Affinity Diagramming

Affinity diagramming is a method for organising and structuring (large amounts of) qualitative data and information.

Affinity diagramming is widely used in business and project management as well as in interaction design or usability testing to organise data from various sources such as for example brainstorming, user research, customer feedback, interviews, surveys, focus groups or design workshops.

Affinity diagramming can be done by a single person or by a small or large team. All you need for this method is a huge pile of sticky notes and a place large enough to arrange all these notes. Of course, instead of tangible sticky notes in paper and a large whiteboard/wall you can also work with virtual sticky notes on a virtual (online) whiteboard.

Practical Tips for the Affinity Diagramming Process

Step 1: Create the Sticky Notes

In this first step, split the huge pile of information into single aspects and write each of these aspects on a separate sticky note. Put all these sticky notes on the whiteboard/wall in no special order.

Practical Tip: To preserve the connection to their origin for these bits and pieces of information, use color coding by putting information from different sources on sticky notes of different colour. For example, write information pieces gained from the interview answers of user A on yellow sticky notes and those gained from interview answers of user B on orange sticky notes.

Step 2: Cluster the Sticky Notes into High-Level Categories

The process of clustering the sticky notes is simple: take any of the sticky notes as the first one and put it on an empty part of the whiteboard/wall. If you have defined high-level categories, put it to that area of the whiteboard, with the suitable label. Then take the next sticky note and decide, whether or not it should go into the same group as the first one. If yes, put it close to the first sticky note, otherwise put it on an empty part of the whiteboard/wall to start another group. Continue sticky-note by sticky-note, and either put it to one of the existing groups or create a new group, if it does not fit into an existing cluster.

Practical Tip: To speed up the process, you can define (some) high-level categories for the information area before you start clustering the sticky notes. Label empty parts of the whiteboard/wall with these pre-defined high-level categories and sort the sticky notes into the respective categories. If you come across a sticky-note, which does not fit into any of the pre-defined categories, start a new category/group, as described above.

Example: when organising the information collected for the development of personas for AI applications in computational pathology, we defined the following high-level information categories: personal (age, sex, family status, hobbies...); work-related (tasks/workflows/context); education/knowledge/skills; personal traits; goals/values/aspirations; motivations; frustrations

Step 3: Refine the Clustering

For each of the high-level category clusters, repeat the clustering process and sort the sticky-notes into subgroups. Repeat this process, as appropriate.

Step 4: Label the Groups

Find a label for each of the groups, which summarises the content of that specific group.

Example from Practical Implementation of Affinity Diagramming

The following figure shows a small part of the Affinity Diagram created from the interview responses of quality managers from diagnostics institutes. In this case, Affinity Diagramming was done with virtual sticky notes on an online whiteboard. The colors of the sticky-notes show the information gathered from different interviewees. The labels of the groups shown in this figure name personal traits and skills, which are necessary for this job, according to the interview answers of quality managers.

