
Brainstorming Process Description

Brainstorming is a structured method of problem solving that encourages contributions from everyone in a team and facilitates quick agreement on solutions. It generates lots of ideas around a clearly defined abnormal or non-conforming situation. Teams approach a problem by asking “what could have caused this” questions and then formulating solutions.

Process

1. The identity of the person leading the 5WHY analysis should be pre-determined by a formal responsibility linked to a job profile. The leader will assemble the team and facilitate the session visually by using an aid such as a flipchart.
2. Define (or describe) the abnormality, incident or defect.
3. Team members are asked the question “Why did it happen”?
4. All responses are listed as they are raised.
5. No debate is allowed other than questions of clarification.
6. Each potential cause is subsequently discussed and either
 - a. Acknowledged
 - b. Prioritised
 - c. Deleted
7. All prioritised items (potential root causes) are separately subjected to another round of brainstorming with the focus on finding an answer to the question: “what can we do about this”?
8. Suggestions are listed per selected cause.
9. Potential solutions are then selected by consensus.
10. List solutions which should include short- and long-term actions. Grouped together, actions should provide a permanent solution to the identified problem.
11. Solutions should consider actions linked to equipment (Machine), people (Man), systems (Method), product (Material) or data (Measurement) – also referred to as the 5Ms.
12. Track the implementation of solutions through an action log.
13. Test the outcome of solutions over time to ensure the effectiveness of the solution. If the problem is not resolved or re-appears, the problem should be subjected to a 5WHY analysis.

Brainstorming Tips

- Never challenge a response but do a sanity check as part of the process.
- Always involve a team including staff involved in the incident.
- Brainstorming is not a witch-hunt. Create an atmosphere where there is true participation.
- Put a time-limit to ideas generation sessions.
- It’s easy to blame people or machines, but abnormalities or non-conformances are typically caused by system/process failures.