



Module 19:
Creativity and Innovation
Part 2:
Exploring the Idea Generation Process

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording or otherwise—without prior permission of the Egyptian Banking Institute

Table of Contents

Part 2: Exploring the Idea Generation Process

Importance	3
Learning Objectives	3
Exercise - Spaghetti Towers	4
Brainstorming	5
Brainstorming and Lateral Thinking.....	7
Exercise: Brainstorming for Solutions.....	9
Six Thinking Hats	10
Exercise: Six Thinking Hats	12
Summary	13

Training for Employment

Module 19: Creativity and Innovation

Part 2: Exploring the Idea Generation Process

Importance

In order to generate new ideas you need the skills and knowledge and, critically, the ability for flexible thinking – Tools don't give you the creative ideas, they switch on the behaviors that do

Learning Objectives

Upon the completion of this module, you will be able to:

- Discuss the concept of brainstorming
- Explain the six thinking hats

Exercise - Spaghetti Towers

In small groups you will be given a packet of spaghetti and some packets of marshmallows. Your task as a group is to build one unsupported (free standing) tower using only the spaghetti and marshmallows. The winning team is the one whose tower is still standing unsupported at the end of 20 minutes (or however long the trainer gives you to complete the task).

After you have built your tower the trainer will lead a discussion about the activity.

Brainstorming

Madison Avenue advertising executive Alex Osborn developed the original approach and published it in his 1953 book, "Applied Imagination." Since then, researchers have made many improvements to his original technique.

The approach described here takes this research into account, so it's subtly different from Osborn's approach.

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.

Therefore, during brainstorming sessions, people should avoid criticizing or rewarding ideas. You're trying 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.

Evaluate ideas at the end of the session – this is the time to explore solutions further, using conventional approaches.

Brainstorming is a group activity designed to increase the quantity of fresh ideas. Getting other people involved can help increase knowledge and understanding of the problem.

Brainstorming is a useful and popular tool that you can use to develop highly creative solutions to a problem. It is particularly helpful when you need to break out of stale, established patterns of thinking, so that you can develop new ways of looking at things. This can be when you need to develop new opportunities, where you want to improve the service that you offer, or when existing approaches just aren't giving you the results you want.

Used with your team, it helps you bring the experience of all team members into play during problem solving. This increases the richness of solutions explored, meaning that you can find better solutions to the problems you face, and make better decisions. It can also help you receive buy in from team members for the solution chosen. After all, they have helped create the solution.

Purpose of Brainstorming

The purpose of brainstorming is to generate a large number of ideas in a short period of time.

Rules for Brainstorming

There are five rules associated with brainstorming.

1. The more ideas the better! Everyone thinks freely and adds as many ideas as possible, regardless of how crazy they may seem.
2. No discussions during brainstorming—keep the thoughts coming!
3. No idea is a bad idea—no criticizing, groaning or making fun of other people's ideas.
4. Hitchhike or piggyback on one another's ideas.
5. Display all ideas for everyone to see. Recording ideas on a flipchart works best.

Remember: There are no right or wrong answers. Brainstorming is an exploration of thoughts and ideas.

Clarify understanding

Once all the ideas have been generated, review the ideas offered. This is the time participants may ask questions of one another's ideas to clarify their understanding. You may ask a question like, "What did you mean by that?"

Combine items that are similar and/or eliminate duplicates

Confusion and time can both be reduced if similar ideas or thoughts can be eliminated.

Completion

The brainstorming process is completed once the ideas have been offered, discussed and consolidated. Brainstorming may also be used as the basis for making decisions.

Brainstorming and Lateral Thinking

Brainstorming is a lateral thinking process. It asks that people come up with ideas and thoughts that may at first seem shocking or crazy. You can then change and improve them into ideas that are useful and often stunningly original.

Ideas should only be evaluated at the end of the brainstorming session. You can then explore solutions further using conventional approaches.

Individual Brainstorming

Since you do not have to worry about other people's egos or opinions and can be more freely creative, brainstorming on your own will tend to produce a wider range of ideas than with group brainstorming. However, you may not develop ideas as effectively as you do not have the experience of a group to help you.

Group Brainstorming

Group brainstorming can be very effective since it uses the experience and creativity of all members of the group. When individual members reach their limit on an idea, another member's creativity and experience can take the idea to the next stage. Therefore, group brainstorming tends to develop ideas in more depth than individual brainstorming.

Brainstorming in a group can be risky for individuals. Valuable, but strange, suggestions may appear trivial at first sight. Because of this, you need to chair sessions tightly so that uncreative people do not crush these ideas and leave group members feeling humiliated.

How to Use Brainstorming as a Tool

To run a group brainstorming session effectively, do the following:

- Define the problem you want solved clearly, and lay out any criteria to be met.
- Keep the session focused on the problem.
- Ensure that no one criticizes or evaluates ideas during the session.
- Criticism introduces an element of risk for group members when putting forward an idea. This stifles creativity and cripples the free running nature of a good brainstorming session.
- Encourage an enthusiastic, uncritical attitude among members of the group. Try to get everyone to contribute and develop ideas, including the quietest members of the group.
- Let people have fun brainstorming. Encourage them to come up with as many ideas as possible, from solidly practical ones to wildly impractical ones. Welcome creativity.
- Ensure that no train of thought is followed for too long.
- Encourage people to develop other people's ideas, or to use other ideas to create new ones.
- Appoint one person to note down ideas that come out of the session. A good way of doing this is to use a flip chart. This should be studied and evaluated after the session.

Exercise: Brainstorming for Solutions

Instructions:

This exercise will improve your brainstorming skills.

1. Form groups of four to five persons each. Each group will be provided one flipchart and pen.
2. Select a group leader.
3. The group leader will kick off the activity.

The goal is to come up for as many ideas as possible for new technology that will revolutionize the banking industry.

Once you have identified your ideas, group them into similar ideas.

Then as a group decide which ideas you think are the best.

Six Thinking Hats

In Edward DeBono's book *Six Thinking Hats*, he uses hats to represent ways of thinking. Each "Thinking Hat" is a different style of thinking. When you put on different hats you think in different ways. Each thinking hat is explained below.

White Hat

This hat focuses on the available data, for instance, past trends or historical data. 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.

Red Hat

When you use red hat thinking you use your intuition, gut reaction, and emotion. You also think about how other people will react emotionally, especially what the intuitive responses of people who do not fully know your reasoning will be.

Black Hat

As you would guess, when you're doing black hat thinking, you look at things pessimistically, cautiously and defensively. You look at why something won't work. You look for flaws in a plan or course of action. This kind of thinking allows you to eliminate problems, alter your approach, or prepare contingency plans to counter problems that arise.

Bono tells us that, "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, leaving them under-prepared for difficulties.

Yellow Hat







This hat allows you to see all the possibilities, benefits and values of the decision. 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.

Blue Hat

The Blue Hat stands for problem facilitation or process control. For instance, this is the hat to wear when you chair a meeting. If you run into difficulties you can put on the right hat—Green for creative solutions or Black for preparing for the worse if an idea goes wrong.

PROCESS	 Blue Hat - Process Thinking about thinking. What thinking is needed? Organizing the thinking. Planning for action.	CREATIVITY	 Green Hat - Creativity Ideas, alternatives, possibilities. Solutions to black hat problems.
FACTS	 White Hat - Facts Information and data. Neutral and objective. What do I know? What do I need to find out? How will I get the information I need?	BENEFITS	 Yellow Hat - Benefits Positives, plus points. Why an idea is useful. Logical reasons are given.
FEELINGS	 Red Hat - Feelings Intuition, hunches, gut instinct. My feelings right now. Feelings can change. No reasons are given.	CAUTIONS	 Black Hat - Cautions Difficulties, weaknesses, dangers. Spotting the risks. Logical reasons are given.

Exercise: Six Thinking Hats

In your groups you will each be given a different colored hat (if the group is larger or smaller than 6, some people may be given more than one colored hat or more than one person may have the same color hat).

You have 20 minutes to think about the following problem in your group, each person thinking in the style of their hat:

You want to sell ice-creams near the entrance to the pyramids but need to be able to keep them frozen so that they don't melt before you sell them.

At the end of the 20 minutes review as a group how effectively you have thought about the problem using the Six Thinking Hats.

Summary

In this part, you learned how to:

- List the six thinking hats
- Define four thinking styles