

I214: Usability analysis and reporting

February 21, 2013

USABILITY ANALYSIS

Quick qualitative analysis for quick tests

1) Group observations

By feature tested (ie, the editing toolbar)

By shared theme (ie, "Editing makes me feel stupid")

By underlying cause (ie, "People don't think they have anything to add")

2) List for each group

Observations

Quotations

Break the group into subgroups where necessary.

3) Name the groups

Providing reliable information

- providing trustworthy information: are the reviews accurate?
 - J: wants more than one review
 - M: wants link to Yelp
- providing accurate locations: are the locations accurate?
 - T: Cinematheque in ocean
 - J: Exploratorium????
 - M doubts phone numbers and addresses

Time-to-task: an example of quantitative analysis in usability

For $N < 25$ use geometric mean*

-Otherwise, compare median values

Examine distribution for outliers

Take *how* the test was conducted and moderated into account

Consider comparing numbers approximately

Consider reporting relative ratings rather than absolute numbers

*<http://www.measuringusability.com/average-times.php>

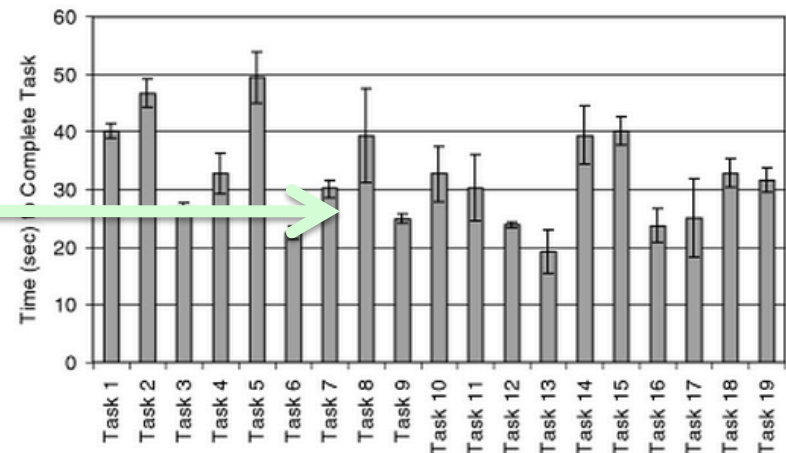


FIGURE 4.5

Mean time-on-task for 19 tasks. Error bars represent a 95 percent confidence interval. These data are from an online study of a prototype website.

USABILITY REPORTS

The three challenges of reporting

- 1) Delivering potentially challenging news
- 2) Efficiently
- 3) But *usefully*
- 4) And *convincingly*

efficient

Common Industry Format (CIF) report

(some details modified)

Title Page

Executive Summary

Introduction

Method

Results

Appendices

Main components of a Common Industry Format (CIF) usability report

Title Page	Product (and version, if necessary) tested
Executive Summary	Test: who led it, and when
Introduction	Report: date, author, and author contact info
Method	Customer company and contact person
Results	
Appendices	

Main components of a Common Industry Format (CIF) usability report

Title Page	
Executive Summary	Name and brief description of the product.
Introduction	Brief summary of method(s) including number(s) and type(s) of participants and tasks.
Method	
Results	Reason for and nature of the test.
Appendices	Summary of results

Main components of a Common Industry Format (CIF) usability report

Title Page

Executive
Summary

Introduction

Background description

Method

Test objectives

Results

Appendices



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Participants: *who* did we work with?

Context: *what* tasks were tested,
where, & *when*

Experimental design: *how* was it tested?

Metrics: *how* did we evaluate success?

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What did we learn?

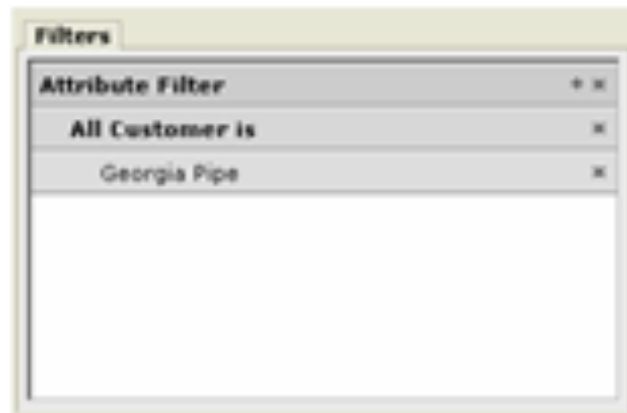
Appendices

Tables, charts, photographs, video

Recommendations (optional)



USABILITY TESTING REPORT – PRICE EXPLORER



Filter display - few noticed the filter edit button



After clicking the filter edit button, the current filters are shown in the Attribute Filter window.



But when clicking "Filter by Attribute", the current filters are not shown in the Attribute Filter window.

Editing filters

When asked to change the waterfall chart from showing Georgia Pipe to showing Liberty Plastics, only one of the participants used the filter edit button. It is the "+" icon to the left of the "x" at the top, right of the filter display area. Two tried to click directly on Georgia Pipe in the filter display area, thinking that would bring up the list of customers to choose from.

- "I don't want to clear filters and start over. I want to just go back to the customer list. [Tries clicking on Georgia Pipe] And there's no back button... It would have been easier to have a more obvious way to back up one step."

Two participants clicked the "Filter by Attribute" link and thought that selecting Liberty Plastics would replace Georgia Pipe. After adding Liberty Plastics, they did not notice at first that Georgia Pipe was still in the filter list. That was because clicking the "Filter by Attribute" link brings up a version of the Attribute Filter window that does not show the current filters selected on the right. Clicking the filter edit link brings up the Attribute Filter window with the current filters displayed on the right side. This inconsistency can cause these types of errors.

Recommendations:

- Open the Attribute Filter window when users double click on the items in the filter display area (e.g., Georgia Pipe).
- When filters are selected, clicking the "Filter by Attribute" link should open the Attribute Filter window with the current filters displayed in the "Filter Lists" box on the right side of the window (the same as it appears when the filter edit button

HISTORY

Checkboxes

- When asked to view only the business events in the history, 50% of the participants incorrectly unchecked all of the other checkboxes, including Accurate, Cellular, and No GPS.
- They did not understand the relationship between the top row of checkboxes and the second row.



Your goal: tell the story

By The Numbers

Users Rate the Site Much Lower than UCSF's Reputation

As in the moderated testing done last March, participants have a high opinion of UCSF but their experience using the site does not reflect the hospital's reputation.



Bolt|Peters
Usability Recommendations | UCSF website

Steps in Registration Process

32



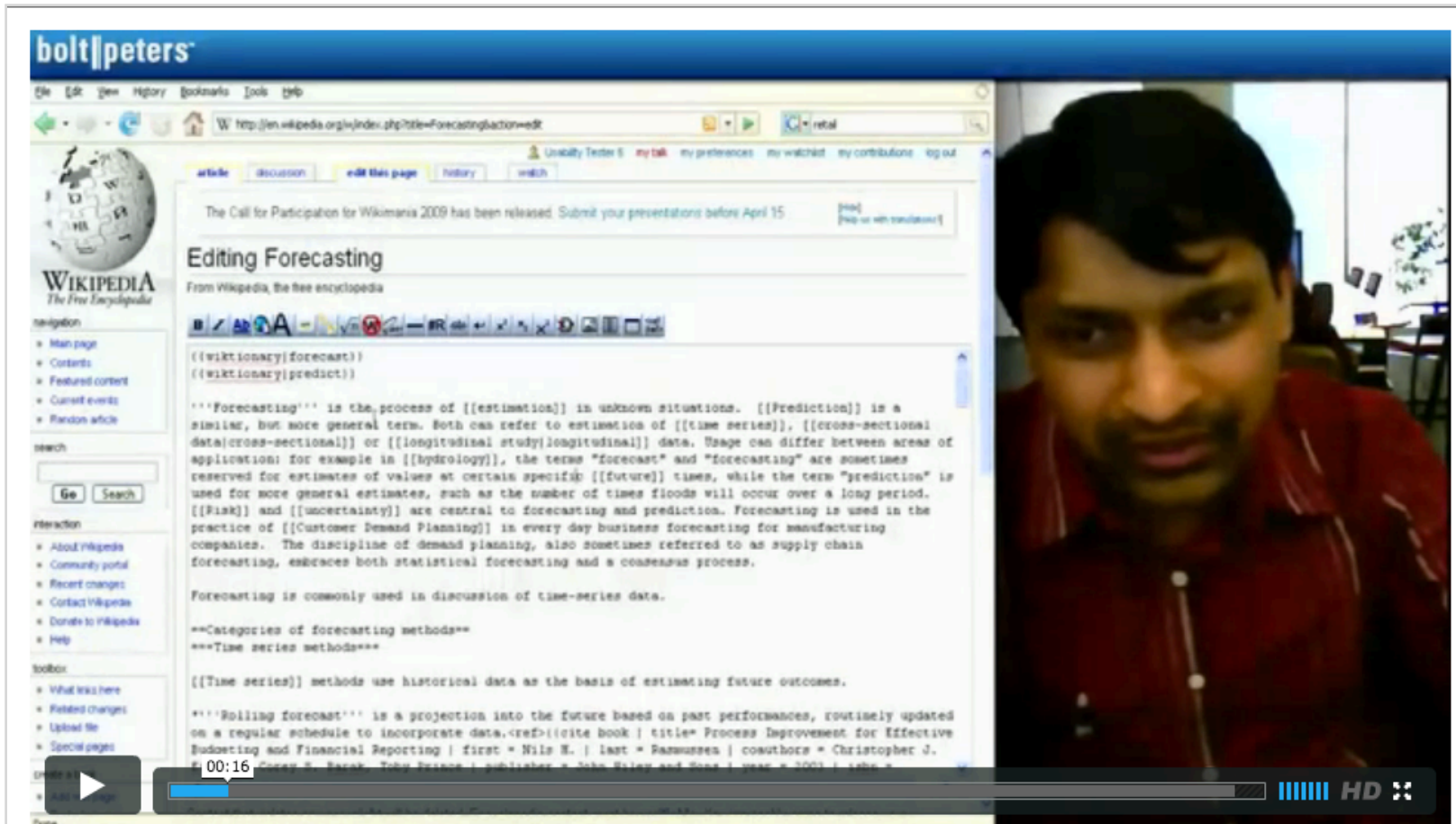
Too many steps involved

- 22 steps to register and set up a profile in the application
- The number of steps and the multiple security steps gave people a very negative opinion of the site
- "You have to do an awful lot to get this. I don't want to do this. I would probably give up."
- "It's a little lengthy. It's a little more than I would want to be bothered with. It's too complicated. Once you've registered, I feel that you shouldn't have to keep typing it in over and over again."

Recommendations:
Redesign this process to eliminate as many steps as possible

Jim Ross,
Communicating User Research Findings

Video highlights clips



The video player shows a man in a red shirt editing a Wikipedia article titled "Editing Forecasting". The browser address bar shows the URL: <http://en.wikipedia.org/w/index.php?title=Forecasting&action=edit>. The article content includes the following text:

```
((dictionary|forecast))  
((dictionary|predict))
```

'''Forecasting''' is the process of [[estimation]] in unknown situations. [[Prediction]] is a similar, but more general term. Both can refer to estimation of [[time series]], [[cross-sectional data|cross-sectional]] or [[longitudinal study|longitudinal]] data. Usage can differ between areas of application: for example in [[hydrology]], the terms "forecast" and "forecasting" are sometimes reserved for estimates of values at certain specific [[future]] times, while the term "prediction" is used for more general estimates, such as the number of times floods will occur over a long period. [[Risk]] and [[uncertainty]] are central to forecasting and prediction. Forecasting is used in the practice of [[Customer Demand Planning]] in every day business forecasting for manufacturing companies. The discipline of demand planning, also sometimes referred to as supply chain forecasting, embraces both statistical forecasting and a consensus process.

Forecasting is commonly used in discussion of time-series data.

==Categories of forecasting methods==
===Time series methods===

[[Time series]] methods use historical data as the basis of estimating future outcomes.

'''Rolling forecast''' is a projection into the future based on past performances, routinely updated on a regular schedule to incorporate data.<ref>{{cite book | title= Process Improvement for Effective Budgeting and Financial Reporting | first = Nils H. | last = Rasmussen | coauthors = Christopher J. ...</ref>

00:16

Done

b|p Editing Makes Me Feel Stupid - Wikipedia
from bolt peters PLUS 3 years ago NOT YET RATED

Severity ratings: pros and cons

Pro

Severity ratings help readers prioritize
Already made implicitly in organization of report

Con

May be based on incomplete information
Likely evaluator effect

**A compromise:
Use a simple,
user-centered
scale**

	Few users	Many users
Small affect	Low severity	Medium severity
Large affect	Medium severity	High severity

Specific recommendations: pros and cons

Pros

Facilitates *constructive* criticism

Moves discussion towards future, not regrets or blame

Cons

Do you have the credibility?

Can you make *good* recommendations under your time/expertise constraints?

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Full text of questionnaires

Interview protocols

Extra detail on research context, if necessary



Common challenges to usability reports

‘This is not statistically significant!’

Conflicting internal agendas

‘This user is stupid.’

‘User X is not our market.’

‘User X did Y; therefore, everyone must do Y’

‘They all hated the green, so we need to make it all white, like Google.’

Explaining stealth problems