

BRAINSTORMING

QUALITY TOOLS Brainstorming

Description of Brainstorming:

Brainstorming is a simple technique for gathering the ideas for developing creative solutions to problems. The term was popularized by Alex Faickney Osborn in the 1953 book Applied Imagination. He claimed that brainstorming was more effective.

Brainstorming helps you to have diverse experience of all team members into play during problem solving and/or solution development. This increases the confidence and self satisfaction to all team members and a feeling of ownership of the problem which will also help to find better solutions to the problems you face. Brainstorming is a fun activity, it helps team members to establish a bond among them as they solve problems in a positive, rewarding environment.

Brainstorming results with so many solutions and one of the reasons it is so effective is that the brainstormers not only come up with new ideas only in a brainstorming session, but also piggyback ideas from other participants.

When to use the Brainstorming:

Conventional Problem solving is an activity which is not very welcomed by the team members as confident and out spoken participants may drown out and intimidate quieter group members. Less confident and quieter group members may not share their ideas freely and in short group problem solving is often ineffective and sterile.

By contrast, brainstorming provides a freewheeling environment in which everyone is encouraged to participate. Quirky ideas are welcomed, and many of the issues of group problem-solving are overcome. All participants are asked to contribute fully and fairly, liberating people to develop a rich array of creative solutions to the problems they're facing.

How to use the Brainstorming:

There are four basic rules in brainstorming (Osborn, 1963) intended to reduce social inhibitions among team members, stimulate idea generation, and increase overall creativity:

1. Define the problem as a challenge. "Your creative challenge should be concise, to the point and exclude any information other than the challenge itself.
2. Give Targeted time limit. Recommendation could be for 20-30 minutes, but experience will teach how much time is needed for smaller and bigger group.
 1. Once the time starts, participants explained out the solutions to the problem while the facilitator records them down on to a media so that all involved can see. No one is allowed to criticize any idea.
 2. After time is up, Pull five best ideas with the agreement of everyone involved in the brainstorming session.
3. Establish the criteria for criteria for judging the best idea to solve the problem. Criteria should based on cost, legal implication, benefit level and time line for completion. Assign each idea with a score of 0 to 5 points depending on their effectiveness.
4. Select the idea with the highest score and that idea will be the best and solve the problem. A record of all the best ideas and their scores will be helpful in the case when the selected best idea turns out not to be workable.

Tips on use of Brainstorming:

- Note down all the ideas that come to mind.
- Do NOT evaluate ideas until the session completed.
- Let all team members to participate freely in the process of brainstorming.
- Do NOT censor any solution, no matter how silly it sounds. Quantity over quality.
- Try to keep the brainstorming on subject, and look for practical solutions.
- Evaluate the list of actions to determine the best action to correct the problem.

Application of Brainstorming:

Following Table may be used for listing and scoring the ideas:

Ideas	Cost Effectiveness 0-10	Applicability 0-10	Legally Allowed 0-10	Benefit 0-10	Easy to implement & Feasible 0-10	Will help other processes 0-10	Total Score
#1	5	2	8	5	7	2	29
#2	1	2	7	4	5	2	21
#3	3	3	7	4	5	3	25
#4	4	7	10	6	7	6	40
#5	3	6	8	3	3	2	25

As the total score for idea # 4 is the highest among other ideas and hence this idea is more effective to be implemented. An approval from all members of the Brainstorming team should be taken before implementing the corrective action or improvement activity. This will help to boost team members moral for involvement and feeling for problem ownership.

References

- **Brainstorm: Harnessing the Power of Productive Obsessions**
by Eric Maisel and Ann Maisel
- **The Thinker's Toolkit: 14 Powerful Techniques for Problem Solving**
by Morgan D. Jones
- **Solving Tough Problems**
by Adam Kahane