



Charting CHART: Usability Testing for Brooklyn Visual Heritage

Presented by:

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The Task

Pratt SILS UX Team

- Dr. Craig M. MacDonald, UX/IA Professor
 - 7 students
 - 4 months, weekly meetings
- Objective
 - create and carry out testing within CHART's parameters
 - provide documentation
 - analyze results
 - author a final report w/ recommendations
 - present to CHART stakeholders

The Task

Parameters

- Evaluate usability of Brooklyn Visual Heritage (BVH) website
 - identify problem areas while browsing/searching
 - assess users' overall impressions
 - early April deadline
- Target audience
 - Brooklyn residents
 - researchers who might visit physical collections
 - armchair historians
 - cultural heritage professionals
 - companies/businesses looking for historical images
 - local educators

The Method

Recruitment team e-mailed **107** people; **75** respondents; **44** selected; **18** participants

- Questionnaire was distributed to gather:
 - contact information
 - profession
 - familiarity with basic web functionality and applications
 - level of interest in Brooklyn history
- Demographics of selected participants:
 - **4** cultural heritage professionals/students
 - **4** educators
 - **3** librarians
 - **5** creative professionals
 - **2** other (non-cultural heritage student, content manager)

The Method

Materials team developed the following:

- pre-test questionnaire
- The Arnold Emotional Expression Test (AEET)
- post-test questionnaire
- affect grid
- three user tasks:
 - **Task #1:** “Look at this website and tell us about your first impressions. You can scroll around but don’t click on anything yet – just take a moment to look at the site and tell us what you think.”
 - **Task #2:** “Find an image that is interesting or meaningful to you in some way ... Once you find the image, learn as much as you can about it.”
 - **Task #3:** “Find 2 similar images to the one you just found and save or record them in any way you want. These images can be similar in any way.”

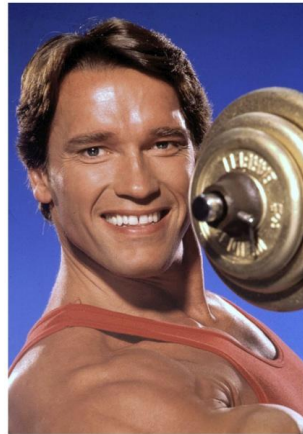
Arnold Emotional Expression Test



1



2



3



4



5



6

The Results: Quantitative

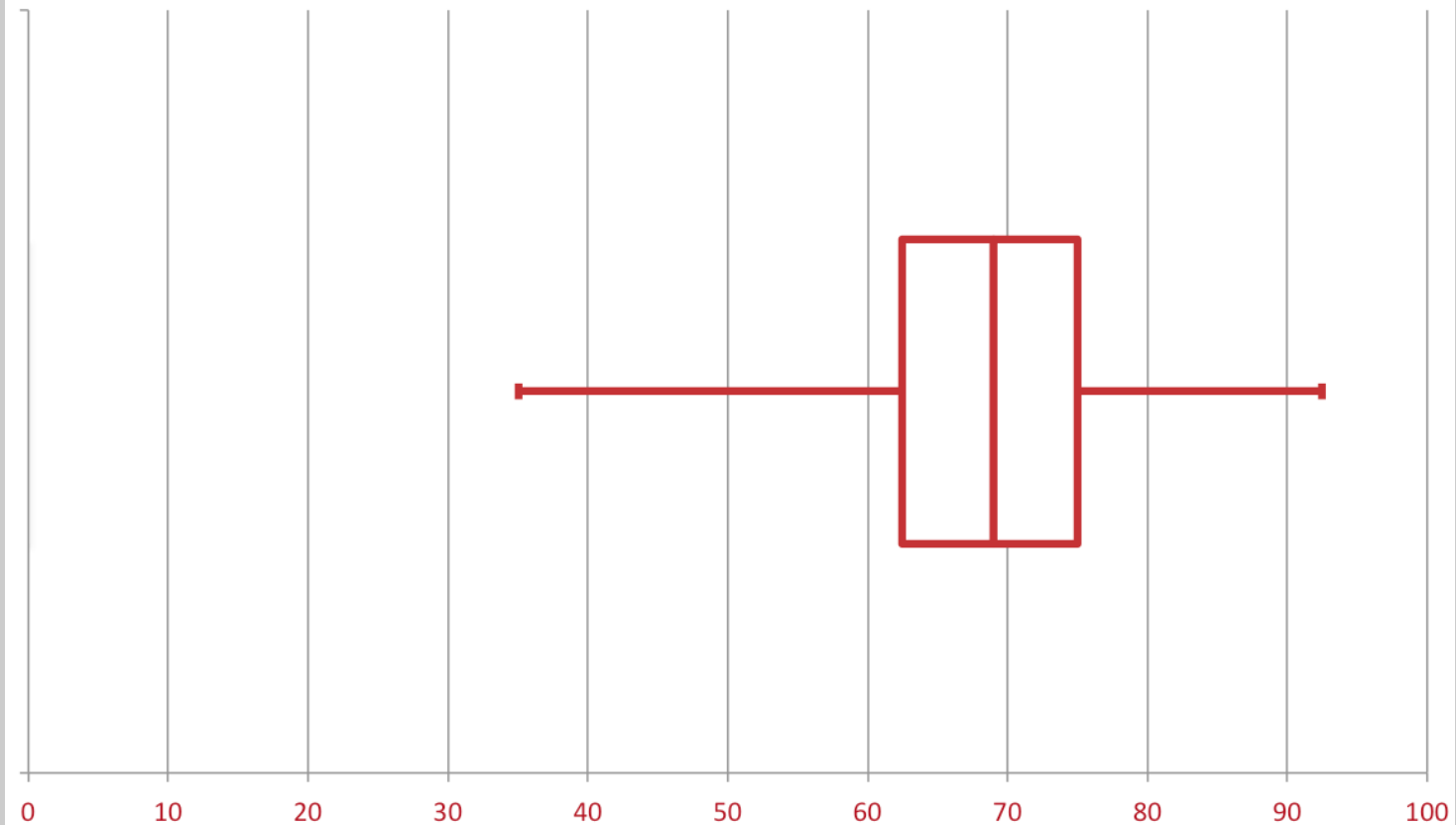
Post-test questionnaire

- **System Usability Scale (SUS)**
 - 10-item questionnaire on agree/disagree spectrum
 - combined, it measures overall usability
- **Supplementary questions**
 - 5 questions on a 1-7 scale (negative to positive)
 - 1 open-ended question
- **Affect Grid**
 - Users plot their overall experience on a chart of energy and pleasure levels

The Results: Quantitative

Post-test questionnaire: SUS score = 69

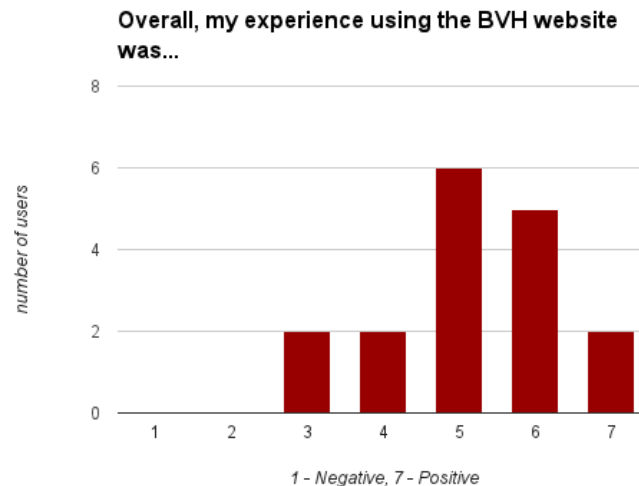
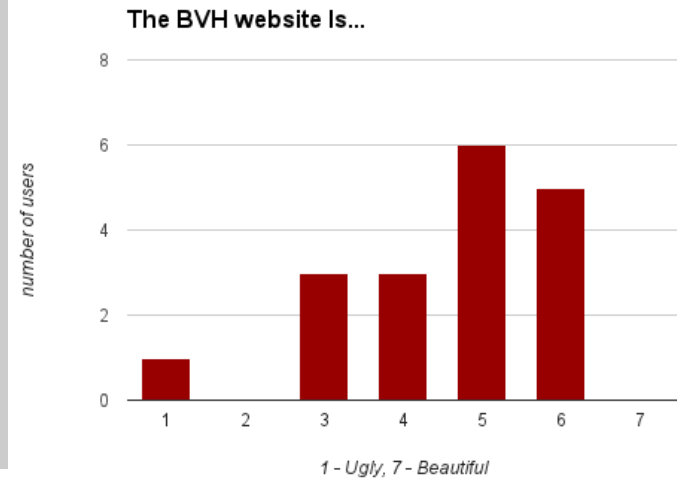
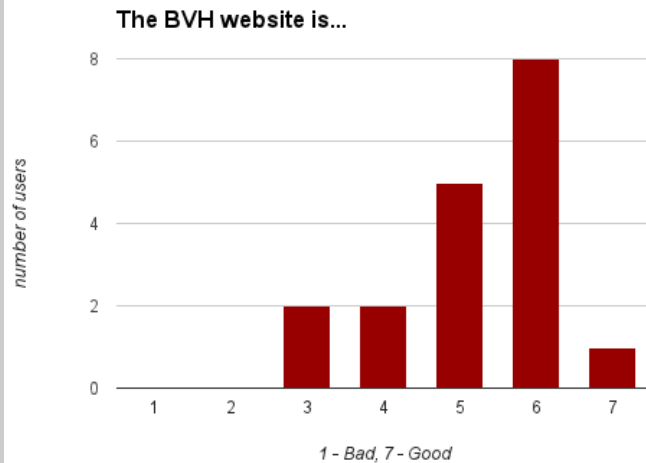
Boxplot of SUS Scores (n=17)



The Results: Quantitative

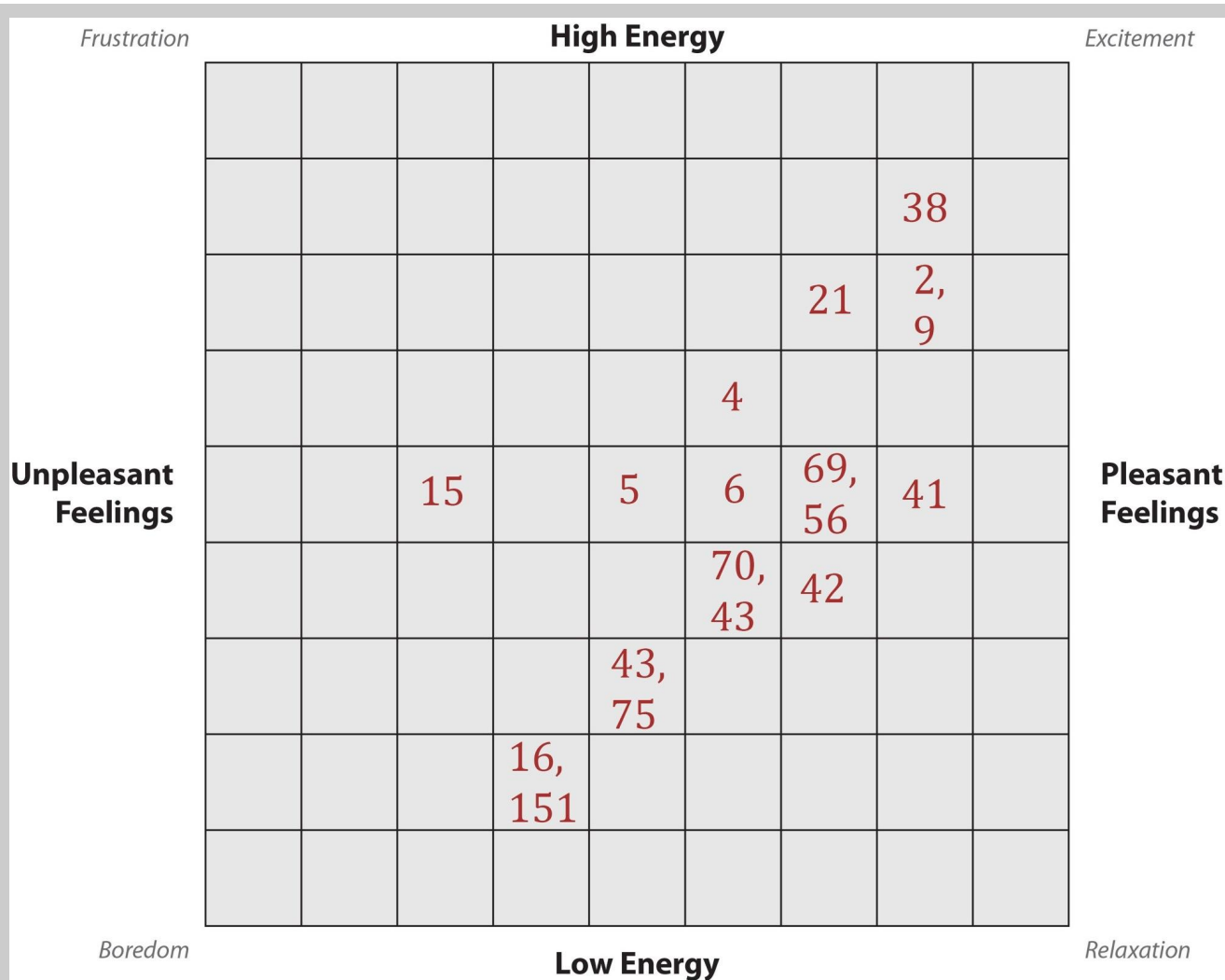
The BVH Website is...

Bad/Good, Ugly/Beautiful, Overall Negative/Positive Experience



The Results: Quantitative

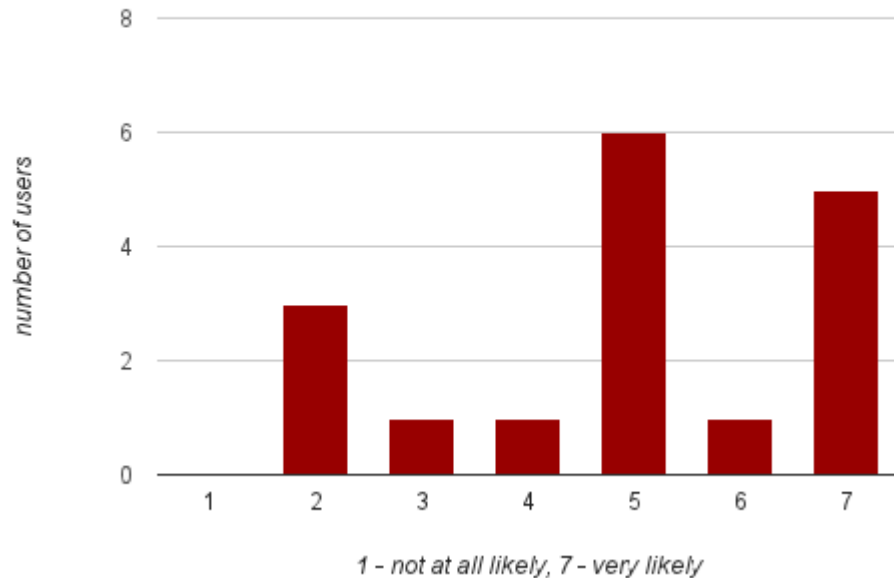
Affect grid



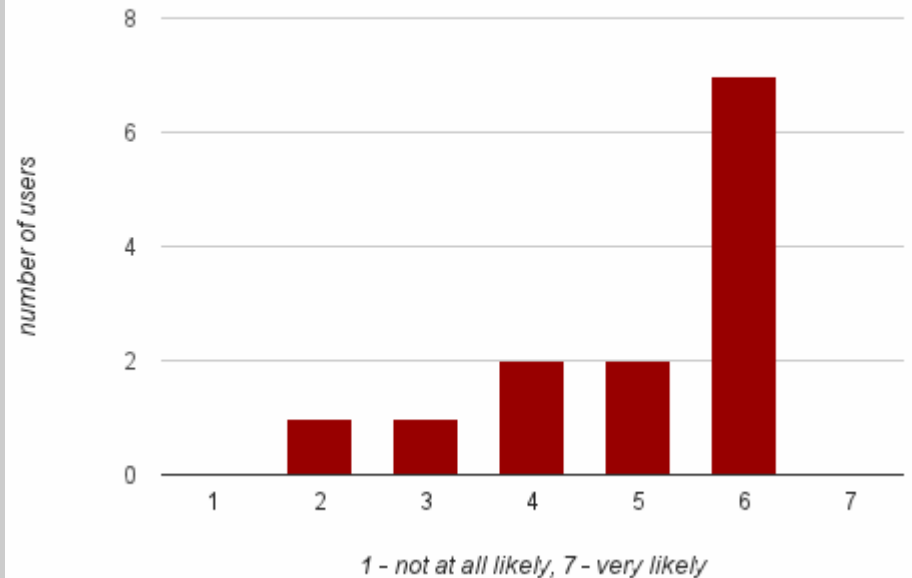
The Results: Quantitative

Would you use BVH again? Recommend it?

How likely are you to use the BVH website again?



How likely are you to recommend the BVH website to someone else?



BVH may not be for everyone, but almost everyone can think of someone who *would* like it...

The Results: Qualitative

Our user studies revealed several areas for improvement. By sorting our findings with an affinity diagram, we identified 7 major areas where usability problems occurred:

- Navigation
- Browsing
- Searching
- Advanced Search
- Image Descriptions
- Help, Documentation & Instructions
- Sharing

Sample Analysis: Advanced Search

Annotations:

- Not enough qualifiers to narrow search results:** Points to the search filters (Anywhere, With all of the words).
- Users confused by term:** Points to the "INSTITUTION" category in the guided search.
- Too robust for most users to peruse:** Points to the list of subjects under the "SUBJECT" category.
- Users do not expect to find Advanced Search here:** Points to the "Advanced Search" link in the top navigation bar.
- Users do not recognize this as synonymous with Advanced Search:** Points to the "More Options" link in the image search section.

Website Content:

BROOKLYN VISUAL HERITAGE PROJECT CHART

Home | **Advanced Search** | Collections | Blog | About | Tech Info | Resources

Home > Search Entire Site

SEARCH ENTIRE SITE

Keyword search

Anywhere

With all of the words

Search

Guided search

Click a term to initiate a search.

INSTITUTION

- Brooklyn Historical Society (4097)
- Brooklyn Museum (1352)
- Brooklyn Public Library (6330)

SUBJECT

- (1)
- 7 Sutherland Sisters (Brooklyn, New York, N.Y.) (1)
- A & P Supermarkets (1)
- A collection of photographs and plates from books. (37)
- A.B. Lee, M.D. (1)
- Abandoned buildings (49)
- Abandoned buildings studios (1)
- Abandoned buildings-7 (9)
- Abraham & Straus. (85)
- Abraham Lincoln High School (New York, N.Y.) (16)
- more...

IMAGE SEARCH

Search

More Options Help

IMAGE BROWSE

Collections Subjects

FOLLOW US @BKLYN_HERITAGE

The long & short of it: playing with lengths in an asymmetric spandex bodysuit. in #BedStuy. tinyurl.com/b9lgrus #fashionfridays

GALLERY

MOST VIEWED

Recommendations

Issue Description	Recommendation(s)
The top navigation bar doesn't offer relevant options for BVH's target users.	Reorganize the top navigation bar as follows: Home, Explore Images (By Subject, By Collection, By Location), Blog, About.
Users were confused and overwhelmed by the A-Z subject guide.	Eliminate the numbers on the A-Z subject guide and create more manageable intervals.
Users were overwhelmed and frustrated with the excessive scrolling and clicking required to navigate the subject headings list.	Arrange subject terms in columns above the fold so that users can scan more subject terms before they need to click to the next page.
Search results don't always match search terms, and users are unclear as to how to find specific images.	Emphasize search options to help users narrow search results more easily.
Users were confused by the placement, organization and functionality of the Advanced Search feature.	Revise the position and functionality of the Advanced Search feature.
The image title is not easily apparent on image description pages.	Make image title stand out more
Metadata fields on image description pages are arranged inefficiently.	Re-order the metadata according to importance.
The existing <i>About</i> and <i>FAQ</i> sections do not provide sufficient documentation.	Revise the structure of the About section to contain the following sections: About Brooklyn Visual Heritage and Project CHART, Research Guide, Using the Images, Tech Info, In the Press.

Conclusions

- 17 specific areas for improvement
- focus on realistically actionable items:
 - reorganize the navigation bar
 - refocus sidebar content
 - implement browsing & searching recommendations
 - reorganize image description pages
 - improve sharing & saving with Drupal's bookmark feature
 - improve the relevance of advanced search results
- Top “pie in the sky” recommendations:
 - faceted search function,
 - highlight geographic facet of image metadata