

# Web User Experience: Where the technology fits in

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Hi, I am Keith

- Information Architect, User Experience, ibm.com
- Computer science > Human-computer interaction > Hypertext > Web usability
- Telecommute to work from Toledo
- In-laws live near Old Man's Cave

## Overview

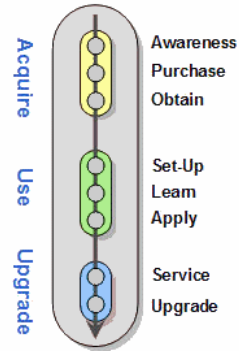
- User experience
- Roles - who
- Principles - what
- Methods - how

## What do we mean by “user experience”? (Microsoft)

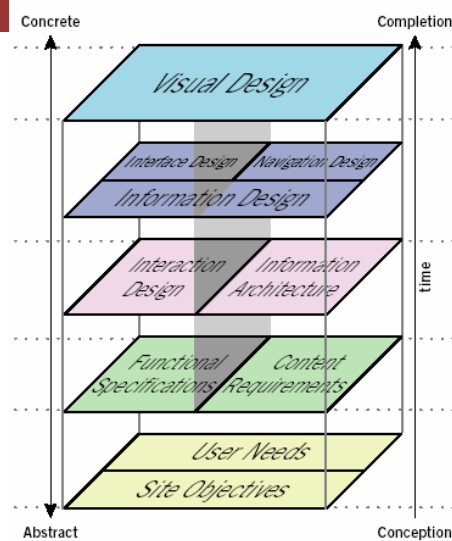
- User experience...represents an approach that **puts the user**, rather than the system, **at the center of the process**...incorporates user concerns and advocacy from the beginning of the design process and dictates **the needs of the user** should be foremost in any design decisions (MSDN)

## What do we mean by "user experience"? (IBM)

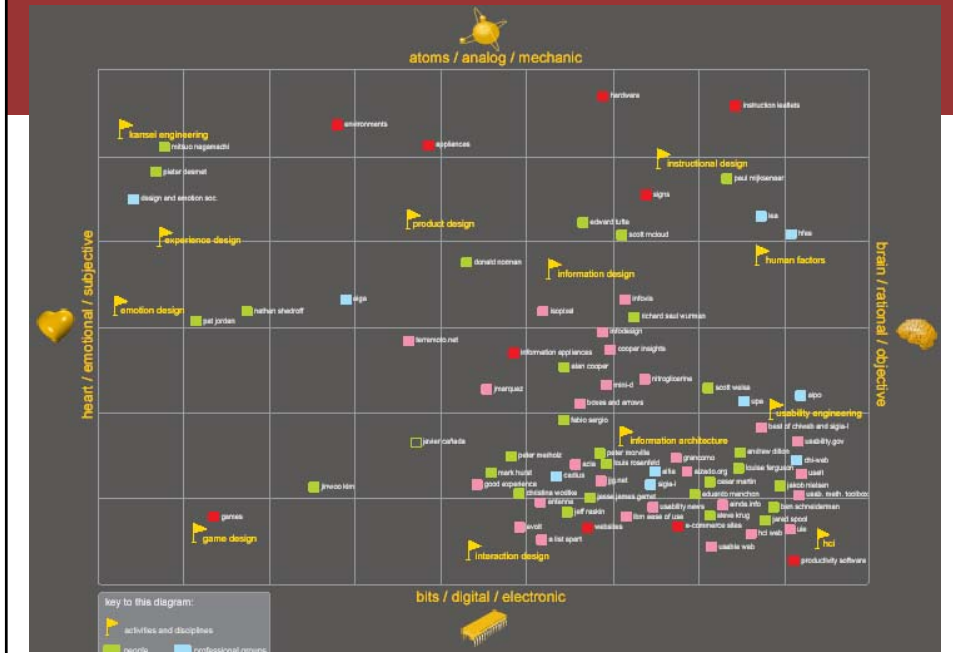
User Experience Design addresses the user's initial awareness, discovery, ordering, fulfillment, installation, service, support, upgrades, and end-of-life activities



## Layers of the user experience (from <http://jjg.net/elements/>)



From <http://terremoto.net/uxcosmos/>



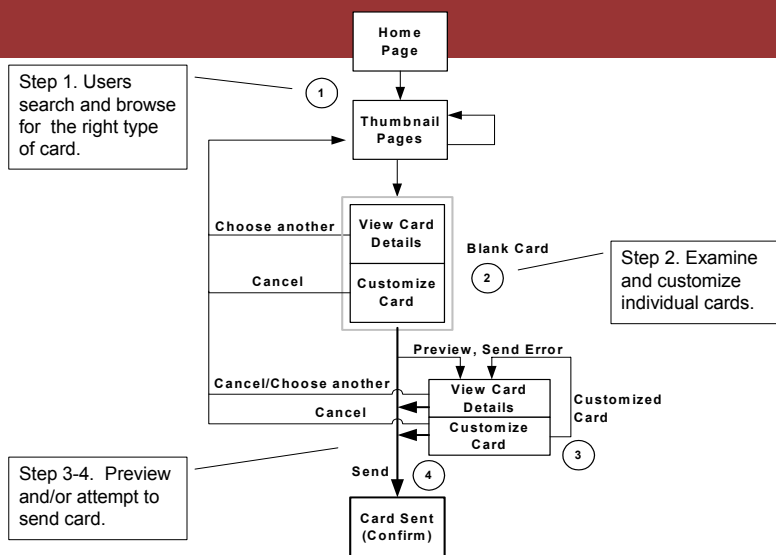
## User experience team

- UE lead
- Business analyst
- User researcher
- UE designer
  - Information architect, interaction designer, user interface designer
- Visual designer
- UE evaluation
- Content specialists
- Developers

## User research – “Users in the Mist”



## UE Design



## UE Design

Header navigation for site-wide functions.

Logo

Banner Ad or Internal Promotion

Banner Ad or Internal Promotion

Home | [Help](#) | [Login/Signout](#)  
[Search](#) | [Site Index](#)

Cards | [Invitations](#) | [Gift Shop](#) | [Gift Certificates](#) | [Promotions](#) | [My Cardshop](#)

Welcome, Tim! Dad's Day is June 16th. [New Cards](#) | [Most Popular](#) | [Highest Rated](#)  
Send a card for free.

Card Thumbnail | Card Thumbnail | Card Thumbnail

title: text text | title: text text | title: text text  
[More Father's Day Cards](#) | [More Summer Cards](#) | [More Music Cards](#)

**Reasons to Send**

**Birthdays**  
[Subchannel](#) | [Subchannel](#) | [Subchannel](#)  
[Subchannel](#) | [Subchannel](#) | [more...](#)

**Channel**  
[Subchannel](#) | [Subchannel](#) | [Subchannel](#)  
[Subchannel](#) | [Subchannel](#) | [more...](#)

**Search Assistant**  
Don't know where to start? I can help you [SEARCH](#)

[learn more](#) | [about us](#) | [investor relations](#) | [advertise with us](#) | [privacy policy](#)  
[job opportunities](#) | [contact us](#) | [terms of service](#)

partner ad/offer space

Primary card classification scheme. Expand level two channels as much as possible.

Promote searching using the wizard on home. Position to catch users not satisfied by channels.

Music  
TV  
Movies  
Stationery  
Teen Lounge  
African American  
Spanish  
Religious

Calendar [full calendar](#)

date	Holiday
date	editorial holiday
date	editorial holiday
date	editorial holiday
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## Question: How do you organize your teams?

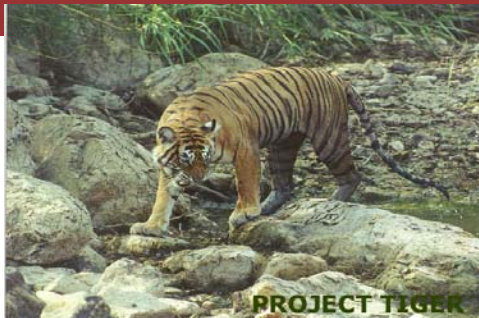
- One-(wo)man-band? Programmer/writer/designer/therapist
- Client – agency model?
- Development team (with perhaps a usability/design consultant)?
- Multidisciplinary?
- End-to-end vs. waterfall model?

“User experience” is a good label for the team to gather under

## "Principles" of user experience

- Don't fight biology
- Understand behavior
- It is not as new as you think
- You are not as special as you think
- Plan on getting it wrong the first few times
- It should be usable *and* enjoyable
- Value, value, value
- Think outside the box

## Don't fight biology



Red text

Light blue text

### Usability Glossary: Fitts' Law

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$$T = k \log_2(D/S + 0.5), k \sim 100 \text{ msec.}$$

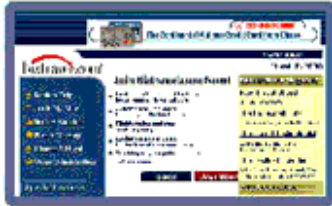
T = time to move the hand to a target

D = distance between hand and target

S = size of target

# Understand behavior (from <http://www.sensible.com/buythebook.html>)

## WHAT DESIGNERS BUILD...



## WHAT USERS SEE...



I want to buy a ticket.



How do I check my frequent flyer miles?

# It is not as new as you think (<http://usability.gov/>)

**Research-Based Web Design & Usability Guidelines**  
NATIONAL CANCER INSTITUTE Improving the communication of cancer research Home  
Dictionary Usability.gov

### Current Evidence-Based Guidelines on Web Design and Usability Issues

[About This Site](#)  
[How to Use This Site](#)

[Submit Additional Research](#)  
[Printing Complete Guidelines](#)

#### Design Process

- [Set and State Goals](#)
- [Set Performance and/or Preference Goals](#)
- [Share Independent Design Ideas](#)
- [Create and Evaluate Prototypes](#)

#### Titles/Headings

- [Provide Page Titles](#)
- [Use Well-Designed Headings](#)

#### Page Length

- [Determine Page Length](#)
- [Determine Scrolling vs. Paging Needs](#)

#### Reading and Scanning

- [Use Reading Performance or User Preference](#)
- [Enhance Scanning](#)
- [Determine Scrolling vs. Paging Needs](#)

#### Links

- [Position Important Links Higher](#)
- [Show Links Clearly](#)

#### Search

- [Consider Importance of Search Engine](#)
- [Indicate Search Scope](#)
- [Enhance Scanning](#)

#### Navigation

- [Keep Navigation Aids Consistent](#)
- [Use Text-Based Navigation Aids](#)
- [Group Navigation](#)



You are not as special as you think  
(designofsites.com and webdesignpractices.com)



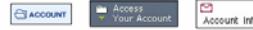
webdesignpractices

Example Icons for Manage Account

Writing Instrument



Folder/File Box



Checkmark



Documents



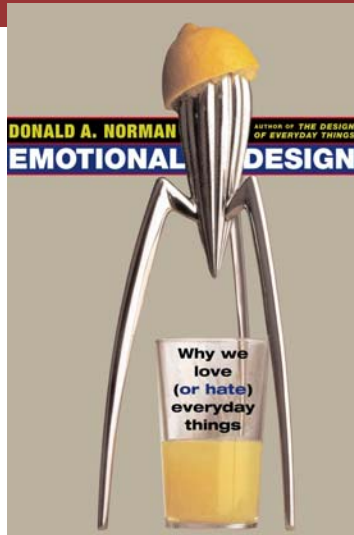
Figure H1.1

Dell uses a process funnel consisting of several logical steps that guide customers to quickly configure and purchase a personal computer. Information in a pop-up window shows additional details but keeps customers in the funnel so that they can continue to completion.

Plan on getting it wrong the first few times

- Include iteration in the project plan
- Include iteration in the project plan
- Include iteration in the project plan
- Include iteration in the project plan
- Include iteration in the project plan
- OK, good enough to launch it
- (See user testing later)

It should be usable *and* enjoyable



usell.com → Alertbox → Oct. 2000 Flash: 99% Bad | Search

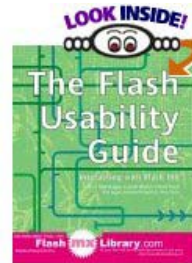
Jakob Nielsen's Alertbox, October 29, 2000:

### Flash: 99% Bad

**Summary:**

Although multimedia has its role on the Web, current Flash technology tends to discourage usability for three reasons: it makes bad design more likely, it breaks with the Web's fundamental interaction style, and it consumes resources that would be better spent enhancing a site's core value.

About 99% of the time, the presence of Flash on a website constitutes a usability disaster. Although there are occasional uses of good Flash design, it



Value, value, value

- “It is the right thing to do” only goes so far
- Value to the customer
- Value to the business
- Bridge between user, business and IT – pretty good job security

# Think outside the box

**Order Summary**

Items:	\$31.50
Shipping & Handling:	\$3.99
Total Before Tax:	\$35.49
Estimated Tax:	\$0.00

**Order Total: \$35.49**

Save on shipping! Select FREE Super Saver Shipping as your shipping speed, and we'll remove the shipping fees on the eligible items in your order.

**Shipping Options:** [\(Learn more\)](#)

**Choose a shipping speed:**

- FREE Super Saver Shipping (5-9 business days) 🚚
- Standard Shipping (3-7 business days)
- Two-Day Shipping (2 business days)
- One-Day Shipping (1 business day)

**Contact us**

- [Call me now](#)
- [Chat online](#)

or call us at  
1-888-IBN-5800  
ext. 5MB



# What other principles do you live by?

## Most important tool: Usability Testing

- Give representative users realistic tasks, watch quietly, be amazed



## Clips from Flash usability testing (Nielsen Norman group - <http://www.nngroup.com/reports/flash/>)

- 00:30 Make sure splash pages serve a user-centered purpose
- 03:16 Keep drag-and-drop manipulations as simple as possible
- 07:30 Make it easy for people to rotate objects
- 09:47 Don't have gratuitous motion
- 12:18 Don't have unnecessary sound
- 16:12 Opening and new browser window can cause user problems
- 20:49 Have an obvious way to pan maps
- 23:05 Don't hide the names of locations
- 27:08 Avoid overly complex and fancy features
- 37:26 Gently guide users through an expected work path
- 43:34 Make sure people understand the purpose and rationale for the application

## First reactions from doing user testing (actual client quotes)

- “It is such a rush. This is what I want to be doing!”
- “Not good news. A real eye-opener. We gotta get the developers involved so they can see where people are struggling.”
- “The testing was not too hard, but now how do we get the results taken seriously?”

## What experiences do you have with user testing?

- Please share your stories.....

## Planning usability testing

- Purpose and audience of site
- Usability goals
- Tasks
- Participants, scheduling, payment
- Materials
- Setting
- ...Expect to hear bad news

## Doing usability testing

- Introduction for participant, list of tasks
- Watch quietly
- Record behavior (take notes, tape)
- Interact with participant
- Debriefing, questionnaire, payment

## Benefiting from usability testing

- Tabulate data
- Findings
- Recommendations
- Actions

## Levels of Commitment

- Opportunistic usability testing
  - Anything is better than nothing
- Quick and dirty
  - Some planning, but not too much
- Multi-purpose rooms
  - “Hey, lovebirds, at least get a room”
- Full usability labs
  - Cha-ching

## Opportunistic

- Do mini usability tests whenever/wherever opportunity arises
- 15 minutes = opportunity
- Violin lessons, after short meetings, cleaning lady, nosy relatives
- A 1-hour usability test: tradeshow, laptop, 50-line email

## Quick and Dirty

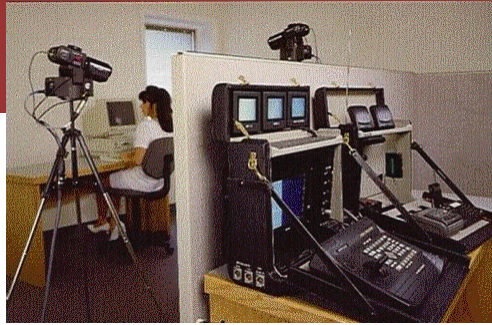
- Shortcuts on the planning: get convenient participants, not ideal ones
- Convenient locations
- Realistic (self-made) tasks, sometimes
- Debriefing very important: ask why
- Shortcuts on the write-up



## Multi-Purpose Rooms

- Use available space as laboratory-for-a-day
- Bring in portable equipment
- Convert an empty office into a full-time lab
- Use a lab for other things to help justify cost
- Since people coming to you, do more planning

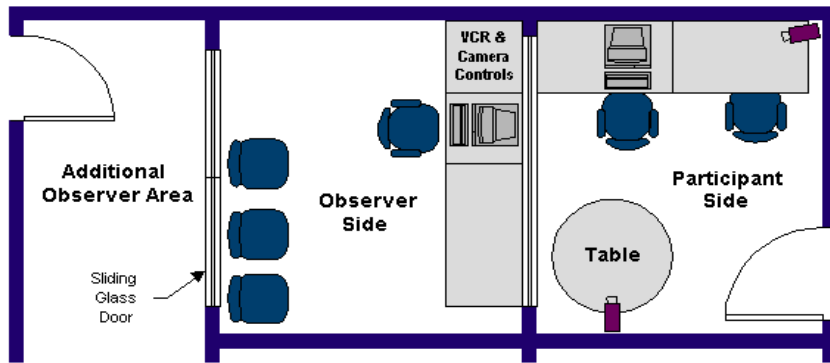




## Full Usability Labs

- Build rooms just for this purpose
- Adjoining, sound-proofed rooms
- Video cameras, scan converters, two-way mirrors, microphones, etc
- Cost: \$80-120k
- Do it all of the time to recoup investment (also very good for marketing usability)

## Microsoft Lab Layout



## Comparison

	Opp.	Q&D	MPR	Labs
Plan	.25	4	5-15	5-15
Do	.50	4	6-10	6-10
Follow-up	.25	4	5-15	5-15
Hours	1	12	16-40	16-40
Users	2	3	4-5	4-5
Deliverable	Email	Text	Video-	Video+
Start-up	0	0	\$1-30	\$80+

## Variations of Usability Testing

- Most common: Make specific parts better (3-5 users, repeat often)
- User research: one of many such activities
- Benchmarking, external (comparative analysis)
- Benchmarking, internal (ROI)
- Prototyping: paper, computer
- Quality assurance (usability goals)
- Research ("statistically significant")
- Shock usability testing (get CEO to notice)

## The Point: It's painful but worth it

- I've always been surprised & learned something
- Easy to do on a small scale, can also become institutionalized
- Flexible technique: qualitative & quantitative

## Recap

- User experience = team with a broad view
- It is a matter of principals...
- User testing: just do it

Thanks for your attention!

This presentation and other stuff about user experience:

<http://user-experience.org/>

PS The best book not on the market:  
The Flash Usability Guide

