The affinity diagram is one of the most widely utilized of the Seven New Management Tools. It can be used to effectively display ideas generated from a brainstorming session. Many of you may be familiar with the technique but did not know what it was called, how it was developed, or the approach to be used in its generation.

The affinity diagram process was developed in Japan by a Japanese anthropologist, Jiro Kawakita. Looking for understanding of the societies that he was studying, he took the ideas he had written on pieces of paper, spread them on the table and looked for natural groupings. He discovered this process allowed him to sort through all kinds of seemingly unrelated data and identify fundamental themes for each grouping. These themes did not always follow traditional lines of thought and so, he concluded that they enhanced breakthrough thinking. Kawakita refined the method, named it KJ, and registered the KJ Method as a trademark.

How does one conduct an affinity diagram session? First, a team has to be formed. There are different points of view on the size of a team. Some authors state that the “ultimate” team size is between 4 and 8 people. Others like to use a larger representation of an organization, say 20 to 30 people. Choose the size of the team you are comfortable managing. The key is to select as diverse a group as possible; a multi-disciplined and multifunctional team. This approach insures that you can challenge traditional viewpoints and yet still be open-minded to new perspectives. A good way to assemble a team is to list all of the job functions in the organization and choose those that are critical for them to be part of the team. This usually identifies 6 to 8 people. The remainder of the list can generally be split between those individuals you would really like to have but are not essential and those that you want to be familiar with what you are doing. This latter group can usually be put on an “information-only” list.

After your team has been organized, determine the issue, topic, product, or product line to be addressed by the group. This part of the process is critical. Everyone needs to understand the topic and why it was chosen. This will allow the group to focus on brainstorming. One school of thought suggests that the issue statement should be as vague as possible. The reasoning here is to minimize the chance of “funnelling” ideas into the way they have always been done. This is not without some risk. Too vague a statement can dilute the process by having people address too much; never answering the question. Another school of thought suggests being as specific as possible so that the critical issue is addressed. The danger is that no new approaches will come out of this process. This can be offset by having as large a team as possible.

Now that the topic has been identified, the brainstorming can begin. There are as many ways to brainstorm. Make sure that all ideas are recorded on a flip chart. It’s a good idea to have a second recorder present to record the same ideas on 3x5 cards or a sticky pad. Use of cards or pads depends on where the session is held and how the team will organize the data. If the room has large table(s), cards work well. If there is limited room available, use sticky pads so that the walls can be used for sorting. A team member should not record because it is difficult to record and contribute at the same time. When brainstorming is completed, the cards/pads should be spread out by the team members on the table or walls in a random order.

The team is now ready to sort. Sorting should be done in silence. By imposing a rule of silence there is less chance of influencing an individuals’ perspective. Silence also forces the creative side of the brain to take over and gets team members to look at data from a different viewpoint. When sorting cards/pads, team members should be looking for instinctive groupings/categories. Sorting tends to be a relatively quick process.

Once sorting is completed, the challenge begins; defining the categories on header cards. The team needs to decide the most concise descriptor for each category. Sometimes, this can be one of the cards already generated, although this rarely happens. The team will have to come to a consensus to the category name. Usually, half of the category names will be generated.

The final step is laying out the affinity diagram. There are two methods. The first way is to lay the cards/pads out and place the category descriptor/header on the top of the cards. Aply named, parent and children. The other method is to form a tree diagram with the header/descriptor on the left side of all the sub-categories. This is similar to taking an organization chart and turning it sideways. This method is used most frequently with QFD (Quality Function Deployment) matrices.

Affinity diagrams can be a powerful tool in the organization of data. It allows grouping of ideas into categories, thereby making sense out of chaos. Once you have experienced the process, you will discover its merits and benefits.

References