for the participants to explore new perspectives and encourage all the participants to propose solutions.</p> <p>Category: Ideation</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Objectives</b>	To generate a great quantity of ideas and possible solutions to a problem or challenge, in a short time.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Paper sheet or paper cards to write the ideas</li><li>• Pens, colors</li><li>• a brainstorming platform as Ideaboardz, Realtime board or other. You can also use a standard word processor (Google Docs or similar) or a Mind mapping tool.</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 120 minutes</li></ul>



<p><b>Implementation - Overview</b></p>	<p>The process includes</p> <ul style="list-style-type: none"> <li>- Definition of the problem or challenge to solve</li> <li>- Definition of "idea capturing" process. It could be that everyone writes down their own ideas and the facilitator collects them after, or that all ideas are called out loud and a note-taker writes them down in a central place.</li> <li>- Opening to the ideation phase. Everyone must add ideas. The facilitator announce that critics and analysis is suspended.</li> <li>- Closing of the ideation phase.</li> <li>- Optional: An analysis phase can be conducted. In this case, the facilitator announce that the time for analysis has arrived and uses any of the evaluation methods available.</li> </ul>
<p><b>Implementation - Guidelines</b></p>	<p>Participants. In general it's a good thing to have participants from different areas, roles and expertise. This will add to the diversity and originality of the solutions found.</p> <p>A good way to start a Brainstorming session is to spend some minutes doing a "Brain-warming" activity. This will let all the brains to tune into the creativity mode and be more confident to release the analytic mind.</p> <p>Session</p> <ol style="list-style-type: none"> <li>1. Present the problem and announce the purpose of collecting as many ideas as possible to solve it. Announce that the main focus is quantity so there will be no time to comment or analyse the ideas. Clarify that the analysis will be carried out later. Be sure that everyone understands correctly the problem and that it is an important one for them. If the problem is a big one, it's recommended to break it into parts and conduct a brainstorming for each of them. You can give the participants the following recommendations: <ul style="list-style-type: none"> <li>- Focus on breaking the record of the number of ideas proposed. Forget about quality.</li> <li>- Explain that some ideas can seem to be "bad" but maybe can be the origin of other ideas with greater potential.</li> <li>- Motivate them to propose ideas inspired on ideas proposed by others</li> <li>- Ask everybody to make the personal purpose of proposing at least one "bad" idea. This will relax the pressure for quality.</li> </ul> </li> <li>2. Announce the time available to propose ideas (15 to 30 minutes will be a good amount of time) and give the signal to start the session. Thing to be into account: <ul style="list-style-type: none"> <li>- Be sure that all ideas are being "captured" using the same description given by the autor. It's frequent that the note-taker chand the way an idea is described, losing important creative elements.</li> <li>- Encourage the participation of all. For some people it is not always easy to speak in public, even more if her boss or someone influential is present.</li> <li>- Find an assertive way to stop the natural tendency to criticize or evaluate ideas proposed. For the more analytic people, it's difficult to restrain their need to discuss the positive and negative aspects of an idea, so it is good if they know that time for this analytic task will be given later.</li> </ul> </li> <li>3. When the time is over stop the ideation activity and congratulate everybody for the creative effort. Announce if the analysis of the ideas will be carried out immediately or in a later session.</li> </ol>



<p>Example of application:</p>	<p>How to improve the service times in a restaurant?</p> <p>In this case, a local successful restaurant has been growing in number of clients and wants to improve the service experience. The restaurant manager decided to conduct a Brainstorming session to explore new ideas to make the experience of dining a lot better. The first thing he did was to reflect the problem in a direct question:</p> <p>How to become the restaurant acknowledge by offering the best experience in the world?</p> <p>Then, he invited 7 people including some waiters, a chef, the community manager and two clients.</p> <p>The manager himself facilitated the session.</p> <p>Being a restaurant, the first thing was an appetizer: a brainwarming game. In this first activity, the participants had to imagine and draw a new plate using the more exotic ingredient possible. All participants enjoyed the activity, especially when each one presented its invention.</p> <p>Once the facilitator took everyone to the "creative mode", the Brainstorming started.</p> <p>The facilitator presented the main question and announced that they would have only 30 minutes to generate 40 ideas. That means more than one idea per minute. The manager explained that the only way to achieve that incredible level of creativity is by focusing on idea generation and postponing the analysis of those ideas.</p> <p>During the first part (7 minutes), the facilitator asked each participant to write down 3 ideas using paper cards. This personal exercise let the group to have more than 20 ideas just starting the session.</p> <p>Then, the facilitator divided the group into two teams and appointed an idea-writer on each. The idea-writer was assigned with the job of writing down all the ideas each participant was proposing. Then, the facilitator gave 12 minutes to all teams to get 10 new ideas (nobody can use any of the ideas proposed on the cards) per team.</p> <p>The group reached the idea target and the facilitator served a new dessert as a reward for each participant.</p> <p>Nevertheless the amount of ideas proposed, several of them had very good potential:</p> <ul style="list-style-type: none"> <li>- Pre-ordering app</li> <li>- Surprise menu</li> <li>- Board games on each table to make the the wait a more enjoyable experience</li> <li>- Two menus: the fast one and the slow one</li> <li>- Clients helping to finish the plate preparation</li> <li>- Extreme slow food</li> </ul>
<p>Templates, Graphics for download</p>	<p>none</p>
<p>Additional format/references</p>	<p><a href="#">The Team Handbook by Peter R. Scholtes</a></p> <p><a href="http://petkoivanov.com/wp-content/uploads/2015/10/302-Brainstorm.pdf">http://petkoivanov.com/wp-content/uploads/2015/10/302-Brainstorm.pdf</a></p> <p><a href="https://www.youtube.com/watch?v=jNFB0BAAYuw">https://www.youtube.com/watch?v=jNFB0BAAYuw</a></p> <p><a href="http://michael-roberto.blogspot.com/2016/06/brainstorming-at-google.html">http://michael-roberto.blogspot.com/2016/06/brainstorming-at-google.html</a></p>



# Ideas multiplication

<b>Field of application</b>	#Ideation
<b>Resume / Brief description</b>	<p>A powerful technique that can take one idea and use it as the origin for several others. The technique builds something similar to a tree of words, where it is possible to read different phrases only changing the way it is read. To build this tree, the ideator can start a new branch from any space between to words of the original phrase (the original idea). In some ways, this tools seems to be familiar with the mind mapping technique but it is not used just as a way to resume or show some information but as a way to force the brain to find new alternatives to an original idea. The similarity of building makes it possible to use the same Mind Mapping tools available online.</p> <p>Category: Ideation</p>
<b>Target group</b>	<ul style="list-style-type: none"> <li>• Entrepreneurs</li> <li>• I&amp;D teams</li> <li>• Innovation teams</li> <li>• Students</li> <li>• Community</li> </ul>
<b>Group size</b>	Can be played as a personal tool of a group building exercise. The ideal size of the grup is 3 to 6 people. Multiple teams can be using the tool simultaneously
<b>Objectives</b>	To generate multiple ideas starting from an original one.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"> <li>• blank paper sheet</li> <li>• Pens, pencils, colors</li> <li>• a mind mapping tool (Coggle, MindMup, Gitmind, or other)</li> </ul> <p>Time:</p> <ul style="list-style-type: none"> <li>• 30 - 60 minutes</li> </ul>
<b>Implementation - Overview</b>	<p>This is a very simple and fast tool. You, as a facilitator must direct the group to follow these steps:</p> <ol style="list-style-type: none"> <li>1. Definition of the initial idea</li> <li>2. Writing the initial idea on the paper or the mind mapping tool word by word</li> <li>3. Branch building starting on any space between the words of the original idea</li> <li>4. Sub-branch building by following the same process over the newly built branches.</li> </ol>
<b>Implementation - Guidelines</b>	<ol style="list-style-type: none"> <li>1. Define the problem or challenge to solve. Must be visible for everybody. Make sure that everyone in the group understands the problem correctly.</li> <li>2. Conduct an initial Brainstorming activity to collect some ideas to start the Ideas multiplicator.</li> <li>3. Assign one idea to each team to work with. The team must write it in the middle of the page so they can have enough space to build the branches.</li> <li>4. Assign a time to work (20 to 40 minutes will be a good amount of time) and ask each team to "activate" the ideas multiplicator. This means that the participants from each team must define one space between two words of the original idea and start a new branch there. Then the participants must read the phrase just to the point where the branch starts and tray to continue the phrase using a different sense or meaning to the original idea. The participant writing this new idea must do it word by word so new sub-branches can start on any point of the new idea.</li> </ol>



<p>Example of application:</p>	<p>In this example, a telecommunications company was using their recently trained innovation leaders to ideate new ways to increase the customer satisfaction. The leaders were divided into 3 groups, 12 persons each. Each group worked in a 2 hour session to generate ideas that will be included in the internal innovation platform to be evaluated.</p> <p>The session was designed as a challenge competition where one team could decide where in the original idea, the other team must create a new branch. This variation added emotion to the activity and brought more originality to the results. The phases were:</p> <ol style="list-style-type: none"> <li>1. The facilitator presented the challenge to the participants: "To find innovative ways to increase the customer satisfaction"</li> <li>2. The facilitator opened a public brainstorming and wrote all the ideas on a big board in front of the room</li> <li>3. The group was divided into 3 teams of 4 participants each</li> <li>4. Each team selected one of the ideas shown on the board to work with</li> <li>5. A representative from each team went to the board and marked the specific points where new branches must be added. 3 points were added to each idea</li> <li>6. In the TV set present in the room, the timer was set to 40 minutes and the facilitator gave the start sign.</li> <li>7. Every team could add all the branches they want but must include new branches on the marked spots.</li> <li>8. A second round was played using other 3 ideas from the original brainstorming.</li> <li>9. A final count of new ideas generated by each team, defined the winner.</li> </ol> <p>An incredible amount of new ideas were generated on those 3 sessions: more than 120 new ideas. This situation made necessary to appoint a new session to pre-select the ideas with the greater potential.</p>
<p>Templates, Graphics for download</p>	<p>Ideas Multiplication Format</p>
<p>Additional format/references</p>	<p><a href="https://www.makeuseof.com/tag/8-free-mind-map-tools-best-use/">https://www.makeuseof.com/tag/8-free-mind-map-tools-best-use/</a></p>



# Wisemen council

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Problem Analysis.</li><li>#Strategic planning</li><li>#Ideation</li><li>#Idea selection</li><li>#Idea prioritization</li><li>#Idea improvement</li><li>#Product design</li><li>#Service design</li><li>#Process design</li></ul>
<b>Resume / Brief description</b>	<p>Imagine if we can have a group of experts helping us to solve every problem. And now imagine if that group was formed by the most wise people in history. It would be great! In fact, that is what the Wisemen council technique does: help the innovator to think as the better brains in history. The Wisemen council uses images or names of great people in history to imagine how they would have solved our problem. Can be played individually or in group.</p> <p>Category: Ideation</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	<p>This game can be played by teams of 1 to 6 people. The minimum number of teams is 3 and a maximum of 5."</p>
<b>Objectives</b>	<p>Find a way to understand a situation or problem from a different perspective and imagine possible new solutions.</p>
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• A set of cards showing a picture representing a famous person from history. It's important to have variety about style, age, gender and area of expertise, for example you can include a famous militar as Napoleon or a writer as Tagore, a scientist as Marie Curie or a football player as Sadio Mane. You can even include fictional characters as Sherlock Holmes or Harry Potter. A good reference to check if we are including different thinking styles is to follow the Intelligence model developed by Howard Gardner. You can use cards showing just the name of the person or character.</li><li>• Paper and pen to write down the ideas.</li><li>• The Wise men set of cards can be arranged in a page of a digital board (Jamboard, Microsoft board, Miró or other). Also can be replaced by a numbered list of famous people and characters. The players can pick a random number and search on the Internet for that character using the image function on a search engine.</li><li>• a document to write down the ideas. It could be a text editor or maybe another page on the digital board.</li></ul> <p>Time: 20 to 60 minutes</p>
<b>Implementation - Overview</b>	<p>The first step is to define clearly the question we will ask to the wise. But before to disturb them, the group will need to make a good effort to find solutions and answer to that question. This is the "Empty head" phase. Once the group creativity is exhausted, a random card is selected. The group looks at the wise depicted in it and tries to imagine what ideas could that person or character give if asked to solve the same question.</p>



**Implementation - Guidelines**

1. Define, as a group, the question or problem to solve. Put that question in a visible place and be sure that everyone understands it.
2. Do a brainstorming activity asking all the participants to write down all the ideas they can on how to solve the problem. This phase is called "Emptying heads".
3. Read or ask some participants to read the ideas presented and put them on the wall so everyone can see them.
4. Announce the arrival of the Wisemen council. Tell the group that those important persons from history are ready to use their intelligences to add some new ideas.
5. Select one card or name randomly and present it to the group. Ask the group if everybody knows that person or character. You can use Wikipedia or other resources on the internet to gather more information about the kind of expertise and intelligence of that person or character. Don't spend too much time on the historical facts but on the style that person or character has to solve problems or get results.
6. Invite all the group to figure out: What ideas would this sage or wise person, contribute with if they were here, with us, trying to solve this challenge?  
Give this instruction to the player: "Imagine that the sage is really working in your organization; that is, do not imagine that Cleopatra is in Egypt during the pharaohs' times. Imagine someone with her personality, her style, her way of thinking, in our current context, and ask yourself: What ideas would someone like her give to us in a situation like this?"

Example of application:

In 2020, a governmental program to help entrepreneurs to grow their business in the midst of Covid-19 pandemic, was going as planned. Not only more than 1000 entrepreneurs had participated in big online working sessions but some of them were being accompanied by personal mentors to address particular issues. During the coaching sessions, the search for new original strategies to grow was becoming an issue. The entrepreneurs, stressed by the market difficult situation, lacked enough creativity power to imagine new ways to act. The team behind the program decided to introduce some creativity techniques to use on those sessions. The Wise council was one of them.

For the sessions using the Wise council tool, a Jamboard (The digital board from Google) was prepared. The first board was filled with 36 cards from the digital version of the WakeUpBrain game. The cards, showing different famous people and characters, were organized in a grid of 10 columns by 6 rows. A web site that provided a virtual version of dice was used to generate 2 random numbers and hence, select a card.

During the session, facilitators asked the entrepreneurs to "empty their heads" doing a preliminar brainstorming. Then, asked them to try to imagine what ideas the selected character would have proposed if facing the same situation. The facilitator runs between 3 and 7 rounds.

The tool helped participants to find new and original ideas as their brains were trying to think as someone else.

A couple and their son, owners of Sholittos, a brand of pet care products, were really happy with the result: "We got Andy Warhol. We didn't know who he was so we searched for him on Google. Then we realized that was a very famous painter that used everyday objects in his art. That fact gave us a lot of ideas on how to promote our products", said Diana Cardona, partner of the company. Even, in the following session, ideas on how to modify the logo were discussed. The brains were working at full speed thanks to this game.

Templates, Graphics for download



Additional format/references

<https://www.multipleintelligencesoasis.org/the-components-of-mi>

[https://en.wikipedia.org/wiki/Theory\\_of\\_multiple\\_intelligences](https://en.wikipedia.org/wiki/Theory_of_multiple_intelligences)



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# Bad ideas

<b>Field of application</b>	#Ideation #Creativity skills development
<b>Resume / Brief description</b>	<p>This is a wonderful game that permits to explore truly innovative solutions starting from what, at first sight, look like bad ideas.</p> <p>This game is very useful when the ideation team is blocked and cannot generate more creative ideas to solve the challenge or the problem.</p> <p>The tool uses the fact that a "bad idea" can be the origin for a new provocative and disruptive innovation. An idea can be labeled as bad because of its low capacity to solve the problem, the undesirable consequences that can bring or because of its low viability. But normally this classification is assigned in a fast and subjective way. Once a person listens to an idea that, because its previous experiences, seems to be "bad", its brain rejects it and no more "thinking power" is invested in it. But it is not infrequent that if the ideator tries to find the hidden potential of the idea, that label can be easily removed and the creative process can advance in a new route.</p> <p>This is the basis of the Bad ideas technique. In short, Bad ideas is a game that encourages ideators to embrace "bad ideas" and use them to create new concepts with high potential.</p> <p>Category: Ideation</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	2 to 10 teams with 2 to 4 members.
<b>Objectives</b>	Generate potentially disruptive new ideas to solve a challenge or a problem or to ideate a new concept for a product or service.
<b>Requirements</b>	<ul style="list-style-type: none"><li>• Paper cards (7 x 10 cm is a good size)</li><li>• Pens</li><li>• digital board (Google Jamboard, Microsoft board or other)</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 60 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The main steps are:</p> <ul style="list-style-type: none"><li>- Define the problem or main objective</li><li>- Ask all the participants to write down as many "bad ideas" as they can</li><li>- Build the teams</li><li>- Ask the teams to transform as many "bad ideas" into "great ideas" as they can</li><li>- Let the teams to present their best "great ideas"</li></ul>



<p><b>Implementation - Guidelines</b></p>	<p>1. The first thing you need to have is the problem. This can be a specific problem (For example to decrease damage of products during transportation) or simply a situation in which you want to innovate (for example the design of your new store).</p> <p>2. Once the objective has been defined and communicated to the participants ask them to write down as many "bad ideas" as they can. Explain them that a bad idea is an idea that has one of the following three defects:</p> <ul style="list-style-type: none"> <li>- Doesn't solve the problem (or even make the situation worse)</li> <li>- Is impossible to execute</li> <li>- Has undesirable consequences</li> </ul> <p>Encourage them to be really creative and wicked generating those bad ideas. "The worst the better" is the main slogan. Ask them to write the ideas following this indications:</p> <ul style="list-style-type: none"> <li>- Write just one bad idea per card</li> <li>- Use big and readable writing. (This is important as all those ideas are going to be read by other people)</li> </ul> <p>3. Break the group into teams of 2 to 4 members</p> <p>4. Give the teams a short time (15 to 20 minutes can work well) to transform as many "bad ideas" into "great ideas" as they can. Give this indications to clarify the idea transformation process:</p> <ul style="list-style-type: none"> <li>- It is mandatory to accept the bad idea. This means that if the idea says: "use rats". The transformed idea MUST use rats.</li> <li>- A transformed idea is an idea that, following the initial bad idea, has found a way to execute it in a way that effectively accomplishes the original objective in a surprising way. Following the previous example, the team can propose to use "Mickey mouse and his friends to..." The idea follows the "use rats" directive and found a creative way to get the desired results.</li> <li>- Teams can use the other side of the card to write the Great idea (the transformed version of the bad idea)</li> </ul> <p>5. Great ideas show. Let the teams present their best "great ideas". Be sure that all the details of the transformed ideas are in the card. The collection of cards is the output of the session.</p>
<p>Example of application:</p>	<p>Even though the Bad Ideas technique is a powerful tool to be used in productive environments, It's also a good way to train students in creativity thinking. The following experience of a public university is a good example of this. As part of the "Creative thinking" class, students from different faculties played "Bad ideas" using a common purpose: To motivate students to use bicycles.</p> <p>The 50+ students of the class contributed with more than 100 bad ideas. It was a funny but very productive exercise. Some of the bad ideas proposed were:</p> <ul style="list-style-type: none"> <li>- To give free bicycles to every student</li> <li>- No other vehicle than bicycles can enter the campus</li> <li>- You can take your bicycle to your classroom</li> <li>- Competition: the highest bicycle pyramid</li> <li>- Bicycle test as part of the admission process</li> </ul> <p>But the best part was the transformation phase. The students, organized in teams, worked deliriously to transform all the bad ideas into great ones. Several of them (As the actual App that gives points for every day the student arrives on bicycle to the university that can be later converted into services or the now famous bicycle parade) followed its path to real execution.</p>
<p>Templates, Graphics for download</p>	<p>N/A</p>
<p>Additional format/references</p>	<p><a href="https://www.inc.com/yazin-akkawi/bad-ideas-are-the-key-to-creativity.html">https://www.inc.com/yazin-akkawi/bad-ideas-are-the-key-to-creativity.html</a></p> <p><a href="https://core.ac.uk/download/pdf/297018879.pdf">https://core.ac.uk/download/pdf/297018879.pdf</a></p> <p><a href="https://uxdesign.cc/this-might-be-a-terrible-idea-why-bad-ideas-are-good-for-design-ae5ce50f6dab">https://uxdesign.cc/this-might-be-a-terrible-idea-why-bad-ideas-are-good-for-design-ae5ce50f6dab</a></p>



# Cromas

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Ideation</li><li>#Idea improvement</li><li>#Product design</li><li>#Service design</li><li>#Process design</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>CROMAS is a group of 6 routes to create new ideas, proposed in 1953 by Alex Osborn, and whose original name was SCAMPER. As CROMAS sounds closer to Chromatic (related to colors) this is a good alternative to the original denomination.</p> <p>CROMAS is a set of actions intended to help innovators to find ideas to avoid mental fixation and find new alternatives to traditional solutions.</p> <p>The technique uses a set of questions to encourage ideators to find new concepts.</p> <p>The actions are:</p> <ul style="list-style-type: none"><li>- To Combine</li><li>- To Reorder</li><li>- To find Other uses</li><li>- To Modify</li><li>- To Adapt</li><li>- To Suppress or Substitute</li></ul> <p>Category: Ideation</p>
<b>Target group</b>	Entrepreneurs I&D teams Innovation teams Students Community
<b>Group Size</b>	Teams from 1 to 6 people. 1 to 10 Teams
<b>Objectives</b>	<p>The objective of CROMAS is to find new ideas to:</p> <ul style="list-style-type: none"><li>- Solve a problem</li><li>- Improve an existing product, service or process</li><li>- Create a new product or service</li></ul>
<b>Material Required (Physical version)</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Paper and pens</li><li>• CROMAS questions list</li><li>• a digital platform to write ideas. It could be a digital board (Google jamboard, Microsoft Board or other) or a conventional word processor.</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 30 to 90 minutes</li></ul>



**Implementation - Overview**

The technique can be used following these steps:

1. Identify and write in a clear way the challenge or the problem to solve.
2. Apply the CROMAS questions
3. Select the best ideas



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## Implementation - Guidelines

1. The first step is to identify the problem to solve or the product, service or process to optimize. Write it down as a clear objective for the session in a way that every participant can read it and be sure that all them understand it perfectly.
2. If you have a big group it is a good idea to break it into teams of 2 to 6 participants each. Having groups will let you to assign different letters to each one or compare results adding some competition to the activity. Appoint an idea-writer on each team and assign her the task of writing down every idea in detail. Encourage them to use not just words but drawings also.
3. Explain the CROMAS general idea and the way the questions are used to search for new ideas. To start the activity you have to options:
  - To assign a different letter to each team. You can do this using a dice to pick a number between 1 and 6 (Remember that CROMAS has 6 letters/questions)
  - To go letter by letter asking all the teams to use them simultaneously.7 to 15 minutes can be a good time for all the teams to work on the assigned letter.
4. Project or hand-out a card with the questions related to the present letter.

Remember that each letter is a mental game, an enticing question that leads to generating ideas. In this technique the most important thing is to let the imagination be led by the brain's right side, to explore new roads. The key is not to base ourselves in logic to find new ideas but do it "without thinking too much." Logic will come after, when the time for idea evaluation arrives.

A base question for each letter is:

C: COMBINE - What new idea can I create combining (without thinking it too much) two things or actions already existing?

R: REORDER - If I change (without thinking it too much) the order of doing things, is there something new and genial?

O: OTHER USES - If I change this context element (without thinking it too much) will it have a novel use and will it originate something innovating?

M: MODIFY - If I change the dimensions, or the material, or the colors (without thinking it too much) do I change my idea into something surprising?

A: ADAPT - If I take (without thinking it too much) a strategy or solution that is already functioning into another different environment, can I bring it into my situation, creating something innovating?

S: SUPPRESS/SUBSTITUTE - If I take (without thinking it too much) something that is supposedly necessary in my original design, and I force myself to rethink it over, will it be renovated?

The CROMAS questions list includes other questions than can help in the process.

One important thing to remember is that it's not required to follow a specific order when applying the letters.

5- Idea evaluation. This activity can be carried out as part of the CROMAS session or in a session afterwards. You can do the evaluations grouping similar ideas, letting a group of experts to vote, using the impact/viability matrix or other tools



<p>Example of application:</p>	<p>The CROMAS technique was used by an airline company who was searching for new actions to improve quality service and differentiate from competition.</p> <p>The challenge was defined as: How could we differentiate in an outstanding way from other airlines?</p> <p>The first step was to divide the service delivered by the company into stages or steps, as booking, check in, baggage drop, waiting, boarding, etc.</p> <p>The following step was to apply each of the CROMAS letters to those stages to find ways to re-think the entire process. Some of the ideas were:</p> <p><b>COMBINATION:</b> - What if we combine the check-in with the trip to the airport? Maybe the taxi driver can do part of the check-in process. Or maybe the online checking adds a cab to your reservation.</p> <p><b>REORDERING:</b> - What if we change the order of the baggage dropping and the trip to the airport? Maybe a transport can pick-up the bags BEFORE the passenger go to the airport</p> <p><b>OTHER USES:</b> - What if the waiting time has other uses? Maybe a nurse can check the blood pressure of the passenger while waiting to board.</p> <p><b>MODIFICATION:</b> - The boarding bridge (or tunnel) can be changed to offer a different experience. Maybe this place can be thematic.</p> <p><b>ADAPTATION:</b> - What if we adapt (from those big concerts) the practice of throwing a big ball for the public to play with. Maybe this will make the trip more fun.</p> <p><b>SUPPRESS/SUBSTITUTE</b> - What if we eliminate the uniforms in the crew? Maybe it will be funnier if they go every month with a different costume.</p>
<p>Templates, Graphics for download</p>	<p>CROMAS questions list</p>
<p>Additional format/references</p>	<p><a href="https://www.designorate.com/a-guide-to-the-scampers-technique-for-creative-thinking/">https://www.designorate.com/a-guide-to-the-scampers-technique-for-creative-thinking/</a></p> <p><a href="https://www.interaction-design.org/literature/article/learn-how-to-use-the-best-ideation-methods-scampers">https://www.interaction-design.org/literature/article/learn-how-to-use-the-best-ideation-methods-scampers</a></p> <p><a href="https://www.youtube.com/watch?v=G8w0rJhztJ4&amp;feature=emb_logo">https://www.youtube.com/watch?v=G8w0rJhztJ4&amp;feature=emb_logo</a></p>



# Idea star

<b>Field of application</b>	#Problem Analysis #Ideation
<b>Resume / Brief description</b>	This game is based on the principle that an idea not only has one but many opposing ideas. This game is a great tool to see those possibilities we are overlooking. The idea star needs a starting idea and uses it to generate a "creative chain reaction" finding series of contrary ideas that even as opposed to the original one, solve the problem too.  Category: Ideation
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	This game can be played individually or as a team.
<b>Objectives</b>	Find new creative ideas to be used to solve a problem or create a product or a service
<b>Requirements</b>	Material: <ul style="list-style-type: none"><li>• Idea star format</li><li>• Pen</li><li>• a digital platform to write ideas. It could be a digital board (Google jamboard, Microsoft Board or other) or a conventional word processor</li></ul> Time: <ul style="list-style-type: none"><li>• 10 to 50 minutes.</li></ul>
<b>Implementation - Overview</b>	This creativity technique uses an initial idea to generate new ones. Hence, the first step will be to select a starting idea and write it down on the format. Then the player or players will generate new ideas thinking in an idea opposed to the original that gets the results we are looking for too.



<p><b>Implementation - Guidelines</b></p>	<p>1. Define and write the problem to solve in a place where everybody can read it. For example: How can we increase our sales in the store?  2. Provide each participant (individual or team) an Ideas Star format. This format can be printed in a personal version to be used on a standard table, or in a big version, to be placed on a wall. Each point of the star will be used to write down an idea.  3. Ask players to provide an idea that solves the challenge and write it down anywhere around the star. Each participant can have a different starting idea.  4. Now ask players to answer the following question:  "Which would be an idea that also solves the problem, but is opposite to the one just written?"</p> <p>As each idea has several components and attributes, other ideas can be opposite to it, in each one of those elements. This way we can find several "opposite" ideas to each one. For example, if a team is working on the idea "We can have a musical show in the store every weekend to bring more clients", some possible opposite ideas can be:  - We can have a musical show every day except weekends  - We can have a show outside the store  - We can have a very quiet show in the store  - The clients can do a musical show</p> <p>5. Repeat the process using the new written idea  For example, if the new idea is: The clients can do a musical show, possible opposite ideas can be:  - The no-clients can do a musical show (as a way to turn them into clients)  - The clients can do a business show (maybe a business speed-dating event)  - We can do music for the clients (maybe we can use subliminal sounds to increase the desire to buy)  - The clients can't do music (maybe we can give music classes to them or their children, while are buying)</p> <p>Instruct the participants: "Write down the new ideas around the star repeating the same question for them. If a proposed idea is already written down, skip it, and think in another one. Remember that an idea has several opposites."</p> <p>As you can see, it is possible to repeat the process several times. Once no more opposite ideas can be found, the participant can take another format and use a different starting idea to build another Ideas star.</p> <p>At the end, you can consolidate all the ideas generated during the exercise into one final document.</p>
<p>Example of application:</p>	<p>An oil transportation company was working in ways to improve its efficiency in the loading and unloading processes. After some sessions, the team was short of ideas so they decided to try some creativity techniques in order to increase the amount of ideas to work with. One of the creativity techniques used was Ideas Star.</p> <p>The team met in a room and wrote the main purpose of the session on the blackboard on the wall: To find innovative ways to increase the efficiency of loading and unloading process. The 8 participants were divided into 4 couples and given 4 Ideas star formats to each couple as well as pens and colors. The couples were formed mainly with people coming from different organizational areas.</p> <p>The facilitator provided some minutos for each team to find the starting idea for each Ideas star format.</p> <p>The facilitator presented the activity as a competition, the winner being the couple who found the more ideas. Chocolate bars were presented as the prize for the winner.</p> <p>The facilitator explained the "multiple opposites" concept and asked participants to be creative and take some risks when searching for solution ideas.</p> <p>The time provided was 20 minutes. The facilitator also played background music to add some creativity mud to the environment.</p> <p>The outcome of the session was the incredible amount of 52 new ideas, many of them with a great potential for effectively improving the process efficiency. A triple deal make the facilitator have to search for more chocolate bars (at the end he gives a chocolate to each participant)</p>
<p>Templates, Graphics for download</p>	<p>Idea Star Format</p>



# Idea duel

<b>Field of application</b>	#Ideation
<b>Resume / Brief description</b>	<p>This is a fast and funny game that brings lots of creative ideas to solve a problem. Designed for two players, each one has 5 "creative cards" in her hands. In its turn she picks a card and puts it into the other player space to challenge her to ideate one more solution to the problem using the element on the card as inspiration. The limited time adds emotion and wakes even more the brains. At the end, a good deal of new and original ideas has been generated.</p> <p>Category: Ideation</p>
<b>Target group</b>	<ul style="list-style-type: none"> <li>• Entrepreneurs</li> <li>• I&amp;D teams</li> <li>• Innovation teams</li> <li>• Students</li> <li>• Community</li> </ul>
<b>Group size</b>	2 players
<b>Objectives</b>	Generate new ideas to solve a problem or improve a situation while having a good time.
<b>Requirements</b>	<ul style="list-style-type: none"> <li>• Idea Duel format</li> <li>• A deck of cards showing Images of objects, places, people. 20 to 60 cards.</li> <li>• 2 pens</li> <li>• Timer</li> </ul>
<b>Implementation - Overview</b>	<p>It's a simple game that only has the following stages:</p> <ul style="list-style-type: none"> <li>- Problem definition</li> <li>- Duel</li> <li>- Ideas collection</li> </ul>
<b>Implementation - Guidelines</b>	<ol style="list-style-type: none"> <li>1. The first phase is to clarify the objective of the ideation. It can be a specific problem to solve or just an exploration of new ideas around a topic. It also could be a "serious" problem (For example: How to avoid old people to forget their medication) or a more informal challenge (For example: Ideas to have a creative birthday party).</li> <li>2. The Idea Duel format is placed on the table between the two players. The deck of cards is placed in the middle of the format, on the space designed for that purpose. Each player takes five cards to form its hand and a pen.</li> <li>3. In its turn, a player selects a card from her hand and puts it into the other player space on the format. The second player will have 1 minute to think of an idea inspired by the element displayed in the card, to solve the problem. After a minute, the turn ends, even if the second player has not proposed an idea. Then the first player takes another card from the deck to complete 5 cards in her hand again. Now it is the turn for the second player, repeating the sequence. The game can last between 3 and 10 turns.</li> <li>4. The winner will be the player who proposes the most ideas.</li> </ol> <p>Although the competition adds excitement, the real reward is finding those new ideas generated in a few minutes.</p>
<b>Example of application</b>	<p>In a marketing agency, the Ideas Duel is a game used frequently. In fact, the Ideas Duel format has been replaced by a more elaborated version printed on strong cardboard. Often, when a creative team is "blocked" they run to the table and play a couple of duels. Some variations to the game had been introduced by the creative people of this agency. For example, the play Team Duels, where two teams of 2 or 3 ideators face each other, or the Chess timer version, where each player has not 1 minute to solve each card but 15 minutes in total to get as many ideas as she can.</p>
<b>Templates, Graphics for download</b>	<p>Ideal Duel format Toolbox cards WakeUpbrain digital game cards</p>



# Idea auction

<b>Field of application</b>	#Idea selection #Idea prioritization
<b>Resume / Brief description</b>	<p>When the time for prioritizing ideas and selecting the best one to implement arrives, the innovator always faces difficult moments.</p> <p>Why?</p> <p>Because every good idea has so many attributes to take into account, that the selection process is demanding work. If you add the long analysis and opinion of the ten participants in the ideation session, the process can be overwhelming.</p> <p>Traditional methods such as weighted evaluation are useful, but when a working group needs a way to order and select the best ideas in a practical and fast way, it is a good thing to have other options.</p> <p>The idea auction is an effective (and funny) method to select the best ideas after an ideation activity.</p> <p>One of the most interesting features of this game is the amount of possible variations available.</p> <p>Category: Idea optimization</p>
<b>Target group</b>	<ul style="list-style-type: none"> <li>• Entrepreneurs</li> <li>• I&amp;D teams</li> <li>• Innovation teams</li> <li>• Students</li> <li>• Community</li> </ul>
<b>Group size</b>	1 to 30 people
<b>Objectives</b>	To prioritize ideas generated in a ideation session to facilitate the selection process.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"> <li>• Paper cards</li> <li>• Masking tape</li> <li>• WakeUpBrain Toolbox cards</li> <li>• Toy money or numbered cards to be used as money</li> <li>• Digital board (Google Jamboard, Microsoft board, Miró or other)</li> </ul> <p>Time:</p> <ul style="list-style-type: none"> <li>• 20 to 40 minutes</li> </ul>
<b>Implementation - Overview</b>	<p>The steps to use Idea auction are:</p> <ul style="list-style-type: none"> <li>- Write each idea in a paper card and place them forming a line in the lower part of a board</li> <li>- Organize the groups into teams and give them money</li> <li>- Run bidding rounds</li> <li>- Look for the winner ideas.</li> </ul>
	<p>Use traditional voting, an impact/viability matrix or other standard method to pre-select the most powerful ideas. 3 to 8 finalist ideas would be a good number.</p> <p>Write down each idea onto a Post-it or a paper card and put them in the bottom line of a whiteboard. Add a number to each one. Use big writing so anyone can read each idea and its number easily from a distance of 2 or 3 meters. Be sure all cards are horizontally aligned.</p> <p>Use WakeUpBrain toolbox cards or another element to add an image or icon to each idea. This will help participants to recall every idea more easily during the auction.</p> <p>Divide your group into teams (2 to 5 people on each)</p> <p>Give each team:</p> <p>Some money to bid for the best ideas (please, don't give them real money). Use toy money or any other element (some numbered cards, for example) that play the role of currency. Assign each team the same amount of money divided equally into different denominations (Example: Each team receives \$100 divided into one \$50 bill, two \$20 bills and two \$5 bills)</p> <p>5 blank paper cards and a pen to write down the number of the idea they want to bid for.</p> <p>Ask someone to read every idea out loud in order to refresh them in the participants mind and resolve all possible questions about the details.</p>



## Implementation - Guidelines

Announce that every team is from now on a “new company” (or the type of organization you are working with) and will be using the idea they get, to be the most successful one. Announce that the ideas will be auctioned off and that each team must win at least one idea so it can start operations.

Ask all teams to select a team name to be used during the game.

Instruct each team to discuss during 3 to 5 minutes and secretly write the two ideas they want to bid for. To identify each idea they must write down its number in a separate card, fold it and put the money they want to offer inside. Every card must be marked with the team name.

Collect the two bids from each team and read them out loud. Write every bid below or above each idea and put the bids near so everybody can view the offers.

In the second round, announce that every team can bid for only one idea. Repeat the process. Add up the new money and refresh the leading bidder for each idea.

In the third and last round, allow the teams to make alliances in order to get more money to bid for the more interesting ideas.

Add up the final money offered by each team (or partnership) for each idea and announce the winners.

### Results and Close-up of sessions

The ideas that received the most money are, without doubts, the most interesting ones. This process gives you a way to identify the magnitude of the potential that the participants see for every idea. And which ideas would receive more support when the execution phase arrives. The gamified process allows the participants to rapidly identify the best ideas avoiding unproductive discussions.

### Variations

Some variations add more fun to the exercise without affecting the efficacy of the tool.

#### Amount of money

Variations in the amount of money assigned to each team. Instead of giving the same amount of money divided in the same way you can give:

Same amount divided in different ways into different denominations. (Example: One team receives the distribution above, other receives 10 \$10 bills and maybe the other receives just one bill of \$100). This version adds some fun as each team has to face a different kind of decision.

Different amounts. In this case, the difference between the higher budget and the lower must be in the 20% range at most. This version adds the emotion related to the expectation about how much money will be available to make bids and the pressure for creative strategies to take advantage of the amount received.

### Blind auction

To avoid some bidders from influencing others, the blind auction can be a good option. In this version, the bid rounds are executed using blind auctions. That means that all participants write down the number of the idea they want to vote for and give it to the facilitator simultaneously. After that, the facilitator read aloud the cards and move the ideas accordingly.

### “Don’t repeat idea” rule

To avoid polarization, the “don’t repeat idea” rule can be introduced. In this version, the participants must go for a different idea each time.

### “Because of” phase

The facilitator can introduce a “Because of” phase after all the bids of the round have been read. This can help to better understand the advantages and disadvantages of the ideas and increase the quality of the exercise.



<p>Example of application:</p>	<p>The tool has been applied on many occasions by innovation leaders in a software company. As the company believes strongly that all the people involved in the development of new projects must be "fanatic" of the project they are working on, the search for more democratic tools took the leaders to this tool. Letting the group of developers to participate in the evaluation process make them more engaged with the selected project. The tool had been integrated with the SCRUM process. For this company, using Idea auction is not a way to select the best ideas but a way to encourage developers to know more about the needs of the market and the user's tastes.</p> <p>In this case, toy money is available permanently in the meeting room. A WakeUpBrain card is assigned to each idea. The name of each idea is added to the card using adhesive notes. The cards are aligned at the lower end of the wall board. The auctions follows the standard procedure, but an "Idea lawyers" variation had been added. In this variation, you can name some participants to be "idea lawyers", and introduce an argumentation stage between the bid rounds. On this stage, the lawyers of the less advanced ideas will have three minutes to invite participants to bid for those ideas presenting benefits and other arguments. This will avoid ignoring positive aspects of the less "charming" ideas.</p> <p>The process takes about 40 to 60 minutes and produces the Top three ideas, which are evaluated by the company directors to select the next project to be executed.</p>
<p>Templates, Graphics for download</p>	<p>N/A</p>
<p>Additional format/references</p>	<p><a href="https://www.coursera.org/lecture/design-research/idea-selection-Zi5vR">https://www.coursera.org/lecture/design-research/idea-selection-Zi5vR</a></p> <p><a href="https://www.lead-innovation.com/english-blog/selection-of-ideas">https://www.lead-innovation.com/english-blog/selection-of-ideas</a></p>



# Ill-omen bird

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Idea improvement</li><li>#Product design</li><li>#Service design</li><li>#Process design</li></ul>
<b>Resume / Brief description</b>	<p>The moment an innovation team picks the best idea, is not the final moment. It's just the beginning. The chosen idea seems to be excellent. Has a lot of benefits and advantages. But... has any hidden problem too? Maybe. But for an excited team, happy with the new and powerful idea, finding weaknesses and problems in it, is a very difficult job. But it is a job that has to be done.</p> <p>The ill Omen bird is a game that encourages the innovation team to find hidden weaknesses in the selected idea. This will be critical in the following stages (prototyping, validation, production) because ignoring them can cause delays, loss of credibility and, of course, extra expenditures.</p> <p>In the Ill Omen bird, three to five teams compete to find reasons why the idea is going to fail and rate solutions provided by the other teams.</p> <p>Category: Idea optimization</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	This game can be played by 3 to 5 teams of 1 to 6 people each.
<b>Objectives</b>	The main objective of the game is to find possible weaknesses in the selected idea and find out possible solutions to them.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• 20 to 60 drawings or pictures. You can use magazine clippings, or image decks showing objects, people, places, animals. You can also use the cards of some card games such as WakeUpBrain or Dixit.</li><li>• 1 ill-omen bird format to write down problems and solutions (ideas)</li><li>• 5 pencils, one for each team</li><li>• 1 table</li><li>• Digital board (Jamboard, Miró, Stormboard or any other). To prepare the board put 20 to 60 images on the first page of the board. As an alternative you can use simply the image search tool from a search engine (as google) and search for random words in order to get good images to work with during the game. Use another page of the board (or another space on the same page) to assign a space for each team to put their cards. You can sign those spaces with the name or the logo of each team. The writing or Pot-it tool will serve as "idea catcher"</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 60 to 180 minutes</li></ul>
<b>Implementation - Overview</b>	One of the team will take the Ill Omen Bird rol and will use one of its cards or images to represent a possible problem that the idea can face. The other teams will use their own images to ideate solutions to that problem. The Ill Omen Bird team will give the image used to show the problem to the team with the best idea. Then the next team takes the Ill Omen Bird roll and a new round is played. A participant must take note of both the problem detected and the solutions proposed.



<p><b>Implementation - Guidelines</b></p>	<p>For face-to-face game</p> <ol style="list-style-type: none"> <li>1. Prepare the necessary elements for the game. (see materials). The pile of images is placed on the table.</li> <li>2: Each team draws five images out of the images pile. This group of images will be its initial hand.</li> <li>3: One or two of the participants should play the role of observer and idea catcher. To do this, they must use the bird of evil format and a pencil. The note-takers can be part of a team or can be neutral.</li> <li>4: One of the teams takes the role of the Ill Omen bird, and proposes aloud to the others a complication or problem, which can arise when executing the idea or when the solution being used by the final users. The team will use one of its images to represent such a weakness, problem or complication.</li> <li>5: The other teams will have 2 to 4 minutes to watch their own images and think of a strategy to avoid or solve the problem inspired by one of them.</li> <li>6: Next, in order beginning with the team left to the Ill Omen bird team, each of the teams shows their image and describes the solution out loud. The note-taker writes down every idea with all the details.</li> <li>7: The Ill Omen bird team takes 2 minutes to select the best idea for its viability, effectiveness and levels of originality and gives the original image of the problem to that team as a win proof.</li> <li>8: A point is awarded to the winning team. All teams discard the used image and take another from the central pile to have five again.</li> <li>9: The Team left to the Ill Omen bird team takes that rol and a new round is played. The original Ill Omen bird team can now play as a solver.</li> <li>10. The game finishes when each team has played the Ill Omen bird rol.</li> </ol> <p>For virtual game:</p> <p>Some adjustments can be done to play the game in a virtual environment.</p> <ul style="list-style-type: none"> <li>- A good idea is to set a page with all the images on it.</li> <li>- Define a space on the board (It can be a second page or a special space on the same page) as the playing space. Assign a private space to each team.</li> <li>- In this version, the team images will be known by all the other teams, so let each team copy 5 images and paste them on their own space on the board.</li> <li>- To show which image is using, each team can move it to the front of its space or mark it using the pen tool.</li> <li>- All the other rules remain the same.</li> </ul>
<p>Example of application:</p>	<p>The bird of ill omen is a game created by the Innovation Center and has been used in different settings. One of the most recent scenarios is the Innovation Catalysts Program 2020, created by MINTIC (Ministry of Information Technologies and Communications of Colombia). This is a training program that develops the skills and competencies of teams coming from different public institutions. They must work on a challenge of their entity for 3 months of training under the modality of experiential learning (learning by doing) while receiving the guide of expert mentors. At the end of the training process, each pair will be able to present a prototype of an innovative solution to the challenge of their entity. The virtual version of the Ill Omen bird game was used once each team selected the idea they want to prototypate. For doing this, a special session was scheduled for each team. Every team brought "invited" participants in order to have new visions around the possibilities and weaknesses of the idea. All the games were played with 4 teams. The detected problems and possible solutions were used to re-design the idea and build a new version of the solution. The most important result was that each team become aware of all the weakness that a innovation team can ignore on the idea they have selected.</p>
<p>Templates, Graphics for download</p>	<p>Ill Omen Bird Format</p>
<p>Additional format/references</p>	<p><a href="https://toywiz.com/dixit-board-game/">https://toywiz.com/dixit-board-game/</a></p>



# Emostory

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Problem Analysis.</li><li>#Product design</li><li>#Service design</li><li>#Process design</li></ul>
<b>Resume / Brief description</b>	<p>The Emostory tool provides a easy way to record, in a detailed way, the emotions involved when a user experiences a service or a product. This knowledge allows the innovators to design better services and products. The Emostory is built using Emostory cards organized in a time line. This line represents the whole experience. On each Emostory card, a moment is described in detail and its emotional charge (positive or negative) is shown.</p> <p>The Emostory requires interviews and interactions with users in order to have real information.</p> <p>Category:</p> <ul style="list-style-type: none"><li>● Problem Analysis</li><li>● Product design</li><li>● Service design</li><li>● Process design</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>● Entrepreneurs</li><li>● I&amp;D teams</li><li>● Innovation teams</li><li>● Students</li><li>● Community</li></ul>
<b>Group size</b>	4 - 20 people
<b>Objectives</b>	Deeply understand the feelings and thoughts of the users regarding a service or product. This knowledge can be used to design better solutions.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>● Emostory format placed on a digital board (Google Jamboard, Microsoft Board, Miró or other)</li></ul> <p>For each team:</p> <ul style="list-style-type: none"><li>● Emostory cards (20 to 40)</li><li>● Pen</li><li>● Red and black colors</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>● 60 to 120 minutes</li></ul>



## Implementation - Overview

This is a tool designed to help innovators create services or products prioritizing user needs and feelings. It reflects the fact that the one who really can rate the quality of something is the user. The emostory model provides a easy way to record and organize the different moments that make up the user experience. The tool provides way to explain, in detail, each moment and rate its emotional charge. This is helpful to design products and services that really add value to the user.



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The Emostory process is as follows:

**Preparation:**

As this tool works better when real customers take part in it, you will have a good amount of pre-work since you will need to contact and convince them. You will need at least one customer for each team.

1 Definition of the objective. With this tool we are attempting to know more about the user experience of a specific product or service, so it is important to define the scope of this experience.

2 Definition of the working strategy.

The Emostory is built when our team meets the user or group of users and talks with them about their experience using the product or service.

So it is possible to arrange this encounter in different ways.

It's important to note that this tool can be applied using different strategies:

- The same team working with several users (or groups of users) one at a time. This can be done sequentially during one day or in different days.

- Several teams working simultaneously with one or several users during the same session.

3. Building of the guide to be used during the interview.

As the interview with the user must be done in an open way, it is important not to apply a questionnaire in a rigid way. But, just to be sure not to forget an important aspect of the experience, an interview guide can be very helpful.

The questionnaire can include the following questions about the product or service:

- How the user got to know about it.
- The happy and angry moments
- The decision process, including influencers
- Personal ways to use it

**Implementation - Guidelines**

**Emostory building**

1. Prepare a space on a table or wall where you can build the Emostory by placing the Emostory cards.

2. Start conversation with the user or users about their experience using the product or service

3. Use an Emostory card to describe on it each of the steps in the experience. The square will allow you to make a drawing showing the situation. The lines allow a written explanation.

4. Ensamble the Emostory cards in a time line showing the user experience from beginning to the end. When a new event appears you can put the respective card in the right place displacing the others.

5. Rate the emotion experienced on each moment. Each Emostory card has a scale of hearts. You will use the black pen if the experience was a negative one and the red if the experience was positive. Using the scale the user can rate how strong was the emotion experienced on that moment. Using the right color, fill as many hearts as the emotion experienced was weak or strong. For example, if the user had a very angry moment using the product, you can fill four or five hearts using the black color, but if the next experience, although positive was "just alright", you can use the red color to fill just one heart.

6. The final line of Emostory cards is the Emostory of that user or group of users. You can use it to understand much better the moments and places where you and your team can innovate to have the most positive impact.

The cards showing the higher amount of hearts filled, no matter the color, represent the opportunities with the most potential to innovate.

If the experience is a bad one (black hearts) your challenge question has to be "how to radically change this situation?"

If the experience is a good one (red hearts) your challenge question has to be "how to take even more advantage of this situation?"

If the experience was rated radically different by different users, there is an opportunity to learn the good practices and standardize them.



<p>Example of application:</p>	<p>The health service of a university was working on "How to create the best health service for our students?"          To find ways to innovate in this service, the team did several sessions with students to learn how to better their experiences. To collect and organize the information collected in each session, the team used the Emostory tool.          Pictures were taken of the final time-lines to identify "high emotion moments"          Here some examples:          - The moment when the student has symptoms (Four black hearts because of the uncertainty they are feeling)          - The moment when the student is calling to make an appointment. (Three black hearts)          - The moment when the student is treated by the doctor (Some rated it with high amount of black hearts and some with high amount of red hearts)</p> <p>All this information led the staff to organize ideation sessions to address the moments with higher rates. The innovation process is ongoing and the future looks better for everybody.</p>
<p>Templates, Graphics for download</p>	<p>Emostory cards</p>
<p>Additional format/references</p>	<p><a href="https://www.salesforce.com/uk/blog/2016/03/customer-journey-mapping-explained.html">https://www.salesforce.com/uk/blog/2016/03/customer-journey-mapping-explained.html</a></p>



# Name uses

<b>Field of application</b>	#Ideation
<b>Resume / Brief description</b>	<p>It's clearly convenient to activate the creative attitude of participants in an ideation session before they start to ideate. As they come with their own worries and their analytical approach, starting the creative labour immediately it's not recommended. Playing a short and funny game that demands some creativity is the best way to start an ideation session. This brain warming technique is a good activity to start an ideation session. It's a game where participants activate their neurons by trying to imagine new and creative uses for everyday objects.</p> <p>Category: Ideation</p>
<b>Target group</b>	<ul style="list-style-type: none"> <li>• Entrepreneurs</li> <li>• I&amp;D teams</li> <li>• Innovation teams</li> <li>• Students</li> <li>• Community</li> </ul>
<b>Group size</b>	1 to any amount
<b>Objectives</b>	To take participants to a creative attitude by activating their creativity in a gameful activity
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"> <li>• Pen and paper for each participant</li> <li>• a word processor or any other platform that allow users to write</li> </ul> <p>Time:</p> <ul style="list-style-type: none"> <li>• 3 to 10 minutes</li> </ul>
<b>Implementation - Overview</b>	<ul style="list-style-type: none"> <li>• This is a very fast and easy game. The steps are: Show the participants an everyday object</li> <li>• Ask them to think and write as many new uses they can come up with for that object</li> </ul>
<b>Implementation - Guidelines</b>	<p>Be sure that every participant has a way to write (pen and paper if the activity is in person). Tell the participants that they will have just 3 minutes to think of as many new uses as they can for an object. To increase difficulty (and creative output), explain that each use will give them one point. In small groups you can add this rule: uses proposed by two or more players will cancel each other and will award no points. Set the timer and show them the object. To do this you can use a deck of cards from the WakeUpBrain Toolbox set or, even use any object present on the room. Once time is up, tell the participants to stop writing. You can allow some of the participants to read aloud some of the new uses invented. This will motivate the group and will send a clear message that creativity is welcome.</p> <p>As a possible game extension, you can ask the participants to make a drawing showing the more creative use they thought of. Drawing always helps wake up their creativity even more.</p> <p>Now you are ready to challenge their brains with the real problem to solve...</p>



<p>Example of application:</p>	<p>In a big program to promote entrepreneurship, several ideation sessions were conducted to find new products or services. To increase the efficacy of the sessions, a "brain warming" game was played before. "Name uses" was one of those games. To play the game, the facilitators asked a participant to take a random WakeUpBrain card without looking at it. One the time limit was announced, the element on the card was showed to the group and the ideation started. After playing the game, the participants showed less creativity blockages and the level of originality increased. The game became so popular that the groups asked to play it even in no-ideation sessions.</p>
<p>Templates, Graphics for download</p>	<p>N/A</p>
<p>Additional format/references</p>	<p><a href="https://www.trytriggers.com/journal-posts/2017/10/20/the-importance-of-proper-warm-up-exercises-in-ideation-workshops">https://www.trytriggers.com/journal-posts/2017/10/20/the-importance-of-proper-warm-up-exercises-in-ideation-workshops</a></p>



# IPM (idea prioritization matrix)

<b>Field of application</b>	#Idea selection #Idea prioritization
<b>Resume / Brief description</b>	<p>When working in an innovation process, the selection of the best ideas is a stage as important as the generation one.</p> <p>Once a good amount of ideas has been generated, using the IPM Matrix is an easy and effective way to select the most suitable of them, to take to the next phase. It's a good tool to use after a first screening action has been applied to the first bulk of ideas generated in an ideation process. The semi-finalist ideas can be placed in this matrix by rating both their potential impact and their viability. Although the variables assigned to the two axis have been proved to be very useful, they can be changed according to the specific needs and conditions of the situation.</p> <p>The visual nature of the tool makes it easy to evaluate the convenience of adopting one idea or another.</p> <p>Category:</p> <ul style="list-style-type: none"><li>• Problem Analysis</li><li>• Product design</li><li>• Service design</li><li>• Process design</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Objectives</b>	The main objective of IPM is to facilitate the process of selecting the best ideas to execute.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Flipchart</li><li>• Markers</li><li>• Large stickers</li><li>• IPM format on a digital board (Google Jamboard, Microsoft Board, Miró or other)</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 40 to 60 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The main steps are:</p> <ol style="list-style-type: none"><li>1. Pre-select the ideas to take to the matrix</li><li>2. Define the evaluation criteria (the two variables to be assigned to the axis)</li><li>3. Draw the matrix.</li><li>4. Rate the ideas following the two selected criteria and place them accordingly into the matrix</li><li>5. Analyze the final result</li></ol>



## Implementation - Guidelines

1. Pre-select the ideas to take to the matrix. This means to apply a tool to reduce the quantity of ideas to evaluate to between 6 and 15. This applies when an intense ideation phase has been conducted and we have a big amount of ideas (in some cases more than 100).

The pre-selection of ideas can be done by:

- Identifying and combining very similar ideas
- Conducting a more open screening action. It can be voting or, better yet, to apply a tool that preserves ideas not so popular but with possible high potential (The WakeUpBrain toolbox is a good source of this kind of tool).

2. Define the evaluation criteria.

The IPM uses two axis to classify ideas. The facilitator must assign a criteria (variable to measure) to each. Usually, this two criteria or variables are:

- Idea potential. This means: How well the idea solves the problem? What good consequences will this idea bring to us? How does this idea fit our specific situation?
- Viability. This means: How easy is to execute the idea? How much effort will require to take it to reality and get those promised results?

3. Draw the matrix.

Using the selected variables, it's time to draw the matrix and name each axis. In a big and physical session, the axis can be drawn in a board or marked in a wall using masking tape. For the digital version, a digital board (Google Jamboard, Microsoft board, Miro or other) can work well.

4. Rate the ideas following the two selected criteria and place them accordingly into the matrix

To do this, take an idea and ask the team how well this idea rates on the first criteria. For example, if the objective of the innovation process is "To find ways to better protect our product during transportation" we have to evaluate how well each proposed solution gets this objective. The more the idea accomplishes the objective, the higher in the corresponding axis the idea will be placed. If the idea is: "To use metal boxes instead of cardboard ones", the team must decide how well this kind of box protects the product during transportation and put the idea far from the center in accordance.

Then the idea must be rated in the second criteria. The idea will advance in the direction of the second axis according to how well accomplished in this variable. If the second criteria is "viability", the idea will advance proportionally to the ease of execution. This movement means that the idea will travel inside the matrix and finish in one of the four quadrants.

A good tip is to first find the extreme ideas. This means to find the idea rating the higher in each criteria. Then place those ideas on the extreme of each axis. This will make the evaluations process easier for the rest of the ideas.

If you are working over the wall, you can use paper cards or Post-its to place and arrange the ideas onto the matrix. The same logic applies if you are using a virtual board. If you are working in a personal format, you can number the ideas and place just the number on the matrix as you don't have too much space.

5. Analyze the final result.

At first glance, the better ideas will be those who rated the among the best on both criteria. These ideas must be taken into account as, probably, are really good solutions. Nevertheless, ideas getting particularly high qualification on just one of the axis, could receive a second thought. You can ask the team: "This idea has an incredible high potential but is very difficult to execute. Is there any way to execute it in a easier way?" This action stretches a little more the creativity of the team and can provide a new insight on how to rescue a promising solution.



<p>Example of application:</p>	<p>During a program designed to help entrepreneurs to reinforce their business model, each company did an ideation work that produced a good amount of ideas. The IPM matrix was included in the delivered material to let the participants to classify and prioritize their ideas. The booklet provided a table to write down the pre-selected ideas including just the following information:</p> <ul style="list-style-type: none"> <li>- Idea number</li> <li>- Title</li> <li>- Short description</li> </ul> <p>The vertical axis was named "Strategic impact" and the horizontal one "Easiness". The first one meaning how well the idea gets the desired results and the second one meaning how easy it was to execute the idea from the entrepreneur perspective.</p> <p>Once the participant filled the table, was asked to invite other collaborators to discuss and assign values to each idea. The corresponding number of each idea was placed on the matrix accordingly the qualifications obtained on each criteria.</p> <p>An extra time was dedicated to an activity named "Rescue team". This activity invited participants to look at the ideas placed on other quadrants difference to the right-upper one and find one that could be moved to it modifying that idea in some way. This activity let the participants avoid the elimination of an idea that they liked very much, but was difficult to execute or had low strategic impact.</p> <p>The IPM was one of the most useful and intuitive tools used in this program</p>
<p>Templates, Graphics for download</p>	<p style="text-align: center;"><b>MATRIZ MEPI</b></p>
<p>Additional format/references</p>	<p><a href="https://belowthesurface.dk/toolbox/2020/4/10/idea-evaluation-matrix">https://belowthesurface.dk/toolbox/2020/4/10/idea-evaluation-matrix</a>  <a href="http://www.creativeeducationfoundation.org/facilitation_tool/evaluation-matrix/">http://www.creativeeducationfoundation.org/facilitation_tool/evaluation-matrix/</a></p>



# Features combat

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Ideation</li><li>#Idea improvement</li><li>#Product design</li><li>#Service design</li><li>#Process design</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>Features combat uses competition between teams to find new possibilities to innovate a product or a service. Each team focuses on radically changing a specific feature or characteristic of the product (or service) to make it the most impressive and powerful possible. Then we will have a clear vision on what feature has the most potential.</p> <p>Category:</p> <ul style="list-style-type: none"><li>● Problem reframing</li><li>● Ideation</li><li>● Idea optimization</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>● Entrepreneurs</li><li>● I&amp;D teams</li><li>● Innovation teams</li><li>● Students</li><li>● Community</li></ul>
<b>Group size</b>	4 to 30 people
<b>Objectives</b>	To find ways to re-invent products or services in order to build competitive differentiators
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>● Paper cards or Adhesive notes</li><li>● Masking tape</li><li>● Pens, colors, markers</li><li>● a digital board (Google jamboard, Microsoft board, Miro or other)</li><li>● drawing or designing software or platform</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>● 20 to 180 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The Features combat includes the following steps:</p> <ul style="list-style-type: none"><li>- Defining the product or service to transform</li><li>- List of features</li><li>- Organization of teams</li><li>- Feature assignment</li><li>- Design marathon</li><li>- Versions presentation</li><li>- Winner definition</li></ul>



**Implementation - Guidelines**

1. The game starts by defining the product or the service to be re-designed. It can be an actual product or service or a new concept just in validation phase.
2. Instruct the group to make a list of features, characteristics or specifications that the product or service has. Each one must be written down on a paper card and put on the wall for all the participants to read it.
3. Organize the features in order of importance. The entire group discusses to define the most important features which go in the upper part of the wall. It must be at least as many important features as the quantity of teams playing. Number those features. The other features go in the lower part without numbering.
4. Divide the group into teams of 2 to 5 people.
5. Randomly assign a feature to each team.
6. Ask the teams to re-design the product or service in a way that become really outstanding. The trick is... they can change only the assigned feature. All the other characteristics must remain the same.
7. Allow the teams to present their final version of the product or service showing how they changed the assigned feature. To define the winner, a group of external judges (even real clients) can be invited to rate these new versions.
8. As a group you must define which features offer the most possibilities to add value in a innovative way.

The activity provides a new vision of the possibilities that a certain product or service offers to delight the market with new versions of it, but more importantly , helps to clarify which features or characteristics offer the most potential to do it.

Example of application:

A company that produces mattresses and pillows applied the Features combat tool to find possibilities to innovate in its mature and highly competitive market. The teams were formed to include at least one person from production, marketing and logistics areas. This helps the teams take into account all possible details and assure more viable solutions. Each team was completed with an internal or external designer who could draw the concepts proposed by the team. The facilitator used a real mattress to build the features list. The participants placed Post-its naming the different features directly on the mattress, leaned against one of the walls of the room. Then, using adhesive dots, the participants voted for the most important features. The selected features were put into a opaque bag so each team could take one randomly. Teams had 1,5 hours to design up to 3 versions of the mattress changing just the feature showed on the note. Teams went out of the room to conduct this creative part of the session. Each team was offered the possibility to change the feature assigned with any other they want from the "less important" features still adhered to the mattress. This will give extra points to that team. Just one team accepted the deal. Once time was up, the teams returned to the room and presented its designs. A judges table including the general and commercial manager, valued the propositions and assigned points. It was a really productive session. Some of the concepts were asked to be transformed into real development projects for future products. And, for future opportunities, the team will have a good understanding of the possibilities offered by each feature of an apparently simple object as a mattress. The winner team was awarded with the Features combat trophy and their picture was placed on the communication boards all over the company.

Templates, Graphics for download

N/A



Additional format/references

<https://welldoneby.com/blog/what-are-the-most-important-features-for-a-product/>

<http://strategictoolkits.com/strategic-concepts/product-feature-matrix/>

<https://core.ac.uk/download/pdf/11011782.pdf>



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# Problem inventor

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Problem Analysis.</li><li>#Strategic planning</li><li>#Product design</li><li>#Service design</li><li>#Process design</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>Innovation usually searches for spaces to work on problematic situations. A badly working product, a source of customer dissatisfaction, a growing problem, etc. But apparently perfect situations can be spaces for innovation too. As innovation is a way to "re-think" things, there is no need to be limited to those problematic scenarios.</p> <p>This tool opens questions as: Is it possible to innovate in a situation going well? Is it possible to making a better product starting from a good one? Is it possible to delight a simply satisfied customer?</p> <p>Category: Problem reframing</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	2 to 20 people
<b>Objectives</b>	To find innovation opportunities in apparently perfect situations.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• the Problem inventorss handtool</li><li>• Paper</li><li>• Pens</li><li>• the Problem inventors handtool in a digital version. It can be a presentation to be shared</li></ul> <p>A word processor software or a digital board (Google jamboard, Microsoft Board, Miró or other)</p> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 40 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The essence of this technique is to use the "Problem inventors handtool", a set of sentences designed to change perception about a situation. To to this, the steps are:</p> <ul style="list-style-type: none"><li>- Define the situation to improve</li><li>- Organize teams</li><li>- Use a game to put them in a "critic" attitude</li><li>- Explain the situation to improve, give them the "Problem inventors handtool" and ask them to identify failures in this, otherwise, perfect situation.</li><li>- Convert the just discovered failures into challenge questions</li><li>- Share discoveries.</li></ul>



<p><b>Implementation - Guidelines</b></p>	<p>1. Define the subject of problem invention. Take a normal situation, a good product, a service with low amount of complaints, a process working well. This will be the starting point for this technique.</p> <p>2. Organize the group into teams (1 to 5 members). Explain them that from now on they will be "Problem inventors", capable of point problems out of the most perfect situations.</p> <p>3. "Brain warm" them by doing this simple exercise: give them three minutes to look around and write down all the wrong things they can identify: something misplaced or broken, a badly designed object, an unsatisfied need. Give them some time to share their discoveries. Now you have a very critical group, ready to act as real problem inventors.</p> <p>4. Start the session by walking them through the situation which is to be improved. Then explain to them that the general idea is to see it in a different way, in a negative way. To do this, the participants must analyze the product, service, process or whatever the object of our improving effort could be, and use the Problem inventors handtool to view it as a failure instead of a success:</p> <p>Problem inventors handtool</p> <ul style="list-style-type: none"> <li>- Although everything seems to be all right, there is something that is not as good as it could be. What is it?</li> <li>- Our actual situation is satisfactory... or mediocre. What we should really aim for is having...</li> <li>- This version of our _____ is just good. To be really outstanding, it must _____</li> <li>- A good competitor would launch a copy of our _____ but improved ten times. How could it be?</li> <li>- A good observer will identify the true faults and weaknesses of our _____, which would be:</li> </ul> <p>The result of the team's work will be a list of "fails" detected (or invented) in the selected situation.</p> <p>5. Each discovery can be converted in a Challenge question using the form:</p> <ul style="list-style-type: none"> <li>- How could we _____ (get the new desired situation)?</li> </ul> <p>6. Provide time for the teams to share the discoveries. Encourage them to identify which possible innovation will bring the more benefits to the organization.</p> <p>The exercise will highlight the incredible possibilities we have to innovate, but were not aware of.</p>
<p>Example of application:</p>	<p>The Problem inventor tool was used as a teaching tool to show undergraduate students how to find opportunities to innovate. The teacher asked their group of students to come up with the thing they liked the most. They thought of video games, music concerts, tv series and others. Then the teacher divided the group into teams and gave them the Problem inventor handtool. Students had to find wrong elements on those things they liked so much.</p> <p>As a result, a good amount of innovation opportunities aroused. Some of them began to think on the possibility of starting a business to take advantage of them...</p>
<p>Templates, Graphics for download</p>	<p>The problem inventors handtool</p>



# Problem breakdown

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Problem Analysis.</li><li>#Strategic planning</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>Overload is one of the reasons behind some of the creativity blockages. That means that the amount of information a brain can manage is limited. When a person or a team is trying to solve a complex problem can lose perspective and motivation. In this case, a technique as Problem breakdown can be useful.</p> <p>Category: Problem reframing</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	4 to 20 participants
<b>Objectives</b>	To better understand the problem to solve and explore solution paths.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Problem Breakdown format</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 90 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The Problem Breakdown tool follows these steps:</p> <ul style="list-style-type: none"><li>- Problem socialization: Everybody must have clarity on the problem to solve</li><li>- Problem breakdown: Teams break the problem into parts</li><li>- Challenges: Teams write challenge questions for each part</li><li>- Presentation: The results are presented and a new version of the problem is set.</li></ul>



<p><b>Implementation - Guidelines</b></p>	<ol style="list-style-type: none"> <li>1. The first step is to explain the problem to the participants and be sure all agree with the definition</li> <li>2. Then break the group into teams (2 to 5 members each). Each team must write down the problem to solve in the format.</li> <li>3. Now explain that every problem is composed of several parts or can be defined as a set of sub-problems. In this step, each team must break the problem into parts and write each of them in one of the spaces designated in the format. Each problem can have several ways to be broken. Let each team to find and follow its own version.</li> <li>4. Ask each team to view each part as a new but smaller problem and ask them to write a new challenge question for each part of the problem. The challenge question usually starts with "How can we..." or similar forms.</li> <li>5. Let each team to present their new challenge questions and the logic behind</li> <li>6. Direct the group to identify if solving one of the challenge accomplish the following: <ul style="list-style-type: none"> <li>- Is a lot easier than solving the original problem</li> <li>- Solve the original problem or, at least, reduce it considerably.</li> </ul> </li> </ol> <p>This exercise gives the team a new way to view and understand the problem the organization is trying to solve.</p> <p>The following step is to conduct an ideation activity using the new challenges. This step can be done as part of the Problem breaking session or as an independent session to be carried out later.</p>
<p>Example of application:</p>	<p>Social challenges are complex by nature. To much variables are involved, including those realted with communities and human relations. That is why social innovation can gain a lot when using tools to improve the problem understanding and help to explore solution routes.</p> <p>A NPO were working with a communtiy to improve its digital capabilities. The community use to have low access to connectivity and low training in the use of technologies. The team in charge of the project were working in the following question: How to accelerate the internet adoption in the community? This question reflects a very broad and ambitious goal, so they decided to use Problem Breakdown to try to find effective strategies.</p> <p>The 6 members of the team, as well as other collaborator of the organization were invited to the session.</p> <p>The group was divided into 4 teams. Each team received the Problem Breakdown format.</p> <p>After presenting the main objective, the teams started breaking the probem into parts.</p> <p>This was very enlightening as one of the teams broke it in stages (following a time-based logic) while other broke it into "actors" (social groups involved). Even the other teams presented diverse type of divisions.</p> <p>Although the exercise confirmed the complex nature of the problem, the smaller challenge questions opened numerous possibilites to design action plans. Some ideas generated in an informal way were added to the results of the session.</p> <p>Using this output, the team could define its strategy and start to work</p>
<p>Templates, Graphics for download</p>	<p>Problem Breakdown format</p>
<p>Additional format/references</p>	<p><a href="https://forge.medium.com/the-500-year-old-piece-of-advice-that-will-change-your-life-1e580f115731">https://forge.medium.com/the-500-year-old-piece-of-advice-that-will-change-your-life-1e580f115731</a></p> <p><a href="https://www.thwink.org/sustain/articles/000_AnalyticalApproach/index.htm">https://www.thwink.org/sustain/articles/000_AnalyticalApproach/index.htm</a></p>



# I thought the problem was...

<b>Field of application</b>	<p>#Problem Analysis. #Strategic planning</p>
<b>Resume / Brief description</b>	<p>This tool is designed to help innovation teams to refine the problem definition. This is important as very often the creative energy goes to try to solve problems that are, really, symptoms of a more deep situation. The game uses two powerful elements:</p> <ul style="list-style-type: none"><li>- The sentence: "I thought the problem was... but maybe the real problem is..."</li><li>- The "Knowledge shower" concept</li></ul> <p>The combination of these elements, creates an enlightening experience that helps teams to understand much better the problem or situation they are trying to solve.</p> <p>Category:</p> <ul style="list-style-type: none"><li>• Problem reframing</li><li>• Brainwarming</li><li>• Ideation</li><li>• Idea optimization</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	4 to 30 people
<b>Objectives</b>	To find the "real problem" behind the problem we are trying to solve.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• I thought the problem was... format</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 60 to 240 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The process has to main parts:</p> <ul style="list-style-type: none"><li>- In the first part, the participants write down its definition of the problem</li><li>- In the second part the participants are exposed to a "Knowledge shower" in order to give them more elements to understand the situation better.</li></ul> <p>The two parts are repeated as long as "Knowledge showers" are prepared</p> <p>At the end, the last versions of the problem are shared to build the final one.</p>



<p><b>Implementation - Guidelines</b></p>	<p>This tool requires a good deal of preparation as each "Knowledge shower" can require investigation, data collection, experts searching, documents preparation, etc.</p> <p>The main objective of the preparation phase is to ensure that the participants will receive high quality varied knowledge. For organizing each "Knowledge shower" you must take into account:</p> <ul style="list-style-type: none"> <li>- Have a variety of knowledge. For example one shower can talk about the financial part of the problem and the other can present the user point of view.</li> <li>- Set the presentation of the knowledge in a "compact" version. This will give you the possibility to deliver not just one.</li> <li>- Think in variety when deciding the format for each "Knowledge shower". Maybe one can be a segment of a movie, other can be bringing a real customer to the session, other can be a presentation of numbers and facts, other can be an interactive experience with the product, etc.</li> <li>- Be sure that the knowledge presented has the potential to challenge the beliefs of the team. Be provocative.</li> </ul> <p>Once the session starts, give several formats "I thought the problem was..." to each participant. Then instruct them to use the first section to write down their personal definition of the problem. This will be the starter point for them.</p> <p>Once everyone has written down their own definition of the problem, the first "Knowledge shower" comes.</p> <p>A "Knowledge shower" is an experience that gives participants the possibility to learn new things about the problem. A "Knowledge shower" can be:</p> <ul style="list-style-type: none"> <li>- A presentation from an expert</li> <li>- A presentation of relevant data</li> <li>- The possibility to talk with an actual client or user</li> <li>- A presentation of similar cases from other organizations</li> </ul> <p>While the participants receive its knowledge shower, must think if this information adds something new that changes its own interpretation of the problem.</p> <p>Once the "Knowledge shower" ends, each participant MUST write down a new interpretation of the problem in its format. This new interpretation is put in the "...but maybe the real problem is:"</p> <p>A good number of "Knowledge showers" can be between 3 and 6. Once all the "Knowledge showers" are finished, the participants are divided into teams and invited to share its interpretations of the problem. If possible, a common statement must be written down by the team.</p> <p>Finally, all teams present their conclusions and their versions of the problem.</p> <p>This exercise helps the innovation teams to avoid fast judgement and waste energy and resources solving the wrong problem.</p>
<p>Example of application:</p>	<p>Some examples of application of this game:</p> <ul style="list-style-type: none"> <li>- To solve day to day problems. In this case, the player can use the format to capture new insights about the problem to solve as she searches new information over the internet.</li> <li>- To start a planning session. In this case, the participants can analyze the actual situation, and write down the main problem that the organization is facing. Then, using "Knowledge showers", each participant can change its view and understanding of the problem and write it down on the format</li> <li>- As an exercise to improve analytical capacities on students. The teacher can expose a typical situation (garbage management, education, gap between rich and poor countries, etc.), let the students write down their own interpretation of the problem and then, let some students present new knowledge and invite the group to find new interpretations to the problem.</li> </ul>
<p>Templates, Graphics for download</p>	<p>Format I thought that the problem was</p>
<p>Additional format/references</p>	<p><a href="https://hbr.org/2012/09/are-you-solving-the-right-problem">https://hbr.org/2012/09/are-you-solving-the-right-problem</a></p> <p><a href="https://www.entrepreneur.com/article/237668">https://www.entrepreneur.com/article/237668</a></p>



# Mysterious Drawings

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Problem Analysis.</li><li>#Ideation</li><li>#Idea improvement</li><li>#Product design</li><li>#Service design</li><li>#Process design</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>In this marvelous exercise, participants use its poor drawing skills (it is forbidden to draw well) to stimulate new ideas in others. The game starts with all participants drawing a couple of creative solutions to the proposed problem. Then, these masterpieces are distributed around the room to let other participants try to guess the solution and add new elements. The result is a variety of interpretations that give birth to unexpected ideas.</p> <p>Drawing has been always associated with creative thinking as involves other parts of the brain different to those usually involved in analysis and problem solving.</p> <p>The dynamic generated by this game produces a large variety of interpretations opening roads for unexpected solutions.</p> <p>Category:</p> <ul style="list-style-type: none"><li>• Problem reframing</li><li>• Ideation</li><li>• Idea optimization</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D team</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	2 to 25 people
<b>Objectives</b>	To help an innovation team to generate new and original ideas to solve a specific situation.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Paper for each participant. Adhesive notes.</li><li>• Pens, colors, markers</li></ul> <p>Digital version</p> <ul style="list-style-type: none"><li>• digital board that let participants draw and add notes</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 60 minutes</li></ul>
<b>Implementation - Overview</b>	The technique starts by asking participants to make a drawing depicting an original solution to the problem. But the fun comes later, when, organized into couples, they try to interpret those precarious drawings.



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<p><b>Implementation - Guidelines</b></p>	<p>The first stage demands to be sure that all participants understand correctly the problem to solve. During the second stage, ask the participants to think of a creative solution for the problem and draw it in a sheet of paper. Letters, symbols and numbers are not allowed. The general idea is to draw badly, this means to draw general lines, including as many elements as they can but not being detailed or rigorous about them. To achieve this you will give points to the first 1 to 5 (depending on the quantity of participants) artists to finish. Once the last of the participants receiving points has finished, no one can draw anything else. This time pressure will grant the kind of drawings needed.</p> <p>The third state is simultaneously funny and productive. The group is reorganized into couples who receive one random drawing (if the drawing received was made by one of the members of the couple, change it) and try to interpret it. In other words, the team must try to guess the solution looking at the drawing. The team must use paper cards or adhesive notes to write down each interpretation. As several different interpretations can emerge from a drawing, the couple must write all of them. At least two interpretations must be presented by each couple. The process is repeated using the remaining drawings.</p> <p>In the fourth stage, the couples present their interpretations and the author presents the original idea. Points are awarded to those teams who:</p> <ul style="list-style-type: none"> <li>- Guessed correctly</li> <li>- Guessed so wrong that everybody laugh</li> </ul> <p>The fourth stage involves the creative-artistic expo. The original sketches and their interpretations (including the original one), are adhered on the wall for all the group to see them.</p> <p>In the final stage the participants are invited to tour the exposition and add more details and complements to the ideas exhibited. Even though this technique is really fun, it is not light. The ideas generated can be really disruptive and should be taken seriously.</p>
<p>Example of application:</p>	<p>In a bank, a group of executives were asked to draw ideas for new products. Each drawing was then put into an envelope and rotated among participants who had to take it out and try to interpret the drawing to guess the original idea. Each interpretation was written down in a paper card and introduced in the envelope with the original drawing.</p> <p>One interesting twist introduced to the game was that in this case, the participant was not allowed to repeat interpretation. This prohibition made the exercise more difficult as it advanced. The participant receiving similar solutions must "invent" a new interpretation to the second drawing. This took the creativity to a higher level.</p>
<p>Templates, Graphics for download</p>	
<p>Additional format/references</p>	<p><a href="https://drexel.edu/goodwin/professional-studies-blog/overview/2017/June/Doodling/">https://drexel.edu/goodwin/professional-studies-blog/overview/2017/June/Doodling/</a></p> <p><a href="https://files.eric.ed.gov/fulltext/EJ811068.pdf">https://files.eric.ed.gov/fulltext/EJ811068.pdf</a></p> <p><a href="https://edition.cnn.com/2013/10/03/business/doodling-in-a-meeting-drawing/">https://edition.cnn.com/2013/10/03/business/doodling-in-a-meeting-drawing/</a></p>



# What if

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Ideation</li><li>#Idea improvement</li><li>#Product design</li><li>#Service design</li><li>#Process design</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>In this technique, the participants use the power of imagination to find opportunities to innovate. Motivating people to create questions based on "What if...?", will let the team to open new possibilities to re-invent products, services, experiences, processes, etc.</p> <p>Category:</p> <ul style="list-style-type: none"><li>• Ideation</li><li>• Idea optimization</li></ul>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	2 to 20 people organized on teams of 1 to 5 people
<b>Objectives</b>	To generate as many creative ideas as possible regarding a specific situation or problem
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"><li>• Paper cards or flip charts for each team. Masking tape for posting cards.</li><li>• Pens, colors, markers</li><li>• The digital version can be done using a digital board (Google Jamboard, Microsoft board, Miro or other)</li></ul> <p>Time:</p> <ul style="list-style-type: none"><li>• 20 to 120 minutes</li></ul>
<b>Implementation - Overview</b>	<p>The steps are:</p> <ul style="list-style-type: none"><li>- Define the objective</li><li>- Ask teams to find "Wath ifs"</li><li>- Ask teams to solve as many "What ifs" as they can</li></ul>



<p><b>Implementation - Guidelines</b></p>	<p>1. Setting the objectives. To start the activity, explain the participants the objective of the session. It can be to find ways to solve a specific problem or simply to explore possibilities to make your business model stronger.</p> <p>2. Once everyone has agreed with the objectives, explain them the importance of using imagination to innovate. You can give examples on how imagination works as a "mental laboratory" to explore new ways to solve problems and to foresee the implications of executing one or another idea. Then explain the "What if...?" phrase as a way to activate imagination.</p> <p>3. In this phase, divide the group into teams of 1 to 5 members. Ask each team to select a note-taker. Each team must use the "What if...?" question to stretch the possibilities of the situation or imagine a way to solve the problem. Tell them not to worry about the level of "impossibility" of the outcomes. The note-taker must write down all the proposed "What ifs" in paper cards or the flip chart. Give this phase time enough (Between 5 and 20 minutes will be ok) to find 5 to 10 "What ifs".</p> <p>4. Once the first phase is finished, ask the teams to present their "What ifs" and sort them vertically in one flip chart. To define which "What ifs" go up in the classification, ask the group to rate how good the final situation would be if each "What if" became real. The better the situation generated by that "What if" becoming real, the higher in the flip board. Then you can group the "What ifs" according to their height. The upper group will be the more powerful "What ifs" and will award 5 points. The lower group will be the less powerful "What ifs" and will award 1 point.</p> <p>5. Ask the teams to use the following 20 to 40 minutes to solve as many "What ifs" as they can, that is, to imagine ways to make factible those "What ifs". To do that, the team must imagine practical ways to get that "What if" into reality.</p> <p>6. Each team will award points equal to the sum of the points of all the "What ifs" solved.</p> <p>7. Each team must present its solved "What ifs" and do a recommendation as to which one the organization must execute.</p>
<p>Example of application:</p>	<p>Innovative companies are full of stories about how great ideas are born. One of those stories takes place in Uber. The What if? technique was used to generate ideas of possible improvements to the service the company was providing to its users. Some of the What ifs proposed were:</p> <p>What If: Cars had vending machines for food, personal items, or gift cards?</p> <p>What If: People could pay more for drivers with better driving records?</p> <p>What If: Uber offset personal charges by increasing corporate rates and/or pairing airlines and travel agencies to offer discounts for a door-to-door travel experience?</p> <p>This is a good example about the way this technique opens new ways to innovate.</p>
<p>Templates, Graphics for download</p>	
<p>Additional format/references</p>	<p><a href="https://www.fastcompany.com/1829576/role-imagination-plays-innovation">https://www.fastcompany.com/1829576/role-imagination-plays-innovation</a></p> <p><a href="https://www.conversationagent.com/2015/08/imagination-creativity-innovation.html">https://www.conversationagent.com/2015/08/imagination-creativity-innovation.html</a></p>



# Microscope

<b>Field of application</b>	#Ideation #Idea improvement #Product design #Service design #Process design #Creativity skills development
<b>Resume / Brief description</b>	<p>Microscope is part of the 6xi set of WakeUpBrain creativity techniques. It takes the focus of the innovation team to one small part or component of the situation to create new concepts. It's a good technique to find ways to differentiate a product or service with original and surprising changes.</p> <p>The technique starts by doing a "zoom" into several parts of the product, service or situation we are trying to solve or improve. Then the participants try to change that part in different ways. Finally, the participants analyse if they can change the "whole" in accordance with that new version of the part changed.</p> <p>For example, a restaurant owner can focus just on the forks (Being the forks a small component of this complex business) to find ways to differentiate his business from competitors. Maybe one idea can lead to make the forks funny, more sustainable or bigger. Then he can ask himself if all the other components of the restaurant can be made funnier, more sustainable or really big.</p> <p>Category: Idea optimization</p>
<b>Target group</b>	<ul style="list-style-type: none"> <li>● Entrepreneurs</li> <li>● Innovation teams</li> <li>● Students</li> <li>● Community</li> </ul>
<b>Group size</b>	Teams from 1 to 8 participants. 1 to 5 teams can play simultaneously
<b>Objectives</b>	To find ways to improve a traditional concept or an idea
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"> <li>● Prints of pictures of the product or service to be improved.</li> <li>● Pens and colors</li> <li>● Paper</li> </ul> <p>Digital version:</p> <ul style="list-style-type: none"> <li>● Pictures of the product or service to be improved placed on a digital board (Google Jamboard, Microsoft board or other)</li> </ul> <p>Time:</p> <ul style="list-style-type: none"> <li>● 40 to 120 minutes</li> </ul>
<b>Implementation - Overview</b>	<p>Sometimes a business owner or product or service designer needs to re-invent her product or service. Even if the actual concept is working well there is always space to make it more surprising and create differentiators for the possible clients to notice and buy it. This logic also applies to the entrepreneurs looking for a concept to be used in a new business. These entrepreneurs can start by taking an actual solution present in the market and re-inventing it. But how to do this?</p> <p>The Microscope tool can be a fast and powerful way to build new concepts starting from actual ones.</p> <p>The technique invites the innovator to focus on a particular element of the solution and re-think it. Then ask the innovator to re-design the entire concept from the ideas generated for that little element. The result is a renewed concept with surprising differentiators than can be a successful innovation.</p>



<p><b>Implementation - Guidelines</b></p>	<p>1. Preparation. Print one or several images of the actual product or service. When printing a service you can print the place where the service is delivered or print the moment the user is receiving it.</p> <p>2. Circle some points of the image. These points can be both essential or accessory elements of the product or service. This means that some points, parts or characteristics selected can be a "must have" in the concept and others can be just a "good to have". For example if you are trying to improve a car washing business, you can print a picture of the place where some cars are being washed and circle the water (essential), a car (essential), a waiting table (accessory) and a plant in the corridor (accessory). You can even ask someone external to the session to circle random points in the pictures.</p> <p>3. Select just one of those elements and focus on it. If the session has more than one team, you can assign different elements to each team.</p> <p>4. Instruct each team to ask themselves the "How to be more" questions. This question is intended to find a way to chance that element to make it more exciting or useful. Examples of "How to be more" questions are</p> <ul style="list-style-type: none"> <li>● How can this element become more crazy?</li> <li>● How can this element be more creative?</li> <li>● How can this element be more surprising?</li> <li>● How can this element be more unique?</li> <li>● How can this element be more funny?</li> <li>● How can this element be more productive?</li> <li>● How can this element be more profitable?</li> <li>● Etc.</li> </ul> <p>Ask each team to describe in detail all the new versions they have imagined of that element. To include drawing on each description is always a good idea.</p> <p>5. Let each team present the more surprising re-design of the element.</p> <p>6. Ask all teams to re-design the entire product or service using as a guide the re-designed small element. Tell them to imagine that the style of this renewed element goes viral and spread to all the other elements on the product or service. Remember them to be very detailed and include drawings to communicate their ideas.</p> <p>7. Now you have one or more renewed versions of the product or service. Let each team present them to the group.</p> <p>8. You can repeat the process of assigning a new element to each team.</p> <p>9. At the end of the session, you will have some exciting and really new alternatives for your product or service.</p>
<p>Example of application:</p>	<p>A school was trying to find ways to improve the learning experience of its students. One of the teachers offered to facilitate an ideation session and used the Microscope as the main tool to work with. A group of teachers and parents were taking part in the session. The facilitator divided them into 4 teams of 6 people each.</p> <p>Previously, the facilitators printed pictures of children in real classes as well as other spaces and moments in the school life. The pictures were printed in letter size. The pictures were placed on the walls all around the room.</p> <p>As the first action, the facilitator gave markers to the participants and invited them to circle from 3 to 5 random elements or points on each picture. No one was permitted to add more than one circle on the same picture.</p> <p>Then the facilitator assigned a picture to each team and invited it to re-design one of the elements circled. A sheet with 6 "How to be more" questions and a six sided dice were given to each team. By throwing the dice, the team found the question they must answer regarding the element in the circle. All the teams were asked to imagine at least two new versions of that element.</p> <p>Each team presented its two better ideas and, by votation, the best were selected.</p> <p>The facilitator dissolved the teams and re-distribute the participants into 6 teams of 4 people each and assigned them one of the selected renewed elements.</p> <p>Then, each team worked in inventing a whole new school inspired by the re-designed element.</p> <p>In the final phase all the new concepts of school were presented. Everybody was really surprised on how easily they could find ways to build exciting new concepts for a school.</p>



# Brain writing - method 635

<b>Field of application</b>	
<b>Resume / Brief description</b>	The tool Brain writing is another important creativity tool. It aims to develop new ideas or to combine existing solutions in a collaborative way.
<b>Target group</b>	Entrepreneurs
<b>Objectives</b>	Develop new ideas, combine existing solutions to a problem
<b>Requirements</b>	Six blank 6-3-5 worksheets
<b>Implementation - Overview</b>	Each person in a circular group writes down one idea, and then passes their piece of paper to the next person in a clockwise direction, who adds some thoughts. This is repeated until everybody gets their original piece of paper back.
<b>Implementation - Guidelines</b>	Principle: 6 participants write 3 ideas and these will be 5 times further developed Each person in a circular group writes down his ideas in a complete and concise sentence (6-10 words). When everybody has finished writing their ideas, they pass their piece of paper to the next person in a clockwise direction, who adds some thoughts after reading the ideas of his neighbour. This is repeated until everybody gets their original piece of paper back. At the end of the process, there will be a total of 108 ideas on the 6 worksheets, ready to be assessed.
<b>Example of application:</b>	One application could be for instance the development of new brand names for services or products. It is a good tool to generate plenty ideas in a short time.
Templates, Graphics for download	
Additional format/references	



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# Creative night

<b>Resume / Brief description</b>	<p>The event is a moderated creativity session that will let students work on the challenges of companies. Based on prepared questions from the companies, the students will be trained to apply creativity techniques. The companies will receive ideas from students in a structured and documented way.</p>
<b>Target group</b>	<p>The target group are entrepreneurs and business managers who are searching for new ideas for some challenges as well as universities and their students who are interested in thinking out of the box.</p>
<b>Objectives</b>	<p>Link companies and universities, especially faculties of management or commerce, but multidisciplinary teams from all faculties are also potential candidates. Provide companies with new ideas from outside in a short event. Train students to structure creativity.</p>
<b>Requirements</b>	<p>For a smooth conduction of the workshop, the following material is required: □ Large sheets of paper or roll of paper to document the process. □ Pin board for each team or a wall with tape to hang the papers. □ Moderation cards with pens. □ Sheet of paper that explains the different creativity methods.</p>
<b>Implementation - Overview</b>	<p>This tool can be implemented in five phases; each of them consists of several steps.</p> <p><b>PHASE 1: PREPARATION WITH COMPANIES</b> In preparation meetings before the event with the selected companies, their challenges have to be defined and clear questions to guide the students have to be articulated.</p> <p><b>PHASE 2: INTRODUCTION</b> The event begins with an introduction about creativity and an introduction of the participating companies.</p> <p><b>PHASE 3: FIRST ROUND - LATERAL THINKING</b> After the companies present their questions/problems, the moderator introduces techniques of lateral thinking. Students are grouped in working teams. Each team exercises one method on one of the presented challenges. The representative of the company explains the challenge again in more detail for the individual groups. Students ask questions until everybody understands the questions/problems presented by the company. The students apply the selected creativity technique for lateral thinking. Each group presents their results to the plenum. The representative of the company comments on the results.</p> <p><b>PHASE 4: SECOND ROUND - VERTICAL THINKING</b> Here the moderator presents techniques of vertical thinking. Students are grouped once again in working teams. Each team exercises one method on one presented challenge. The representative of the company explains the challenge again in more detail for the groups. Students ask questions until everybody understands the questions/problems presented by the company. The students apply the creativity technique for vertical thinking. Each group presents their results to the plenum. The representative of the company comments on the results.</p> <p><b>PHASE 5: THIRD ROUND - PARALLEL THINKING</b> Finally, the moderator presents techniques of parallel thinking. Students are grouped once again in working teams. Each team exercises one method on one of the presented challenge. The representative of the company explains the challenge again in more detail for the groups. Students ask questions until everybody understands the questions/problems presented by the company. The students apply the creativity technique for parallel thinking. Each group presents their results to the plenum. The representative of the company comments on the results.</p>
	<p><b>PHASE 1: PREPARATION WITH THE COMPANIES</b></p> <p><b>STEP 1.1: Question Preparation</b> In the first phase companies willing to participate in the creative night have to be identified. These should be companies that are looking for new ideas or to overcome some challenges in existing products. In meetings with these companies some challenges have to be selected and clear questions have to be formulated. Each company should formulate three questions. A question for each round of the workshop: one for lateral thinking, one for vertical thinking, and one for parallel thinking. The trainer should support the companies in defining the right questions for these three categories.</p> <p><b>STEP 1.2: Student Selection</b> The university has to select some students for participation. It is of advantage for the event if one can find students with different backgrounds. A venue has to be found where separated group work in a pleasant atmosphere is possible. Tip: Let the students</p>



sign an agreement of confidentiality. These may be important for the companies to talk more about their challenges.

#### PHASE 2: INTRODUCTION

After an introduction into creative thinking by the trainer the companies have to be presented briefly.

STEP 2.1: Introduction to Creative Thinking Creativity is one of the most valuable resources to explore new areas of knowledge. Creativity, in its simplest definition, can be understood as ability to create, that is, to produce something out of nothing. Creativity comes from the Latin word *creare*, which means to generate something new, invent something, produce something, but is also associated with the concept of choice. In order to develop ways of thinking that stimulate idea generation (this is creativity itself) Edward De Bono developed the concept of lateral thinking (De Bono, 1970). This way of thinking seeks to generate alternative thinking directions, in opposition to vertical thinking, which seeks to develop ideas in a thinking direction that is already defined. While vertical thinking is analytical, lateral thinking is provocative in suggesting these new thinking directions. Nevertheless, according to De Bono (1970), these two forms of thought are not antagonistic. In this sense, lateral thinking may be useful to find ideas or directions for problem solving and vertical thinking may be useful to develop them. For stimulating creativity, we need: A Question or Problem to Solve The starting point for being creative is necessarily a question or a problem to solve. This is the beginning of the process of creative thinking and thinking outside the box, for which it is essential to first define what the box is. Therefore, at the start of every creative problem-solving process stands the definition of the problem to solve. Here it is important to concentrate on the task to get the right focus on the problem or question or to divide them into suitable partitions. A creative process based on general or meta questions is difficult to handle and in the end the results are often not satisfactory as they are too general. A Team Experiences and research show that a group is much more effective and productive in creativity than a single individual. The myth of the lonesome inventor who independently finds the solution in their enclosed room is widely disproven in reality as well as by literature. Furthermore, the team should be as diverse as possible in terms of age, culture, discipline, background, department etc. The goal should be to involve different perspectives, backgrounds, and experiences into the creative process. A Suitable Environment Based on the fact that thinking and creativity are highly related to emotions and feelings as well as chemical and hormone functions within our brain and body, a positive and motivating environment influences our way of thinking. As the Walt Disney Method demonstrates, putting oneself in a different perspective can be supported by changing the room or place. Time The majority of the methods for creative thinking are time consuming, which can be costly for the companies. However, creative problem-solving processes are strategically addressing the future and thus are substantially important. Therefore they need adequate time resources. Freedom of Thinking To enable the creativity process it is necessary to think absolutely freely. Every idea is welcome. It might be that one idea is better for the explicit problem than another one, but in the end for lots of creative processes the ideas which were produced below the line led to successful innovations. Therefore: no hierarchies, no prejudice, no taboos.... Crazy ideas are allowed! For freedom of thinking it sometimes might be a good idea if the management is not involved in the idea development process due to possible ambiguous hierarchy behaviour of the team, which could hinder the process or make it uncomfortable. Structuring the Process To make the idea creation process manageable, it is helpful to structure the process into four steps and to allocate the different resources and methods to each single step.

Step A: Defining the problem As mentioned above, it is first necessary to define the problem to be solved and the questions to be asked

Step B: Idea generation This step is related to the task of generating as many quality ideas as possible in a compact time frame. This step mainly uses methods and techniques that are addressing intuitive and unconscious ways of thinking. Following Edward de Bono this way of thinking could be defined as "lateral thinking".

Step C: Idea selection Following the step of idea generation, we now have to select those ideas that seem to be most suitable for solving the problem. The ideas should be selected and weighted; we have to prioritise them to build the base for the strategic decision at the end which one of them should be implemented or commercialised. Here more discursive and conscious methods and techniques are helpful to structure the group discussions. Those are more related to linear and structural thinking.

Step D: Idea commercialisation In the last step one has to decide which ideas are to be implemented. Here it is necessary to change the perspective and to involve different people. Idea generation and idea commercialisation are two different tasks and few people have equal capabilities in both. After the idea generation and selection process most of the participants love their ideas and stick to them. Hence they are not able to change into a market perspective and to adjust or transform the idea into a product or a solution which the company can implement or commercialise. Because of that reason most companies separate these sections. Let the people do the things they are able to do well.

STEP 2.2: Introduction of the Companies The company representatives



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STEP 2.2: Introduction of the Companies The company representatives give a very short introduction to their company and field of business. These presentations should include an outline on the challenges they face at the time.

#### PHASE 3: FIRST ROUND: LATERAL THINKING

**STEP 3.1: Introduction to Intuitive Methods** The trainer introduces four intuitive methods to the plenum of the students and company representatives.

**ABC Technique** This is a quick and very easy creative technique that is also very suitable for individual idea development. How it works: Develop the question, problem, or topic for the session and write it in the middle of the board. Make sure that everybody understands the question for the session. Write the letters A, B, C, etc. to Z down the side of the paper or the board. Try now to find answers to the question starting with each letter of the alphabet. In the end you should quickly have 26 possible answers (one answer for each letter of the Latin alphabet).

**Analogies (Synectics)** The use of analogies consists of taking the problem that needs to be solved to other knowledge areas or simply to other scenarios. This stimulates the flexibility of the already established thinking structures, facilitating linkages to generate new ideas. The essential part of this method is the selection of the analogy. It is possible that a group cannot find a suitable analogy or that the found analogy does not lead to the generation of good ideas. One should also take into account the knowledge of the selected area. Although the overall exercise simply attempts to make the mind more flexible, a greater knowledge can lead to new associations and understandings. A good analogy may be made with nature, therefore it is recommended to have at least one participant who is an expert on the selected area, in this case, a biologist. An example could be network intelligence: one of the problems with the proliferation of communication networks is to find the best way to communicate. In order to develop ideas for a more efficient communication, we used the analogy with intelligent swarms within nature. Analysing the topic, it is found that ants leave a pheromone at the places where they walk along so that other ants can find a more efficient path to go somewhere, for example, where their food is. From this, one can also think about leaving a mark on information packages for instance, in emails that could be read by other users and thus, make its transmission and storage more efficient. How it works: Define the problem. Search for an analogy. Analyse the selected analogy. Search for analogy elements that are linked to the problem. Generate ideas based on the analogies. Evaluate and develop ideas.

**Headstand** This method is based on the principle that sometimes it is better to answer the question one doesn't want to be answered than that the question what one wants answered. Therefore, reversing the questions and putting them upside down gives one the possibility to change the perspective. How it works: Develop the question, problem, or topic for the session and write it in the middle of the board. Make sure that everybody understands the question for the session. Turn the question upside down. Don't ask what the company can do for the customers; ask what the customer can do for the company. After answering the reversed questions put them on the ground again and one will have possibilities to solve the problem.

**Mind Mapping** The method was developed by Tony Buyan, a British mental trainer and author of well-known books about creativity. The mind maps are also called spider diagram or conceptual maps and they are built through tree diagrams. How it works: A large sheet of paper, a wide pin board, or a computer with mind-mapping software is needed. Develop the question, problem, or topic for the session and write it in the middle of the board. Make sure that everybody understands the question for the session. For each major subtopic a new branch of the tree has to be started and labelled. For each sub-subtopic a subordinated branch has to be started and labelled. Continue in this way. At the end, a structured picture about the question and the possible answers related directly to the question in the centre is presented.

**STEP 3.2: Group Work** Students are grouped into four working teams. Each team will work with one method on one question of a company. The company representative explains the question the company has on one challenge where they need more new ideas. For example: currently, for product x only a prototype exist. What extra features could be interesting? Before starting: Make sure that everybody understands the question. Make sure that everybody understands the method.

**STEP 3.3: Evaluation** Each group presents their results to the plenum. The representative of the company comments on their results. Factors for evaluation are newness to the company and usefulness. Don't forget to document the results with photos and send it to the company.

#### PHASE 4: SECOND ROUND:

**VERTICAL THINKING STEP 4.1: Introduction to Discursive Methods** Three discursive methods are introduced to the plenum.

**Morphological Analysis** The method was first developed by Fritz Zwicky, a Swiss astrophysicist and aerospace scientist at the California Institute of Technology in the 1940s and 50s. The method is built for the systematic structuring of multidimensional problems and the investigation of complex relationship constructs. The method is based on an attribute list and uses a matrix for visualisation. The morphological analysis consists of the collection and systematic analysis of parameters and their possible values or characteristics, from which possible solutions or ideas are developed. The selection of the parameters and the definition of the possible values or characteristics of each parameter can be made in

#### Implementation - Guidelines



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groups. In the example of the table above there is a description of parameters of a lamp and possible characteristics that each of these parameters could have. For example, as light source, it is possible the use of a candle, a bulb, halogen lighting or a fluorescent tube. The points connected with lines identify one selection within the possible characteristics of each parameter. How it works: Definition of the problem. Definition of the parameters of the object or problem to be solved. Definition of possible values or characteristics of each parameter. Preparation of the parameter matrix and its values or characteristics. Selection of the characteristics of each parameter and development of the concept or solution to the problem. Evaluation of the idea or solution. Force Field Analysis This method was first developed by Kurt Lewin (1890-1947), a German-born pioneer of social psychology and founder of the theory of group dynamics. The method visualises the different factors and topics involved in the problem and structures them into hindering or helping factors. How it works: First a pin board or a large paper with moderation material is needed. Develop the question, problem, or topic for the session and write it in the middle of the board. Make sure that everybody understands the question for the session. The group now has to identify factors that help or hinder in solving the problem. Draw a line in the middle of the paper or board. Draw the helping forces as upward arrows over the line and the hindering factors as downward arrows under the line. The size and thickness of the arrow should symbolise the power of the factor. Then the group develops ways to strengthen or add positive forces, to weaken or remove negative forces, or recognises the negative forces that are too strong to solve the problem. Fishbone Diagram This method was originally developed during the 1940s by Kaoru Ishikawa, a Japanese scientist who developed a couple of tools for quality management. The diagram shows the causes and effects of a certain event or problem. How it works: First a pin board or a large paper with moderation material is needed. Develop the question, problem, or topic for the session and write it in the middle of the board. Make sure that everybody understands the question for the session. Draw a long arrow in the middle and label with topic or question. This is the backbone of the fish. For every major cause the group can think of, draw a line (one bone) at 45 degrees to the backbone and label it. For every subcause there will be a small arrow or bone in direction of the major cause the subcause is related to. Through group discussion one can identify the key cause as starting point for developing a solution. Below you can find an example of a fish diagram for missed deadlines.

STEP 4.2: Group Work Students are grouped into three working teams. Each team will work with one method on one question of a company. The company representative explains the question the company has about a challenge, where they have to decide about an innovation. For example: Product x is targeting a female market segment. Which arguments could be used, that males support them buying it? Before starting: Make sure that everybody understands the question. Make sure that everybody understands the method.

STEP 4.3: Evaluation Each group presents their results to the plenum. The representative of the company comments on the results. Factors for evaluation are newness to the company and usefulness. Don't forget to document the results with photos and send it to the company.

PHASE 5: THIRD ROUND - PARALLEL THINKING STEP 5.1: Introduction to Combination Methods Two combination methods are introduced in the plenum. Walt Disney Method The method was developed by Robert Dilts, a pioneer of Neuro-Linguistic Programming (NLP), and goes back to Walt Disney and his process of "Imagineering" within the Walt Disney Company. The method separates participants into three different roles: the "dreamer", the "realist", and the "critic". The Dreamer: this role is producing the visionary big picture. Everything is allowed even thinking the unthinkable. There are no boundaries and limits. The Realist: in this role everything is organised and structured. Think constructively and devise plans and ways to reach the vision. Cut the vision down to suitable and realistic aims and terms. The Critic: this is the role that critically discusses the plan and the solutions of the realist. Here the role should look behind the scenes. What could go wrong, what is missing? What are the consequences, the cost of the solution? What kind of resources are needed and could they be provided and so on. The method can be used with each individual playing one role. Alternatively the whole group can jump from one role to another. It is even possible to change the room and seats. In the Walt Disney Company there were huge studios for the visionary people with room and space to be creative. For the realistic people there were well-structured and organised offices, and for the critical ones there were tiny and small offices. Six Thinking Hats of Edward de Bono The method was developed in the early 1980s by Edward de Bono, a British medical scientist and author of well-known books about creativity. He is the inventor of the theories and methods for lateral thinking. This method involves the systematic analysis of a problem or situation from different points of view. Each view is represented by a "hat", which is characterised in a specific way. White hat: Focused on data, facts, and information about the problem. What information is available? What data, facts, or information are missing? What data must be obtained and by who? Red hat: with this hat, one can express any feeling or intuition about the problem. The perception and the feelings should be expressed without being criticised by other members of the team. How do you feel? How do you feel about the problem? What sensation comes to your mind? Black hat: This role indicates the errors and gives a critical look at the solution of a problem or the implementation of an idea. One must be careful with it. Is the possible solution profitable? Is there any law or regulation violated? What are the risks? Yellow hat: It is optimistic. When wearing



	<p>the yellow hat, it is necessary to focus on consciously identifying the benefits of a project or an idea. What are the advantages? What does everyone get? What advantages can it bring to other people? Green hat: It concentrates on creative thinking. In this space, new ideas can be generated by complementing the already existing ones. What are the alternatives? Where do you think you can have fallen into paradigms? How can the process be accelerated? Blue hat: This hat emphasises the control of methods and processes. The issues that must be reflected on and the steps to be followed are determined here. What aspects still need to be considered? What is not clear yet? What should be discussed? STEP 5.2: Group Work Students are grouped into two working teams. Each team will work with one method on one question of a company. The company representative explains the question the company has about a challenge, where they have to decide about an innovation. For example: Should this product x be introduced into the market soon? Before starting: Make sure that everybody understands the question. Make sure that everybody understands the method.</p> <p>STEP 5.3: Evaluation Each group presents their results to the plenum. The representative of the company comments on the results. Factors for the evaluation are the newness to the company and usefulness. Don't forget to document the results with photos and send it to the company.</p>
<p>Example of application:</p>	
<p>Templates, Graphics for download</p>	
<p>Additional format/references</p>	



# Screwdriver

<b>Field of application</b>	<ul style="list-style-type: none"><li>#Problem Analysis</li><li>#Strategic planning</li><li>#Product design</li><li>#Service design</li><li>#Process design</li><li>#Creativity skills development</li></ul>
<b>Resume / Brief description</b>	<p>This game will allow participants to find a way to design original solutions to a problem or to improve existing ones.</p> <p>What does a screwdriver do?</p> <p>A screwdriver screws (installs) and unscrews (removes) screws.</p> <p>What a powerful idea!</p> <p>But... What is a screw? I mean, if we are talking about a problem, what is a screw? In other words: What is a "creativity screw"?</p> <p>We could say that a creativity screw is something that fixed our understanding of some situation in only one way. And that is a bad thing when you are trying to be innovative. Because that way of understanding the problem is based on our prior knowledge and past experiences and, for the same reason, traditional and non "novel".</p> <p>So, if we want to find original solutions, if we want to be capable of identifying new action routes, we must take out that screw.</p> <p>Following three steps, this game will help innovation and design teams to find new ways to solve a problem or add value to a design.</p>
<b>Target group</b>	<ul style="list-style-type: none"><li>• Entrepreneurs</li><li>• I&amp;D teams</li><li>• Innovation teams</li><li>• Students</li><li>• Community</li></ul>
<b>Group size</b>	4 - 20 people
<b>Objectives</b>	This game will help a team or an individual working on a problem avoid mental fixation and explore new ways of thinking.
<b>Requirements</b>	Material: <ul style="list-style-type: none"><li>• Paper cards or Post-its</li><li>• Formats</li><li>• Virtual board (Jamboard, Miro, etc.)</li></ul>
<b>Implementation - Overview</b>	<p>This technique goes on three phases:</p> <p>Screws inventory (List of impossibles)</p> <p>Unscrewing screws (On a competition basis)</p> <p>Moving in new ways (Generating new solutions)</p>



## Implementation - Guidelines

The activity is divided into 3 phases:

### 1. Screws inventory

To do this, follow the steps below:

Ask everybody in the group to picture the ideal outcome or solution state for the problem. Ask them to imagine the more ambitious (even if impossible) results.

Use the format "Screws inventory" to identify the most critical screws. A critical screw is a "fact" or "believing" that makes impossible either the most desirable solution or several good solutions. A list of 2-10 critical screws would be ideal.

### 2. Unscrewing screws

This is the most important part. Here, the participants will try to view the problem from different perspectives to find new possible solutions.

Divide the participants into teams (2-4 people per team).

Select one of the most critical screws. Write it down in a whiteboard or print it on a paper to deliver to each team.

Give the teams a fixed time (5' to 15' would be a good time) to find ways to "unscrew" that screw. Explain to them that the "unscrewing" process involves trying to find creative ways to remove or avoid that limitation.

### 3. Moving in new ways

In the third phase, the teams show their ways to "unscrew" the critical screw presented. While each team is doing its proposal, every other participant will imagine ways to use that "trick" to solve the problem and write them in the "Ideas catcher" format.

The exercise can be repeated several times in order to cover the most important "critical screws"

#### Results and Close-up of sessions

The ideas collected in the "Ideas catcher" formats are new and powerful routes to solve the problem. You can put all the formats on the wall and allow the participants to read them again.

The next step will involve selecting and improving the ideas generated. You can use some of the Optimization tools

#### Variations

Online version:

In order to use this tool in an online format, you can use a shared board where you can include the two formats and everyone can add their ideas using Post-its



<p>Example of application:</p>	<p>As an exercise to improve the quality of urban transportation in a city, the participants of a comitee, where asked to give ideas of how the city could improve its transportation system. A group of 12 participants was divided into three small teams of 4 participants each.</p> <p>Phase 1 Before going into ideation step, the whole group worked on how the ideal transportation system could be. Several aspects were defined, including the following:</p> <ul style="list-style-type: none"> <li>- Everyone must arrive on time to its job</li> <li>- Being comfortable while commuting is desirable</li> <li>- Doing something useful in the meantime</li> <li>- Low contamination system</li> <li>- Could transportation be funny?</li> </ul> <p>The group worked on finding the "Screws" making impossible the ideal solutions. Several screws were identified, including:</p> <ul style="list-style-type: none"> <li>- The people have to go to their offices because all the information they need to work is stored there</li> <li>- It is out of our reach to entertain people during their commuting time</li> <li>- The only way to motivate people to attend the traffic laws is punish them everytime the broke those laws</li> </ul> <p>Phase 2</p> <p>The teams worked on each screw to try to remove it. In other words they asked themselves: "How can we change the fact that all the information needed to work is stored in the office?" or "How can we change the idea that we cannot entertain people during their commute?" or "Why are we accepting that the only way to motivate people to follow traffic rules is using punishment?"</p> <p>Phase 3</p> <p>Each team presented its solutions to "unscrew" each of the screws identified.</p> <p>All the participantes wrote down all the ideas they could, on how to make those solutions viable in the actual context.</p> <p>At the end of the session, more than 30 ideas were consolidated into a solution document. This document was used as a base for further work.</p>
<p>Templates, Graphics for download</p>	<p>Screwdriver Format (attachement)</p>
<p>Additional format/references</p>	<p>How to use Jamboard  <a href="https://www.youtube.com/watch?v=4haCz1kV57Q&amp;ab_channel=GoogleWorkspace">https://www.youtube.com/watch?v=4haCz1kV57Q&amp;ab_channel=GoogleWorkspace</a></p> <p>Reading:  Overcoming Fixation: Creative Problem Solving and Retrieval-Induced Forgetting  <a href="https://people.ucsc.edu/~bcstorm/sa_2010.pdf">https://people.ucsc.edu/~bcstorm/sa_2010.pdf</a></p>



# Five why

<b>Field of application</b>	Problem Analysis Idea improvement Product design Service design Process design Creativity skills development
<b>Resume</b>	<p>One of the most frequent errors the innovation teams can make during the ideation process is going directly to the search for solutions instead of spending the required time to understand the problem in a very deep way. This tendency decreases the quality of outcomes as one of the basis for generating high potential ideas is having a real understanding of the problem. Sometimes the teams spend too much energy searching for solutions to something that is just a symptom or consequence of the real problem.</p> <p>To solve this, one excellent tool is the 5-why technique.</p> <p>This tool was developed by Sakichi Toyoda from Toyota in the 30's decade. It helps the team to focus on understanding the problem before trying to solve it. Applying this technique makes it easy to find the root of the problem.</p> <p>The technique lets do a cause-effect analysis by asking several times Why? until the team finds a satisfactory answer. The number 5 is just a reference and the amount of Why can change every time.</p> <p>Category: Problem reframing</p>
<b>Target group</b>	<ul style="list-style-type: none"> <li>• Entrepreneurs</li> <li>• I&amp;D teams</li> <li>• Innovation teams</li> <li>• Students</li> <li>• Community</li> </ul>
<b>Group size</b>	1 to any number of people
<b>Objectives</b>	The objective is to deep into the understanding of the problem to solve in order to identify the real cause or the root of it.
<b>Requirements</b>	<p>Material:</p> <ul style="list-style-type: none"> <li>• blank sheet of paper, pens</li> <li>• any word processor or mind mapping tool</li> </ul> <p>Time:</p> <ul style="list-style-type: none"> <li>• 20 to 60 minutes</li> </ul>
<b>Implementation - Overview</b>	<p>One you have the problem you are trying to solve, ask yourself if maybe there is a deep cause for it. This is why you use the "Why?" question. One you have one or more answers (causes), you can apply the "Why?" question to those answers too. That way you build a cause chain that can take you to the real problem you have to solve to get the initial problem solved too.</p> <p>This kind of tool is very useful especially solving problems of medium or low complexity, because this kind of problems can have causes that a group can identify during a session. Complex problems usually require a more demanding process of research.</p>



<p><b>Implementation - Guidelines</b></p>	<p>This technique is better used when all the persons in the group have a good understanding of the problem and the circumstances around it. Be sure to have people knowing all the aspects involved. For example, you can invite some persons who know about the technical aspects of the problem and some persons knowing about the financial, human related, and legal aspects too.</p> <ol style="list-style-type: none"> <li>1. As a facilitator, you can start by writing down the problem in a place where everyone can read it. It can be a board in front of the room, or the starting point of a mind mapping tool. Ask if everybody agrees with the problem definition before starting.</li> <li>2. Invite the group to answer the first "Why?" question. It can go in this way: "Why is this problem happening?" Ask all the participants to be sure of the facts about each possible cause. It is not an exercise of imagination or speculation. If someone needs to check some data to back an important possible cause, you can give some time off before continuing with the session.</li> <li>3. Write down the causes identified</li> <li>4. Check if some of those causes can have a deeper cause. In this case repeat the process using a new "Why?" question.</li> <li>5. If the group cannot find a deeper cause, it's time to finish the questioning process.</li> <li>6. Review the identified causes to define the real problem that the innovation team is going to solve. Write down the real problem identified and be sure that everyone understands it and agree with this conclusion.</li> </ol>
<p><b>Example of application</b></p>	<p>In a manufacturing plant a team was trying to solve the problem of continuous malfunctioning of a machine. The team used the 5 Why tool to identify the true underlying problem behind. The plant supervisor wrote the problem on a blackboard and drew a line below to write down its cause. Then repeated the process until the group found the real problem. The causes chain was:</p> <ol style="list-style-type: none"> <li>1. Why is this machine not working again? Cause: Has a broken cog</li> <li>2. Why did this cog become broken? Cause: The mechanism was not moving.</li> <li>3. Why does the mechanism stop moving? Cause: Some accumulated dirt stops the movement.</li> <li>4. Why was so much dirt on the mechanism? Cause: the service team don't clean the mechanism internally</li> <li>5. Why the service team is not cleaning the mechanism internally? Cause: The machine has a seal showing a sign "The machine can lose factory warranty if this seal is broken"</li> </ol> <p>At this point, the team stop asking Why and defined a set of new problems to solve:</p> <p>How can we extract dirt without opening the machine?  How can we break the seal without losing warranty?  How can we be sure no dirt is going into the machine?</p> <p>The new questions opened new possibilities for creative solutions.</p>
<p><b>Templates, Graphics for download</b></p>	<p>N/A</p>
<p><b>Additional references</b></p>	<p><a href="https://buffer.com/resources/5-whys-process/">https://buffer.com/resources/5-whys-process/</a>  <a href="https://en.wikipedia.org/wiki/Five_why">https://en.wikipedia.org/wiki/Five_why</a></p>



# USE FORMAT

<b>Field of application</b>	
<b>Resume / Brief description</b>	
<b>Target group</b>	
<b>Objectives</b>	
<b>Requirements</b>	<b>Material:</b> <b>Time:</b>
<b>Implementation - Overview</b>	



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**Implementation - Guidelines**



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Example of application:

Templates, Graphics for download

Additional format/references



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