Human-Computer Interaction

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CARDSORTING
Card sorting is a simple technique in user experience design where a group of subject experts or "users", however inexperienced with design, are guided to generate a category tree or folksonomy. It is a useful approach for designing information architecture, workflows, menu structure, or web site navigation paths.

Card sorting

Card sorting has a characteristically low-tech approach. The concepts are first identified and written onto simple index cards or Post-it notes.

Card sorting

The user group then arranges these to represent the groups or structures they are familiar with.

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- Your Librarian
- Around the Library
- Directions to Alden/Music/Annex
- Hours
- Phone
Card sorting

- **Card sorting.** Donna Spencer, Rosenfeld Media; 1ª edición (Abril 5, 2009), 978-1933820026.
Card sorting

• Donna Spencer:

  Card sorting is a great, reliable, inexpensive method for finding patterns in how users would expect to find content or functionality.
Types of card sorting

• Open Card Sorting
• Closed Card Sorting
• Hybrid Card Sorting
Types of card sorting

- Open Card Sorting:
  - Participants are given cards showing site content with no pre-established groupings.
  - They are asked to sort cards into groups that they feel are appropriate and then describe each group.
  - Open card sorting is useful as input to information structures in new or existing sites and products.
  - Open sorting is generative; it is typically used to discover patterns in how participants classify, which in turn helps generate ideas for organizing information.
Types of card sorting

• Closed Card Sorting:
  – Participants are given cards showing site content with an established initial set of primary groups.
  – Participants are asked to place cards into these pre-established primary groups.
  – Closed card sorting is useful when adding new content to an existing structure, or for gaining additional feedback after an open card sort.
  – Closed sorting is *evaluative*; it is typically used to judge whether a given set of category names provides an effective way to organize a given collection of content.
Types of card sorting

• Hybrid Card Sorting:
  – Participants are given cards showing site content with an established initial set of primary groups.
  – Participants are asked to place cards into these pre-established primary groups.
  – Participants can modify pre-established primary groups (add, delete, change name).
Advantages

• **Simple** – Card sorts are easy for the organizer and the participants.
• **Cheap** – Typically the cost is a stack of 3×5 index cards, sticky notes, a pen or printing labels, and your time.
• **Quick to execute** – You can perform several sorts in a short period of time, which provides you with a significant amount of data.
• **Established** – The technique has been used for over 10 years, by many designers.
• **Involves users** – Because the information structure suggested by a card sort is based on real user input, not the gut feeling or strong opinions of a designer, information architect, or key stakeholder, it should be easier to use.
• **Provides a good foundation** – It’s not a silver bullet, but it does provide a good foundation for the structure of a site or product.
Disadvantages

• **Does not consider users’ tasks** – Card sorting is an inherently content-centric technique. If used without considering users’ tasks, it may lead to an information structure that is not usable when users are attempting real tasks. An information needs analysis or task analysis is necessary to ensure that the content being sorted meets user needs and that the resulting information structure allows users to achieve tasks.

• **Results may vary** – The card sort may provide fairly consistent results between participants, or may vary widely.
Disadvantages

• **Analysis can be time consuming** – The sorting is quick, but the analysis of the data can be difficult and time consuming, particularly if there is little consistency between participants.

• **May capture “surface” characteristics only** – Participants may not consider what the content is about or how they would use it to complete a task and may just sort it by surface characteristics such as document types.
Method

1. A person representative of the audience is given a set of index cards with terms already written on them.

2. This person puts the terms into:
   1. Open: logical groupings, and finds a category name for each grouping.
   2. Closed: established initial set of primary groups.

3. This process is repeated across a population of test subjects.

4. The results are later analyzed to reveal patterns.

Preparation

Selecting participants:
The most important aspect of selecting participants is that they come from and are representative of your user group. (If you have multiple user groups, it is important to include a representative sample from each, as they may view the information differently).
Preparation

Number of cards:
Between 30 and 100 cards works well. Fewer than 30 cards typically does not allow for enough grouping to emerge and more than 100 cards can be time consuming and tiring for participants.
The test

Provide instructions to participants:
Instructions

• First of all, we’d like to thank you for coming. As you may be aware, we’re in the initial stages of (re)designing a (web site, product, intranet). In order to make it as easy to use as possible, we’d like to get some input from the people who will be using it. And that’s where you come in. We’re going to ask you to perform a very simple exercise that will give us some great insight into how we can make this (web site, product, intranet) easier to use.

• Here’s how it works. In front of you is a stack of cards. Those cards represent the content and functionality for this (web site, product, intranet). Working together, you should try and sort the cards into groups that make sense to you. Don’t worry about trying to design the navigation; we’ll take care of that. Also, don’t be concerned with trying to organize the information as it is currently organized on your (web site, product, intranet). We’re more interested in seeing how you would organize it into groups you would expect to find things in.
Instructions

• Once your groups are established, we’d like to have you give each group a name that makes sense to you.

• Oh, and one last thing. Feel free to ask questions during the exercise if you feel the need. I can’t guarantee that I can answer them during the exercise, but I’ll do my best to answer them when you’re finished.
Instructions (optional)

• If you feel that’s appropriate, you are allowed to make sub-groups.
• If you feel something is missing, you can use a blank index card to add it.
• If a label is unclear, feel free to write a better label on the card.
• If you think something doesn’t belong to any group, you can make an “outlier” pile.
The test

- Give cards to the users.
- Shuffle (change the order) of the cards for each user.
Problems

• With more than 50 cards the test can be very long, participants can get tired and the quality of results can be low:
  – More participants are needed to compensate low quality of results

• Difficult names: cards with names participants can’t understand

• Testing the test: before the real test, check how it works with 2-3 participants
Exercise 1

- Election website
• Candidate’s bio
• Election issues
• Press releases
• Campaign events
• Speeches
• Campaign donations
• Media coverage
• Campaign timeline
• Voter registration
• Website feedback
• Newsletter
• Endorsements
• Ask the candidate a question
• On-the-road journal
• Candidate’s record and accomplishments
• Let a friend know about this website
• Candidate comparison
• Privacy policy
• Frequently asked questions
• Related links
• Sitemap
• Volunteering
• Campaign staff
Exercise 2

• University website
• Presentation
• Students
• University management
• Technology Transfer
• In-company Internships
• Culture and sport
• Libraries and archives
• Study Programmes
• Admissions
• Study at the university
• Moodle
• International programmes
• Research and business
• Directory
• Information and Services
• Centres and Research Institutes
• Administrative organisation chart
• Alumni
• Centres and departments
• Technological resources
• Webmail
• **Instructions:**
  – Open card sorting
  – Choose a name for each group
  – You can’t add or delete option
  – One card in one group
DIGITAL CARDSORTING
All the things in all the right places.

Find the best way to organize your website by using the smartest user experience tools around.

- **Treejack**
  Know why and where people get lost in your content with tree testing

- **OptimalSort**
  Discover how other people organize your content with card sorting

- **Chalkmark**
  Reveal first impressions of designs and screenshots with first click analysis

- **Reframer**
  Take notes and find themes super fast with qualitative research for teams

You will love remote user testing with Optimal Workshop.
<table>
<thead>
<tr>
<th>Treejack</th>
<th>Free account</th>
<th>Paid account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unlimited surveys</td>
<td>Unlimited surveys</td>
</tr>
<tr>
<td></td>
<td>3 tasks per survey</td>
<td>Unlimited tasks per survey</td>
</tr>
<tr>
<td></td>
<td>10 participants per survey</td>
<td>Unlimited participants per survey</td>
</tr>
<tr>
<td></td>
<td>Customize survey logo and color</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set password and closing rules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set a redirect URL + screener criteria</td>
<td></td>
</tr>
<tr>
<td>OptimalSort</td>
<td>Unlimited surveys</td>
<td>Unlimited surveys</td>
</tr>
<tr>
<td></td>
<td>30 cards per survey</td>
<td>Unlimited tasks per survey</td>
</tr>
<tr>
<td></td>
<td>10 participants per survey</td>
<td>Unlimited participants per survey</td>
</tr>
<tr>
<td></td>
<td>Print/scan cards for moderated sort</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customize survey logo and color</td>
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<tr>
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</tr>
</tbody>
</table>
Welcome

Welcome to this OptimalSort open card sort demo!

In a real world scenario, your contribution would be used to help organize the content of our website. This time, have fun organizing content for Bananacom, our fictional telecommunications provider.

Continue
Before we begin
Please answer the questions below.

What BananaCom services (if any) do you currently subscribe to?
- Home Phone
- Internet
- Home TV
- Cell Phone
- Mobile Broadband

How many times per month do you use the BananaCom website?
- 0
- 1-3
- 4-10
- 10+
Step 1
Take a quick look at the list of items to the left.
We’d like you to sort them into groups that make sense to you.
There is no right or wrong answer. Just do what comes naturally.

Step 2
Drag an item from the left into this area to create your first group.
Bananacom Demo Results - OPEN

General

This OptimalSort card sort study was launched on 12 June 2015 and closed on 9 August 2015.
The latest response was received on 3 August 2015.

Participants

100 completed + 22 abandoned

122 people participated and 100 (81%) of those people sorted all 26 cards into an average of 6 groups.

Time Taken

- Lowest observed time: 1.03
- Lower Quartile: 3.43
- Median: 4.46
- 4.46 mins
| BananaCom's contact phone number | The email address to use for BananaCom help | BananaCom's freephone number | Career opportunities at BananaCom | How to set up my BananaCom email address | What to do when my cell phone has been broken or stolen | How to transfer my home phone number to my new house | Add-on services for my home phone | International calling rates for my home phone | Deals for home internet and phone bundles | The price of 3G Broadband data | A table of prices for cell phone plan options | A tool to calculate the best cell phone plan for me | 3G coverage map | Internet connection speed test | Change my home internet plan online | An online form to request a plan upgrade | Pay my bill online | The date that my next home phone and internet bill is due | TrueTone ringtones I can buy | Downloadable games for my cell phone | Accessories for my cell phone | Discounted cell phones | A list of the most popular cell phones | Purchase a cell phone online | Reviews of new handsets |
Actual Agreement Method

The Actual Agreement Method works best with 30 or more participants and will depict only absolutely factual relationships. We call this the Skeptical Dendrogram.