Card Sorting

The card sorting method is commonly used when developing a site architecture but has also been applied to developing workflows, menus, toolbars, and other elements of system design.

The method provides data on how users tend to associate concepts and group information. Card sorting is usually conducted in the early design phase of a project for defining architecture, but can similarly be used during a product evaluation to determine if usability issues are due to problems with grouping or group labels.

Card sorting is a method used to help design or evaluate the information architecture of a site. In a card sorting session, participants organize topics into categories that make sense to them and they may also help label these groups. To conduct a card sort, use actual cards, pieces of paper, or one of several online card-sorting software tools.

Depending on needs, choose to do an open or closed card sort. They differ as follows:

* **Open Card Sort:** Participants are asked to organize topics from website content into groups that make sense to them and then name each group they created in a way that they feel accurately describes the content. Use an open card sort to learn how users group content and the terms or labels they give each category.
* **Closed Card Sort**: Participants are asked to sort topics from website content into pre-defined categories. A closed card sort works best when working with a pre-defined set of categories, and the goal is to learn which content items will be placed placed by users into the pre-defined categories.
* **Modified Delphi Model Card Sort:** The Modified Delphi Card Sort method is a fresh approach to open card sorting that arrives at the same results as an open sort with fewer participants.

Basically the first participant conducts an open card sort. Then the organization that the first person came up with gives it to the next participant to re-organize. Repeating this process over a handful of participants helps them generally come to consensus without being subject to bandwagon effects. Even if there is a disruptive sort in the process where the sorter goes a very different way, the consensus order tends to return within a few participants. The Modified Delphi Card sort is quick, very reliable, and doesn't require the use of semantic distance math to gather the results. Currently there is no off the shelf tool for performing these remotely.

Another option is to try a combination of the two. Conduct an open card sort first to identify content categories and then use a closed card sort to see how well the category labels work.

[**This PowerPoint**](https://vaww.portal2.va.gov/sites/humanfactors/_layouts/PowerPoint.aspx?PowerPointView=ReadingView&PresentationId=/sites/humanfactors/BoKContent/VSSC%20Card%20Sort%20Presentation%20to%20Card%20Sort%20Users.pptx&Source=https%3a//vaww.portal2.va.gov/sites/humanfactors/BoKContent/Forms/AllItems.aspx?InitialTabId%3DRibbon%252EDocument%26VisibilityContext%3DWSSTabPersistence&DefaultItemOpen=1&DefaultItemOpen=1) can be used to inform card sort participants about how to do a card sort. It can be sent out as an attachment with the card sort invitation. Customize it with the name of the system that you are working on.

**Benefits**

* Provides a good foundation for the structure of a site or product.
* Simple – Card sorts are easy for the organizer and the participants.
* Quick to execute – It is possible to perform several sorts in a short period of time, which provides significant amount of data.
* Involves users – Because the information structure suggested by a card sort is based on real user input.

**Limitations**

* Does not consider users’ tasks – Card sorting is an inherently content-centric technique.

May capture “surface” characteristics only – Participants may not consider what the content is about.

**Study Execution**

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| **​Milestone** | **​Owner** |
| ​Initiate kick-off call | ​HFE |
| Define the concepts to be sorted | ​Business Office |
| Develop materials | ​HFE |
| Field the materials or lead sessions | HFE |
| Analyze and summarize results | ​HFE |
| Perform [**After Action Review (AAR)**](https://vaww.portal2.va.gov/sites/humanfactors/SitePages/AAR%20Process.aspx) | ​HFE |

**Outcomes**

A site or application information structure based on end user grouping and categorization of content.

Analysis with low user agreement may indicate:

* Different users use or understand information differently.
* Content that is not well understood.

Content that can be included in more than one area.

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| **Phase of Development​** | |
| ​​ | ​Planning, Scoping & Definition |
| **✔** | **​Requirements Gathering** |
| **​✔** | **​Early Design** |
| **✔** | **​Detailed Design & Development** |
| ​ | ​Field Testing |
| ​ | ​Deployment |
| ​​ | ​Post-Deployment |

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| --- | --- |
| **​Study Characteristics ​** | |
| ​**Timeframe** | 2 weeks |
| **​Level of Effort** | Low |
| ​**Data Collection** | Attitudinal |
| ​**Data Reporting** | ​Quantitative |

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| --- | --- |
| **​Related Methods ​** | |
| **Derived from** | NA |
| ​**Complimentary Methods** | [**Formative Usability Test**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Formative%20Usability%20Test.aspx) |
| **​Similar Methods** | NA |
| **​Follow-Up** | [**Visual Modeling**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Visual%20Modeling.aspx) |

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