

Brainstorming

A lot of people roll their eyes at the term brainstorming because there have been so many lousy uses of the word that it, like "design," has lost its original meaning.

Brainstorming, as we define it in ME71, is a great tool for generating new concepts, solutions, ideas, etc for any field or topic - but most generally it helps get your brain unstuck by generating lots of possibilities.

Things to remember about brainstorming:

- People love being clever and brilliant without having to implement their ideas.
- Brainstorming builds enthusiasm around your project.
- It gets people talking to each other - good communications tool.
- It leads to less ownership of ideas within a group.
- It means greater group involvement in idea generation and decision making within a group.
- Much better than an "update" meeting within a group.

The rules of brainstorming are:

- DEFER JUDGMENT

This is a tough one - especially for engineers because formal training teaches them to be excellent in analysis and judgment. One of the greatest hurdles that must be overcome for a good brainstorm is the fear of looking stupid! You are dealing with possibilities - however remote they may be - you are NOT dealing with realities or actual choices. When someone chirps in and declares "oh you can't do that because ... " (fill in the blank with a negative evaluation) it kills a whole generation of new ideas.

In brainstorming, bad ideas don't exist because they serve to make good ones better.

- GO FOR QUANTITY

Try for 50 ideas, 100, 150!

"The best way to get a good idea is to get a lot of good ideas." - Linus Pauling

- ENCOURAGE WILD IDEAS

Make people crack up on and roll on the floor. Laughter is a proven key to idea generation.

"If at first an idea doesn't sound absurd then there's no hope for it." - Albert Einstein

If you're looking for uniqueness or you want to be provocative though it's highly probable that those normally discarded crazy ideas offer the most creative potential - use them as a jumping off point for other ideas.

- LEAPFROG OFF OTHER IDEAS

It's a team effort. No one owns an idea - it's the team's. Take someone's idea and make it better. Sometimes when you paraphrase someone and redescribe their idea you actually misunderstand it and come up with a new and better idea.

- STAY FOCUSED ON THE TOPIC

No talking about the phone bill...

- ONE PERSON AT A TIME

It is easy to get so darned excited you roll over some quiet brilliance mumbled in the corner. Give everyone a forum.

- EXTRA CREDIT: Be visual - It is OK to be messy

It drives us crazy when designers are afraid to draw because of what others might think. Draw, draw, draw. Pictures help others (even if they are not good enough to show Mom), they will help communicate your ideas.

The ingredients to a great brainstorm:

- THE SET-UP

Put paper everywhere.

Pens, markers, etc. It's very helpful to use different colors.

Make sure everyone can see everything.

Bring relevant things for inspiration and comparison - competitor products, toys, interesting mechanisms.

Scissors, glue, foamcore, tape - build relevant stuff on the spot.

Snacks!

- PICK A FACILITATOR

No more than 1.5 hours - people lose intensity after 1.5 hours.

4 - 8 people is a typical good size.

Tactfully remind people of the rules, especially deferring judgment.

Educate the group first if the topic is complex.

List and number or sketch ideas quickly. Write down enough to clearly identify it, then move on to the next. Be aware to list everybody's idea - it's a real zing when a facilitator judges an idea. It can destroy a brainstorm because the participants will begin editing.

- Important Note: PICK A SPECIFIC TOPIC

You must have a need or a specific topic. Trying to come up with cool ideas and great new products without a focus is like pouring cyanoacrylate into your brain.

- EVALUATE THE IDEAS AFTERWARDS

After, rewrite the 'mess.' Distill ideas soon before you forget nuances.

After everyone has left, get a core group to circle the best ideas.

Classify all ideas into themes and families.

Try to show the finished list(s) to the original participants. It's likely they will come up with a few more add-on ideas.

Lastly, HAVE FUN.