

A. SCAMPER TECHNIQUE

S = SUBSTITUE

C = COMBINE

A = ADAPT

M = MODIFY = MAGNIFY

P = PUT TO OTHER USES

E = ELIMINATE = MINIMIZE

R = REVERSE = REARRANGE

SCAMPER ANALYSIS

Substitute

The substitute technique focuses on the parts in the product, service or solution that can be replaced with another. During this part of the discussion the meeting attendees focus on making decisions to substitute part of the process with another. Questions asked during this part are:

- What part of the process can be substituted without affecting the
- whole project?
- Who or what can be substituted without affecting the process?
- What part in the process can be replaced with better alternatives?
- Can the project time or place be replaced?
- What will happen when we replace part of the project with another?
- Where else could you sell the product?
- Could we use another alternative of X?
- Can we substitute the current device with another better one?
- Can we replace the process with simpler one?

Combine

The combine technique tends to analyze the possibility of merging two ideas, stages of the process or product in one single more efficient output. In some cases, combining two innovative ideas can lead to a new product or technology which leads to market strength. The combine technique discussion can include the following questions:

- Can we merge two steps of the process?
- Can we apply two processes at the same time?
- Can our company combine resources with another partner in the market?

- Can we mix two or more components together?
- Can we combine X and Y technologies?

Adapt

Adapt refers to a brainstorming discussion that aims to adjust or tweak product or service for a better output. This adjustment can range between minor changes to radical changes in the whole project. The adapt technique brainstorming session can include the following questions:

- What would we need to change to reach better results?
- What else could be done in this specific task?
- How can we improve the existing process?
- How can we adjust the existing product?
- How can we make the process more flexible?

Modify, minify or magnify

The modify technique refers to changing the process in a way that unleashes more innovative capabilities or solves problems. This change is more that just adjustment as it focuses on the overall process. The questions asked under this rubric include:

- How will modifying the process improve results?
- What if we had a double consumer base?
- If the market was different, what would the process look like?
- Can we change the process to work more efficiently?
- What if the product is double the current size?

Put to another use

This technique concerns how to put the current product or process in another purpose or how to use the existing product to solve problems. For example, this technique can be used to learn how to shift an existing product to another market segment or user type. The questions in this technique can include the following:

- What other parts in the company can use the product?
- What are the benefits for the product if used elsewhere?
- What if we target another market segmentation for the current product?
- Can we add a specific step into the process to replace another?
- What are other ways can we use it?
- Can we recycle the waste for another use?

Eliminate or elaborate

As the name implies, this technique aims to identify the parts of the process that can be eliminated to improve the process product or service. It also helps to explore the unnecessary parts of the project. Questions related to this part includes:

- What would happened if we removed this part?
- How can we achieve the same output without specific part of the project?
- Do we need this specific part?
- What would we do if we had to work with half the resources?

Reverse

Finally, the reverse or rearrange technique aims to explore the innovative potential when changing the order of the process in the production line.

Reversing the process or part of it can help solving problems or produce more innovative output. The questions in this part include:

- What would happened if we reverse the process?
- How can we rearrange the current status for better output?
- What if we consider it backwards?
- Can we interchange elements?

The following table summarizes and put the same questions in a different way ARISING FROM the same tool.

SUBSTITUE

- What can be substituted?
- Who else?
- Can Rules be changed?
- Other processes or procedures?
- Other place?
- Other approach?
- What else instead?

COMBINE

- What ideas can be combined?
- Combine purposes?
- An assortment?
- Combine units or functions?
- Offer a combination?
- How to assemble and ensemble offering?
- Merge other items or services?

ADAPT

- What else is like this?
- What or Who could we copy?
- Does the past offer a parallel?
- What ideas from outside my business could we adopt?
- What processes could be adapted?
- What other ideas are suggested?

MODIFY = MAGNIFY

- MODIFY
- What aspects of the product/service could be modified.
- How can this be altered for the better?
- Can the service be combined with the product?

• Is there a new twist that could be offered

MAGNIFY:

- What can be made larger or extended?
- What can be added?
- How about greater frequency? Extra features?
- What can add value?
- What can be duplicated?
- What can be exaggerated?

PUT TO OTHER USES

What else can this approach be used for?

- Are there new ways to use this approach?
- Are there extensions to this process
- Can these resources be reallocated to be used more effectively? Efficiently?
- Can other markets benefit from this?
- How can it be used in other markets?
- What should we omit?
- What is not necessary?
- Can this be streamlined?
- Should I divide it up?
- Separate into different parts?
- What if it were smaller or less complex?

ELIMINATE = MINIMIZE

REVERSE:

- What are the opposites?
- What are the negatives?
- Do the unexpected?
- Consider it backward?
- Should I turn it around?
- Down instead of up?

REVERSE = REARRANGE REARRANGE:

- What other organization or arrangement might work
- Other sequences or changes in the order?
- Transpose cause and effect?
- Interchange components?
- Change pace?
- Change schedule? Change Rules?

SIX HATS CREATIVITY DEVELOPMENT

How is the market weather now? Perhaps a hat would help? Take one; don't let your brains freeze. Here we have total six hats, please choose yours and let's get started.

Depending of source, there is plenty of defining at what single hat

means or what is its purpose on this method. We represent to you define which is combination from three different sources. Including methods original founder, Mr. Edward De Bono's define.

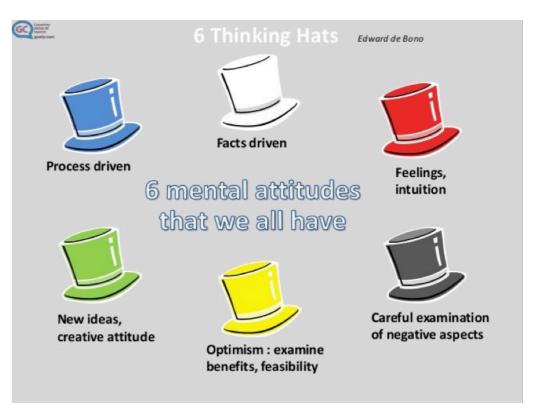


Image1: Francois Guély slideshare-presenatation, slide 68. 2015-01-09

Great combination of picture above and two different style description of Hats purposes are here:

	Hat	Headline	Orientation	Usage
P	White	Information	Facts driven	Asking for information from others.
•	Black	Judgement	Careful examination of negat ive aspects	Playing devil's advocate. Explaining why something won't work.
*	Green	Creativity	New ideas, creative attitude	Offering possibilities, ideas.
%	Red	Intuition	Feelings	Explaining hunches, feelings, gut senses.
%	Yellow	Optimism	Optimism: examine benefits, feasibility	Being positive, enthusiastic, supportive.
%	Blue	Thinking	Process driven	Using rationalism, logic, intellect.

Each 'Thinking Hat' is a different style of thinking. These are explained below:

White Hat: With this thinking hat you focus on the data available. Look at the information you have, and see what you can learn from it. Look for gaps in your knowledge, and either try to fill them or take account of them. This is where you analyze past trends, and try to extrapolate from historical data.

Red Hat: 'Wearing' the red hat, you look at problems using intuition, gut reaction, and emotion. Also try to think how other people will react emotionally. Try to understand the responses of people who do not fully know your reasoning. Red Hat's main keywords are feelings, hunches and intuition.

Black Hat: Using black hat thinking, look at all the bad points of the decision. Look at it cautiously and defensively. Try to see why it might not work. This is important because it highlights the weak points in a plan. It allows you to eliminate them, alter them, or prepare contingency plans to counter them. Black Hat thinking helps to make your plans 'tougher' and more resilient. It can also help you to spot fatal flaws and risks before you embark on a course of action. Black Hat thinking is one of the real benefits of this technique, as many successful people get so used to thinking positively that often they cannot see problems in advance. This leaves them under-prepared for difficulties.

Yellow Hat: The yellow hat helps you to think positively. It is the optimistic viewpoint that helps you to see all the benefits of the decision and the value in it. Yellow Hat thinking helps you to keep going when everything looks gloomy and difficult.

Green Hat: The Green Hat stands for creativity. This is where you can develop creative solutions to a problem. It is a freewheeling way of thinking, in which there is little criticism of ideas. A whole range of creativity tools can help you here. Keywords too are alternatives, new ideas and possibilities.

Blue Hat: The Blue Hat stands for process / thinking control. It's the control mechanism that ensures the Six Thinking Hats' guidelines are observed. This is the hat worn by people chairing meetings. When running into difficulties because ideas are running dry, they may direct activity into Green Hat thinking. When contingency plans are needed, they will ask for Black Hat thinking, etc.

A variant of this technique is to look at problems from the point of view of different professionals (e.g. doctors, architects, sales directors, etc.) or different customers.

C. BRAINSTORMING

Probably one of the most popular methods in creating new ideas or solving problems is brainstorming. It has been used for years, but it is still a good method.

Brainstorming combines a relaxed, informal approach to problem solving with lateral thinking. It encourages people to come up with thoughts and ideas that can, at first, seem a bit crazy. Some of these ideas can be crafted into original, creative solutions to a problem, while others can spark even more ideas. This helps to get people unstuck by "jolting" them out of their normal ways of thinking.

One of the most important things by using brainstorming is, that people should avoid criticizing or rewarding ideas. The target is to open up possibilities and break down incorrect assumptions about the problem's limits. Judgment and analysis at this stage stunts idea generation and limit creativity.

To be successful brainstorming demands a free and open environment that encourages everyone to participate. Quirky ideas are welcomed and built upon, and all participants are encouraged to contribute fully, helping them develop a rich array of creative solutions.

Here, you can take advantage of the full experience and creativity of all team members. When one member gets stuck with an idea, another member's creativity and experience can take the idea to the next stage. You can develop ideas in greater depth with group brainstorming than you can with individual brainstorming.

Usually brainstorming is used i groups, but individual brainstorming can also be very effective. You often get the best results by combining individual and group brainstorming, and by managing the process according to the "rules" below. By doing this, you can get people to focus on the issue without interruption, you maximize the number of ideas that you can generate, and you get that great feeling of team bonding that comes with a well-run brainstorming session!

Steps:

- 1. comfortable meeting environment
- 2. icebreaker, to make the atmosphere more relaxed
- 3. define the problem
- 4. a large number of ideas is the aim
- 5. Encourage everyone to contribute and to develop ideas, including the quietest people, and discourage anyone from criticizing ideas.

