



The Politics of Usability

Overcoming Objections and Creating a Usability Culture

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About Andrea

- Technical communicator since 1983
- Online information presentation focus since 1989
- Consultant since 1995
 - User-centered design and development process and start-to-finish usability—analysis, design, testing
 - Focus primarily on software product user interfaces and interactive information systems, including Web
- Coordinator of two University of California, Santa Cruz, Extension technical communication certificates
- Society for Technical Communication Board of Directors

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Discussion Topics

- Understanding usability
 - Usability overview
 - Achieving usability through UCD&D
 - The typical usability adoption process
- Creating a usability culture
 - Characteristics
 - Skills and knowledge you'll need
- Objections and countering them
- Resources

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Understanding Usability

Understanding Usability

- What is usability?
- What *isn't* it?

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Understanding Usability

The Problem: Products Are Hard to Use

- Emphasis on products and selling, not end users—product *buyer* may *not* be *user*
- Design? What design? Designing usable products is difficult due to the human factor—need to understand users' mental models
- Development organizations have little to no process—forget user-centered!
- Information development processes are at the mercy of product development—typically not integrated



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Understanding Usability

How Usability Issues Affect Documentation

- Compensation for unusable products
- Documentation is a finger in the eroding dam of an unusable product
- We're losing the battle, because traditional documentation deliverables are not working



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Understanding Usability

The Solution: Usability

- One of many product characteristics—includes
 - Usefulness
 - Intuitive or intuitive
 - Ease of use (aka usability)
 - Ease of learning
 - Likeability
- A result of an iterative, user-centered design and development process



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Understanding Usability

Additional Product Characteristics That Affect Usability

- High-performance
- Maintainable
- Reliable
- Manufacture-able
- Functional
- Compatible
- Portable
- Localize-able/internationalize-able



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Understanding Usability

Usability Is Not...

- *Only* usability testing
- *Just* a back-end attempt to rectify design problems
- Occurring *only* late in the design/development process

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User-Centered Design and Development

User-Centered Design and Development Process

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    graph TD
      Analysis[Analysis] -- 3. design --> Design[Design]
      Design -- 6. Implement --> Dev[Development/Implementation]
      Dev -- 9. release/publish --> Product[Product/Process/Document]
      Product -- 10. maintain/support/improve --> Analysis
      Analysis -- 1. validate --> Validation[Validation/Evaluation]
      Validation -- 2. Inform --> Analysis
      Design -- 4. validate --> Validation
      Validation -- 5. Inform --> Design
      Dev -- 7. validate --> Validation
      Validation -- 8. Inform --> Dev
  
```

- "Required" phases/steps
- Validate analysis results/requirements; Incorporate results
- Validate design for usability; Incorporate results
- Validate Implementation for adherence to requirements/specifications; Incorporate results


Planning, Scheduling, and Tracking
Managing and Tracking
Technologies
Tools
Leading and Empowering People and Developing Careers


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Typical Usability Adoption Process

They're Doing It Backward!

- 1 Validation
- 2 Design (barely)
- 3 Analysis (maybe)




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Creating a Usability Culture

Creating a Usability Culture

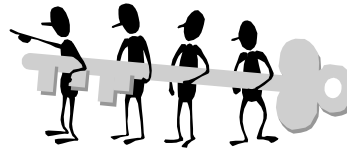
- What is a usability culture?
- Why is it important?

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Creating a Usability Culture

Your Goal: Attributes of Usability Organizations

- Phased approach to development that includes user input and feedback at all critical points
- Multidisciplinary team approach—especially to design
- Concerned, supportive management
- Individual contributors who are bought in and take responsibility for usability of product
- It's not one person's/ group's job (e.g., human factors)—it's *everyone's* job!



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Politics of Usability > Objections

Objections to Usability...

State some objections you've heard (or imagine you'd hear) about:

- ❶ Adopting validation in your organization
- ❷ Adopting design in your organization
- ❸ Adopting audience analysis in your organization

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...and Countering Them

- 1 Pick two objections.
- 2 Develop responses to those two objections.
- 3 Share your responses with the group.

We Can't Do That!

- Not enough time—takes too long
- No budget
- That's not how MS does it
- Should look just like the old one
- We're too late in the process to have any affect
- "Yes, we do usability" (not)
- Executives and management do design—and of COURSE it's intuitive



No. Absolutely Not.

- We're too geographically dispersed to do usability
- No, you can't talk to my users (typically, from sales or marketing)
- Perfectionism—we can't show any of it 'til it's all working/done

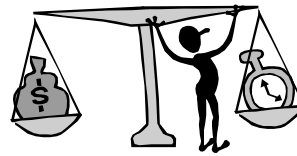
Build a Business Case

- Ask your organization:
 - How much does your product currently cost?
 - How much will your usability techniques cost?
 - How much will you save as a result of usability?
 - How much money is spent on support costs (when testing could find problems customer support representatives are solving on the phone)?
 - How much productivity is lost by users asking colleagues how to use product—or hunting in documentation—vs. doing their work?
- You need to understand your business!

Some Statistics

(Karat, IBM, 1992)

- Small product, used by a few thousand people
 - Usability cost \$20,700
 - Benefit \$41,700
- Larger product, used by over 200,000 people
 - Usability cost \$68,000
 - Benefit (during first year of implementation) \$6,800,000



Cost Arguments: Costs of Usability

(Dumas and Redish)

Costs of usability

- Build usability into product from beginning
- Test and fix iteratively before release


Politics of Usability > Strategies and Tactics

Cost Arguments: Costs *without* Usability

(Dumas and Redish)

- Spend money later on:
 - Fixing problems
 - Support calls
 - Training
- Spend more money now on documentation
- Get poor reviews
- Deal with unhappy/ unproductive customers and employees
- Lose customers and employees

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Politics of Usability > Strategies and Tactics

Cost vs. Benefit: Measuring Benefits

- Measuring costs is fairly easy
- Measuring benefits is harder
 - ① Conduct iterative usability tests with the same tasks
 - ② After each test, improve product based on test results
 - ③ Assume any improvement is result of improvement based on test results

∴ Thus, attribute any improvement in users' productivity to usability

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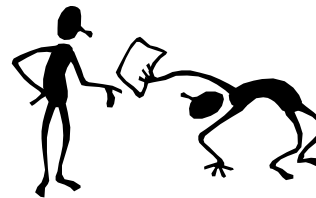
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Start Small, Measure, and Justify

- Do a little bit—shoestring tactics
- Measure, measure, measure!
 - What did it cost before? How long did it take?
 - How much did it cost to implement usability? How long did it take?
 - What did it cost after? How long did it take?
- Usability test to “prove”/justify going forward
- Document everything, including the process

Adopt a Demeanor to Earn Respect

- Act like a consultant
 - Speak the language of your objectors
 - Think strategically—outside the box
 - Provide alternatives, options, data—enable decision makers to make informed decisions
- Educate others
 - Start a usability interest group
 - Present at a brown-bag lunch

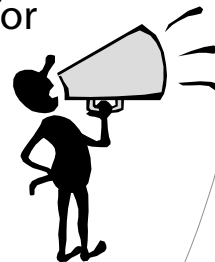


Do a Little Politicking—Don't Be a Lamb; Become (at least) a Survivor!

- Address each objector individually and gather their objections so you can address specifics; get details
 - What did they try, and why do they think it failed?
 - How do they think it might be made successful?
- Develop relationships with tech support, customer service, marketing, engineering to collect data and other support

Communicate, Communicate, Communicate!


- *Communicate* throughout the project—get buy in, help, and ownership for usability
- Clearly present trade-offs and options in reports and other documents



Politics of Usability > Strategies and Tactics

Implementing Changes After Testing


- Changing the product
- Changing the process

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Politics of Usability > Strategies and Tactics

Changing the Product

- Ensure everyone understands implications of *not* changing the product
- State these in report
- Make business case by comparing cost of changes before release with costs incurred by company due to unchanged product after release
 - Customer support
 - Lost revenue and market share
 - Lost work time
 - Lost reputation

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Changing the Product-Development Process

- Change attitudes about usability: Educate and seek support informally
- Change the design process: Try to determine if problems are related and generalize recommendations from specific problem to more global cause

Finding Out More

- Beyer, Hugh and Karen Holtzblatt, *Contextual Design: A Customer-Centered Approach to Systems Design*
- Bias, Randolph and Deborah Mayhew, *Cost-Justifying Usability*
- Carrol, John, *The Nurnberg Funnel*




Resources > Books and Articles

Finding Out More (cont.)

- Constantine, Larry and Lucy Lockwood, *Software for Use: A Practical Guide to the Models and Methods of Usage-Centered Design*
- Cooper, Alan *The Inmates Are Running the Asylum*
- Dumas, Joseph and Janice (Ginny) Redish, *A Practical Guide to Usability Testing*
- Hackos, JoAnn and Janice (Ginny) Redish, *User and Task Analysis for Interface Design*

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Resources > Books and Articles

Finding Out More (cont.)

- Nielsen, Jakob, *Usability Engineering*
- Redish, Janice C. and Judith A. Ramey, "Special section: Measuring the value added by professional technical communicators." *Technical Communication*, 42(1), 2/95
- Rubin, Jeffrey, *Handbook of Usability Testing*
- Velotta, Chris, ed.: *Practical Approaches to Usability Testing for Technical Documentation (STC)*

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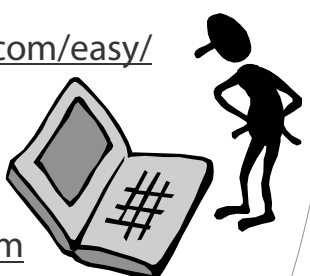


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Resources > Books and Articles

Finding Out More (cont.)

- IBM's Ease of Use site: www.ibm.com/easy/
- uidesign.net Interaction Design Webzine: www.uidesign.net
- Usable Web: www.usableweb.com
- Jakob Nielsen's site: www.useit.com
- Ask Tog: www.asktog.com



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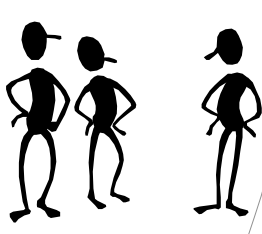


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Resources > Books and Articles

Finding Out More (cont.)

- Usability Professionals' Association (www.upassoc.org)
- STC's Usability SIG (www.stc.org/pics/usability/)
- ACM's SIGCHI (www.acm.org/chi/)



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