# Reporting Usability Results
(Creating effective communication)

A Tutorial for User Friendly 2005
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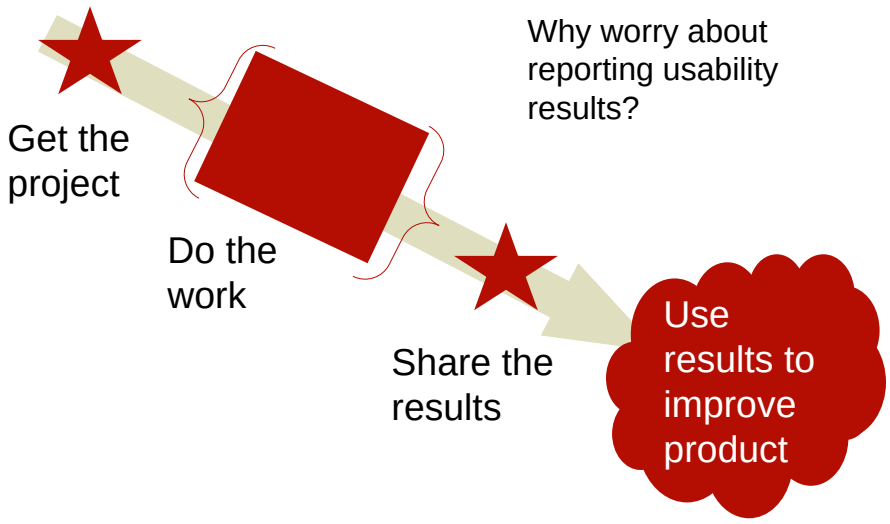
## Agenda

- Defining the problem
- Industry projects on reporting
- Understanding the audience
- Elements of usability reports
- Putting it together

## Defining the Problem




## Don't report…tell the story of what you learned

Stories

- Let one person persuade many
- Let the team think creatively
- Act as a springboard for change

| Method | Effectiveness |
|---|---|
| Documents | Low |
| Charts and diagrams | Limited |
| Rational argument | Limited |
| Dialogue | Impractical |
| **Storytelling** | **High** |

Adapted from Stephen Denning - www.stevedenning.com

## Industry projects on reporting usability

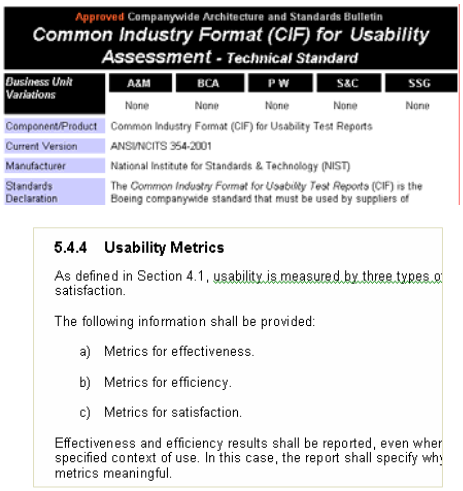
- Defining international standards
  - IUSR Project
  - ANSI standard for reporting summative usability tests
  - New project on reporting formative usability test
- What should be "standardized"?

## About the IUSR Project

- Industry Usability Reporting Project (IUSR)
- Started in 1998 and managed at NIST (US National Institute of Standards and Technology)
- Goal: Increase the visibility of software usability
  - Reduce uncontrolled overhead costs of poor usability
  - Encourage software suppliers and consumer organizations to work together
  - Define a process to support decision-making
- The Common Industry Format (CIF), became a US ANSI standard in 2001, and was approved as an ISO standard in 2005

## The Common Industry Format (CIF)

- ANSI/INCITS 354-2001
- Codifies best practice for describing a summative test and reporting the statistical results
  - Defines objective usability measures
  - Focuses on reporting usability metrics
  - Provides a description of the test to allow it to be repeated



Approved Companywide Architecture and Standards Bulletin

**Common Industry Format (CIF) for Usability Assessment - Technical Standard**

| Business Unit Variations | A&M | BCA | P W | S&C | SSG |
|---|---|---|---|---|---|
| | None | None | None | None | None |
| Component/Product | Common Industry Format (CIF) for Usability Test Reports | | | | |
| Current Version | ANSI/NCITS 354-2001 | | | | |
| Manufacturer | National Institute for Standards & Technology (NIST) | | | | |
| Standards Declaration | The *Common Industry Format for Usability Test Reports* (CIF) is the Boeing companywide standard that must be used by suppliers of | | | | |

**5.4.4 Usability Metrics**

As defined in Section 4.1, usability is measured by three types o satisfaction.

The following information shall be provided:

a) Metrics for effectiveness.

b) Metrics for efficiency.

c) Metrics for satisfaction.

Effectiveness and efficiency results shall be reported, even wher specified context of use. In this case, the report shall specify wh metrics meaningful.

## The CIF Template

The CIF is a template for a summative usability test report

- Title page
- Executive summary
- Introduction
  - Full product description
  - Test objectives
- Method
  - Participants
  - Context of the test
  - Tasks given to participants
  - Test facility
  - Equipment used
  - Experimental design
- Usability Metrics
  - Effectiveness (task completion, errors, assists)
  - Efficiency
  - Satisfaction
- Results
  - Data analysis
  - Tables with performance data
- Appendices
  - Questionnaires
  - Participant instructions
  - Task instructions

Join IUSR to get access to the research and full version of the CIF: www.nist.gov/iusr/

## IUSR Formative Usability Reporting Project

- The need
  - Most usability work is formative, not summative
  - The CIF was being adapted for reporting formative or informal usability tests
- Goals
  - Raise the level of visibility of usability
  - Promote best practices
  - Assist practitioners
- Two workshops
  - Boston – October 2004
  - UPA 2005 Workshop

## Definition of "Formative Usability Testing"

- A usability evaluation with:
  - Representative users
  - Realistic tasks
  - Some version (prototype, semi-working model, etc.) of the thing being evaluated
- And where the primary purpose of the evaluation is to guide improvement in the design for future iterations

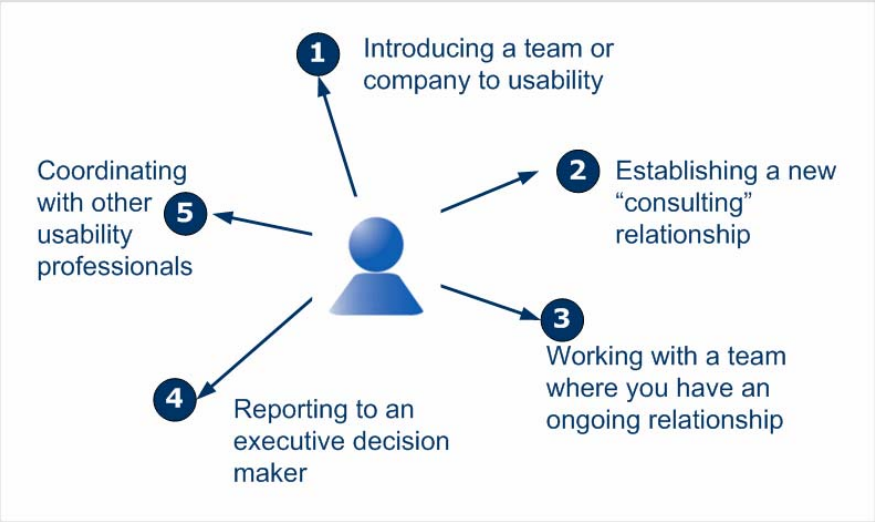
## Workshop groups worked on ...

- Reporting context and audiences
  - What are the contextual issues in usability reporting
- Elements of a report
  - What goes into a report…always, or just sometimes
- Reporting metrics
  - When, and how, to report on quantitative metrics
- Guidelines for reporting
  - How do we make decisions about reporting elements, style or audience

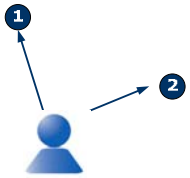
## Understanding audience and context

- A report is designed like any other interface!
  - Who is the audience?
  - What is our relationship to that audience?
  - How does this affect what and how we report?
- Do we practice user-centered reporting?

## Five contexts in which a report is presented




## Introducing yourself and usability




**In these contexts, the report must**

- **Teach**
- **Show credibility and**
- **Help gain acceptance for the recommendations**

1. **Introducing a team to usability**
   - Need to explain usability
   - Need to avoid jargon
   - Need to establish credibility of the methods
2. **Establishing a new consulting relationship**
   - Meet a new team, and introducing your approach
   - Learn their existing methodology and show how usability fits
   - Need to establish credibility

## Continuing an ongoing relationship


**In these contexts, the report must**

- **Communicate efficiently**
- **Talk professionally to your colleagues**

3. **Working with a team where you have an ongoing relationship**
   - You may be part of the team or a "consultant"
   - Need to work within expectations and processes you have established
   - Can take some "shortcuts" on areas of agreement or where the whole team participated
5. **Coordinating with other usability professionals**
   - You may be sharing usability results across projects or over time
   - May need more methodology details to satisfy other professionals
   - May need more data to allow comparison

## Reporting to business executives


**This is the most difficult context. The report must**

- **Be brief and to the point**
- **Teach (at a high level)**
- **Speak to business needs**

4. **Reporting to an executive decision maker**
   - Keep it short!
   - Focus on actions to be taken: recommendations and decisions that need to be made
   - Explain how the work was done, but avoid detailed discussions of methodology
   - Emphasize connection between business goals and recommendations
   - Consider a presentation instead of a report

## Four relationships between author and readers

| Report Documents Team Process | Report Feeds Team Process | Report Informs and Persuades | Report Provides Historical Record |
|---|---|---|---|
| Usability report author is part of the team | Usability report author is related to the team | Usability report author is external and possibly unrelated to the team | Time, distance, or relationship separates author from reader |
|  |  |  |  |
| The report<br>• Collects findings from the usability test<br>• Documents team process and decisions<br>• Acts as a team "memory" and work list<br>Might:<br>• Justify decisions<br>• Explain usability process to others<br>• Report to management on progress or decisions of team | The report<br>• Informs about new findings from the usability test<br>• Creates recommendations for the team<br>• Suggests next steps in the design and process<br>Might:<br>• Need to accommodate different levels of "firmness" in making recommendations<br>• Explain usability or process used to others<br>• Be used to lead or justify decisions made later by the team<br>• Report to management on progress or decisions of team | The report<br>• Informs and persuades<br>• Provides an "outsider view" to help the team move forward<br>Might:<br>• Need to stand alone<br>• Be read and reacted to by people who are hostile to usability input<br>• Be used to report to management on progress or decisions of team | The report<br>• Provides retrospective view of the usability test approach, method and findings<br>Might:<br>• Explain usability process used in the past<br>• Provide a high level of detail on the specifics of the test context<br>• Contribute to long-term analysis or decisions<br>• Be used as part of an overview to a team or management on ongoing usability activities or results |

## One report, or a collection of deliverables?


**TEST MATERIAL**

Scripts, surveys and other test materials

**TEST DATA AND INITIAL ANALYSIS NOTES**

Notes, logs and data from the usability session

Quick "memo of findings" (perhaps the notes from a team debrief)

Immediate "to do" list

**REPORTING TO THE TEAM AND OTHER STAKEHOLDERS**

Team notes or worklist

Formal report

Presentation or executive summary (stand-alone or to present report)

Video highlights as part of formal report or presentation

Next steps or long-term recommendations

Secondary reports, such as material for other teams

**ARCHIVAL DOCS**

Session audio/video

Logs and notes

Participant details

Scripts

Surveys

Prototypes

In many situations, the data from a usability test lead to multiple reports (or reporting formats) to satisfy different audiences and different contexts.
Ginny Redish, June 2005

## Elements of usability reports

- What should be included in a usability report
  - What information?
  - How much detail?
  - How to present it?
- Do different audiences need different information in a report?

## What's in a usability report

The "superset" of elements has more emphasis on description and explanation than the CIF template, and includes more detail on results and recommendations.

- Title page or front matter
- Executive summary
- Teaching usability
- Test background
- Method and methodology
- Overall test environment
- Participants
- Tasks and scenarios
- Results and recommendations
- Details of recommendations
- Metrics
- Quotes, screenshots and video
- Conclusions
- Next steps
- Appendices

The list of all elements is in the back of the workbooks, and published in the paper in UPA's Journal of Usability Studies

## Analysis of sample reports

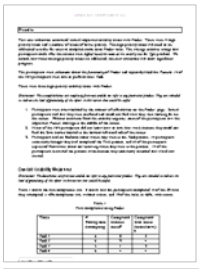
- The IUSR project analyzed 24 reports (some with more than one document)
- There was a lot of variation
  - No elements appeared in every report
  - Some elements were not used in any of the reports
- But most had some form of
  - List of participants
  - Findings or results
  - Recommendations

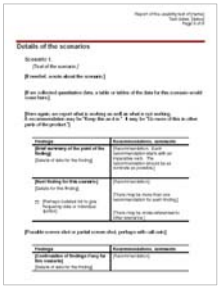
| | | | |
|---|---|---|---|
| **Tasks and Scenarios** | | | |
| E41 | Tasks | 67 | % |
| E42 | User-articulated tasks | 4 | % |
| E43 | Scenarios | 46 | % |
| E44 | Success criteria | 13 | % |
| E45 | Difficulty | 0 | |
| E46 | Anticipated paths | 8 | % |
| E47 | Persons on the task | 0 | |
| **Results and Recommendations** | | | |
| E48 | Summary | 63 | % |
| E49 | Positive findings | 67 | % |
| E50 | Table of observations or findings | 58 | % |
| E51 | Problems / Findings | 88 | % |
| E52 | Recommendations | 83 | % |
| E53 | Definitions of coding schemes | 17 | % |
| **Detail of Recommendations** | | | |
| E54 | Severity of errors | 25 | % |
| E55 | Priority | 13 | % |
| E56 | Level of confidence | 4 | % |
| E57 | Global vs specific | 13 | % |
| E58 | Classification as objective and subjective | 29 | % |

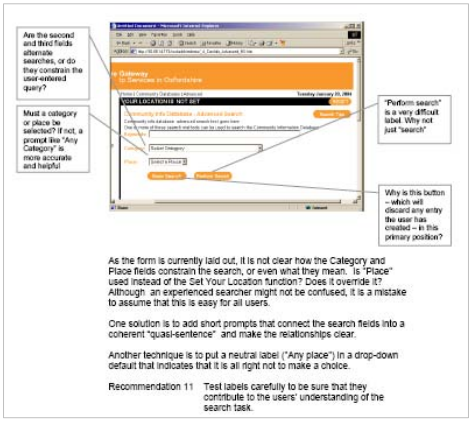
A summary of this analysis is published in the UPA Journal of Usability Studies

## There was a wide range of styles

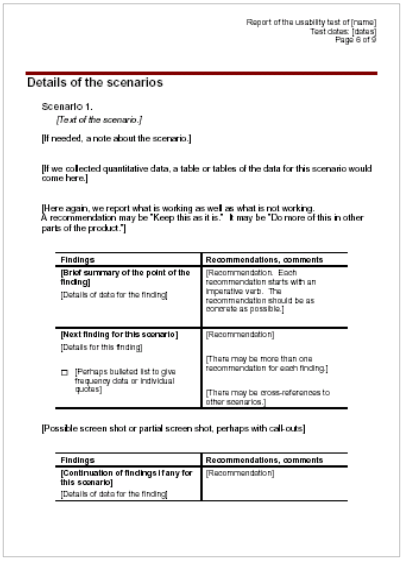
- Formal documents
- Documents and presentations with screen shots
- Documents with tables of tasks, findings and recommendations
- Spreadsheets or tables with lists of issues



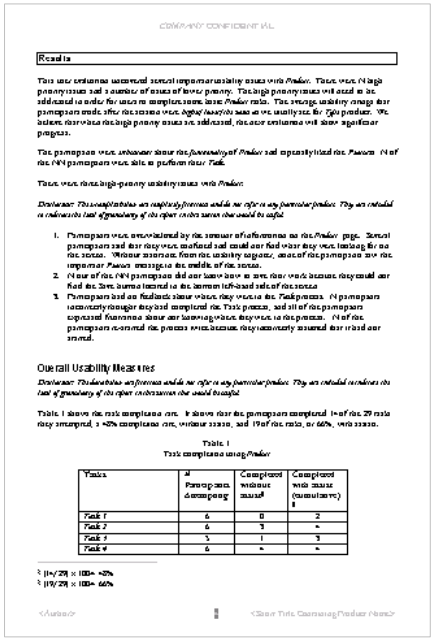






Organized by page, with lots of screen shots and callouts




Organized by scenario and user task

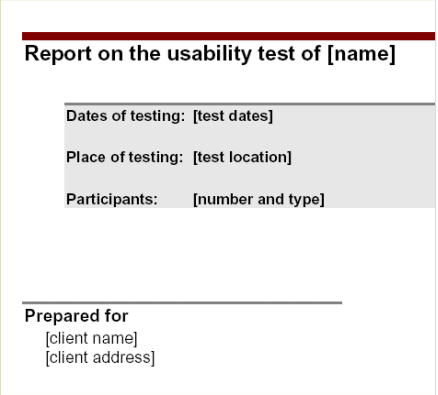



Classic document format


Presentation format

## Front page (or cover)

- Use the cover or first page to identify the test being reported
  - What was tested
  - When and where was the test conducted
  - Who conducted the test
  - Brief description of the participants



**Report on the usability test of [name]**

**Dates of testing:** [test dates]

**Place of testing:** [test location]

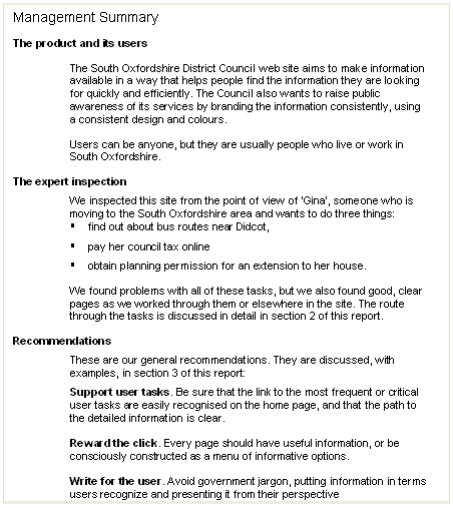
**Participants:** [number and type]

**Prepared for**
[client name]
[client address]

This example (from Ginny Redish) is one of the few that showed details of the *test* so clearly.

## Executive summary

- Use the executive summary to provide a 1-2 page overview of the most important findings and recommendations
  - Briefly define the project
  - Summarize overall usability level of product
  - List recommendations at a high level
  - Include positives!



Management Summary

**The product and its users**

The South Oxfordshire District Council web site aims to make information available in a way that helps people find the information they are looking for quickly and efficiently. The Council also wants to raise public awareness of its services by branding the information consistently, using a consistent design and colours.

Users can be anyone, but they are usually people who live or work in South Oxfordshire.

**The expert inspection**

We inspected this site from the point of view of 'Gina', someone who is moving to the South Oxfordshire area and wants to do three things:

- find out about bus routes near Didcot,
- pay her council tax online
- obtain planning permission for an extension to her house.

We found problems with all of these tasks, but we also found good, clear pages as we worked through them or elsewhere in the site. The route through the tasks is discussed in detail in section 2 of this report.

**Recommendations**

These are our general recommendations. They are discussed, with examples, in section 3 of this report:

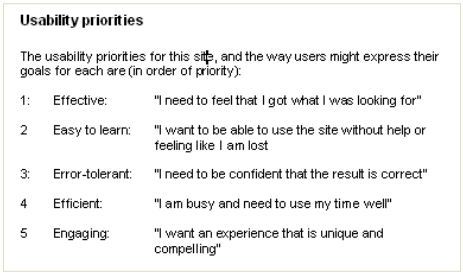
**Support user tasks**. Be sure that the link to the most frequent or critical user tasks are easily recognised on the home page, and that the path to the detailed information is clear.

**Reward the click**. Every page should have useful information, or be consciously constructed as a menu of informative options.

**Write for the user**. Avoid government jargon, putting information in terms users recognize and presenting it from their perspective

## Teaching usability

- Some reports always include general information to teach readers about usability.
- Useful:
  - Introducing a new team to usability
  - For an executive audience
  - But not for an ongoing relationship



**Usability priorities**

The usability priorities for this site, and the way users might express their goals for each are (in order of priority):

| | | |
|---|---|---|
| 1: | Effective: | "I need to feel that I got what I was looking for" |
| 2 | Easy to learn: | "I want to be able to use the site without help or feeling like I am lost |
| 3: | Error-tolerant: | "I need to be confident that the result is correct" |
| 4 | Efficient: | "I am busy and need to use my time well" |
| 5 | Engaging: | "I want an experience that is unique and compelling" |

This report included a brief description of the usability priorities we set for an expert review.

## Participants

- Include a summary of the participants that shows:
  - How many people you worked with
  - Demographics (relevant to the project)
  - Totals for different characteristics (especially for high numbers
- Formats
  - Table or list
  - Summary descriptions
  - Profiles or personas

| # | Name | Job/Title | 3.0 Experience | 4.0 Training |
|---|---|---|---|---|
| 1 | Jeannette | Trainer | Very experienced | None |
| 2 | Nicole | Training Developer | Experienced | None |
| 3 | Craig | Trainer | Very experienced | None |

| | Length of time online | Online usage | Child with |
|---|---|---|---|
| P1 | 2 years | 2x per week AOL | Daughter, 16 with therapy |
| P2 | 8 years | 1-2X per week Ask Jeeves | |
| P3 | 3 years | 1x week AOL | |
| P4 | 2 years | 3x per week AOL | |
| P5 | 6 years | Daily AOL E-Bay, WebMD | |

| | | |
|---|---|---|
| Total | 27 | Participants |
| Gender | 10 | Men |
| | 17 | Women |
| Ethnicity | 1 | Asian |
| | 4 | Hispanic |
| | 4 | African American |
| | 18 | Caucasian |
| Age | 2 | Under 40 |
| | 23 | 40-70 |
| | 2 | Over 70 |
| Education | 3 | High School |
| | 12 | Some College |
| | 4 | College |
| | 8 | Post Graduate |
| Relationship (some multiple relationships) | 7 | Family member |
| | 6 | Current Patient |
| | 8 | Survivor (Breast) |
| | 4 | Survivor (Prostate) |
| | 4 | Survivor (Other) |

## Participants

- These profiles of users for a poker web site, with a brief description of their style of play, prior background and success criteria described general market research

### The Tentative Player

This player may be an experienced gamer, used e-commerce sites, or has played "real" poker, but has not yet tried online poker.

Whatever his level of prior web experience, online gambling is new, and brings with it a whole new set of worries about using the Internet.

The site must pass the 'trust test' which includes both commercial trustworthiness *and* hesitations over downloading software (fear of viruses) and the risk of being added to spam lists.

To choose Full Tilt Poker, he needs:

- To be reassured that he can trust the site.
- Understand the mechanics (that the software must be downloads)

### The Casual Player

The casual player has tried other online gaming sites, including online poker. He finds it enjoyable, but it's still an occasional activity, not a primary method of entertainment.

This player is not afraid to try out a new game, but can be equally quick about leaving if there is a problem

To choose Full Tilt Poker, he needs:

- Feel the site is a good match to his reasons for playing
- Feel engaged by the site (and subsequent software)
- To not encounter any usability or trust barriers during download and initial play

### The Avid Player

Although an amateur, this user is an experienced and frequent player. He believes he plays poker well, and finds it a stimulating challenge.

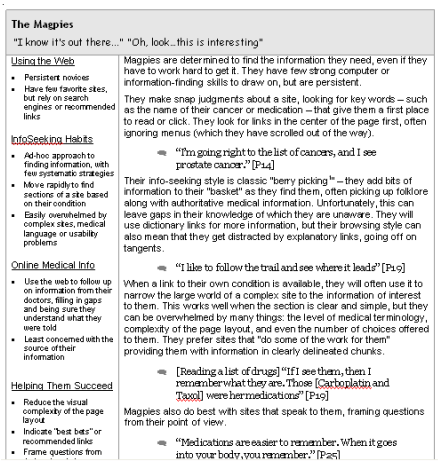
He has played online at other sites, and is familiar (and comfortable) with the basic mechanics of online play. The need to download software to play is familiar, and he has his own preferred methods for payment.

To choose Full Tilt Poker, he needs:

- For the site to offer a challenge or a more advanced style of play
- To feel engaged by the branding pitch
- To trust the site, based on personal trust requirements and past experience with other sites

## Participants

- These quick personas summarized the user analysis, putting participants into four groups

**The Magpies**

"I know it's out there..." "Oh, look...this is interesting"

Using the Web

- Persistent novices
- Have few favorite sites, but rely on search engines or recommended links

InfoSeeking Habits

- Ad-hoc approach to finding information, with few systematic strategies
- Move rapidly to find sections of a site based on their condition
- Easily overwhelmed by complex sites, medical language or usability problems

Online Medical Info

- Use the web to follow up on information from their doctors, filling in gaps and being sure they understand what they were told
- Least concerned with the source of their information

Helping Them Succeed

- Reduce the visual complexity of the page layout
- Indicate "best bets" or recommended links
- Frame questions from

Magpies are determined to find the information they need, even if they have to work hard to get it. They have few strong computer or information-finding skills to draw on, but are persistent.

They make snap judgments about a site, looking for key words – such as the name of their cancer or medication – that give them a first place to read or click. They look for links in the center of the page first, often ignoring menus (which they have scrolled out of the way).

> "I'm going right to the list of cancers, and I see prostate cancer." [P14]

Their info-seeking style is classic "berry picking" – they add bits of information to their "basket" as they find them, often picking up folklore along with authoritative medical information. Unfortunately, this can leave gaps in their knowledge of which they are unaware. They will use dictionary links for more information, but their browsing style can also mean that they get distracted by explanatory links, going off on tangents.

> "I like to follow the trail and see where it leads" [P19]

When a link to their own condition is available, they will often use it to narrow the large world of a complex site to the information of interest to them. This works well when the section is clear and simple, but they can be overwhelmed by many things: the level of medical terminology, complexity of the page layout, and even the number of choices offered to them. They prefer sites that "do some of the work for them" providing them with information in clearly delineated chunks.

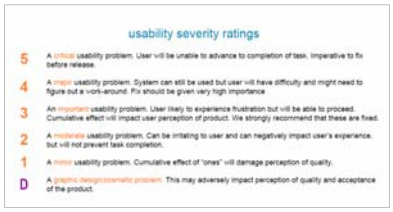
> [Reading a list of drugs] "If I see them, then I remember what they are. Those [Carboplatin and Taxol] were her medications" [P16]

Magpies also do best with sites that speak to them, framing questions from their point of view.

> "Medications are easier to remember. When it goes into your body, you remember." [P25]

## Prioritizing severity

- Should problems and recommendations be prioritized on a severity scale?
  - Some reports use formal severity scales
  - Some reports list recommendations in a general “priority order”
- If you use a severity scale define the levels in the report.


## Organizing results and recommendations

**By page or feature**

- Group by the location in the product where the problem occurred

**Advantages**

- Easy to see all the problems in one page or screen
- Useful when this maps to developer assignments

**Disadvantages**

- Each item is taken in isolation

**By task or scenario**

- Show problems as they relate to a complete task that the user might need to complete

**Advantages**

- User centered – focused on user path
- Not dependent on implementation
- Easier to find common interaction patterns

**Disadvantages**

- Doesn’t map as well to a work list

**By priority or severity**

- Put the critical recommendations at the beginning of the list

**Advantages**

- Focuses on most critical problems
- Works well for overarching design problems

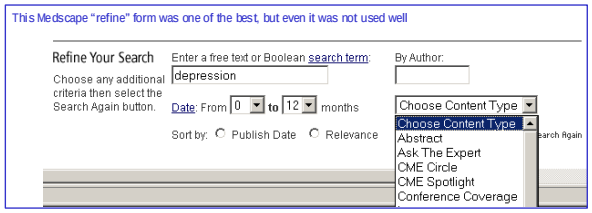
**Disadvantages**

- It can be hard to assign severity accurately

## Reporting problems

- This sample reports problems observed in a key area of the interface, but does not include recommendations.

- User typed the same words again
  - Changed the order
  - Replaced words with phrases
  - Used same words on a different site
  - Or just searched again
- Refining fields were not understood
  - They looked at them, and made no choices
  - Even users who cared about dates did not use date ranges
  - The most successful were article types… but even these were infrequently used




## Matching problems to recommendations

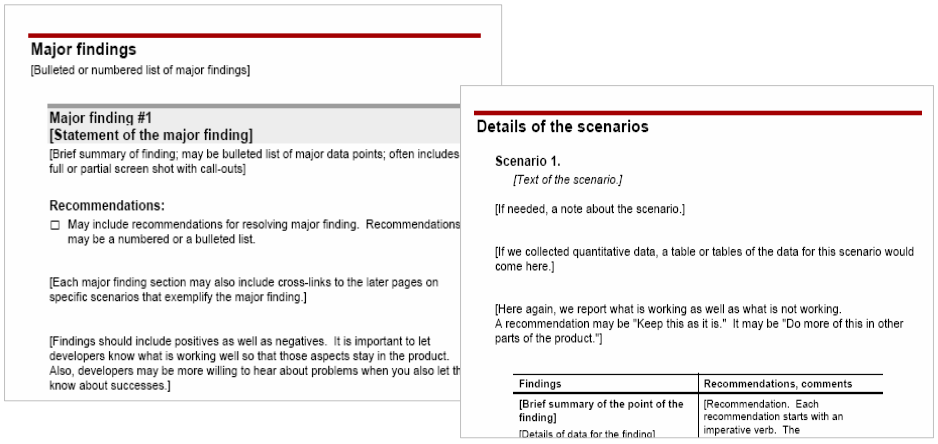
- In this example of a popular format, each problem is matched to a recommendation, and organized by severity.

Table 3: usability problems and recommendations

| Usability problem | Recommendation | Severity |
|---|---|---|
| 1 - Problem described in Full Detail | Recommended usability solution described in full detail here. | ★★★★★ |
| 2 - Problem described in Full Detail | Recommended usability solution described in full detail here. | ★★★★★ |
| 3 - Problem described in Full Detail | Recommended usability solution described in full detail here. | ★★★☆☆ |

## Recommendations summary and details

- In this template, one section summarizes the major findings, but all findings are listed in detail by scenario



**Major findings**

[Bulleted or numbered list of major findings]

**Major finding #1**
**[Statement of the major finding]**

[Brief summary of finding; may be bulleted list of major data points; often includes full or partial screen shot with call-outs]

**Recommendations:**

☐ May include recommendations for resolving major finding. Recommendations may be a numbered or a bulleted list.

[Each major finding section may also include cross-links to the later pages on specific scenarios that exemplify the major finding.]

[Findings should include positives as well as negatives. It is important to let developers know what is working well so that those aspects stay in the product. Also, developers may be more willing to hear about problems when you also let th know about successes.]

**Details of the scenarios**

**Scenario 1.**

*[Text of the scenario.]*

[If needed, a note about the scenario.]

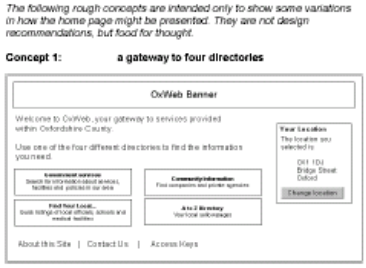
[If we collected quantitative data, a table or tables of the data for this scenario would come here.]

[Here again, we report what is working as well as what is not working. A recommendation may be "Keep this as it is." It may be "Do more of this in other parts of the product."]

| Findings | Recommendations, comments |
|---|---|
| [Brief summary of the point of the finding] [Details of data for the finding] | [Recommendation. Each recommendation starts with an imperative verb. The |

## Visual recommendations

- Graphical presentations of recommended solutions can help when there is not a simple list of actions to fix a problem



*The following rough concepts are intended only to show some variations in how the home page might be presented. They are not design recommendations, but food for thought.*

**Concept 1: a gateway to four directories**

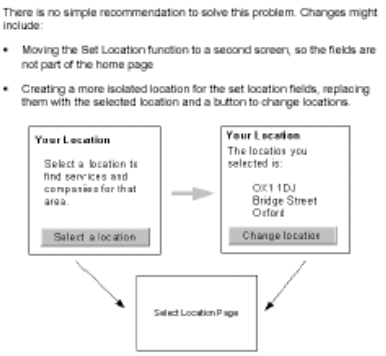
OxWeb Banner

Welcome to OxWeb, your gateway to services provided within Oxfordshire County.

Use one of the four different directories to find the information you need.

Your Location
The location you selected is:
OX1 1DJ
Bridge Street
Oxford
Change location

About this Site | Contact Us | Access Keys



There is no simple recommendation to solve this problem. Changes might include:

- Moving the Set Location function to a second screen, so the fields are not part of the home page
- Creating a more isolated location for the set location fields, replacing them with the selected location and a button to change locations.

**Your Location**

Select a location to find services and companies for that area.

Select a location

**Your Location**

The location you selected is:

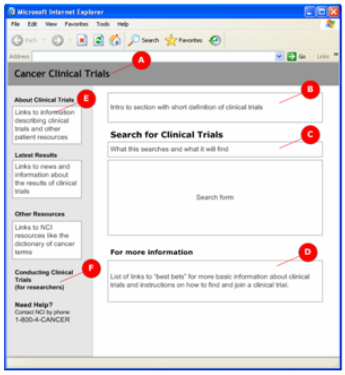
OX1 1DJ
Bridge Street
Oxford

Change location

Select Location Page

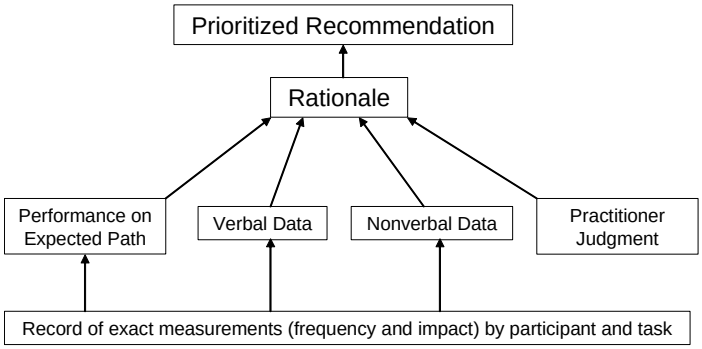
## Visual recommendations

- This report was organized entirely around wireframes illustrating recommendations for a new way to organize the interface




A. Create a consistent section title (like in cancer types)
B. Start with a basic, short definition of clinical trials to orient users
C. Provide a one-line description of what the search will find
D. Make a good transition to information below the form, with no "false bottoms"
E. Use left menu area for links to section features
F. Provide a minimal link to information for professionals

## Reporting metrics




**Task Level Measurements**

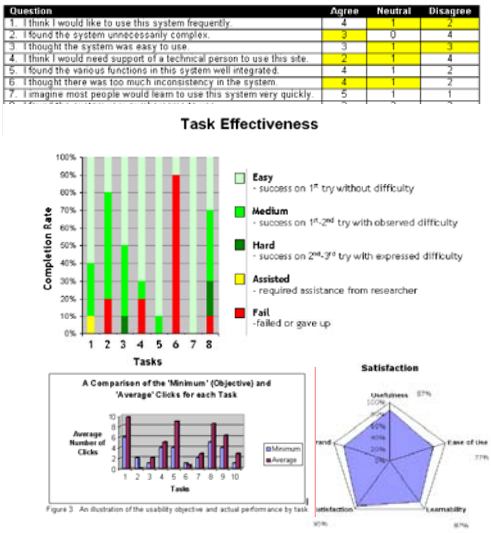
- Completion rates
- Completion times
- Satisfaction

**Event Level Measurements**

- Event descriptions
- Event analyses

## Reporting metrics

- Reports that included metrics also used graphs or some visualization to present the data
  - Highlighting in tables
  - Simple Excel bar charts and pie charts
  - More advanced graphs
- If you use graphs, make sure they are readable and communicate well.




## Controversies

- Let's talk about a few controversies, and see what you think:
  - Is a usability report complete without recommendations?
  - How many users do you need to *report* a problem?
  - Should you use quantitative values when there were just a few users?
- What do you think?

## Do you have to have recommendations?

- Is a usability test report complete if you have simply reported on what you observed, or must you recommend changes?

## How many users…

- How many users must experience a problem for it to be a valid finding to report?

  Are there some problems that don't need quantitative validation?

  Is number of people who encounter an error a good metric?

## Reporting quantity and statistics

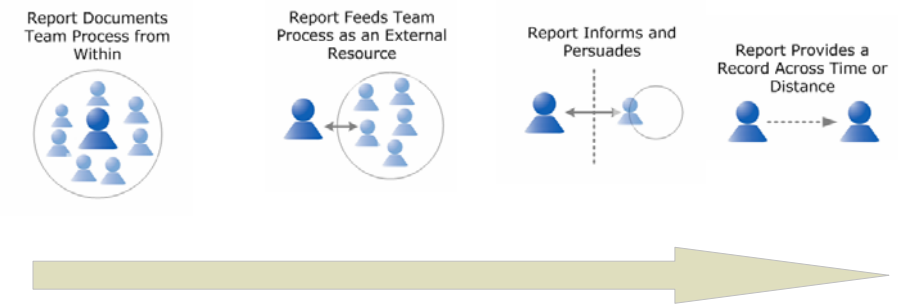
- If you only have a few users, should you report quantitative counts? Does it make sense to report that "50% of the users did…" if there were only six participants?

  What information should be reported as statistics?

## Putting it all together

- How do you "tell the story" for the most impact?
  - Consider your audience
  - Consider the goals of the report
  - Tell the business story
- Why not just use a research report format?

## What is the reporting context?




Shared experiences ……Report read out of context

Report documents ……Report persuades

Use “team language” …….. Use formal language

Shared project structure …….. Report must stand alone

## Case study: building consensus

- Context
  Two vendors (design and usability) working on a new web site
- Problem
  The design agency did not like the idea of being judged
- Challenge
  How to be sure that everyone would accept the results of the test

Our solution:

A team analysis session right after the test (literally – we started at 6pm)

As a team, we:

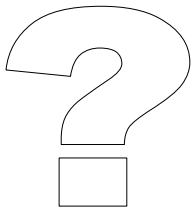
1. Agreed on what we saw during the test
2. Agreed on what it meant, what was the source of the problem (interaction, terminology, visual…)
3. Brainstormed a *general* solution (but did not make any final decisions)

Then:

4. We wrote a report that documented this work (along with other minor issues)
5. The designer created changes based on the general solutions we had agreed on

## Let's create an ideal report

- **Content**
  What elements are the most important, and which ones would you leave out?
- **Information Architecture**
  How would you organize the report?
- **Presentation**
  How would you present findings and recommendations?
- **Media**
  How would you deliver the report?



## Resources

- Industry Usability Reporting Project (IUSR)
  www.nist.gov/iusr/
- Reporting Formative Usability Test Results (A UPA Workshop Report)
  www.usabilityprofessionals.org/usability_resources/conference/2005/formative%20reporting-upa2005.pdf
- "Towards the Design of Effective Formative Test Reports" Mary Theofanos and Whitney Quesenbery, UPA Journal of Usability Studies, Issue 1, Volume 1, November 2005, pp. 28-46
  www.usabilityprofessionals.org/upa_publications/jus/2005_november/formative.html
- Steve Denning – The Leader's Guide to Storytelling: Mastering the Art and Discipline of Business Narrative
  www.stevedenning.com

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Whitney Quesenbery is a user interface designer and usability specialist with a passion for clear communication.

She is an expert in developing new concepts for product designs and has produced award winning multimedia products, web sites, and web & software applications.

Whitney is President of UPA - Usability Professionals' Association and is a leader in the STC Usability and User Experience Community.

Before she was seduced by a little beige computer into the world of usability, Whitney was a theatrical lighting designer on and off Broadway. The lessons and stories from the theatre stay with her in creating user experiences.

## Publications


**Dimensions of Usability**
in Content and Complexity
eds. Michael Albers, Beth Mazur.
Erlbaum, 2003


**Personas and Narrative**
in The Persona Lifecycle: Keeping People in Mind During Product Design
by John Pruitt & Tamara Adlin
Morgan Kaufmann Press,
February 2006

More articles and publications on my web site:

http://www.wqusability.com/publications