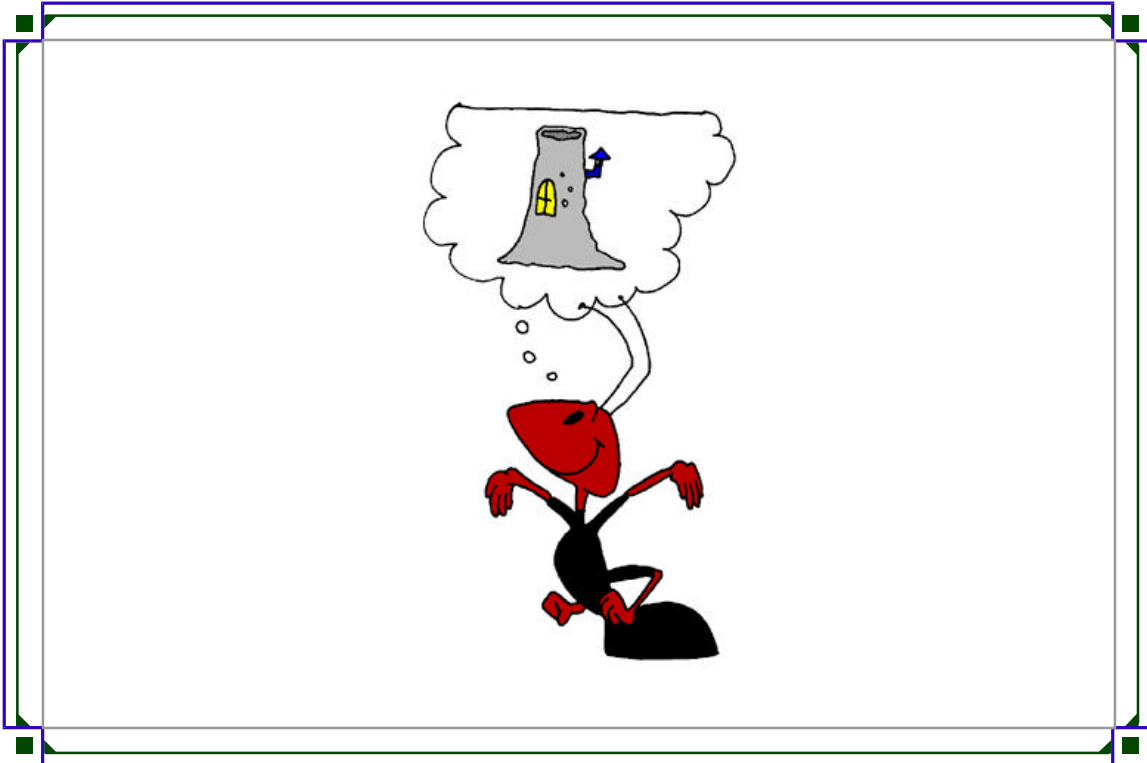


BRAINSTORMING



Purpose

Brainstorming is a technique used to quickly generate a list of ideas by a team to solve problems or issues. It is used to help a team or group to increase creativity and idea generation in a very short amount of time by focusing on the quantity, not quality, of ideas.

Brainstorming is used throughout the problem solving process whenever the team needs to generate ideas quickly and effectively. It is useful as a data-gathering technique to :

- a. Identify possible causes when constructing a cause and effect diagram.

- b. Identify drivers and restrainers in force field analysis.
- c. Identify suppliers and both internal and external customers of a process or organization.
- d. Identify other organizations appropriate for benchmarking.
- e. Identify possible solutions to problems or process improvement ideas.
- f. Any other time when a team needs to tap the ideas, expertise, and creativity of the group.

What does **brainstorming** look like? It is a fast moving, free flowing session pinpointing wild ideas, creativity, leapfrogging (building or feeding on others' ideas), and in some cases a feeling of uncontrolled interaction. The end result is a list of ideas, problems, issues, and solutions that can be used as a starting point in further analysis.

There are three approaches commonly used in **brainstorming** sessions. Each group must understand before the session starts which approach the team will use in conducting its **brainstorming** session.

Free Wheeling Brainstorming is the technique where participants call out their ideas when they occur to them and in no particular order. A recorder posts all ideas for everyone to see as they are presented.

Advantages- very spontaneous
increased creativity
easy to leapfrog (build on) ideas

Disadvantages-strong individual may dominate
too many members talk at once
ideas may be lost in the overall confusion of the session

Round Robin Brainstorming is the technique that provides each individual an opportunity to participate. Each team member is asked, in turn, for an idea. Members may pass on any round as the session continues until all members have passed during the current round.

Advantages- difficult for one person to dominate session
discussion is more focused
all are encouraged to take part in the session

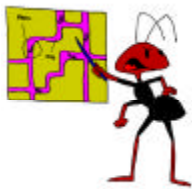
Disadvantages-difficult for some team members to wait their turn
loss of energy and spontaneity

reluctance to pass
not as easy to leapfrog ideas

Slip Method of *Brainstorming* is a structured technique where each individual writes down their ideas on small slips of paper or index cards. The slips are then collected and organized by the group.

Advantages- anonymity allows sensitive topics to surface
can be used with large teams or groups
not necessary for team members to speak up

Disadvantages-not possible to leapfrog ideas
some ideas may not be legible
difficult to clarify ideas



Process

The typical **brainstorming** session consists of three phases: 1) Idea Generation, 2) Idea Clarification, and 3) Idea Evaluation.

1. Idea Generation

- The team leader presents the topic to be brainstormed. The topic should be stated in specific, precise terms, and should be visible to all participants.
- The team leader makes sure that the team understands the problem, the objective of the session, and the method of **brainstorming** to be used.
- A team recorder writes ideas on a flip chart. Only one person talks at a time to ensure that the recorder is able to effectively record the idea presented.
- Team members begin generating ideas using the method selected for the session. Do not stop until all ideas are exhausted. Idea generation sessions should last no more than 10 to 15 minutes. The time allowed will be flexible depending on the energy of the session.

2. Idea Clarification

- Review the list for understanding and eliminate duplication.
- Do not discuss the ideas now. Evaluation and discussion will occur in later stages or in conjunction with the use of other tools.
- Clarification or modification of an idea is only done with the approval of the idea originator.

3. Idea Evaluation

- Review the list to eliminate irrelevancies or issues that are not related to the predetermined purpose of the session.
- Idea evaluation is often performed in conjunction with other analytical tools such as multivoting and decision matrix. And, it may take place outside the team meeting itself.



Example

Ideas developed during a **brainstorming** session on the purposes of a traffic signal.

1. Stop flow of traffic
2. Manage traffic flow
3. Allow cross traffic right-of-way
4. Allow pedestrians safe passage across roadway
5. Test for color blindness
6. Restrict speeding
7. Exert governmental control over citizens
8. Provide for safe left turns against traffic
9. Test brakes in case of an emergency
10. Absolutely nothing at all
11. Add color to an otherwise boring drive
12. Give State traffic services people something to do
13. Prevent accidents



Key Points

- **Brainstorming Rules**
 - * Clearly state the purpose of the **brainstorming** session.
 - * Record ideas where they are visible to the whole group. Recorder writes down the words of the idea presenter unless the presenter agrees on an acceptable paraphrase of their idea.
 - * Build on the ideas of others (leapfrog).
 - * Strive for quantity (not quality) of ideas.
 - * Do not evaluate ideas, there are no right or wrong ideas.
 - * Encourage presentation of wild or even impossible ideas.
 - * Never criticize ideas. Remember the goal is quantity not quality.
 - * Everyone contributes

THIS PAGE LEFT INTENTIONALLY BLANK