

PRINCIPLES OF CREATIVE THINKING

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Adapted from Walt Disney

It is often difficult to go from complex problems to solutions and then to implementation, because this requires both creativity and discipline, which are like oil and water. Here, I summarize the technique developed for this purpose by Walt Disney, and taught by his one-time assistant, Mike Vance.

Creative Thinking Session

Use teams of 6 to 10 people. They need not be experts in the problem to be solved. In fact, it is better if they are from different parts of the company, and are at differing levels of seniority, so that they bring with them different perspectives, experience, and ideas.

Teams do their work in problem-solving sessions that typically last four hours on average (though they can be much shorter). A series of these sessions may be required to develop a complete solution to a problem. The series has a host, who poses the problem to be solved, and a facilitator. The host participates in the problem solving. The facilitator does not; he guides it. The facilitator looks to the host for guidance on policy, definition of the problem, etc.

Each session is broken into two parts of equal duration, separated by a break of 15 minutes. The first part is devoted to creative thinking (idea generation), the second part, to critical thinking (idea elimination). Research has shown that this separation is essential, because when creative and critical thinking are mixed together, the flow of creative energy stops.

There are ten main rules for the creative thinking session. They are:

- The session starts with an introduction to the rules of the game by the facilitator.
- All ideas are welcomed, even if they have been stated before; this makes everyone want to contribute.
- All ideas are written down on cards and displayed on a cork wall so that they can be seen by everyone. This makes people feel their ideas are valued; it also helps people to generate more ideas by stimulating their thinking.
- The cards are displayed according to certain rules, see Exhibit 1.
- Ideas are offered in turn, going around the table. Individuals may say pass if they have no ideas at the time.
- Every team member is either a penner (writes down ideas with a pen) or a pinner (pins cards to the wall). This creates plan-do-see equality.
- The facilitator makes sure no one dominates the session. He also determines when the creative energy is dying, and uses several techniques (see Exhibit 2) to re-energize the group.
- Team members are not allowed to criticize other people's ideas. In fact, they are praised by the facilitator when they build on other people's ideas.
- The session ends with a re-ordering of the cards on display to make logical sense and to eliminate duplication of ideas.
- The final wall of cards is photographed for the record.

The critical thinking session follows 15 minutes later. By this time, no one cares which ideas came from whom. The main rules are seven in number.

The facilitator asks the team members in rotation (going around the table) to criticize ideas on the wall, to say why they should be eliminated. When he receives a criticism, he turns to the rest of the group and asks if they agree. If they do, the card is removed. If even one person maintains (after debate), that the idea has validity, then the idea stays on the wall. Eliminated cards continue to be displayed on the wall (but off to one side) so that they can be reconsidered.

When about half an hour remains, the facilitator asks the team to take one last look at the rejected ideas to see if they should continue to be rejected. When about 15 minutes remain, the facilitator asks for the remaining cards to be reorganized. He then turns to the host and asks him if he is satisfied. If he is not, another session is arranged to generate more ideas, possibly with new team members. If the host is satisfied, the facilitator asks the host what the next problem is, and promises to arrange a session to solve it. (Often the next problem will be to explore a specific idea generated by the first problem-solving session.)

The final wall of ideas is photographed.

The host thanks all participants for their ideas. Photographic copies of both the creative and critical walls of ideas are distributed to all participants.

There are typically four different series of sessions, in the following sequence, leading to full implementation of a creative solution:

- Planning: what are we going to do in the next few weeks?
- Ideas: what solutions do we have?
- Communications: how do we tell everyone who needs to know?
- Organization: who will do what, and by when?

If it is well-organized, the four-part process need not take more than six to eight months for a significant problem (such as the design of a new product). For a smaller problem, it can be completed in a week or so.

The characteristics of a successful facilitator are shown in Exhibit 3.

EXHIBIT 1 - Rules for Displaying Ideas

The host writes a problem statement on a 5" x 8" card, and places it on the wall.

The group first agrees on headers or main topics to be discussed, which are also recorded on 5" x 8" cards, as shown below. The card on the left always says **Purpose** (why do we want to solve this problem). The card on the right is always **Miscellaneous**

Next, the group develops ideas under the headers. These are recorded on 3" x 5" cards, known as subbers. These can be offered for any header that the person wishes to address, not necessarily in sequence from left to right.

Ideas must be written concisely and legibly.

Exhibit 1 - Diagram

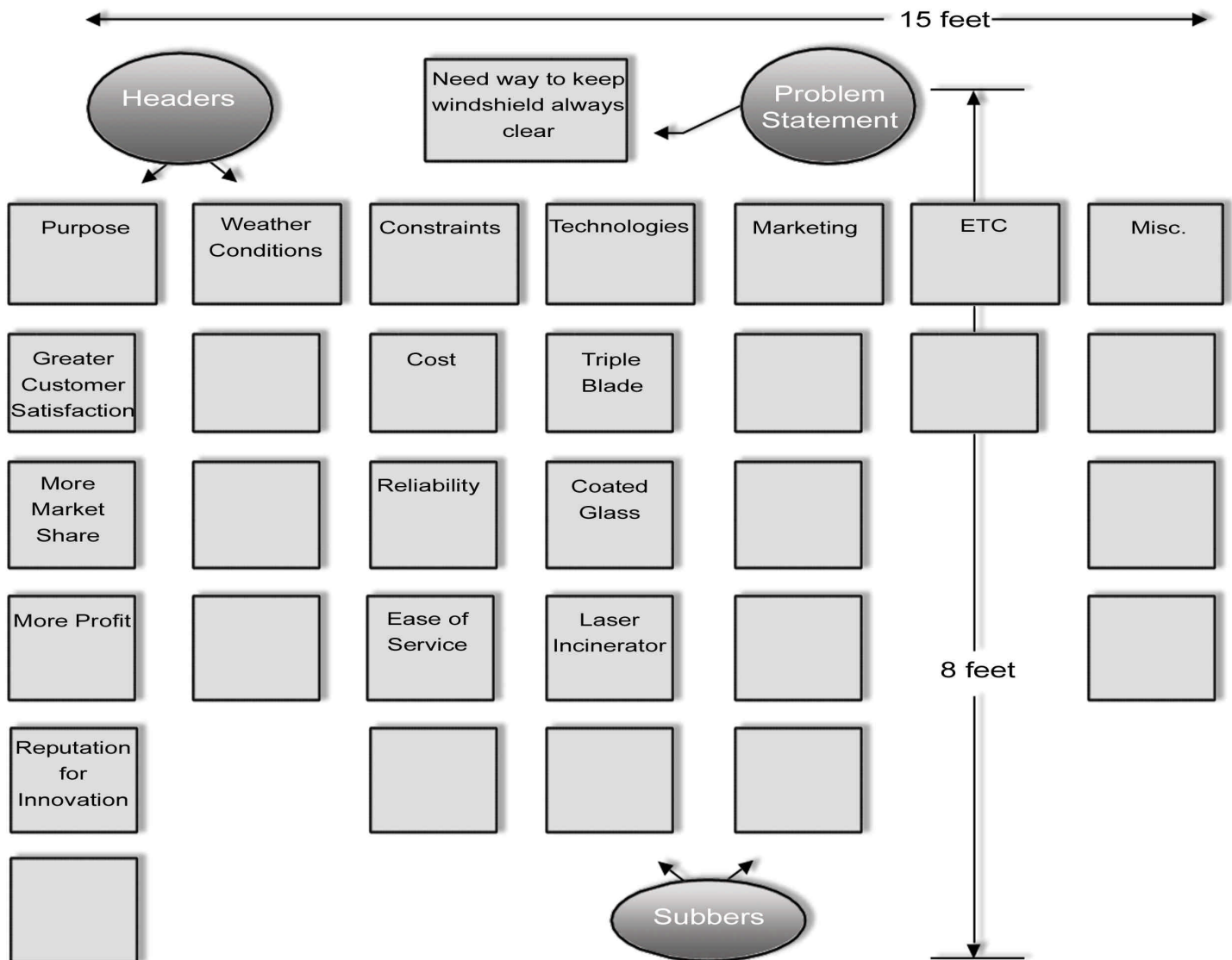


EXHIBIT 2 - Techniques for Re-energizing the Team

- Ask for insight-- zoom in and view the problem at close quarters, to see if new ideas emerge.
- Ask for oversight-- zoom out (develop a helicopter perspective) and view the problem in the context of a larger situation.
- Ask for farsight-- does the combination of insight and oversight lead to an innovative idea for the future?
- Ask for five senses-- see if going through the five ways you perceive the world will give you new ideas.
- Ask for education perspective-- think about your education (disciplines, courses), and see if new ideas emerge.
- Ask for neoteny (a term coined by Buckminster Fuller) -- adopt a childlike, unsophisticated perspective, and see what ideas emerge. (Children often have very creative ideas.)
- Ask for innovation transfer -- look for other problems in the experience of the members of the team that seem similar to the problem that is being solved, and see if innovative ideas can be transferred from one problem to the other. It is necessary to stretch the imagination to see the similarity between different problems.
- Ask for plusing -- add to a good idea.
- Ask for ephemeralization -- how can we get more for less? Make it smaller, lighter.

(Many additional techniques are available.)

EXHIBIT 3 - Successful Facilitators

- They are senior, experienced people who understand what a solution consists of.
- They have the personal authority to control people who try to dominate, and to activate timid but creative people.
- They don't feel compelled to contribute their own ideas to the problem.
- They have a high level of energy, which they communicate to the team, so that the team becomes excited and enthusiastic.
- They have a good sense of humor, and can make team members take a light-hearted point of view. Often, creativity goes with a sense of humor.
- They have been trained on-the-job in the basis of creative thinking, as outlined in this paper.