

## Card Sorting

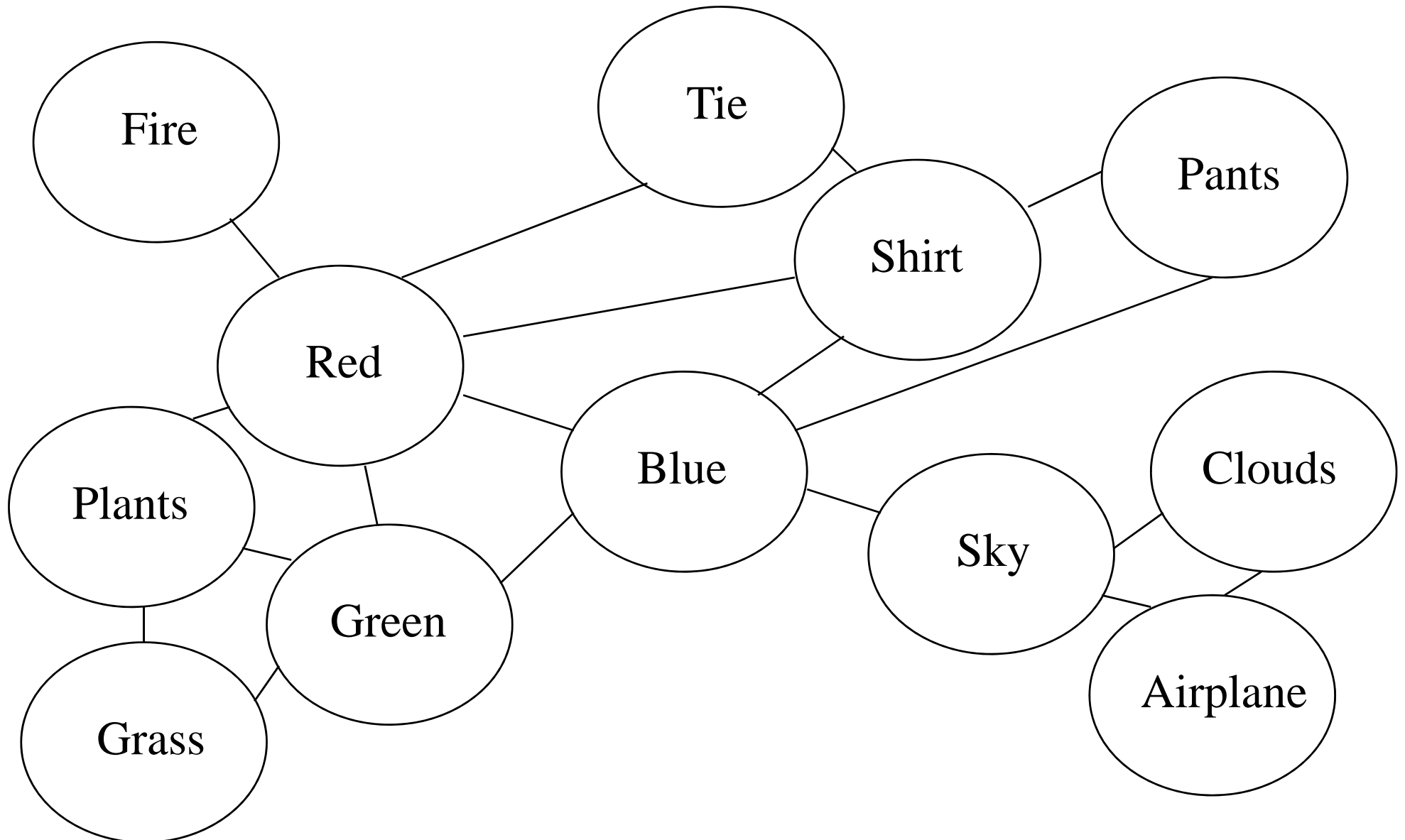
## Overview

- Introducing Card Sorting
- Major Approaches to Card Sorting
- Preparing the Card Sort
- Exploratory Card Sort Example
- Confirmatory Card Sort Example
- Card Sorting Tools
- Similarity Matching
- Affinity Matching

## What is Card Sorting?

- A method for determining how users mentally group your website's content
  - Results are derived from the semantic networks of the users
  - Semantic networks are vast webs of connections between concepts, determined by our learning and experiences

## Partial Semantic Network



## What Does Card Sorting Offer?

- **Insight into how content should be grouped**
  - Helps determine the hierarchy of pages (exploratory card sorting)
- OR*
- **Validation of chosen groupings**
  - Do the users put the same content in the same location? (confirmatory card sorting)

## When is Card Sorting Useful?

1. When you have established a content list
  - Explore how items on the list group together
2. After the initial organization and labeling are decided
  - Does your hierarchy hold up?
  - Or do users put things in different places?
3. When redesigning a website
  - Should the content stay in the same locations?  
Does it need a new label?

## Who Should Be Tested?

- Card sorting can be done with anyone, but ideally it is done with potential or actual users, as they possess:
  - Better knowledge of the content, so they have a clearer idea of how things are related and what is top-level, second-level, etc.
  - Familiarity with the common terminology used (most helpful if the website targets an audience that uses special terminology, such as a legal, financial, or medical audience)

## How Many Should Be Tested?

- Number of Users
  - 6-7 users is sufficient to see patterns
  - More users will provide more data, but once you get beyond 15 users there are diminishing returns
- Number of Cards
  - If you have lots of cards (more than 75), you may want to have the user sort half of them first, then sort the remaining half
  - This is less overwhelming to the user

## Major Approaches to Card Sorting

- Exploratory Card Sort
- Confirmatory Card Sort

## Exploratory Card Sort

- Also called an *open* card sort
- Takes a **bottom-up approach**: How does the content group together?
- Best if you only have a content list and need to determine an organizational structure (hierarchy) for the website

## Confirmatory Card Sort

- Also called a *closed* card sort
- Takes a **top-down approach**: Does our content all fit neatly (and as we planned or expected) into our hierarchy?
- Good when validating your newly developed hierarchy and its labels
- Useful when adding content to an existing site

## Preparing the Card Sort

- Purchase lots of blank 3 x 5 cards
  - Or make your own ‘cards’ from paper, post-it notes, etc.
- On each card, write either:
  - The name of the content or the page name (e.g., Pet Adoption Stories)

*OR*

  - A brief description of the page content (e.g., Stories about adopting pets)

## Pilot Testing is Essential

- Try them out on a colleague/friend/spouse
- The name you assigned to some content may be ambiguous (i.e., there are two ways to interpret the name of the page) so you switch to a short content description
  - Your card labeled 'Alumni' could either be **for** alumni or **about** alumni - it isn't clear.
  - You will want to change the label on the website and change the label on the card.

## Exploratory Card Sort Process

1. Orient the user (What is the site? Task?)
2. The user groups related cards into piles
3. The user assigns one label to each pile
4. Can the piles be subdivided further?
5. Label each of the smaller sub-piles
6. Sometimes further subdivision is needed
7. Record the groupings and labels
8. Repeat with another user

## Exploratory Example: 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		Volunteering
Sitemap		Campaign staff and openings

## Create Primary Groups

Candidate's bio

Candidate's record and accomplishments

Campaign staff and openings

Ask the candidate a question

Privacy policy

Website feedback

Sitemap

Related links

Election issues

Candidate comparison

Frequently asked questions

Press releases

On-the-road journal

Campaign timeline

Media coverage

Volunteering

Endorsements

Voter registration

Campaign donations

Speeches

Newsletter

Let a friend know about this website

Campaign events

## Label Primary Groups

### About the Candidate

Candidate's bio

Candidate's record and accomplishments

Campaign staff and openings

Ask the candidate a question

### Getting Involved

Volunteering

Endorsements

Voter registration

Campaign donations

Let a friend know about this website

### On The Issues

Election issues

Candidate comparison

Frequently asked questions

Privacy policy

Sitemap

Website feedback

Related links

### News & Events

Press releases

On-the-road journal

Campaign timeline

Media coverage

Speeches

Newsletter

Campaign events

## Create Secondary Groups

### **News & Events**

Campaign timeline

Campaign events

Newsletter

Media coverage

Press releases

On-the-road journal

Speeches

## Label Secondary Groups

### **News & Events**

#### **Events**

Campaign timeline  
Campaign events  
Newsletter

#### **In the Media**

Media coverage  
Press releases

### **News from the Candidate**

On-the-road journal  
Speeches

## Key Exploratory Issues

- Note which content is hard to categorize
  - Does it seem to ‘go’ in more than one pile?
  - ‘Pet Adoption Stories’ seems to fit into both the ‘Adoption’ pile and the ‘Testimonials’ pile
  - On the final website, you decide to put it in ‘Testimonials’, since it is mainly stories from satisfied customers, but in ‘Adoption’ you provide a ‘See Also’ link to the stories - some users will look for it there first.
- Is there any missing content?

## Record/Analyze Findings

- The result is a labeled hierarchy of the content; a possible website structure
- The labels assigned to the piles are suggestions only
  - Their real value is the insight they convey concerning *why* the cards were grouped
- Record your data, test more people, look for common groupings across users

## Confirmatory Card Sort Process

1. Orient the user (What is the site? Task?)
2. Lay out global navigation cards
3. User puts content cards under the appropriate global navigation label
4. Lay out cards with second-level labels
5. User subdivides content cards under new second-level labels
6. Lay out third-level cards and sort further

## Provide Global Navigation Cards

**About the Candidate**

**Related Links**

**Getting Involved**

**Sitemap**

**News & Events**

**On The Issues**

**Website Feedback**

**Privacy Policy**

## First Pass at Dividing Cards

### About the Candidate

Candidate's bio

Candidate's record and accomplishments

Campaign staff and openings

Ask the candidate a question

### Related Links

### Getting Involved

Endorsements

Voter registration

Campaign donations

Let a friend know about this website

### Sitemap

### News & Events

Press releases

On-the-road journal

Campaign timeline

Media coverage

Speeches

Newsletter

Campaign events

### On The Issues

Election issues

Candidate comparison

Frequently asked questions

### Website Feedback

### Privacy Policy

## Provide Second-Level Labels

### **News & Events**

Press releases

On-the-road journal

Campaign timeline

Media coverage

Speeches

Newsletter

Campaign events

**Events**

**News from the Candidate**

**In the Media**

## Further Subdivision Occurs

### News & Events

#### Events

Campaign timeline  
Campaign events  
Newsletter

#### In the Media

Media coverage  
Press releases

### News from the Candidate

On-the-road journal  
Speeches

## Key Confirmatory Issues

- Note which content is hard to categorize
  - Does the user put a content card in one global navigation pile, only to later say it should go in another global navigation pile when the second-level labels are shown?
- Does some content simply not fit?
  - If multiple users cannot 'place' certain content under any of the labels you give them, you have a problem!

## Record/Analyze Findings

- Does their final hierarchy match the one you created?
- Was certain content hard to categorize based on the labels you are using?
- Record your data, test more people, look for patterns across users

## Card Sorting Tools

- CardZort
- uzCardSort
- WebCAT
- WebSort
- MindCanvas
- UZ Cardsorting
- Socratic Cardsort
- Or use a spreadsheet (e.g., Excel)

## Pros and Cons of the Tools

### *Pros:*

- Less time (potentially much less) required for test preparation and data analysis
- Data is based on statistical analysis rather than on 'eyeballing' the groups
- Best if you have lots of users to test (if you want to test more than 10)
- Lots of variety – Flash, server-based, desktop versions, etc.

## Pros and Cons of the Tools

### *Cons:*

- The non-verbal communication is absent, as well as the hesitations and verbal comments that tell you so much
- Some programs are a little 'rough around the edges'; interfaces and interaction can be clunky and thus distort the results
- Limitations sometimes arise, such as the number of 'cards' that can be used

## Pros and Cons of the Tools

### *Cons:*

- Are not appropriate for every variation of card sorting
- The clusters that emerge are not labeled by the computer; you have to determine what those clusters represent
  - Cluster analysis also does not do a good job indicating lower-level clusters, which represent subnavigation areas

## Similarity Matching

- Have the user rate the similarity of every possible pair of content cards
  - Cluster analysis is used to determine how closely content items relate to one another
  - The cluster analysis creates the groups by crunching the numbers and seeing which items are rated as being most similar

## Limitations of Similarity Matching

- No labels are suggested for each cluster or 'pile' of similar items
- Requires the use of a computer for the analysis (unless you have lots of free time!) and there are no packages available that perform similarity matching
  - A general-purpose stats program can do the cluster analysis, but you have to configure the program to perform this type of analysis

## Affinity Modeling

- Affinity modeling focuses on visually recreating a semantic network
- Typically a whiteboard and post-it notes are used
- Lines are drawn between connected concepts, with one concept per post-it note
- Length of line and relative placement of the post-it notes indicates how strongly related concepts are to one another