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Guidance - How to create an
Affinity Diagram
October 2011

Project definition
and initiation
(work before the
work)

Measurement and
analysis

Solution
development and
improvement

Sustainability
and spread
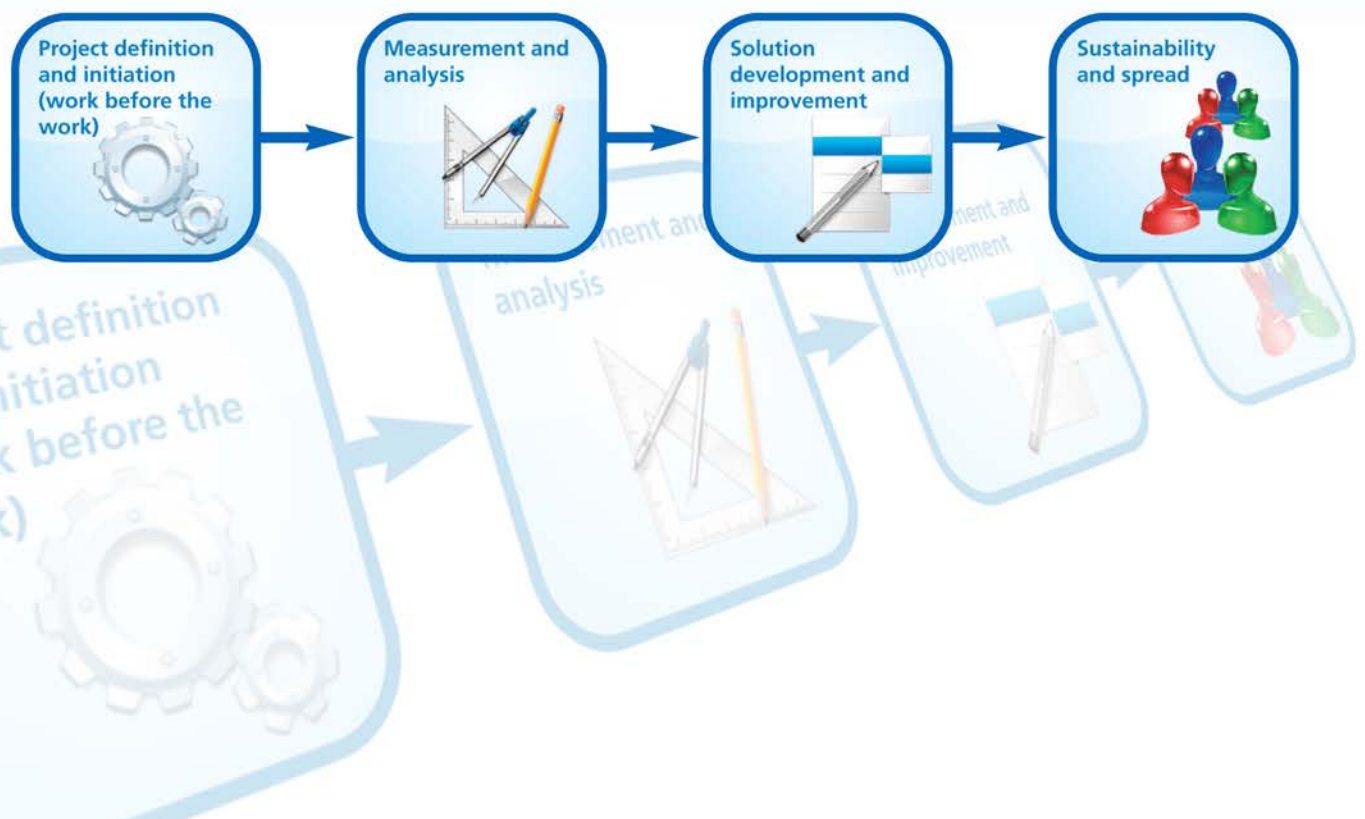
What is an Affinity Diagram?

An Affinity Diagram is a graphic tool designed to help organize loose, unstructured ideas generated in brainstorming or problem solving meetings and gathers large amounts of language data (ideas, opinions, issues) and organizes them into **groupings based on their natural relationships**. In this method, disparate but related ideas (collected in the idea generation session) are grouped (on cards or sheets of paper) into meaningful categories called affinity sets. These categories tie different concepts together with one underlying theme, clarify the issues, and provide a structure for a systematic search for one or more solutions. May also be called affinity charts.

Why should teams use the Affinity process?

The Affinity process is a good way to get people to work on a creative level to address difficult issues. It may be used in situations that are unknown or unexplored by a team, or in circumstances that seem confusing or disorganized, such as when people with diverse experiences form a new team, or when members have incomplete knowledge of the area of analysis.

When should we use the Affinity process?

The Affinity process is formalized in an Affinity Diagram and is useful when you want to

- **Sift through large volumes of data**. For example, a process owner who is identifying customers and their needs might compile a very large list of unsorted data. In such a case, creating an Affinity Diagram might be helpful for organizing the data into groups.

- **Encourage new patterns of thinking**. An Affinity exercise is an excellent way to get a group of people to react on a "gut level" rather than mulling things over intellectually. Since Brainstorming is the first step in making an Affinity Diagram, the team considers all ideas from all members without criticism. This stimulus is often enough to break through traditional or entrenched thinking, enabling the team to develop a creative list of ideas.

- When you are confronted with many facts or ideas in apparent chaos
- When issues seem too large and complex to grasp
- When group consensus is necessary

Typical situations are:
- After a brainstorming exercise
- When analysing verbal data, such as survey results.

When shouldn't we use the Affinity process?

As a rule of thumb, if less than 15 items of information have been identified, you can skip the Affinity process. Instead, you can clarify and combine the ideas and then use one of the Decision-Making Tools to identify the highest priority items.

How is an Affinity Diagram created?

The creation of an affinity diagram is a process performed by a group or team. The idea is to meld the perspectives, opinions, and insights of a group of people who are knowledgeable about the issues. The process of developing an Affinity Diagram seems to work best when there are no more than five or six participants.

Before we go over the steps used to create an Affinity Diagram, we need to look at some unique features of the Affinity process that are important to its success:

- The most effective way to work is to have everyone move the displayed ideas at will, without talking. This is a new experience for many people. It has two positive results: It encourages unconventional thinking (which is good), while it discourages semantic battles (which are bad). It also helps prevent one person from steering the Affinity.

- Go for gut reactions. Encourage team members not to agonize over sorting but to react quickly to what they see. Speed rather than deliberation is the order of the day, to keep the process moving.

- Handle disagreements simply. The process provides a simple way to handle disagreements over the placement of ideas: If a team member doesn't like where an idea is grouped, he or she moves it. This creates an environment in which it is okay to disagree with people having a different viewpoint. If consensus cannot be reached, make a duplicate of the idea and place one copy in each group.

- Materials needed: sticky notes or cards, marking pens, large work surface (wall, table, or floor).

  Step 1 – Generate ideas. Use the Brainstorming tool to generate a list of ideas. Record each idea with a marking pen on a separate sticky note or card. (During a brainstorming session, write directly onto sticky notes or cards if you suspect you will be following the brainstorm with an affinity diagram.)

Step 2 – Display the ideas. Randomly spread notes on a large work surface so all notes are visible to everyone. The entire team gathers around the notes and participates in the next steps. Post the ideas on a flipchart, a wall or a table in a random manner.

Step 3 - Sort the ideas into related groups.

The team members physically sort the cards into groupings, **without talking**, using the following process:

- Start by looking for two ideas that seem related in some way. Place them together in a column off to one side.

- Look for ideas that are related to those you've already set aside and add them to that group.

- Look for other ideas that are related to each other and establish new groups.

- This process is repeated until the team has placed all of the ideas in groups.

NOTE: Ideally, all of the ideas can be sorted into related groups. If there are some notes that don't fit into any of the groups, don't force them into groupings where they don't really belong, let them stand alone under their own headers. Also, where a note seems to belong in two groups make a second note and put them in both.

Step 4 - Create header cards for the groups.

You can talk now. Participants can discuss the shape of the chart, any surprising patterns, and especially reasons for moving controversial notes. A few more changes may be made. When ideas are grouped, select a heading for each group. Look for a note in each grouping that captures the meaning of the group. Place it at the top of the group. If there is no such note, write one. Often it is useful to write or highlight this note in a different colour.

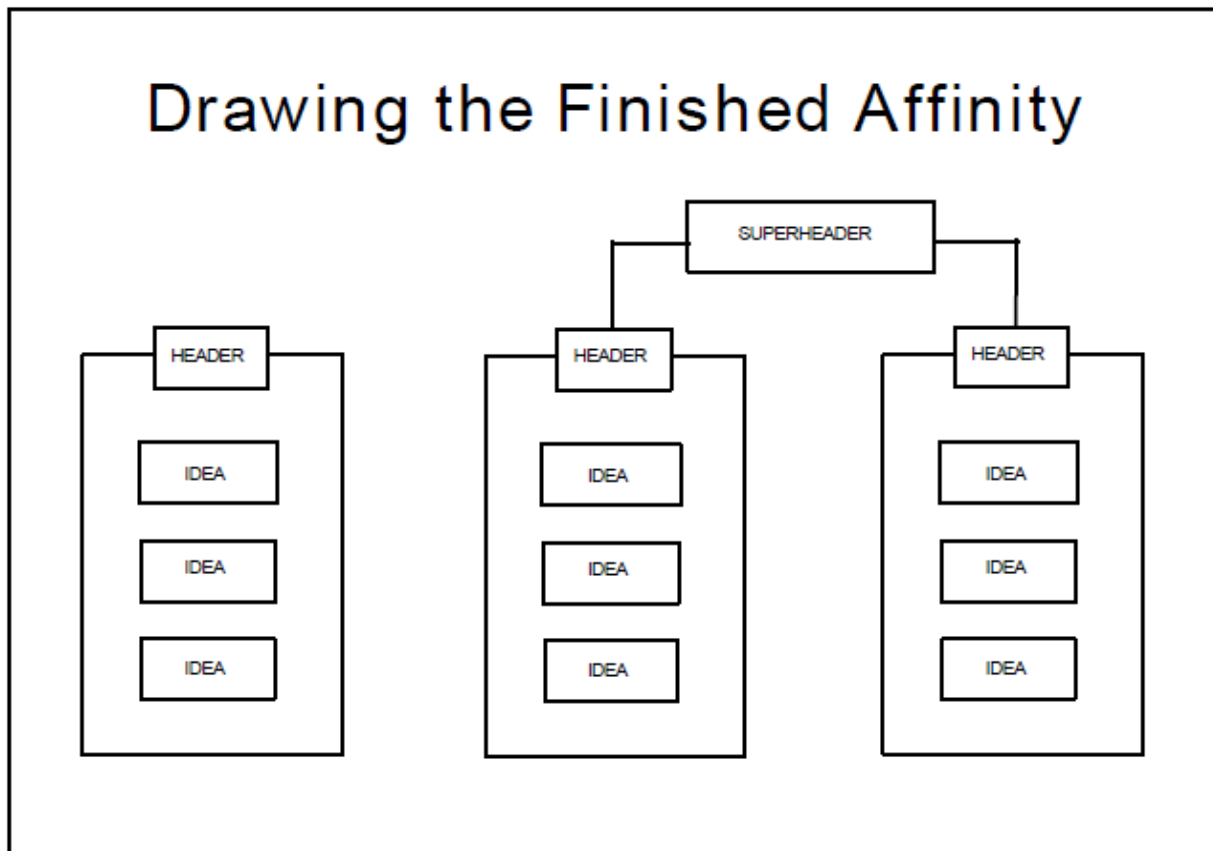**Combine groups into "supergroups" if appropriate**

A header is an idea that captures the **essential link among the ideas contained in a group of cards.** This idea is written on a single card or post-it™ and must consist of a phrase or sentence that clearly conveys the meaning, even to people who are not on the team. The team develops headers for the groups by:-

- Finding already existing cards within the groups that will serve well as headers and placing them at the top of the group of related cards.

- Alternatively, discussing and agreeing on the wording of cards created specifically to be headers.

- Discovering a relationship among **two or more groups** and arranging them in columns under a **superheader**. The same rules apply for superheaders as for regular header cards.

Step 5 - Draw the finished Affinity Diagram.

- Write a problem statement at the top of the diagram.

- Place header and superheader cards above the groups of ideas. Review and clarify the ideas and groupings.

- Document the finished Affinity Diagram

Drawing the Finished Affinity

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Affinity Diagram Considerations

The affinity diagram process lets a group move beyond its habitual thinking and preconceived categories. This technique accesses the great knowledge and understanding residing untapped in our intuition.

Very important "Do nots": Do not place the notes in any order. Do not determine categories or headings in advance. Do not talk during step 2. (This is hard for some people!)

Allow plenty of time for step 2. You can, for example, post the randomly-arranged notes in a public place and allow grouping to happen over several days.

Most groups that use this technique are amazed at how powerful and valuable a tool it is. Try it once with an open mind and you'll be another convert.

Use markers. With regular pens, it is hard to read ideas from any distance.

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