


User Interface Software Projects

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Interaction design tools



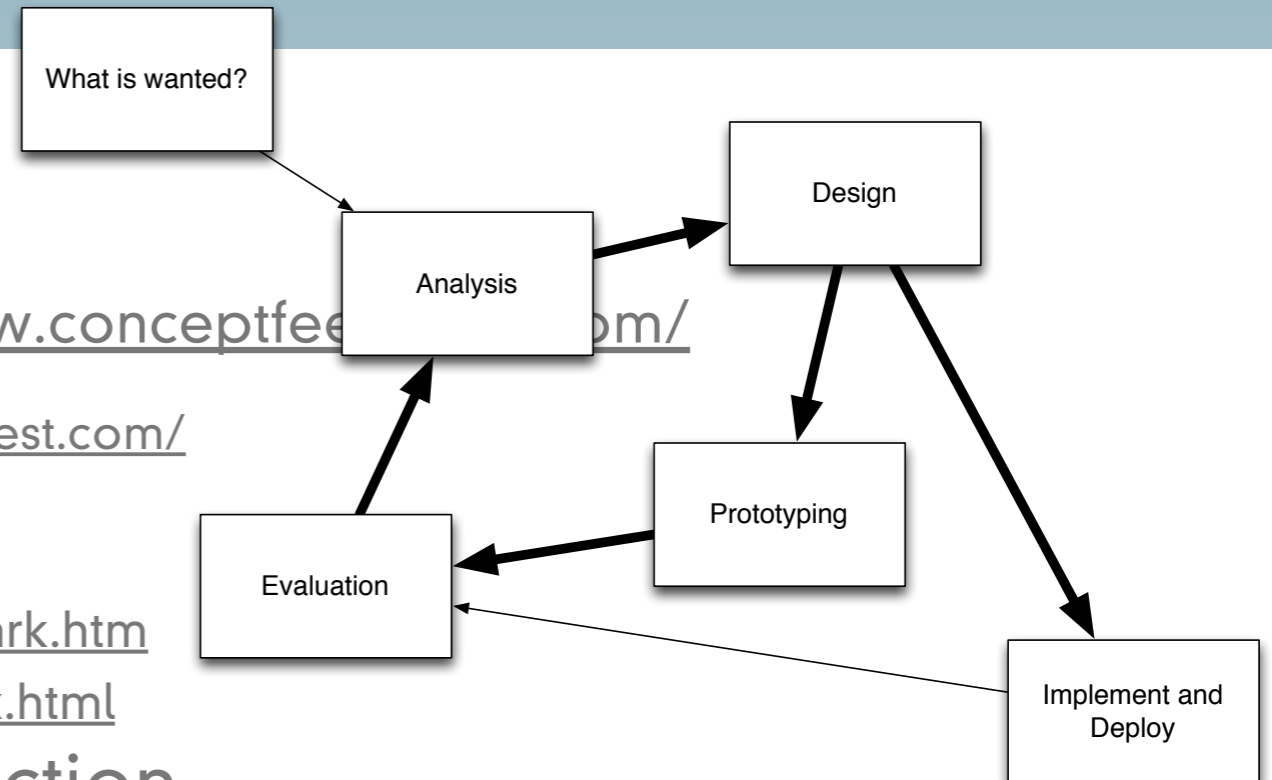
Survey Tools

- EEE Tools Survey
 - <https://eee.uci.edu/toolbox/survey/published.php>
- Survey Monkey
 - <http://www.surveymonkey.com/>
 - Supports Targeted Audiences
- Google Forms
 - <http://youtu.be/xEY10Ub-k-U>
- Mechanical Turk
 - <https://www.mturk.com/mturk/welcome>
- Audiences
 - Social Sciences Pool
 - http://hsl.ss.uci.edu/hsl_experimenter-info
 - mailing lists
 - Survey Monkey
 - Lotteries



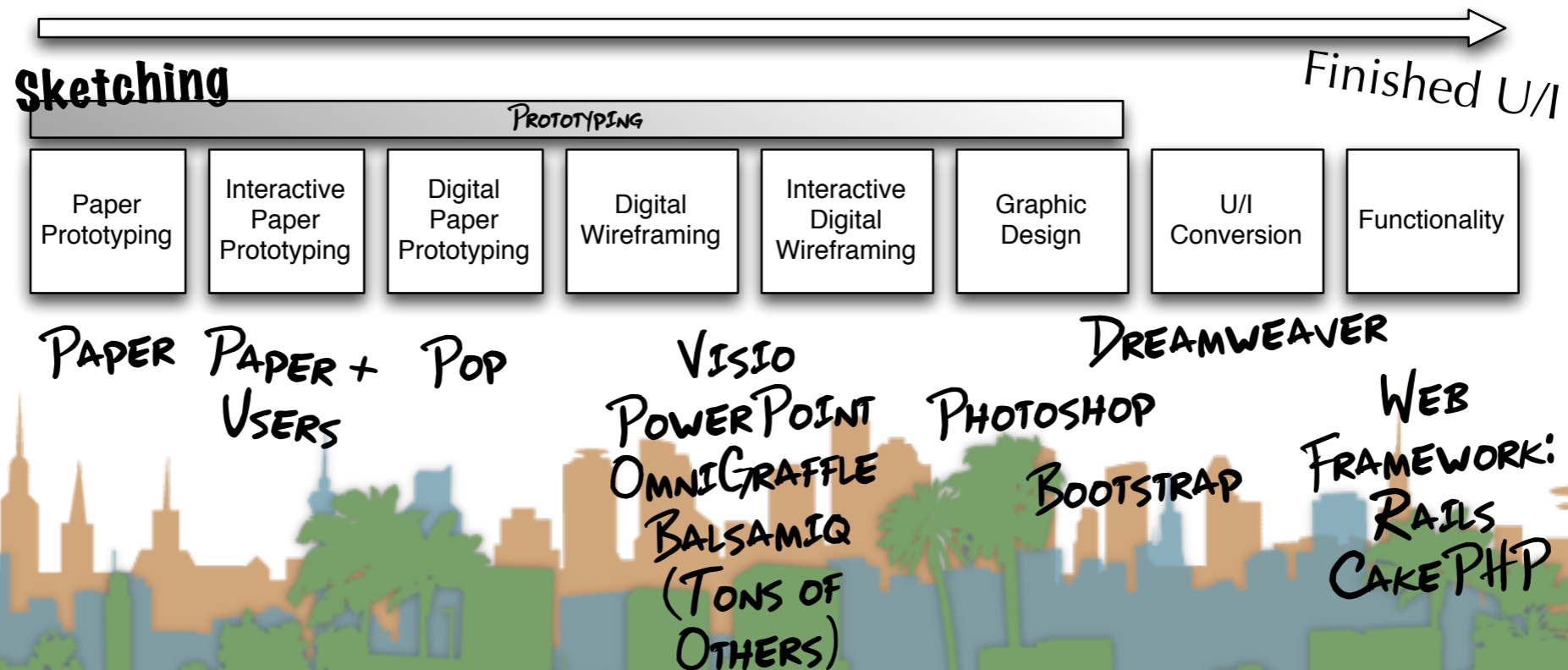
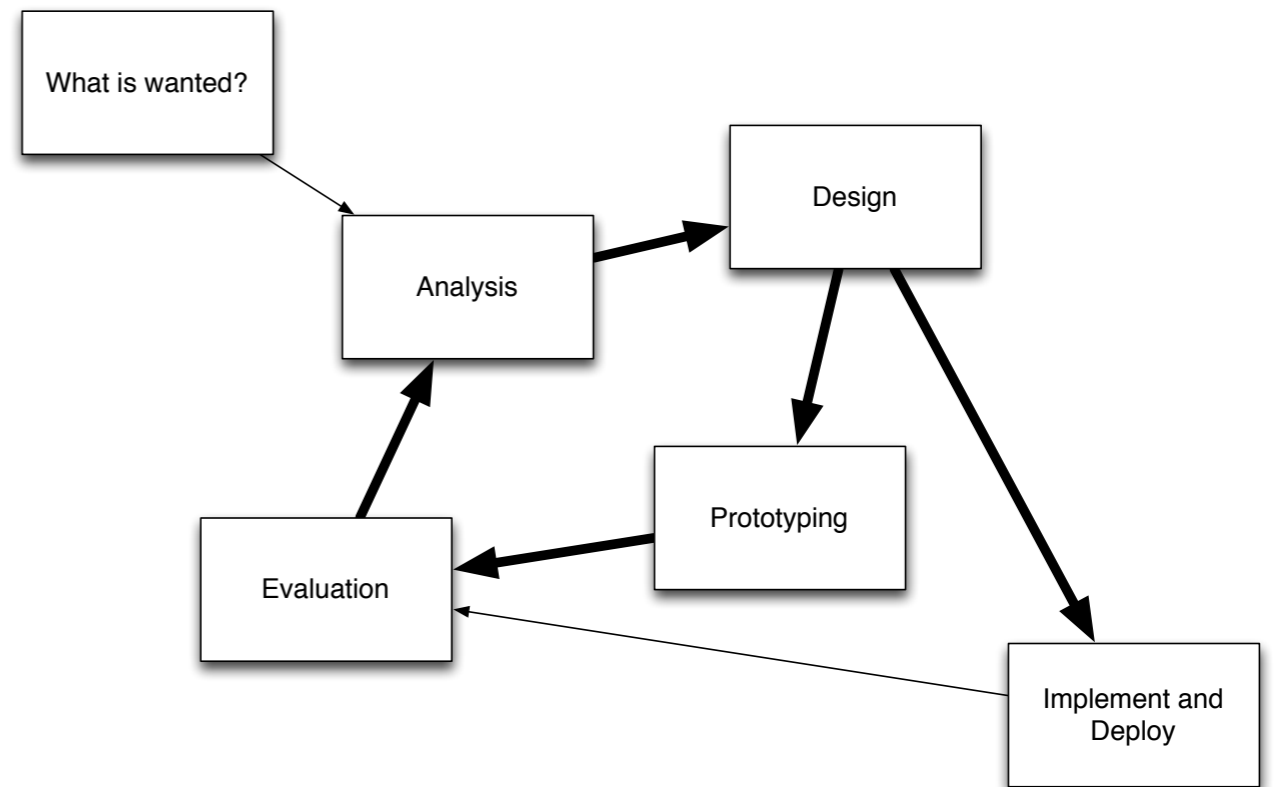
Analysis

- “Expert Review”
- Concept Feedback: <http://www.conceptfeedback.com/>
- FiveSecondTest: <http://fivesecondtest.com/>
- Chalkmark/ClickHeat
 - <http://www.optimalworkshop.com/chalkmark.htm>
 - <http://www.labsmedia.com/clickheat/index.html>
 - Test user understanding of action
 - screen shot + heatmap
- Action Tracking
 - ClickTale: <http://www.clicktale.com/default.aspx>



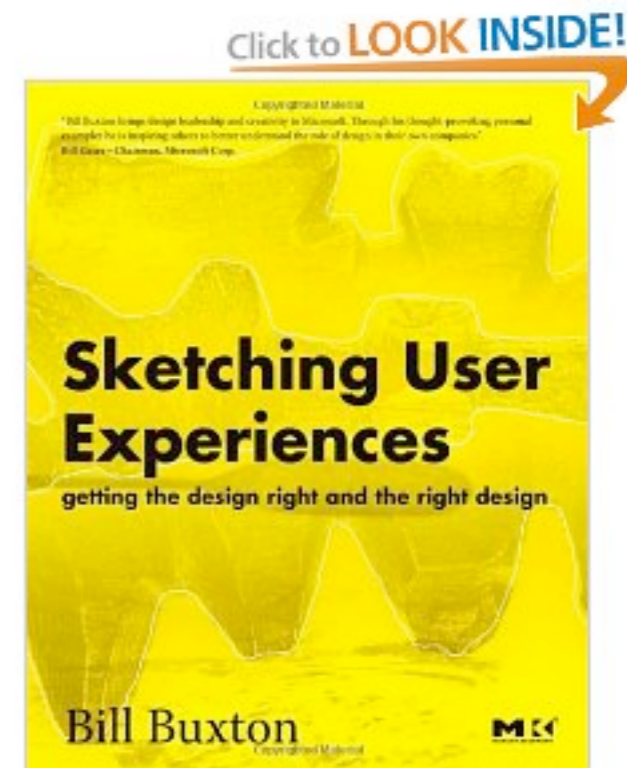
Prototyping

- Each time you do a prototype it becomes more refined
 - from Sketching
 - to deployment
 - and beyond



Prototyping

- Paper Prototyping
 - Post it video
 - Tektronics video
 - <http://www.elsevierdirect.com/companion.jsp?ISBN=9780123740373>
 - iPhone:
 - <http://www.youtube.com/watch?v=6TbyXq3XHSc>
 - Pop!
 - <http://popapp.in/>
- Digital Sketching Prototyping
 - Balsamiq:
 - http://www.youtube.com/watch?v=70hfU7_95Gw
 - PowerPoint:



Interactive Paper Interfaces

- Why sketching?
 - Quick
 - Timely
 - Inexpensive
 - Disposable
 - Plentiful
 - Clear Vocabulary
 - Distinct Gesture
 - Minimal Detail
 - Appropriate degree of refinement
 - Suggest and explore, not confirm
 - Ambiguity

Quick to make (at least after some practice)



Interactive Paper Interfaces

- Why sketching?

- Quick

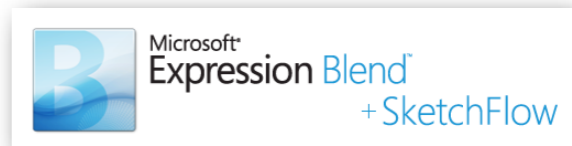
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Prototyping - Enterprise Tools - post sketching

- Expression Blend - MS family of products
 - <http://expression.microsoft.com/en-us/cc136530>
 - <http://youtu.be/47Luwq85NCs>
- SketchFlow - Silverlight - deprecated
- Adobe Catalyst - Flash - deprecated
 - For creating Flash/Flex interaction design
 - <http://www.adobe.com/products/flashcatalyst.html>
- Adobe Dreamweaver - HTML
 - <http://www.adobe.com/products/dreamweaver.html>
 - http://www.adobe.com/products/dreamweaver.html#nerolimedia_split_dw-updates-cc_708x398-1300.mp4
 - <http://www.adobe.com/products/dreamweaver/features.sl.id-contentfilter.sl.featuredisplaytypes.sl.new.html#content-dotconlayouts>



What is wanted

Analysis

Design

Prototype

Impleme
deploy



UI/UX evaluation post-deploy

- Feedback Army
 - <http://www.feedbackarmy.com/>
- Silverback
 - <http://silverbackapp.com/>
- Userfly (dead)
 - <http://userfly.com/>
- Morae
 - <http://www.techsmith.com/morae/uses.asp>
- Hana Lab

FEEDBACK ARMY

HOME * REQUEST FEEDBACK * FAQ * SAMPLES * CONTACT

Simple, Cheap Usability Testing for Your Website.

Start a [usability test](#) for your site in [two minutes](#). Submit questions about your site and receive [10 responses](#) from our reviewers. The cost is [\\$15](#).

Silverback allows anyone to perform usability testing with little or no budget. The best part is that it comes ready-to-use right out of the box. There are no configuration files or settings — it just works.

so says [The Carsonified Blog](#) | [Next testimonial](#) >

Silverback 2.0

Guerrilla usability testing software for designers and developers

- Capture screen activity
- Add chapter markers on-the-fly
- Video the tester's face
- Control recording with the remote
- Record the tester's voice
- Export to Quicktime

Features in 2.0 include

- Preview**
Watch sessions within Silverback
- Batch Export**
Save selected sessions, tasks, highlights or projects in one go
- Tasks & Highlights**
Set tasks and mark noteworthy moments within a session
- Performance**
Faster export, better usability

NEW FEATURES



Morae usability testing and market research software

Free Trial Buy Morae

Understand your customer.

Morae is the premier software for deeply understanding customer experiences... and sharing those insights clearly and powerfully.

NEW 3.2

Example Project Study

Overview Video

userfly

Usability testing has never been this easy.

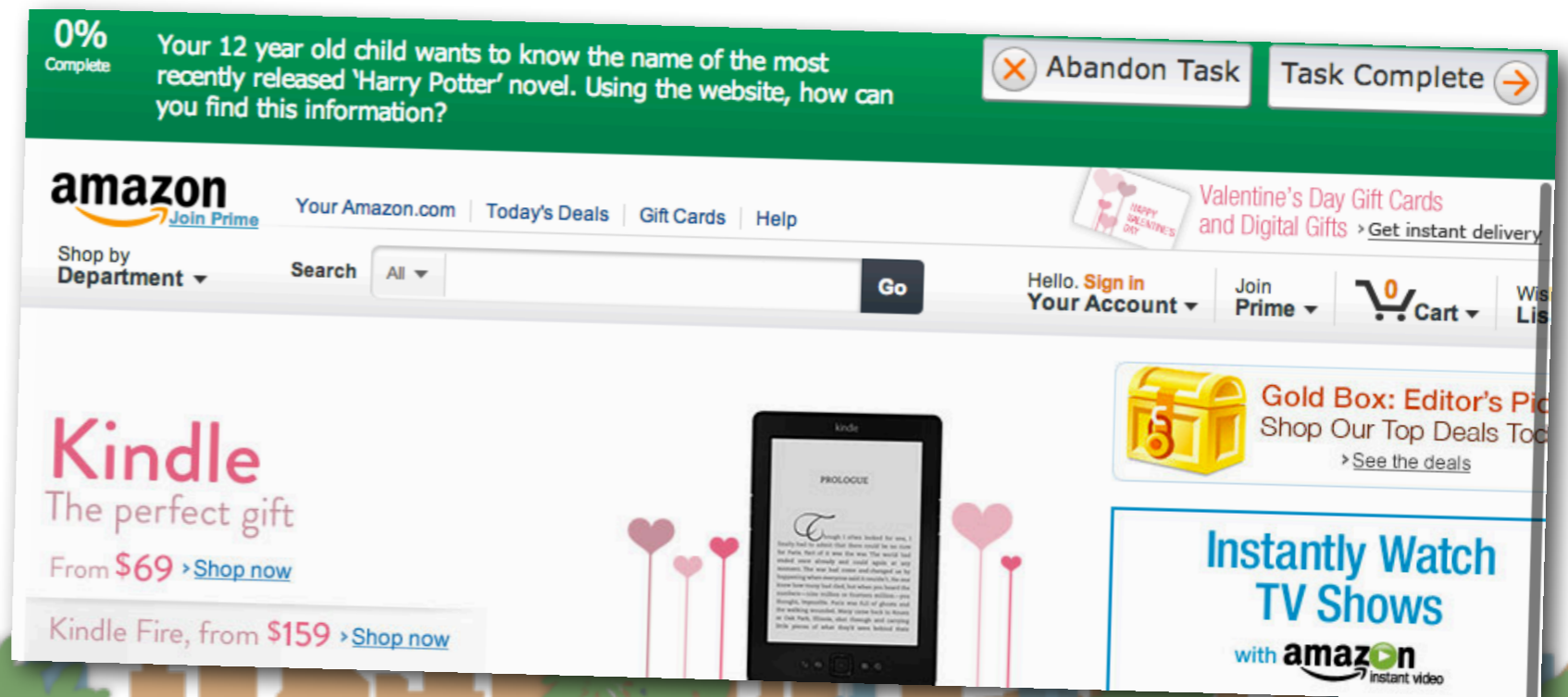
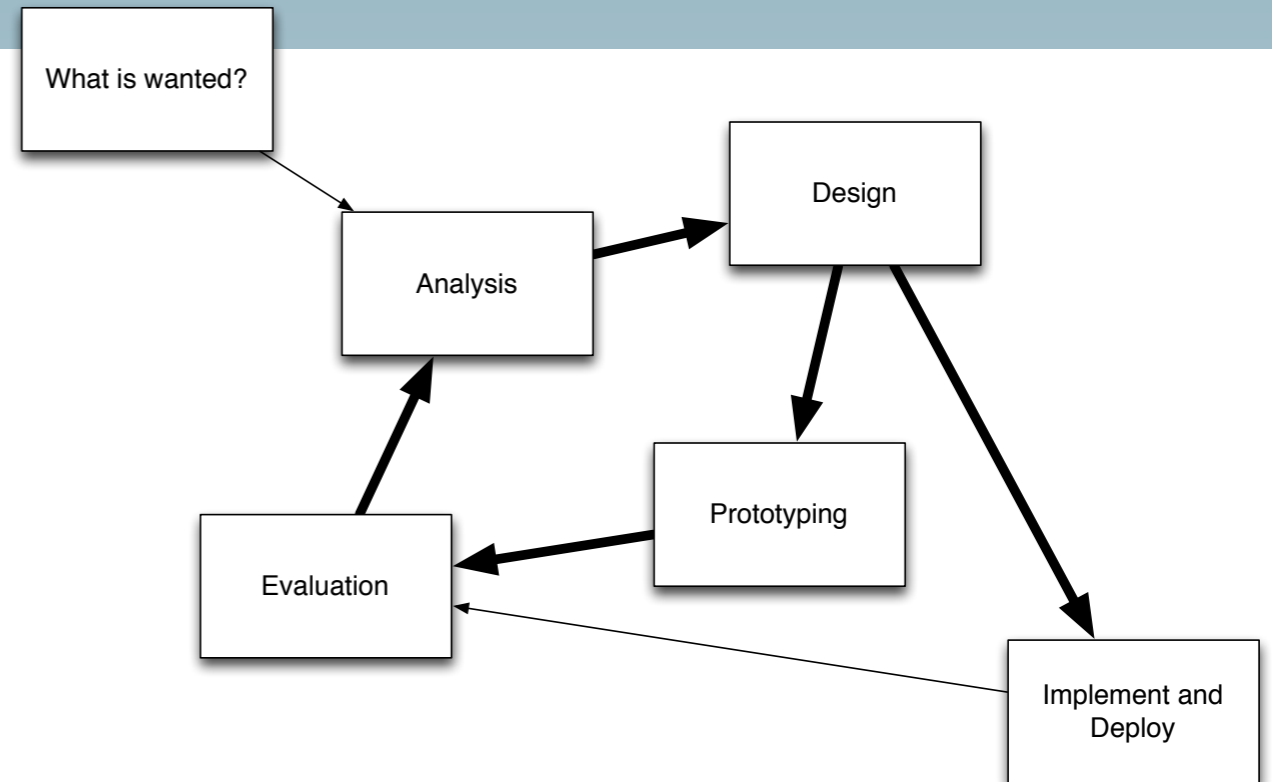
- ✓ Watch videos of your real users.
- ✓ See every mouse movement and click.
- ✓ Install in seconds with one line of code.
- ✓ Increase conversions on landing pages.

Sign up for free
Takes less than 30 seconds.

[Try the demo.](#)

Acceptance tests

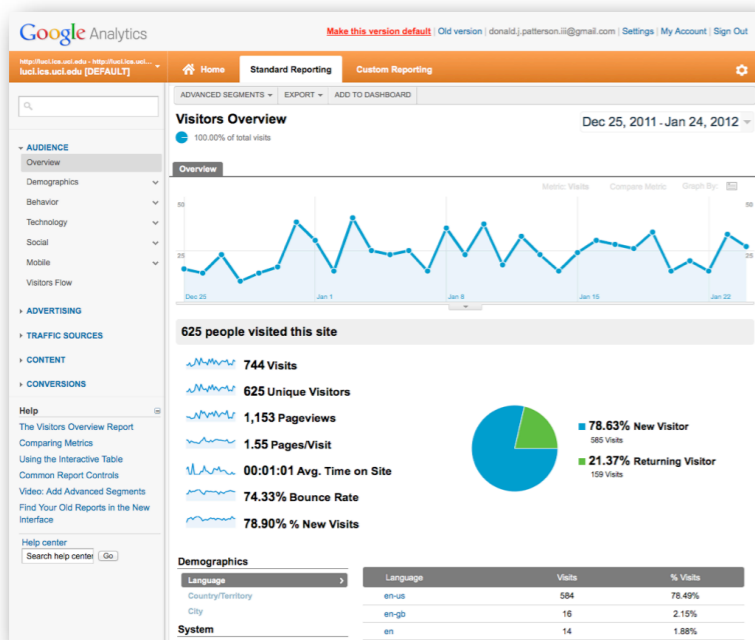
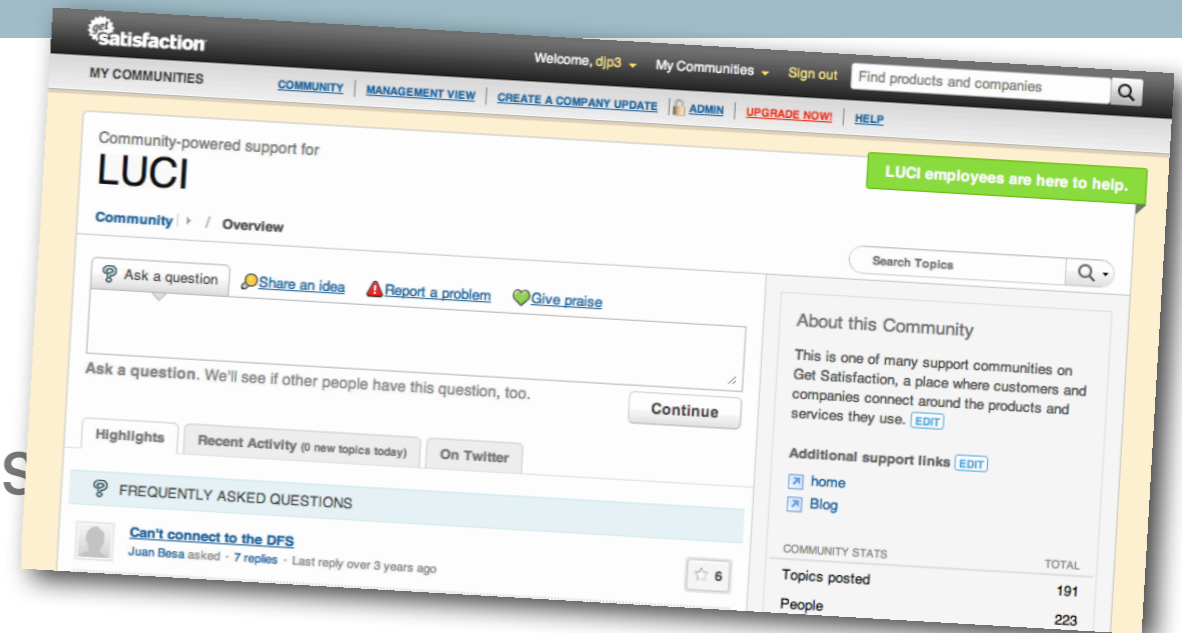
- Loop 11: <http://www.loop11.com/>



<http://www.usefulusability.com/24-usability-testing-tools/>

UI/UX evaluation post-deploy

- Get Satisfaction
 - http://www.youtube.com/watch?feature=player_embedded&v=1UqwJjNCRF4
- Google Analytics
- Google Context Experiments



Experiment to improve goal conversion

Test which page design is more effective for your website visitors

Enter the URL for the page you want to improve:

http://

START EXPERIMENTING

Which pages should I include in my experiment?

Your experiment can focus on any single page that helps visitors accomplish a specific goal:

- A landing page
- A page along the goal funnel
- Your goal page

How do I get started?

- Decide which page to test
- Design variations of that page (separate URL for each variation)
- Decide which goal conversion to improve



Need followup

- Other ideas
 - Camtasia
 - screen recorder
 - processing
 - visualization design
 - Kompozer.net
 - web design for dummies
 - Pencil Project
 - online Balsamiq
 - Lucid chart
 - online omnigraffle



What is interaction design?

Content derived from Rogers, Sharp and Preece <http://www.id-book.com/>

Bad Designs



From: www.baddesigns.com

Bad Designs

- Show video

From: www.baddesigns.com

Bad Designs



From: www.baddesigns.com

Bad Designs

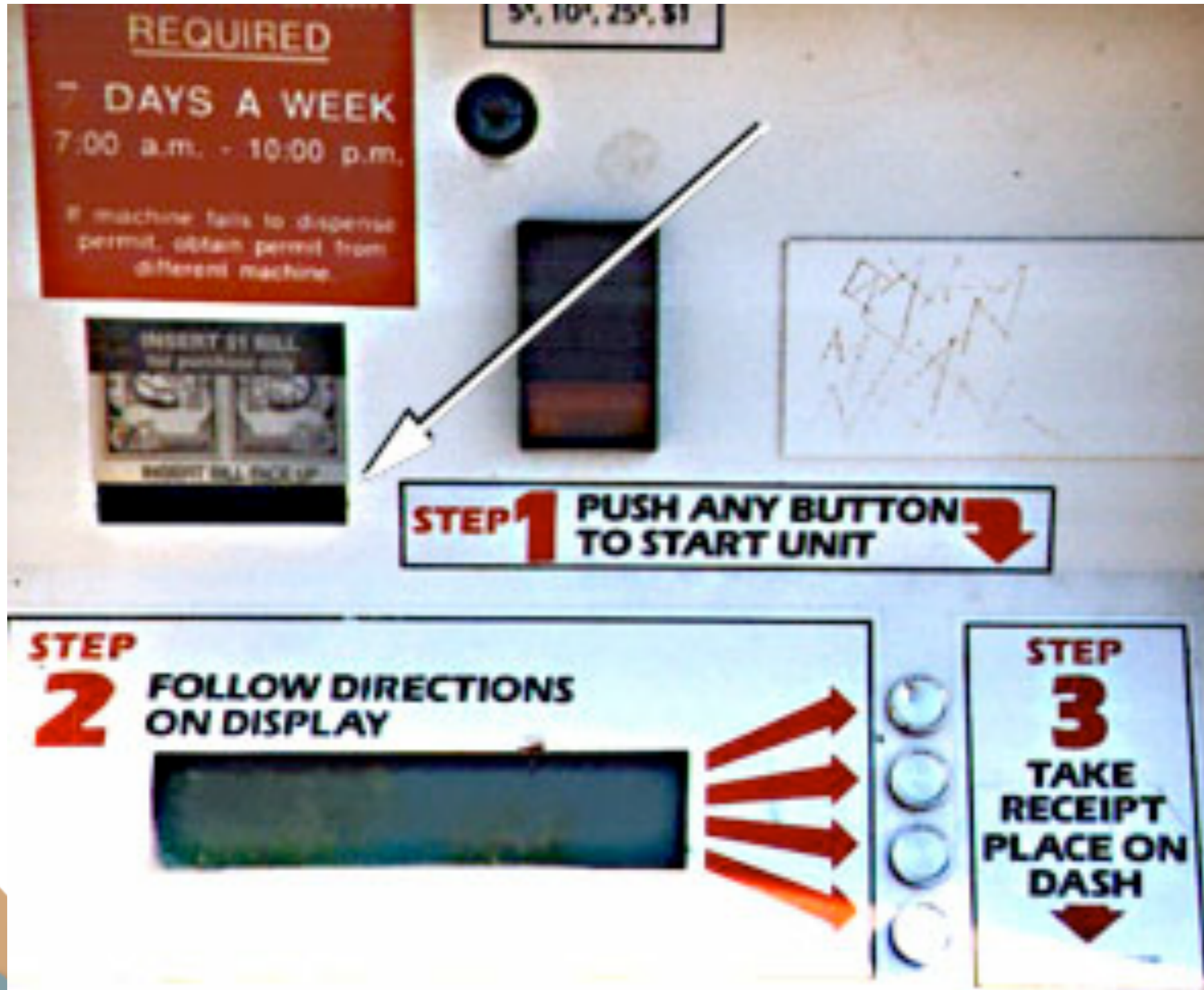
- Elevator controls and labels on the bottom row all look the same, so it is easy to push a label by mistake instead of a control button



- People do not make same mistake for the labels and buttons on the top row. Why not?

Bad Designs

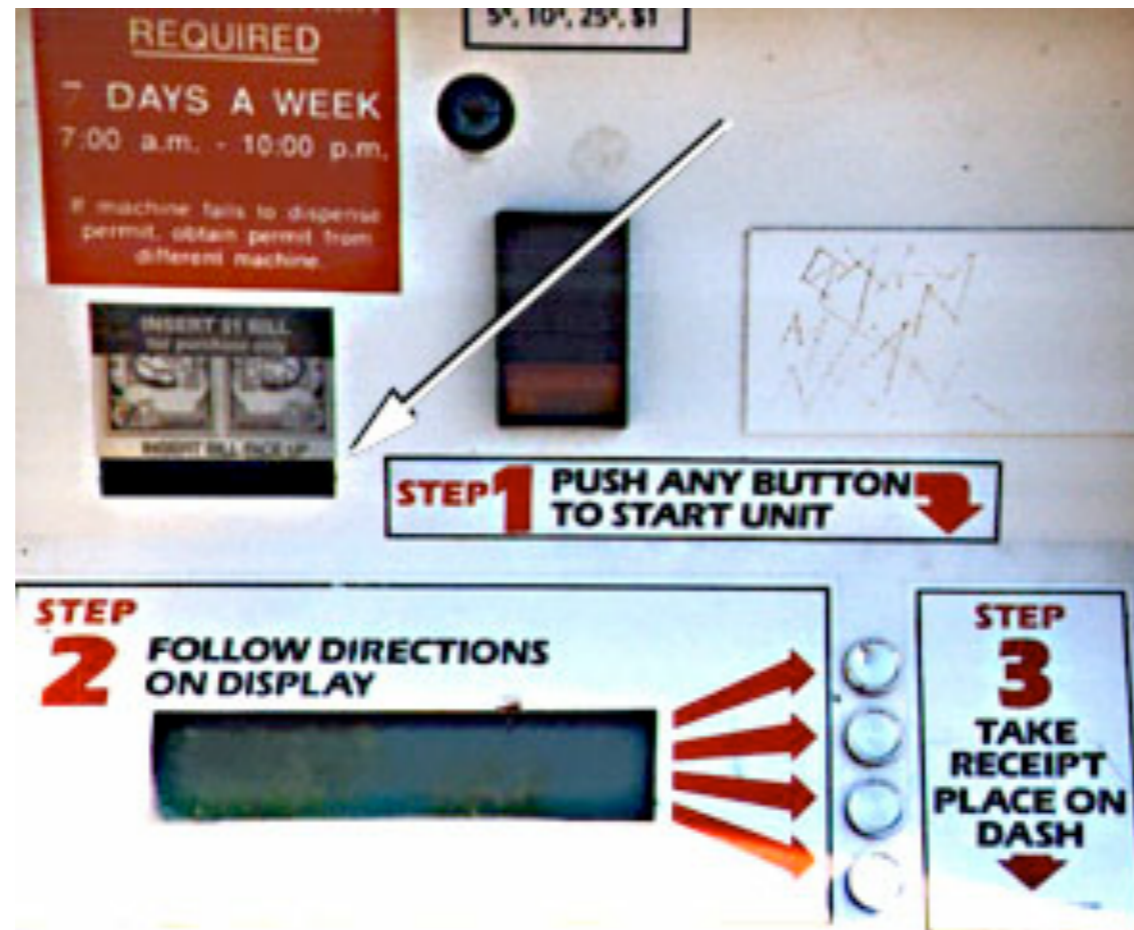
- Why is this vending machine so bad?



From: www.baddesigns.com

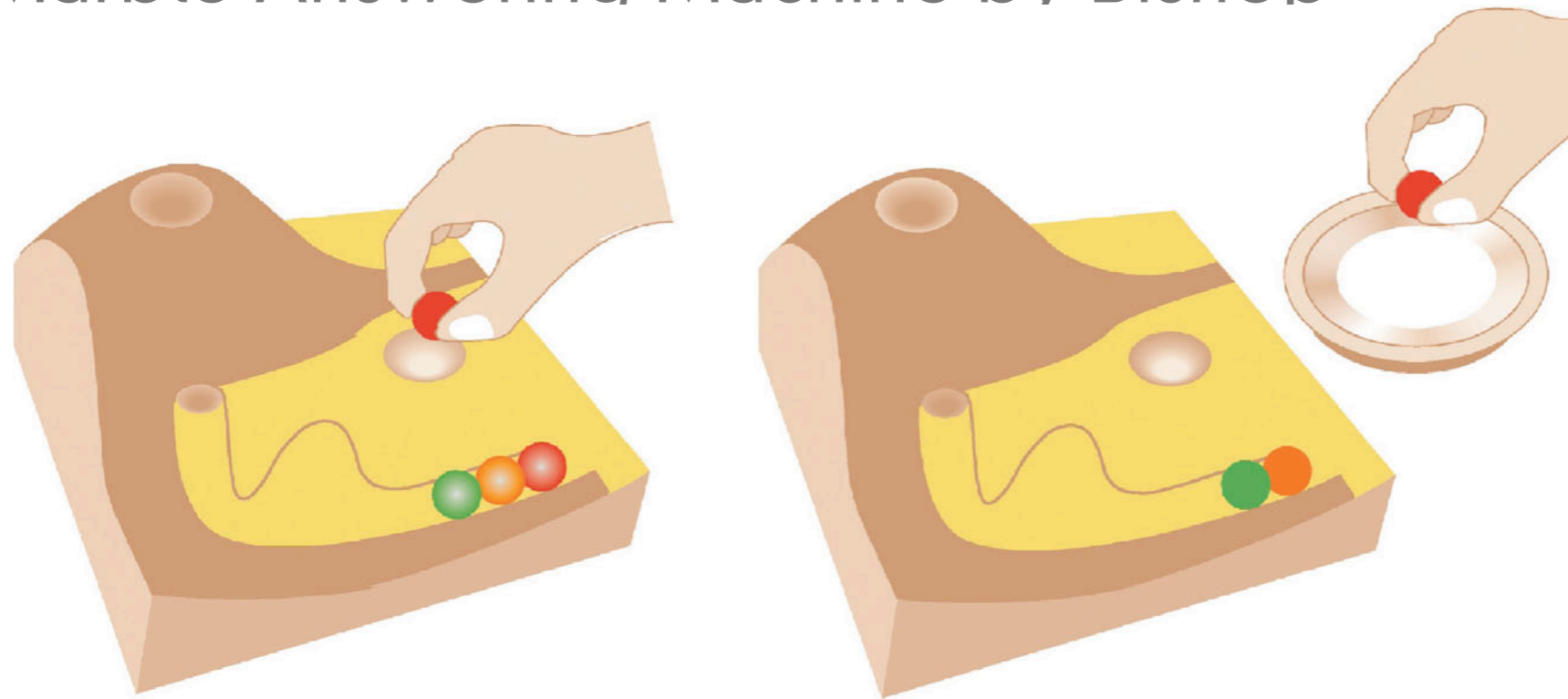
Bad Designs

- Why is this vending machine so bad?



- Need to push button first to activate reader
- Normally insert bill first before making selection
- Contravenes well known convention

- Marble Answering Machine by Bishop



- Based on how everyday objects behave
- Easy, intuitive and a pleasure to use
- Only requires one-step actions to perform core tasks

Good and Bad Designs

- Which remote is better designed?



Good and Bad Designs

- Peanut shaped to fit in hand
- Logical layout and color-coded, distinctive buttons
- Easy to locate buttons



What to design

- Need to take into account:
 - Who the users are
 - What activities are being carried out
 - Where the interaction is taking place
- Need to optimize the interactions users have with a product
 - So that they match the users' activities and needs

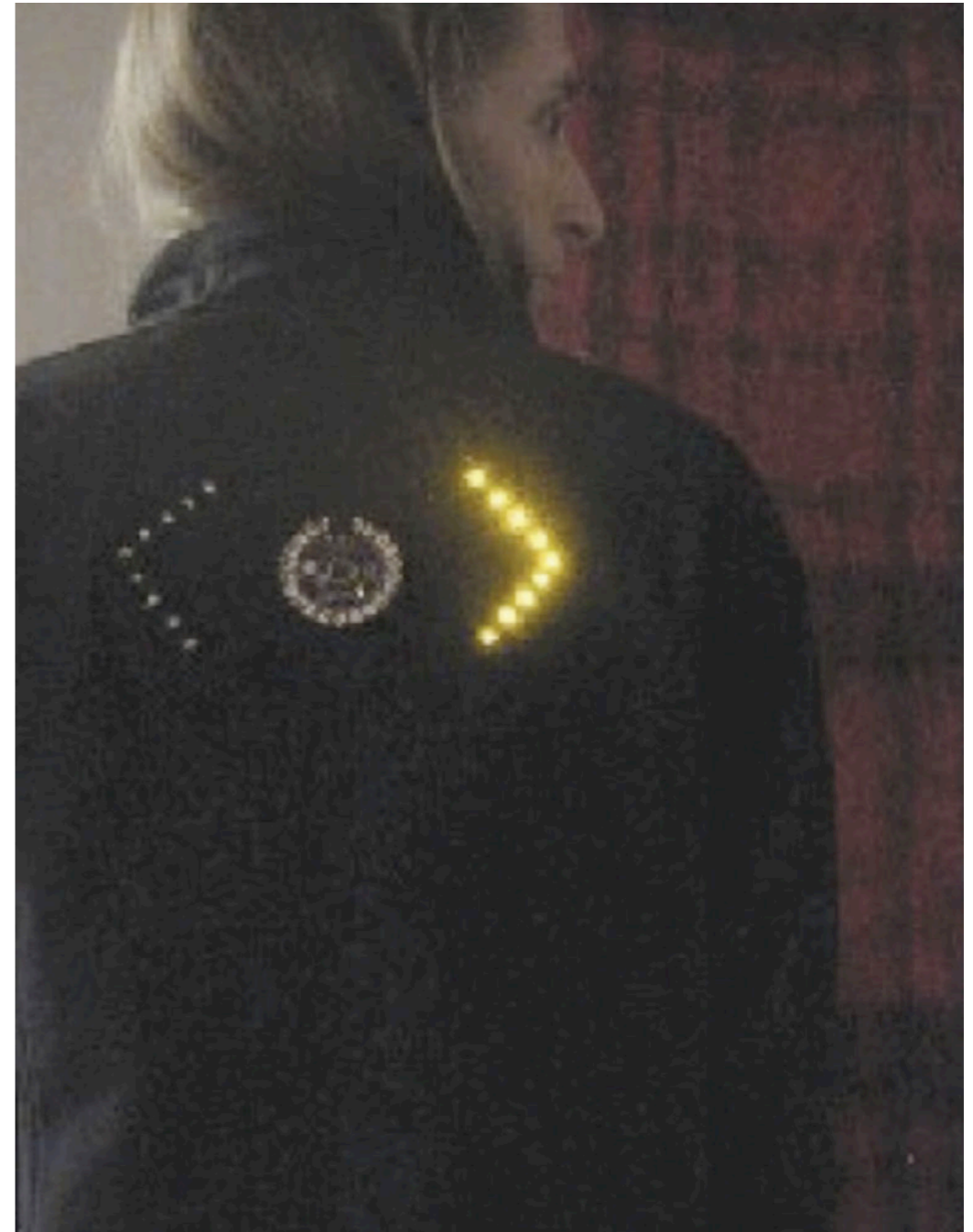


Interaction design is about designing interventions

- Designing something in a vacuum vs.
- Designing a new “intervention”
 - Ix needs a goal
 - Ix acknowledge that lots of stuff is already going on
 - Ix designers need to understand it deeply
 - so that the new intervention will be successful



Novel Interface



Novel Interface



<http://freshome.com/2011/05/30/wake-up-or-start-your-day-sobbing-the-money-shredding-alarm-clock/>

Understanding users' needs

- Need to take into account what people are good and bad at
- Consider what might help people in the way they currently do things
- Think through what might provide quality user experiences
- Listen to what people want and get them involved
- Use tried and tested user-centered methods



What is interaction design?

- “Designing interactive products to support the way people communicate and interact in their everyday and working lives” Sharp, Rogers and Preece (2011)
- “The design of spaces for human communication and interaction” Winograd (1997)



Goals of interaction design

- Develop usable products
 - Usability means easy to learn, effective to use and provide an enjoyable experience
- Involve users in the design process

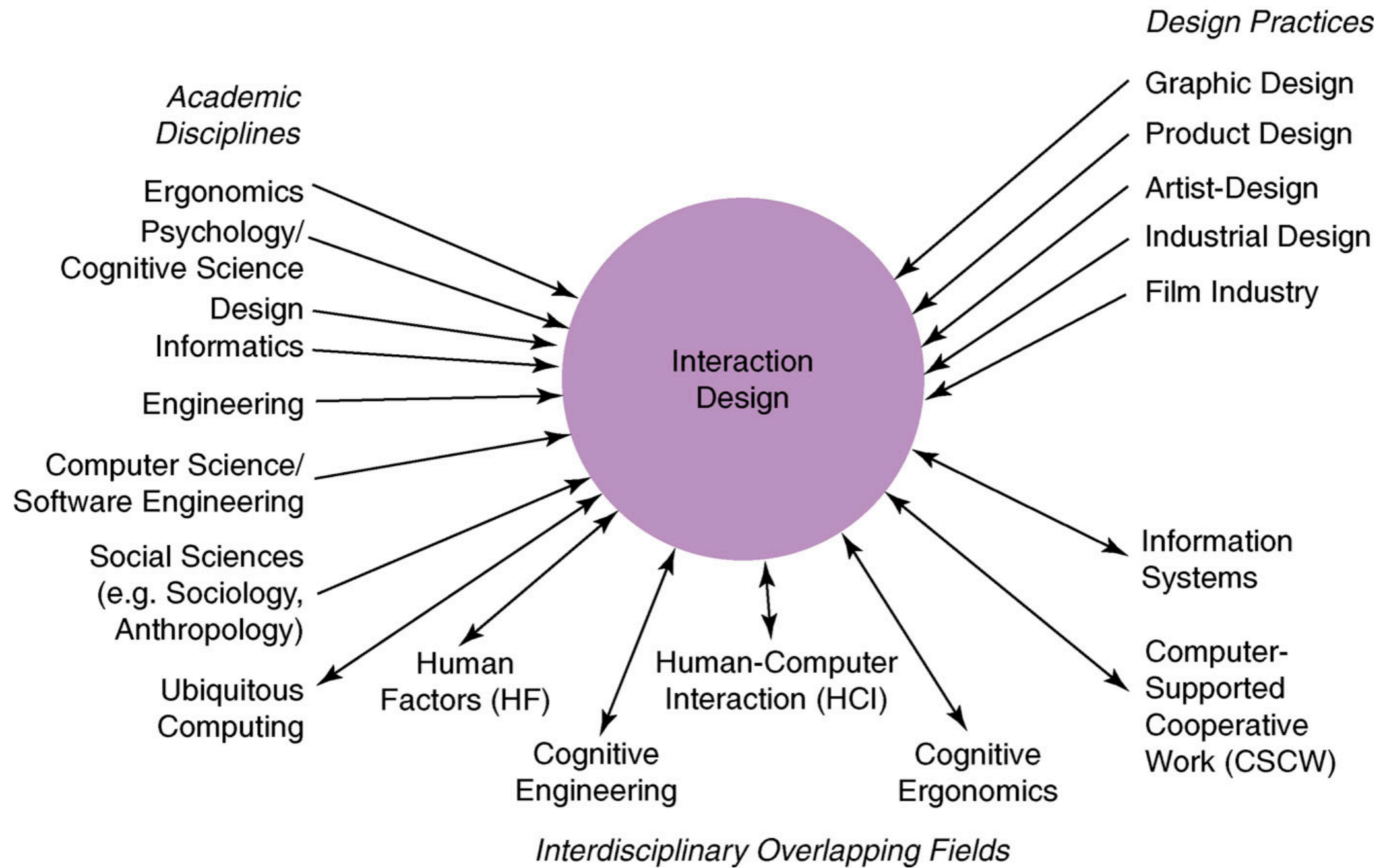


What kind of design?

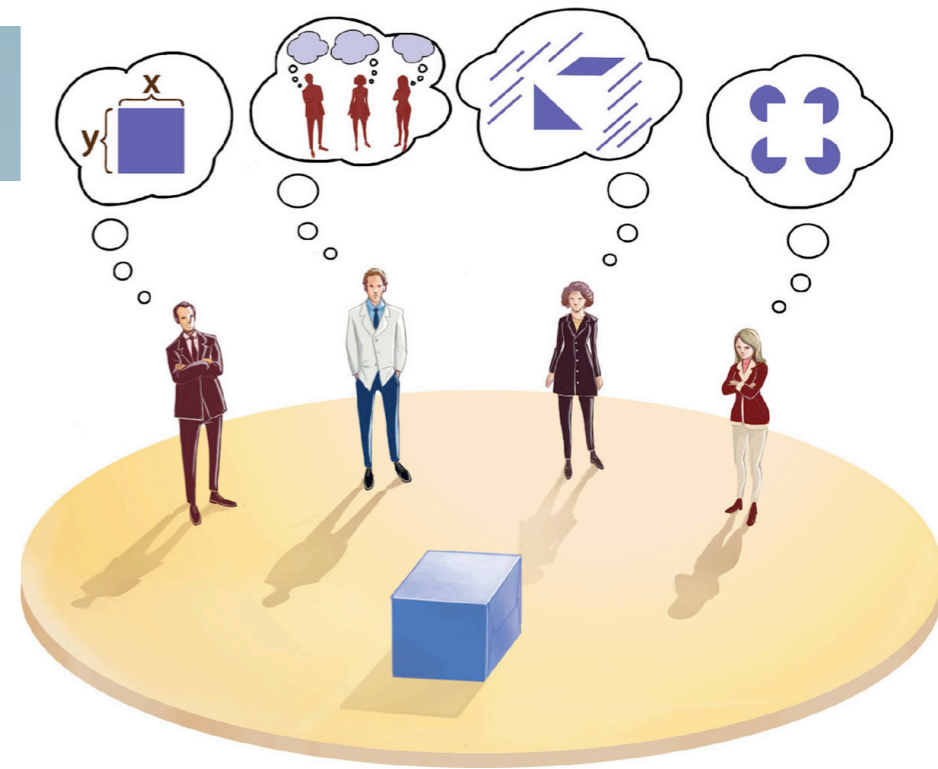
- Number of other terms used emphasizing what is being designed:
 - user interface design, software design, user-centered design, product design, web design, experience design (UX)
- Interaction design is the umbrella term covering all of these aspects
 - fundamental to all disciplines, fields, and approaches concerned with researching and designing computer-based systems for people



HCI and Interaction Design



Working in multidisciplinary teams



- Many people from different backgrounds involved
- Different perspectives and ways of seeing and talking about things
- Benefits
 - more ideas and designs generated
- Disadvantages
 - difficult to communicate and progress forward the designs being create



Interaction design in business

- Increasing number of ID consultancies, examples of well known ones include:
 - **Nielsen Norman Group**: “help companies enter the age of the consumer, designing human-centered products and services”
 - **Cooper**: “From research and product to goal-related design”
 - **Swim**: “provides a wide range of design services, in each case targeted to address the product development needs at hand”
 - **IDEO**: “creates products, services and environments for companies pioneering new ways to provide value to their customers” <http://vimeo.com/33544142>

NN/g



SWIM

IDEO



What do professionals do in the ID business?

- **interaction designers** - people involved in the design of all the interactive aspects of a product
- **usability engineers** - people who focus on evaluating products, using usability methods and principles
- **web designers** - people who develop and create the visual design of websites, such as layouts
- **information architects** - people who come up with ideas of how to plan and structure interactive products
- **user experience designers (UX)** - people who do all the above but who may also carry out field studies to inform the design of products



Summary

- Interaction design is concerned with designing interactive products to support the way people communicate and interact in their everyday and working lives
- It is concerned with how to create quality user experiences
- It requires taking into account a number of interdependent factors, including context of use, type of activities, cultural differences, and user groups
- It is multidisciplinary, involving many inputs from wide-reaching disciplines and fields

