Brainstorming: Generating ideas

Techniques such as brainstorming are designed to expand the design space and encourage you to consider new options and new directions. They also help to determine and redefine the problem, rather than simply solving the first problem that appears. The purpose of this session is to explore the design space and generate as many new ideas as possible, in a form that is concretely and directly relevant to the design project.

☞ **Brainstorming** refers to strategies for generating innovative ideas. The basic procedure involves 3-7 people who are given a topic and a limited period of time. One person writes down every idea on a blackboard or flip chart. Another variation has everyone write down ideas individually, then shares them with the group. The moderator ensures that comments are constructive and that the time is spent generating ideas, not evaluating them. The moderator is also responsible for ensuring that the session finishes on time. The time limit is very important: brainstorming is very intense and, if done well, will leave everyone energized and excited by the ideas, not tired and bored. Brainstorming usually has two phases: the first for generating ideas and the second for reflecting upon them.

In phase 1, everyone suggests ideas, no matter how impractical or silly they seem at the time. The most important rule is: DO NOT EVALUATE THE IDEAS. Statements such as "that's stupid" or "they already did that" are forbidden. What makes brainstorming sessions interesting and fun is the way in which ideas spark other ideas, which is why the rule is so important. To help make people more comfortable and to encourage people to offer unfinished ideas, insist that everyone put in at least one "stupid" idea (without identifying which one it is).

In phase 2, everyone begins to evaluate the ideas. A number of strategies can work, depending upon the goal of the session. If it is important to thoroughly investigate all possibilities, then each idea can be discussed in turn. If it is important to select a small set of ideas that will become the basis for further work, the group can vote on the ideas. Each person goes up to the blackboard or the Flipchart sheets and puts a check mark next to the best (or the top three) ideas. After everyone has voted, the ideas with the highest scores can be discussed. Do not worry about ideas that are not at the top of the list; everyone has been influenced by all the ideas that have been generated, so even minor ideas may become incorporated into the final project.

Video brainstorming is a variation that involves demonstrating ideas for interaction in front of a video camera. The goal is to simulate a wide variety of ideas very quickly and capture them in a way that is easier to understand (and remember) than text notes. In general, raw notes from brainstorming sessions tend not to be very useful after a certain amount of time has passed because the participants no longer remember the context in which the ideas were created. Video brainstorming generates fewer ideas, but they are much easier to recall, since more of the context is captured. Video brainstorming is more likely to be useful at later stages in project design.

Brainstorming Exercises

Exercise 2: Begin with standard brainstorming to generate as many specific ideas as you can about new kinds of interactive *Post-it®* notes. Then run a video brainstorming session to demonstrate how users would interact with the most promising ideas.

Standard Brainstorming: The moderator is responsible for starting the session, ensuring that everyone participates, keeping the tone positive, and ending on time. The goal is to generate as many ideas as possible for a new electronic *Post-it®* note. Include basic simple functions as well as new ideas. Be creative and do not forget to include "stupid" ideas.

Spend 20-30 minutes generating as many ideas as possible. Do not worry about whether or not it is a "good idea"; quantity, not quality, is the goal. Then, re-read the list of ideas out loud and each person should individually select the three most interesting ideas to pursue. When everyone has voted, check to see if there are any clusters of votes. The purpose of the vote is not really to evaluate the ideas. Instead, the goal is to encourage you to reflect on them to help you in the design phase of the project.

☺ **Roles:** Choose a moderator who will direct the discussion and a (different) scribe to take notes. Also, choose someone to monitor the camera. Everyone in the group is responsible for generating ideas.

📷 **Video Brainstorming:** After reading your ideas out loud to each other, decide which to explore further in video. (Do not argue about this; simply let each person illustrate their favorite idea; their own or someone else's.) Video brainstorming requires thinking more deeply about each idea than standard brainstorming. Instead of describing the idea in words or with sketches, you demonstrate or act out what it would be like to interact with the new system. However, the goal is to be quick: each participant should be able to videotape several ideas.

Begin by setting up the camera as explained in the video tips section and shoot at least 20 seconds of the first title card at the beginning of the cassette, before taping any ideas. Then, for each idea, tape 3-5 seconds of a title card that includes a brief description, the author, the date and the "take".

Keep each clip short. If you envision a series of actions, they should be captured as separate takes. If you decide to explore several variations of the same idea, each variation is also considered a "take". Use paper, *Post-it®* notess and transparencies and whatever other materials you like to illustrate how the idea will work. One person is the director, who explains and illustrate the idea to the group (to work out the idea and to practice before shooting). The camera person should videotape title card with the corresponding idea number, e.g., "Take 3". The person directing the idea should perform it again in front of the camera. If the camera person has the idea, the moderator should take over handling the camera. Do not try to edit in the camera, by rewinding the tape and reshooting the idea if you make a mistake. Simply shoot the title card again (modified to say "Take 3 b") and try again. Remember, you want to capture as many ideas as possible.

Worksheet: Standard Brainstorming

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Worksheet: Video Brainstorming

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Video Brainstorming

Idea

Author

Date **Take**