

Brainstorming

In a few words: The generation of many ideas by an individual or group, based on the concept of suspending judgement until after the ideas have been generated.

What is Brainstorming?

Brainstorming has become a very commonly used word in the English language as a generic term for creative thinking. The basis of brainstorming is that of generating ideas in a group situation based on the principle of suspending judgment until after the ideas have been generated.

Brainstorming is a process for developing creative solutions to problems. It works by focusing on a problem, and then deliberately coming up with as many solutions as possible and by pushing those ideas as far as possible.

One of the reasons it is so effective is that the team members not only come up with new ideas in a session, but there is a type of chain-reaction where further ideas are generated as one person's ideas help other members to spark off new ideas by developing and refining the original idea.

The generation phase must always be kept separate from the judgment phase of thinking.

Brainstorming can be used by both individuals and teams. However, it works best with a team when you conform to the following four rules.

1. Have a well-defined and clearly stated problem
2. Have someone assigned to write down all the ideas as they occur
3. Have the right number of people in the group
4. Have someone in charge to help enforce the following guidelines:
 - o Suspend judgment
 - o Every idea is accepted and recorded
 - o Encourage people to build on the ideas of others
 - o Encourage way-out and odd ideas

A typical brainstorming session might be run along the following lines:

Idea generation phase

1. Gather the participants from as wide a range of disciplines with as broad a range of experience as possible. This brings many more creative ideas to the session.
2. Write down a brief description of the problem - the leader should take control of the session, initially defining the problem to be solved with any criteria that must be met, and then keeping the session on course.
3. Use the description to get everyone's mind clear of what the problem is and post it where it can be seen. This helps in keeping the group focused.
4. Encourage an enthusiastic, uncritical attitude among team members and encourage participation by all members of the team. Encourage them to have fun!
5. Write down all the solutions that come to mind (even ribald ones). Do NOT interpret the idea, however you may rework the wording for clarity's sake.
6. Do NOT evaluate ideas until the session moves to the evaluation phase. Once the brainstorming session has been completed, the results of the session can be analysed and the best solutions can be explored either using further brainstorming or more conventional solutions.

7. Do NOT censor any solution, no matter how silly it sounds. The silly ones will often lead to creative ones - the idea is to open up as many possibilities as possible, and break down preconceptions about the limits of the problem.
8. The leader should keep the brainstorming on subject, and should try to steer it towards the development of some practical solutions.
9. Once all the solutions have been written down, evaluate the list to determine the best action to correct the problem.
 - When the participants say they "can't think of any more ideas" then give them about 15 more minutes as the best ideas sometimes come towards the end of long thought out thought processes.
 - Brainstorming sessions can be held by individuals or groups. When done individually, brainstorming tends to produce a wider range of ideas than group brainstorming as individuals are free to explore ideas in their own time without any fear of criticism. On the other hand, groups tend to develop the ideas more effectively due to the wider range of experience and diversity.
 - Keep all the generated ideas visible. As a flip chart page becomes full, remove it from the pad and tape it to a wall as that it is visible. This "combined recollection" is helpful for creating new ideals.
 - If the team members have difficulty in coming up with solutions, you may have to restate the problem.
 - Brainstorming variation: One approach is to start the session with a word randomly pulled from a dictionary. This word acts as a starting point in the idea generation process.

Solution selection phase

When you are sure the brainstorming session is over, it is time to select a solution.

1. By using a show of hands, for example, allow each person to vote for as many ideas on the original list as they want.
2. Write the vote tallies next to the idea. You can use a different colour than the idea to help it stand out.
3. Once the voting is completed, delete all items with no votes.
4. Look for logical breaks. For example, if you have several items with 5 or 6 votes, and no 3 or 4 and only a couple of 1 and 2, then retain only the 5 and 6 votes.
5. Each person now gets half as many votes as there are ideas left. For example if you narrowed the number of generated ideas down to 20, then each person gets 10 votes (if it is an odd number, round down). The scribe should again tally the votes next to the idea, only this time using a different colour.
6. Continue this process of elimination until you get down to about 5 ideas.

Put the remainder ideas into a matrix. Put each idea into its own row (first column). Then label the columns using whatever criteria are most applicable to your project. For example:

Generated Idea	Low Cost	Easy to Implement	Help Other Processes	TOTAL
Outsource it to a vendor				
Hire a new employee.				
Share the extra workload				

Next, working one column at a time, ask the group to rate each idea in how it compares to the others. Using the above example, which one will cost the least, the most, and will be in the middle.

Repeat this for all columns. Total each column until it looks something like this:

Generated Idea	Low Cost	Easy to Implement	Help Other Processes	TOTAL
Outsource it to a vendor	2	2	2	6
Hire a new employee.	3	1	1	5
Share the extra workload	1	3	3	7

It this case, the lowest number column, "Hire a new employee," would be the best solution.

Some of the columns will, or course, require much discussion, as choosing an arbitrary number will not be that easy in some cases.

Often, you will have a couple of ideas that tie, but having them shown in a matrix makes it much easier to make a decision.

References

Donald Clark, *What is Brainstorming*, September 2000,
<http://www.nwlink.com/~donclark/perform/brainstorm.html>

Morgan, M., *Creating Workforce Innovation* , Business and Professional Publishing,
1993

Recommended Further Reading

de Bono, E., *Serious creativity*, Harper Business, 1992