

# Design and implementation of a web-based application for the maintenance of tags in social bookmarking services

Diploma Thesis Final Presentation

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- Change of the thesis title
- Tagging
- TACKO
- Goal
- Usability Evaluation Methods
- Plan and execution of the tests
- Demo
- Versions and improvements
- Table of main features vs groups
- List of main issues
- Conclusions
- List of possible improvements
- Challenges

- No sense to try the interface with hundreds of people when the main problems could be found by a small group of people
- Interface Usability Evaluation
- It is still true you can maintain the tags of diverse social bookmarking websites (delicious, flickr) and easily add importers for new websites

- Allows users to assign text labels to resources in order to facilitate the retrieval of these resources in the future
- Tags are more flexible while hierarchies are more structured
- Became popular with large content based websites like flickr or delicious among others
- Social tagging: Collectively classify and find resources

- System that uses the advantages of hierarchies on tags
- Improve navigability through tags
  - TACKO vs TagClouds



france friends fun garden geotagged germany girl graffiti green halloween hawaii holiday  
house india **instagramapp** iphone **iphoneography** island italia italy  
**japan** kids la lake landscape light live london love macro me mexico model museum

- Main ideas
  - Subsumptions
  - Facets

- Does the interface help the users understand the system?
  - Can users effectively use the system to search, organize and discover ?
- 
- Do the users understand the interface/system?
  - Which is the minimum information users need to understand the system?
  - Is it easy to learn?

## Inspection Methods

- Heuristic Evaluation
- Cognitive Walkthrough
- Action Analysis

## Test Methods

- Thinking Aloud
  - Constructive Interaction
- Field Observation
- Questionnaires/Interviews
- Logs Analysis

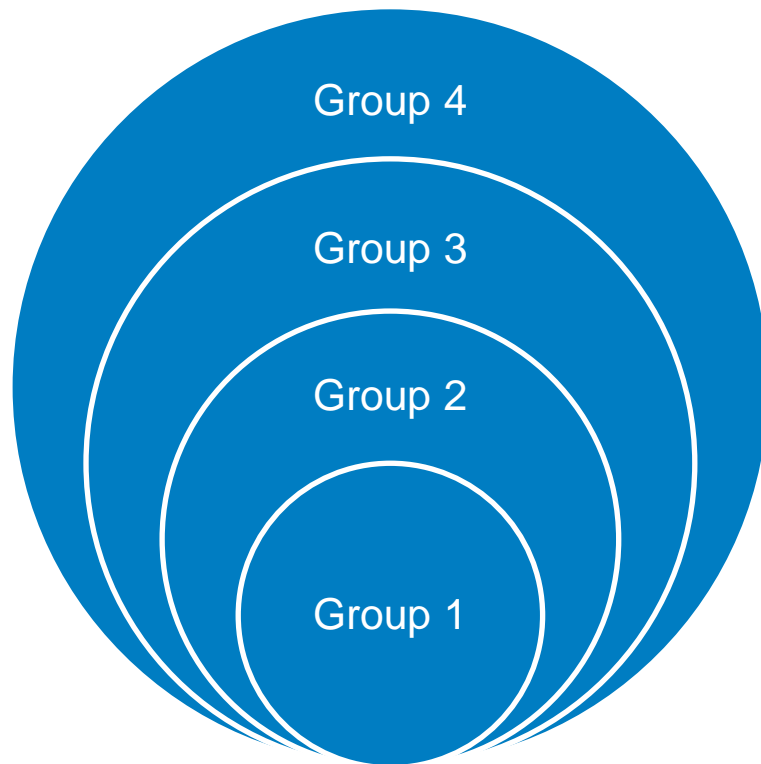
- Preparatory work
  - Development of a web-based application that integrates TACKO's interface
  - Pool of tags: Import tags from Delicious and Flickr
    - Use of external libraries: deliciousJ and FlickrJ



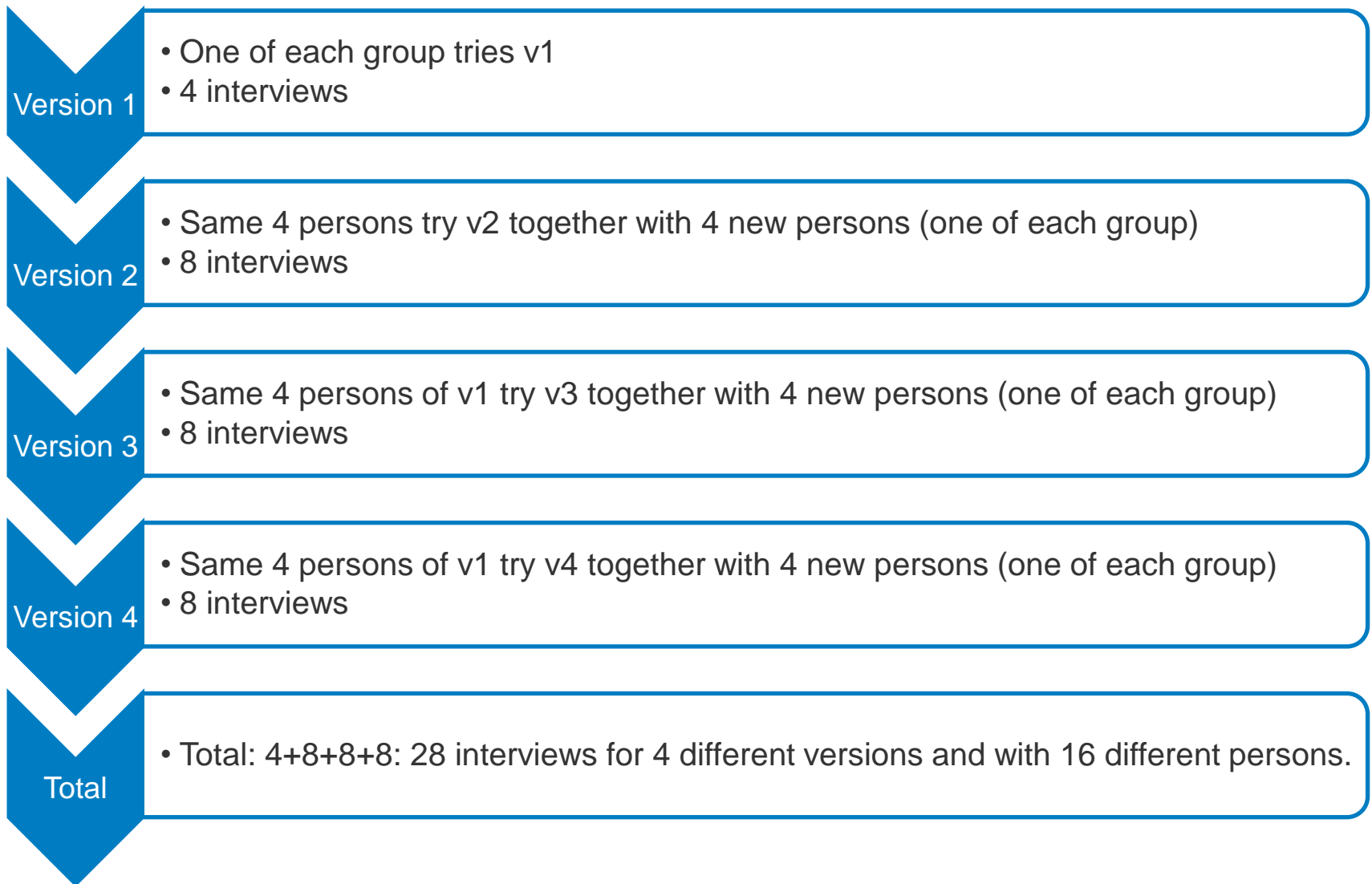
- Dataset
  - 506 well-tagged pictures
  - Flickr group with 40000 pictures
  - Some users have used their own accounts



- 4 groups of 4 people with different starting information



- Group 1  
Without information nor facets
- Group 2  
Predefined facets
- Group 3  
With explanation but no facets
- Group 4  
Predefined facets, explanation and examples



## Search

- Search for concrete resources
- Provide a picture and ask the users to find it

## Organize

- Organize the small dataset of tags using the facets

## Discover

- Explore the resources in the system using facets defined by other users

- Examples:
  - One with none of these
  - One with subsumption
  - One with the faceted tag suggestions
  - Define facets and show the dragging options

- List of selected tags by order of selection
- More limited breadcrumb
- Edit mode in the facetMenu
- Facets can be removed at once

Home > **norway** > **2011** >

<b>norway</b>	(231)
<b>2011</b>	(231)
<b>july</b>	(99)
<b>june</b>	(109)
none of these	(23)

 **Sheep**  
2011 july sheep top norway

 **Lighthouse**  
lighthouse 2011 sea july norway

- Selected tags
- Tags without occurrences don't appear in the facet
- Limited number of suggestions

The screenshot shows a search interface with the following elements:

- Breadcrumb trail:** Home > **norway** [X] > **2011** [X] > [ ]
- Suggestions:**

july	(99)
june	(109)
none of these	(23)
- Image:** A photograph of three sheep.
- Title:** Sheep
- Current tags:** 2011 [X] | july [X] | sheep [X] | top [X] | norway [X] |
- Tag selection panel:**

You can select tags from the columns below:

<b>norway</b>	2010	<b>july</b>
sweden	<b>2011</b>	june
- Form:** A dashed box labeled "Add tag".

- Doesn't show selected tags anymore (only breadcrumb)
- Faceted suggestions
- More suggestions

Home > **norway** X > **2011** X >

april	(0)
december	(0)
<b>july</b>	(99)
<b>june</b>	(109)
march	(0)
none of these	(23)

Add tag

**231 results were found**

 Sheep  
2011 july sheep top norway

 Lighthouse  
lighthouse 2011 sea july norway

- Shows tags without occurrences in the facet
- All drag&drop options are available
- None of these now shows other facets as well



# Table of main features vs groups

Impact of the previous knowledge on the understanding of the system.

Version 4	Group 1	Group 2	Group 3	Group 4
<b>Breadcrumb</b>	Yes	Yes	Yes	Yes
<b>FacetMenu</b>	Not at all	Slight idea	Yes, but with misuses	Yes
<b>None of these</b>	Slight idea	Slight idea	Yes, but with misuses	Yes
<b>Add/rm all</b>	Yes	Yes	Yes	Yes
<b>Resource edit mode</b>	Yes	Yes	Yes	Yes
<b>Faceted suggestions</b>	Not at all	Slight idea	Yes, but they search for alternatives	Yes, but they search for alternatives
<b>Drag &amp; drop</b>	Noone noticed	Noone noticed	Yes, but with misuses	Yes, but they make mistakes

- Tags without occurrences not being shown on facets
- Suggestions are very dependant on the quality of the tags
- No initial facets make the facet menu totally unintuitive
- Drag&drop indicators are totally overlooked
- Drag&drop can have multiple meanings: copy, cut, move in...
- Hierarchy in both directions can easily mislead
- Removing a tag from a facet removes it from all the other facets where that tag is
- No indicator for the deduced tags via subsumption
- Hard to undo some operations
- Inability to reorder facets
- Faceted suggestions are not representing their utility in a proper way
- Facets need to be deleted tag by tag

- Users are totally dependant on examples and an explanation
- The interface alone is powerful but no one really knows how to use it properly without previous knowledge
  
- Users generally agree on finding the system useful but not so easy to understand
  - Search: Traditional search complements the facetMenu, users being generally successful at this task
  - Organize: Varied approaches, some may conflict with the implementation
  - Discover: Very random, but users appreciate the knowledge of other users when it comes to group tags

- Rollback option
- Possibility to organize facets within a context
- Possibility to collapse facets (within a context)
- Indicators for deduced tags via subsumption
- Better indicators for the drag&drop options
- Alphabetical order is not always the best one
  - Possibility to reorder tags within a facet
- Editable resources without an edit mode
- Option to select resources from the list to execute an operation
- Improve the representation of the faceted suggestions

- Tricia
- Reuse of a lot of changing code
- Always evolving interface
- Few examples of usability evaluation on tag navigation systems

Thanks for your attention!