

Web Usability

Gilles Bailly

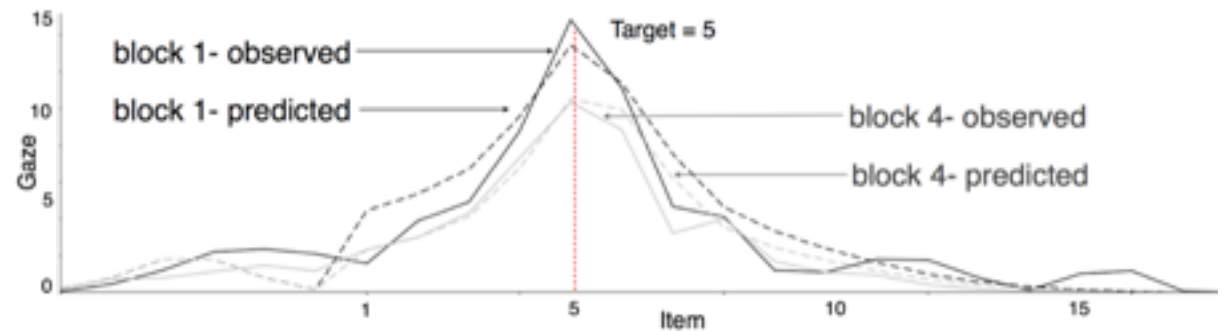
gilles.bailly@telecom-paristech.fr

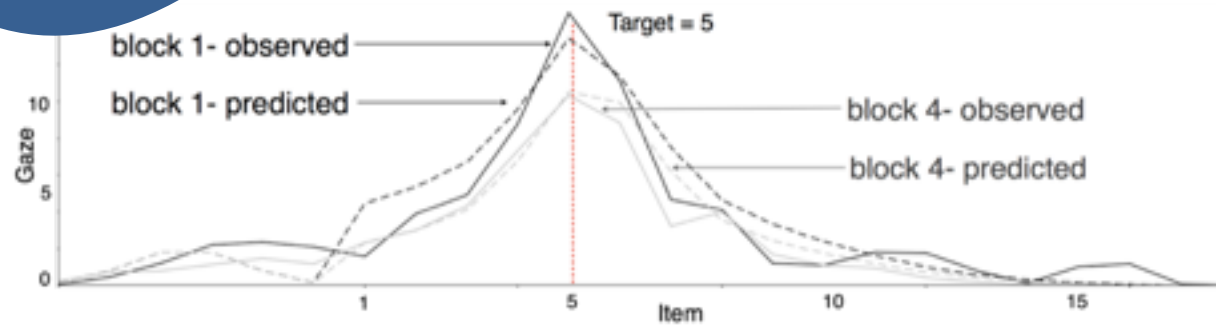
Thanks

- Wendy Mackay
- Patrick Baudisch
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- www.lukew.com

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- Chercheur CNRS à Telecom-ParisTech
- Équipe VIA (Visualization & Interaction)
 - Groupe IC2
 - Département INFRES





www



- Hired to quickly **create the website** of the company.
- What do you **plan** do?



www



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- What do you **plan** do?

30s Brainstorming



INTRODUCTION

- Have you ever:
 - gotten **lost** in a Web site?
 - **left a site** without finding the information you wanted
 - waited **too long** for a page to download
 - gone to a site you **can't view or read**
 - visited a site with **outdated** information
- Do you want people **to visit and return** to your site?

People **cannot find the information** they seek on Web sites about **60%** of the time

[User Interface Engineering]

62% of online shoppers have **given up** at least one time

[Davis 1999]

The **Back button** accounts for somewhere between **30 and 40%** of all Web clicks

[Catledge 1995]

26% of **all apps downloaded** are opened only once and then never used again

[LukeW 1995]

=> Wasted time, reduced productivity, increased frustration, loss of repeat visits and money

*Studies of user behavior on the Web find a **low tolerance** for difficult designs or slow sites. People don't want to wait. And they **don't want to learn how to use a home page**. There's **no manual** for a Web site. People have to be able to grasp the functioning of the site **immediately** after scanning the home page*

[Jakob Nielsen]

IBM



Avant (1999)

La fonctionnalité **la plus utilisée** était ... **Recherche.**

“Les utilisateurs n’arrivaient pas à naviguer sur le site.”



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La seconde fonctionnalité **la plus utilisée** était ...

Le bouton ‘HELP’.

“car le moteur de recherche était inefficace.”



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Le bouton ‘HELP’.

“car le moteur de recherche était inefficace.”

Après

L’utilisation du bouton ‘Help’ a **baissé de 40%**

Les ventes ont **augmenté de 400%**

A Story



- In 1995, now-famous web guru **Jakob Nielsen** had less than 24 hours to recommend if adding three new buttons to Sun's home page was a good idea
- He found that each new, but unused button costs visitors **500 000 \$** per year.
- 2 of the 3 new buttons were taken back out
- The method he used for his estimate: GOMS.

Check out his "**Alertbox**" online column for good (and often fun) web design advice0

DEFINITIONS



Usability assesses how easy your site is to **learn and use** by your customer (Jacob Nielsen)



The usability of a website is based upon whether people can **find information** they need (Jared Spool)



The usability is based on whether you are meeting your **business and user goals** with your product (Brian Sullivan)

GOALS

- Create **Usable** Web sites
- Create **Usable** Web applications

```
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML//EN">
```

```
<html>
```

```
<head>
```

```
<meta name="TITLE" content="..."/>
```

```
<meta name="KEYWORDS" content="..."/>
```

```
<meta name="DESCRIPTION" content="..."/>
```

```
<link rel="stylesheet" type="text/css" href="..."/>
```

```
<script language="javascript" src="..."/>
```

```
</head>
```

```
<body bgcolor="#ffffff" width="100%">
```

Dw

Adobe® Dreamweaver® CS6

Ouvrir un élément récent

Ouvrir...

Créer

- HTML
- ColdFusion
- PHP
- CSS
- JavaScript
- XML
- Mise en forme de grille fluide...
- Site Dreamweaver...
- Site Business Catalyst...
- Plus...

Principales fonctionnalités

- Vue d'ensemble de CSS
- Dispositions à grille fluide
- Création Business Catalyst
- Panneau Transitions CSS
- Récupérateurs jQuery Mobile
- Panneau PhoneGap Build
- Plus...

- Mise en route >
- Nouvelles fonctions >
- Ressources >
- Dreamweaver Exchange >
- Ne plus afficher



Adobe BrowserLab

Insertion

Styles CSS Éléments PA

Tous Actuel

Résumé de la sélection

Règles

Propriétés

Business Catalyst

Créez et publiez des Sites Web professionnels et de puissantes boutiques en ligne dans Dreamweaver.



Essayez Adobe Business Catalyst gratuitement dès aujourd'hui!

Mise en route



Themes Directory

Username Password ([forgot?](#)) or [Register](#)

Extending WordPress

Plugins

Themes

- Commercial
- More Info
- Contact Us

Mobile

Ideas

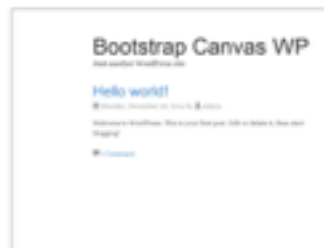
Kvetch!

Looking for the awesome WordPress themes? Here's the place to find them!
Welcome to the Free WordPress Themes directory.

Search below or [check out our new filter and tag interface](#).

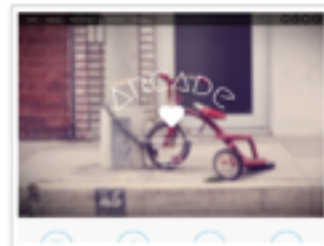
2,931 THEMES **122,275,981** DOWNLOADS, AND COUNTING

Featured Themes



Bootstrap Canvas WP

The 2015 theme for WordPress built on Bootstrap, a sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development.



Arcade Basic

Create a truly unique design with Arcade, a lightweight and fully responsive HTML5 theme. Use the theme customizer to add your own header image, page layout, site width and more. Distinguish each post with one of the eight supported post formats, such as: Video, Image, Aside, Status, Audio, Quote, Link and Gallery. Install JetPack

Most Popular »

- Twenty Twelve** Downloaded 20,597 times
- Twenty Fourteen** Downloaded 18,453 times
- Twenty Thirteen** Downloaded 17,896 times
- Twenty Eleven** Downloaded 17,136 times
- Twenty Ten** Downloaded 15,871 times
- Customizr** Downloaded 10,603 times
- ColorWay** Downloaded 8,435 times
- Virtue** Downloaded 7,887 times
- Responsive** Downloaded 7,189 times
- Vantage** Downloaded 6,062 times
- Alexandria** Downloaded 5,491 times
- Pinboard** Downloaded 5,472 times
- Nirvana** Downloaded 5,399 times
- Make** Downloaded 4,840 times
- MI Magazine lite** Downloaded 4,787 times

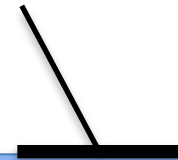


N'oubliez pas
l'utilisateur



Design Process

implementation



Today

- Create **Usable** Web sites and Web applications
- Lecture
 - Design Process
 - Guidelines (site, form, blog, smartphone)
 - ?Web 2.0?



"Good design is obvious.

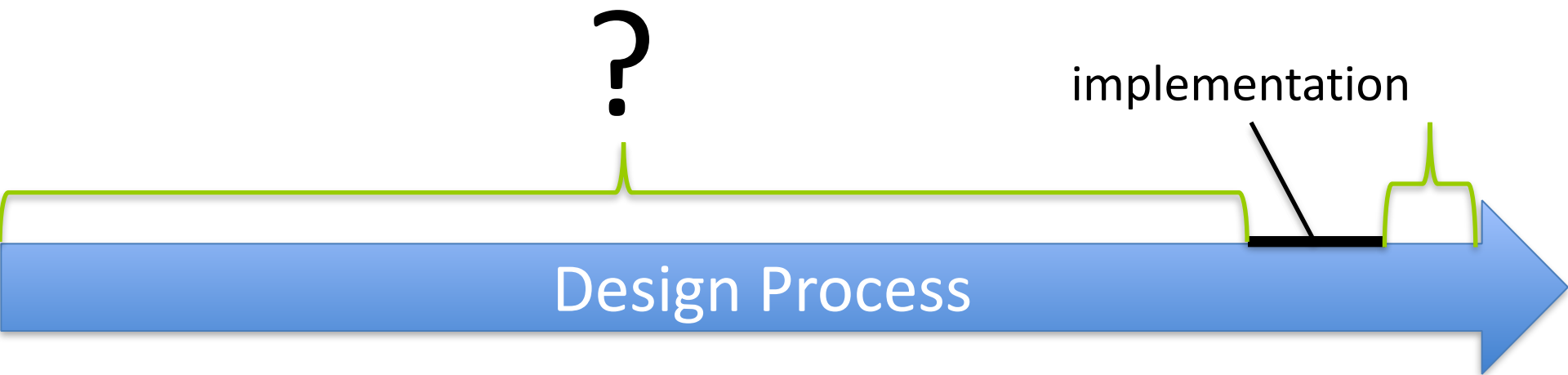
Great design is transparent"

Joe Sparano, 2009

Design Process

Gilles Bailly

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30s Brainstorming

The Wrong Way: Waterfall model

Analysis

Design

Implementation

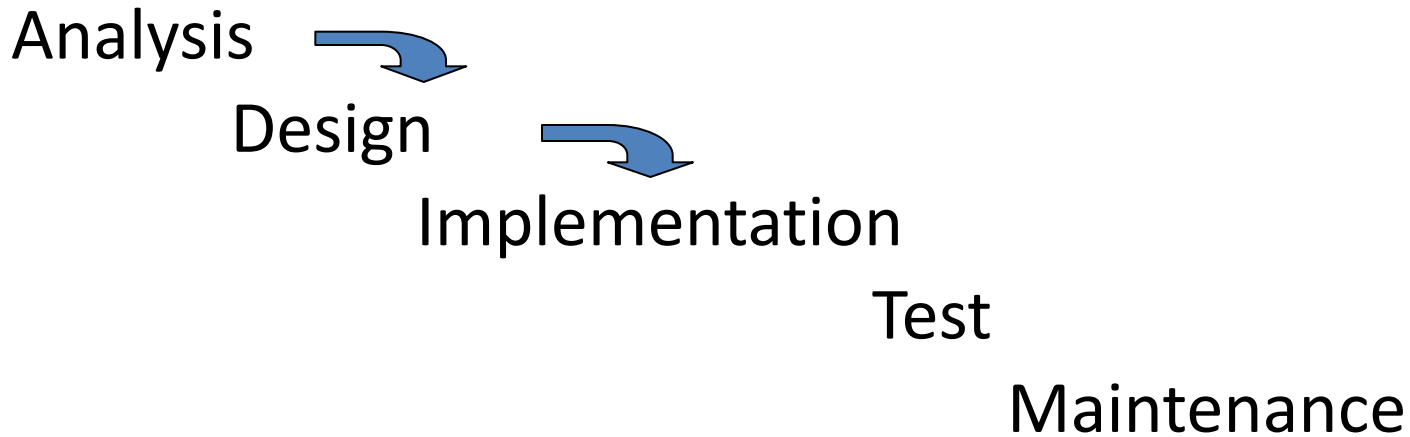
Test

Maintenance

The Wrong Way: Waterfall model



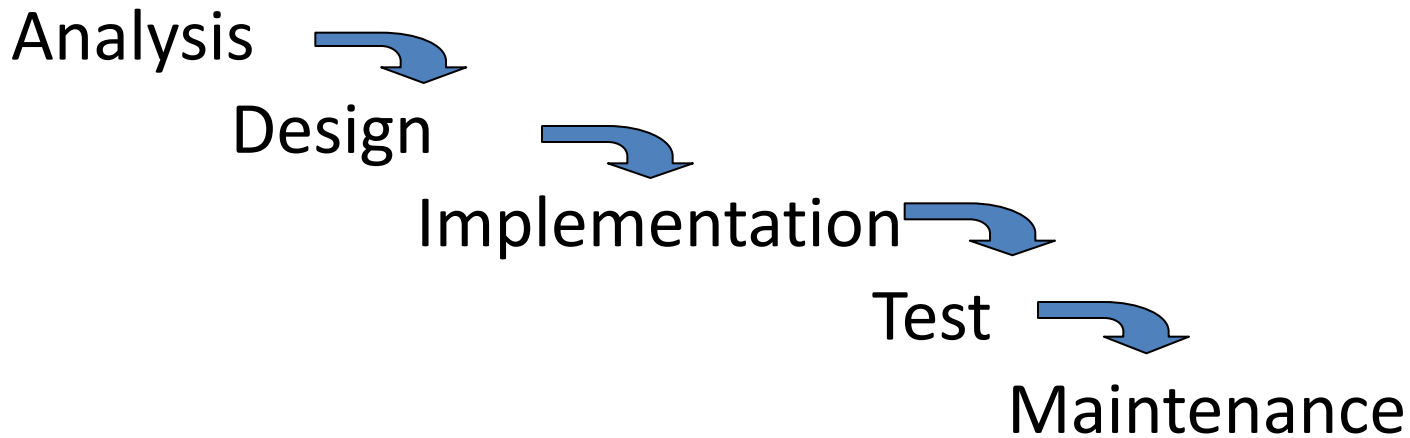
The Wrong Way: Waterfall model



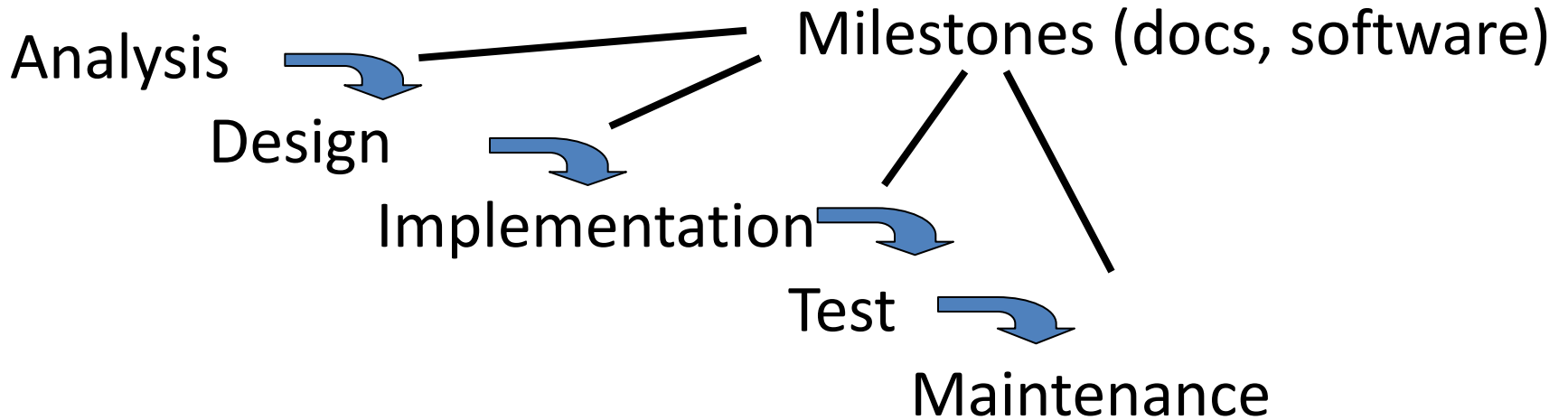
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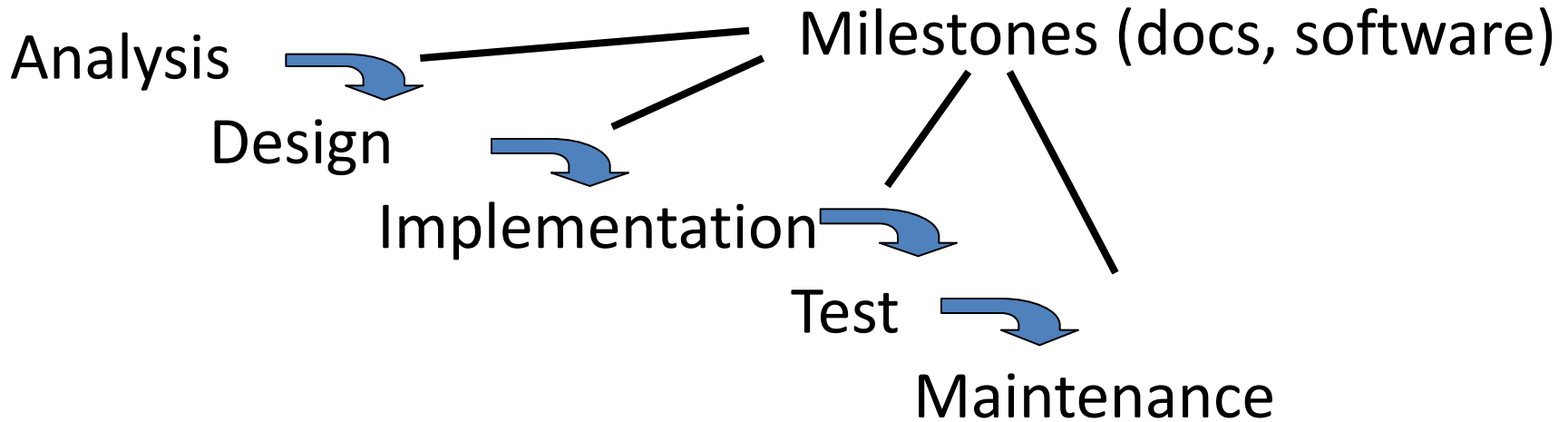
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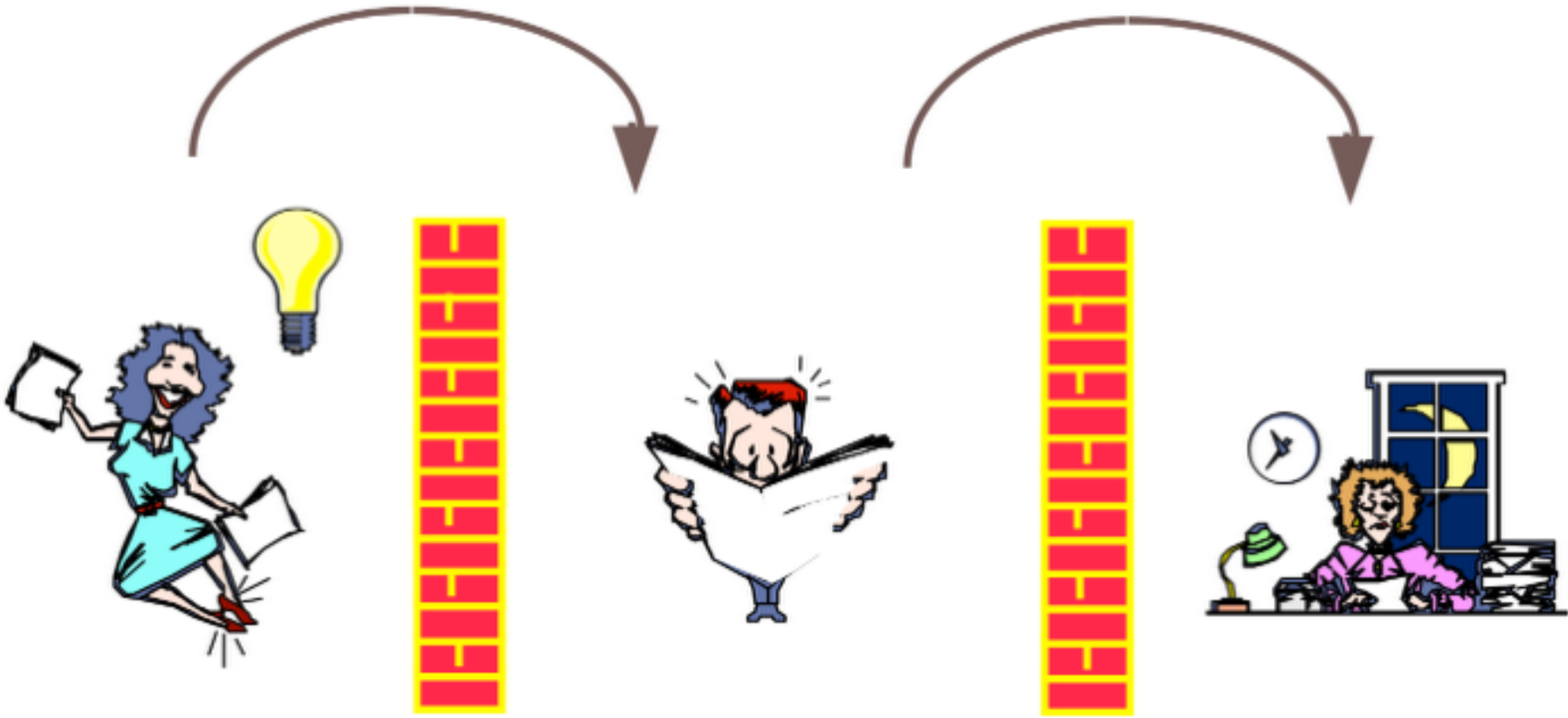


Problems

- Phases **idealistic**, reality requires backtracking
- **Specifications often too abstract** to guide design
- **Wrong assumptions** hard to detect & fix early

Human activity is **too complex and flexible**
for complete specification

⇒ **Involve final users as much as you can**



Researchers & Designers

Engineers & Developers

Users



How the customer explained it



How the Project Leader understood it



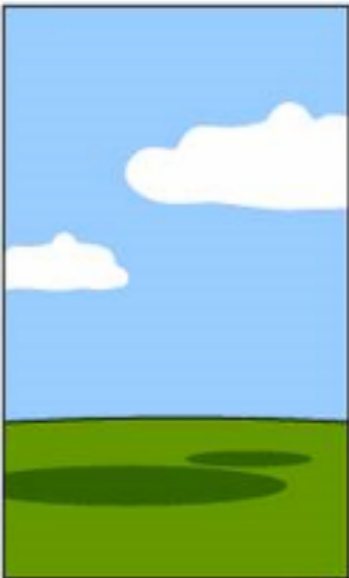
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



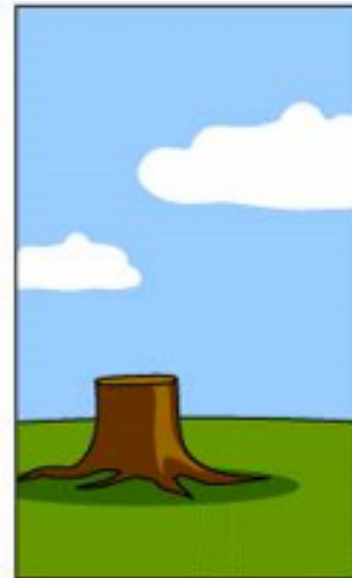
How the project was documented



What operations installed



How the customer was billed

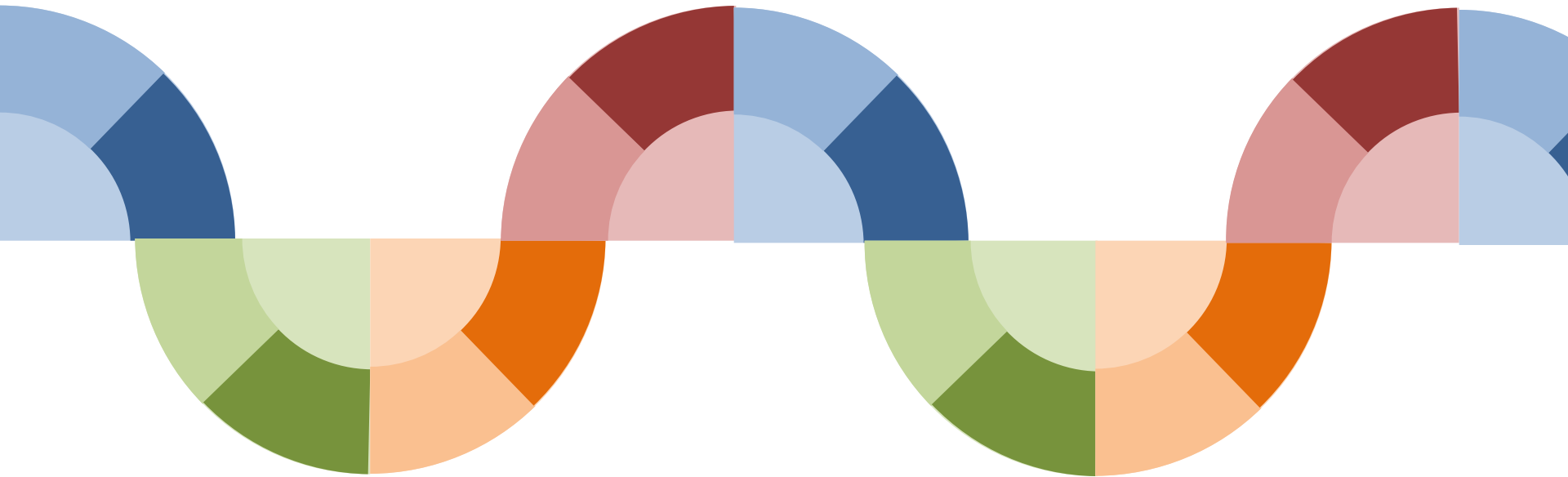


How it was supported



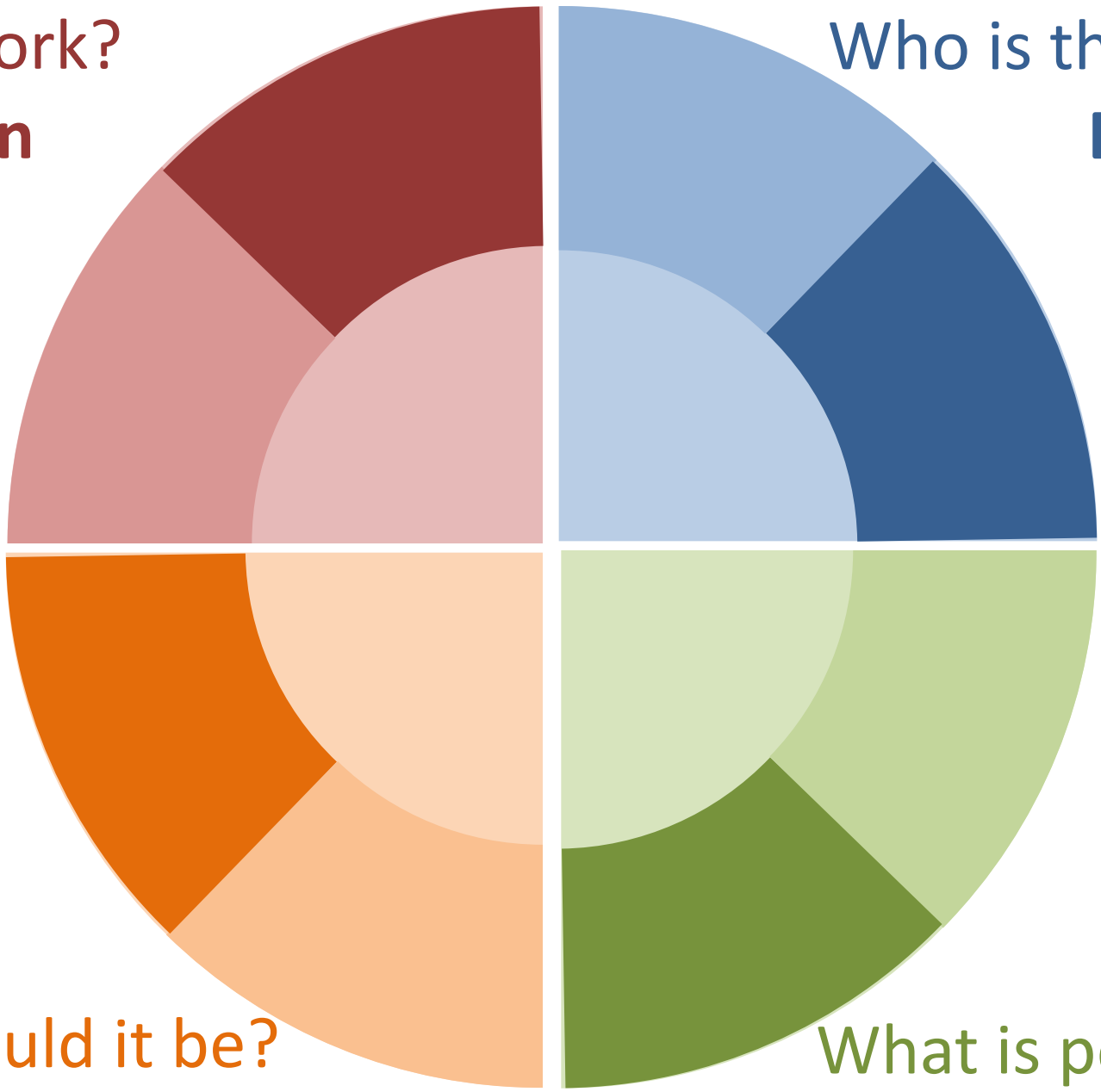
What the customer really needed

Generative Design



Does it work?
Evaluation

Who is the user?
Discover

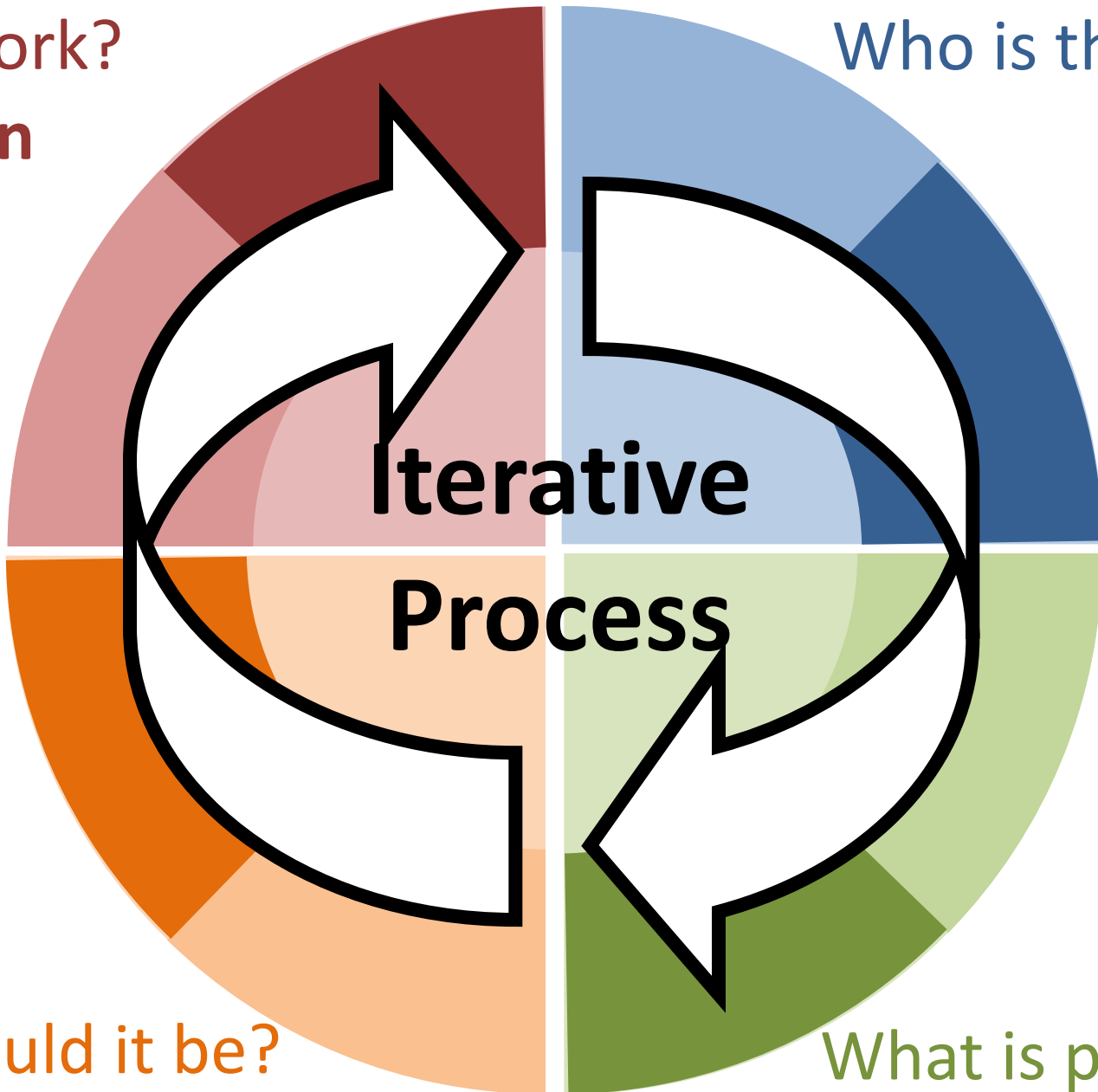


What should it be?
Design

What is possible?
Invention

Does it work?
Evaluation

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**Iterative
Process**

What should it be?
Design

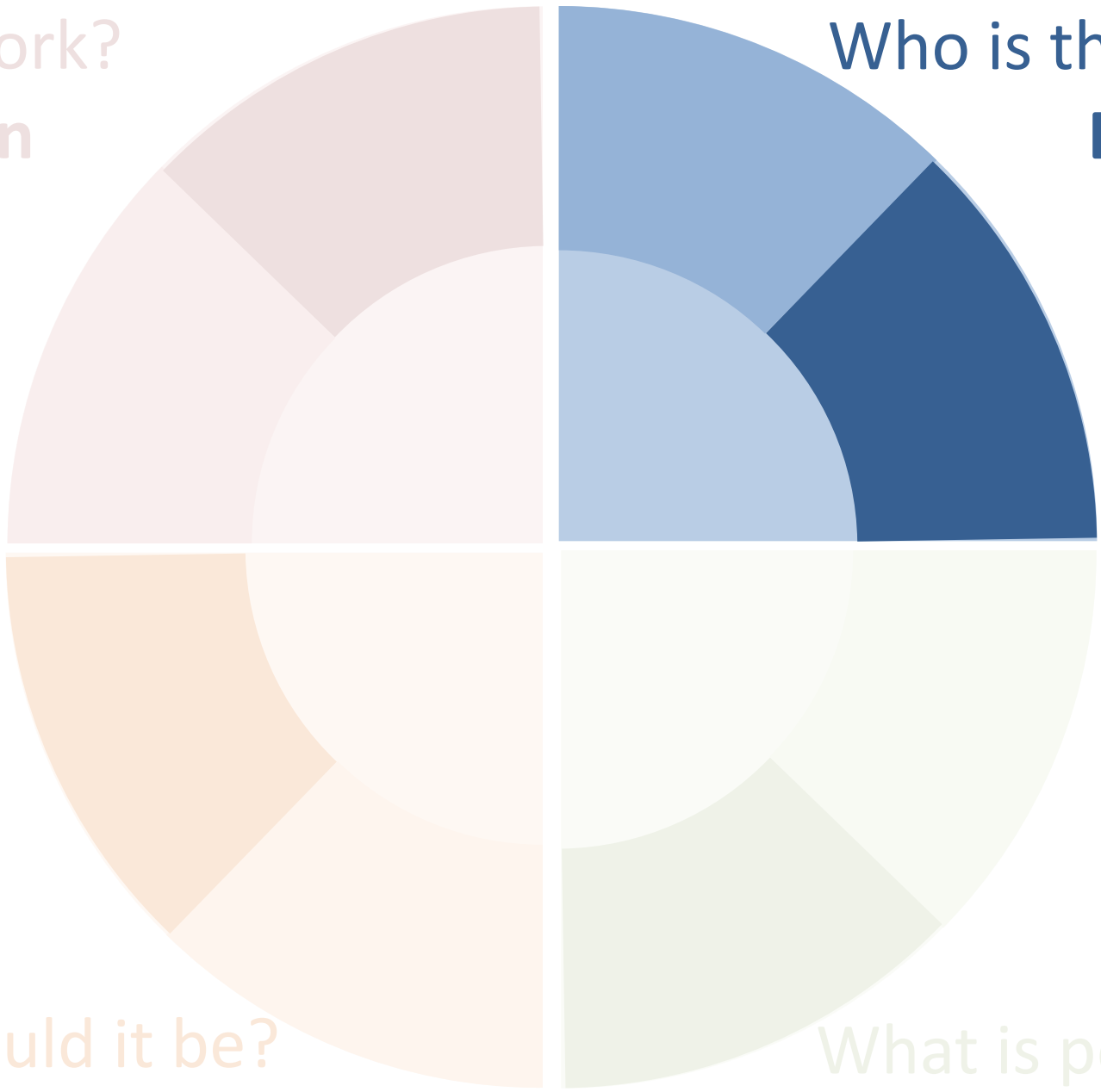
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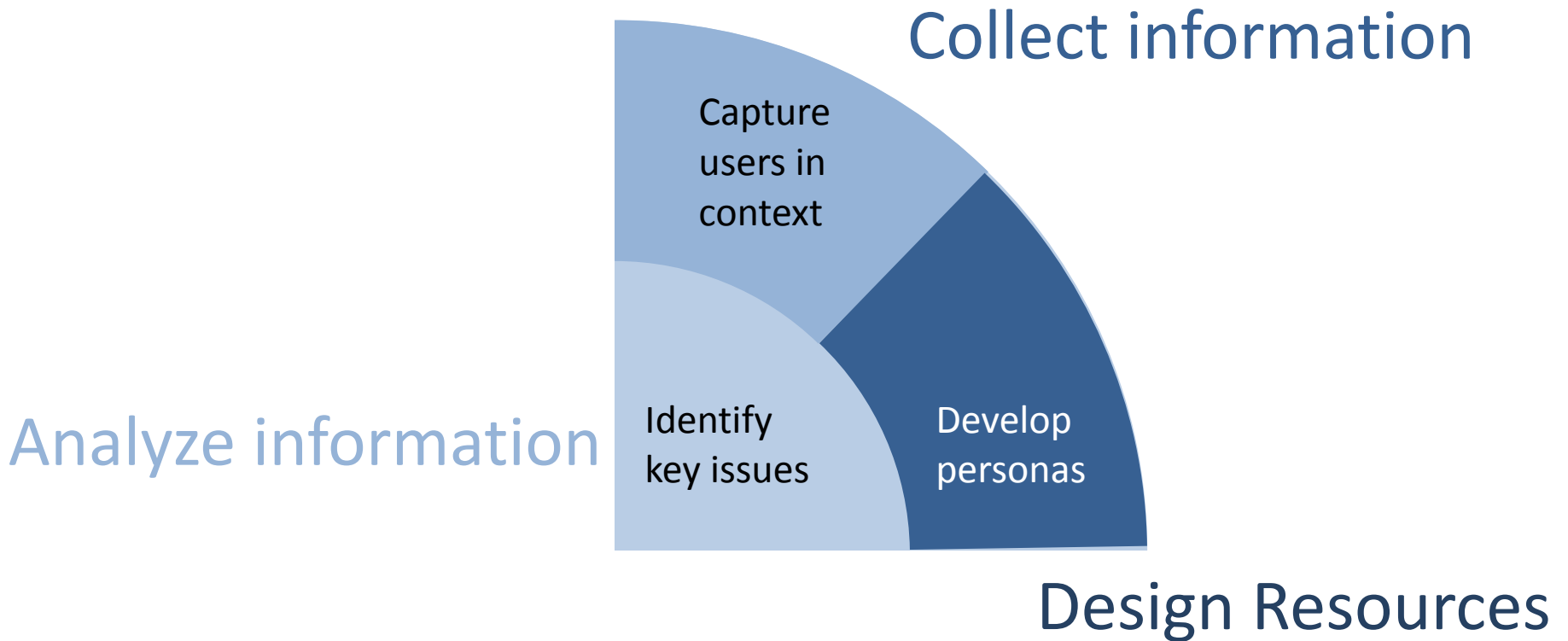
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What should it be?
Design

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UNDERSTAND WHO IS THE USER



Learning About Users

- Providing **useful functions/contents is not enough**
- Functions/contents need to fit seamlessly to user's tasks
- Find real **people interested** in your system (otherwise there's a problem)


Find and Know the Users

Finding Users

- Designer: “My web site/ application is useful for everyone”
- Designer: “I am a typical user myself”
 - Would you really use it daily?
 - Usefulness apparent to designer after long thought process may **not** be **obvious** to the user



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Find and Know the Users



uk.yahoo.com

YAHOO! UK

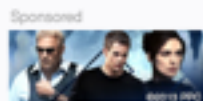
www.ebay.com

Search

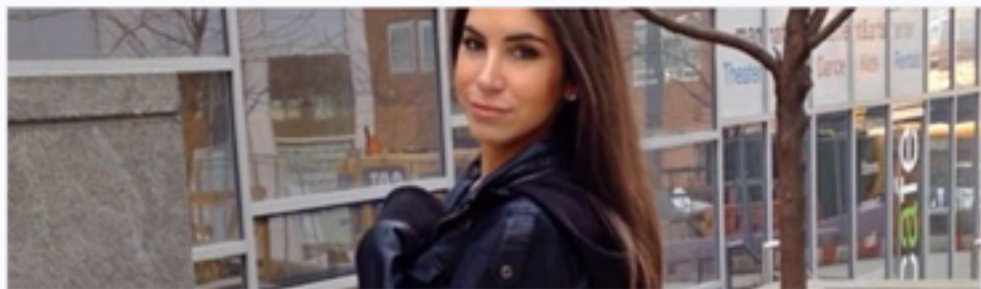
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- News
- Sport
- Finance
- Lifestyle
- omg!
- Cars
- Movies
- Screen
- Shopping
- Games
- Dating
- More >>

eBay
Amazon

Make YAHOO! your homepage



Intelligence is a weapon. Jack Ryan: Shadow Recruit. In cinemas now.



Is this woman's bum the most famous online?

Step aside Kim Kardashian - Instagram queen Jen Selter has a bum that's made her an online phenomenon. [Derriere extraordinaire >](#) 1 - 5 of 35

- The biggest fashion flop?
- Mystery ghost ship heads for UK
- Woman's bum finds fame
- Stunt ends painfully
- Bookies hit by 'real-life sting'

Trending Now

- | | |
|----------------------|-----------|
| 1 Hancock sex claims | 6 Pension |
| 2 Michelle Keegan | 7 Mia Gr |
| 3 Diamond earrings | 8 Hybrid |
| 4 Holly Willoughby | 9 50 sha |
| 5 Kelly Brook | 10 Bieber |

Featured videos Yahoo Screen

- Would dinosaurs have become humanoid?
- Ouch! Par painfully w

Thai govt seeks go-ahead to raise \$4 billion to pay rice farmers

How to capture data?



Introspection



Interviews

Likert Scales

Please circle the number that represents how you feel about the computer software you have been using

I am satisfied with it
Strongly Disagree —1—2—3—4—5—6—7— Strongly Agree

It is simple to use
Strongly Disagree —1—2—3—4—5—6—7— Strongly Agree

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It does everything I would expect it to do
Strongly Disagree —1—2—3—4—5—6—7— Strongly Agree

I don't notice any inconsistencies as I use it
Strongly Disagree —1—2—3—4—5—6—7— Strongly Agree

Questionnaires



Observations

How to capture data?



Susceptible
to errors

Introspection



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Questionnaires



Observations

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YAHOO! UK

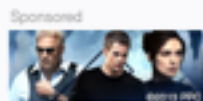
www.ebay.com

Search

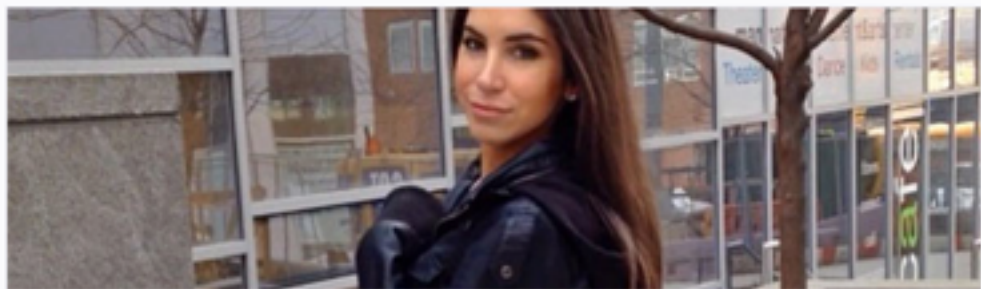
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Navigation arrows: < >

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News Sport Entertainment Finance

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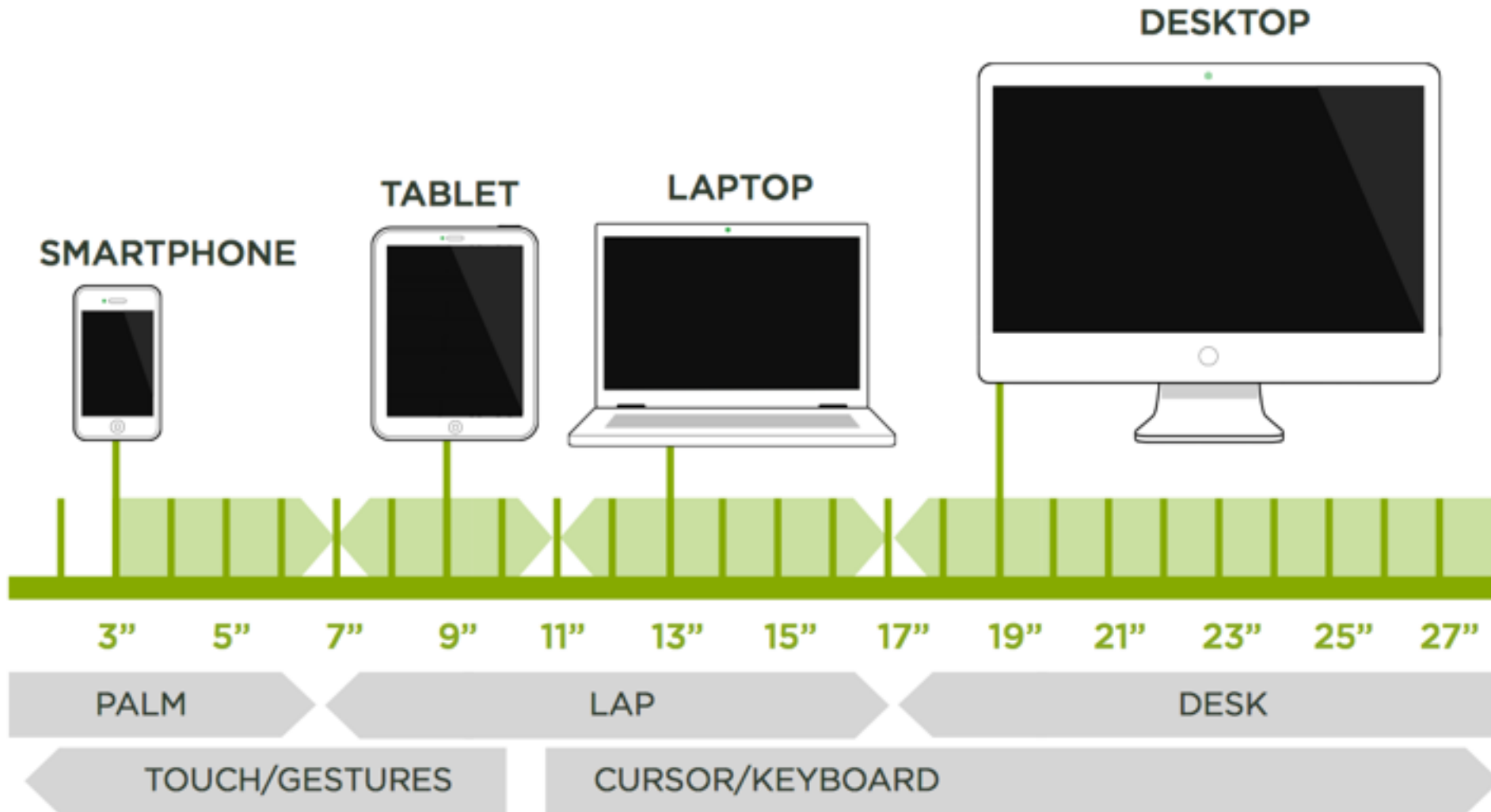
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Devices (input/output)



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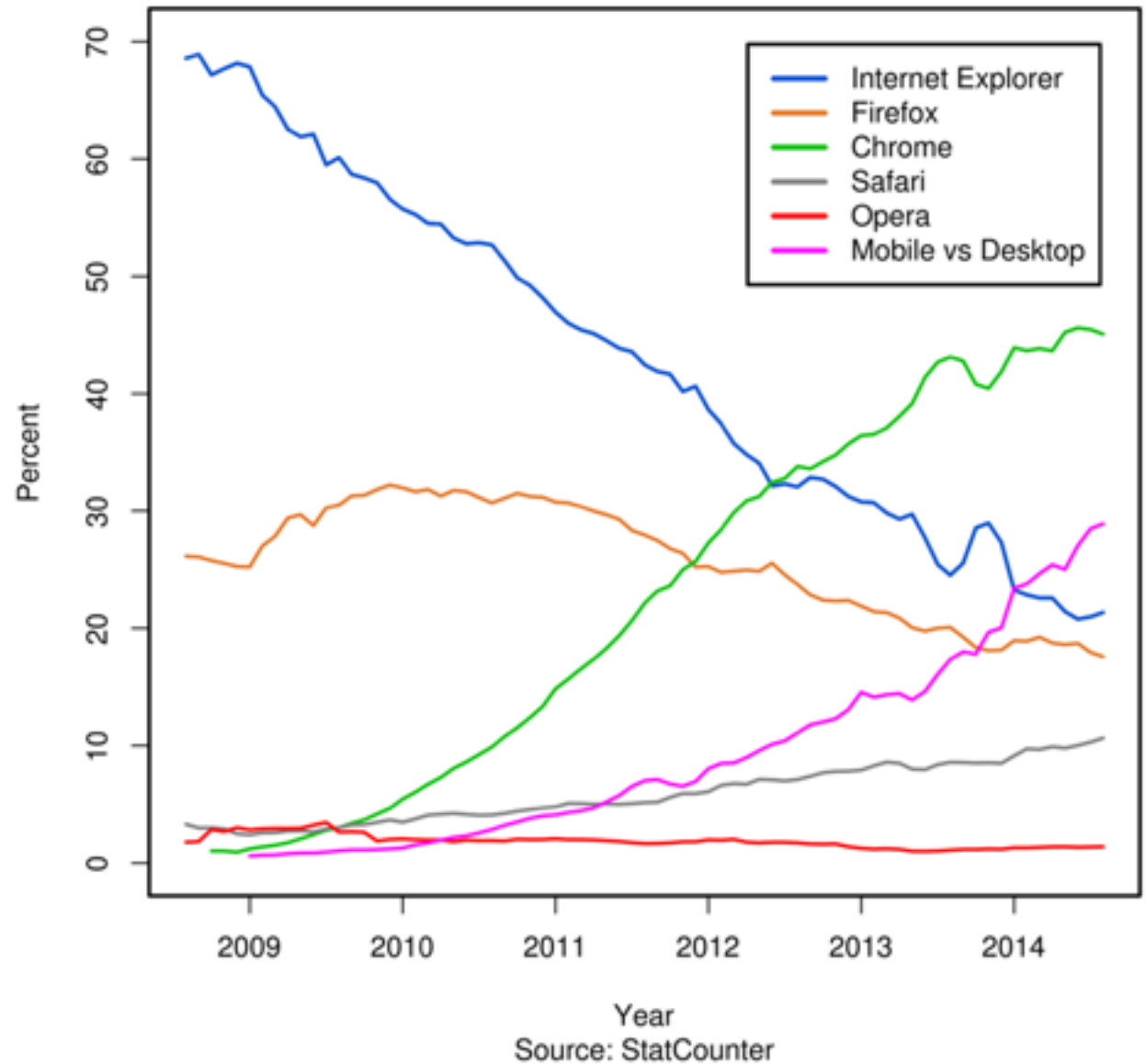
Devices (input/output)

Will be bundled with Asus computers.

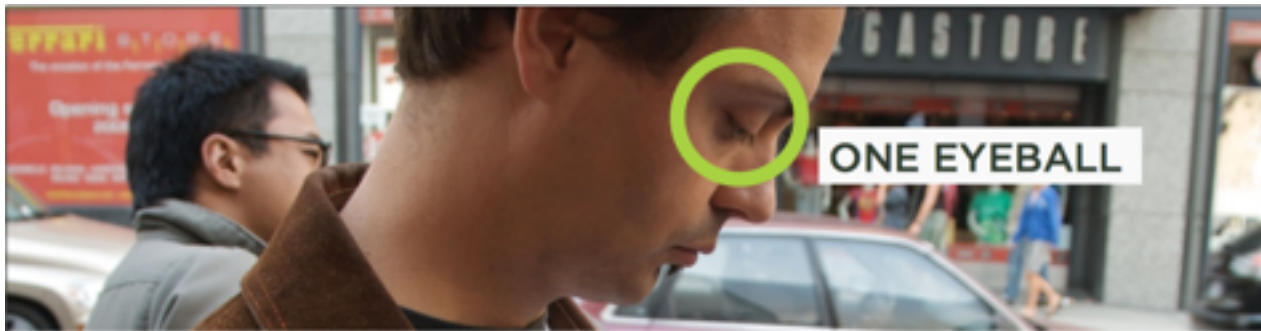


Browsers

Usage share of web browsers



Context



ONE EYEBALL

Partial attention requires focused design



ONE THUMB



How to capture data?



Introspection



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Questionnaires



Observations

UNDERSTAND WHO IS THE USER

Collect information

- introspection
- interviews
- questionnaires
- observations

Capture
users in
context

Identify
key issues

Develop
personas

Analyze information

- identify the key points
- give a code
- group codes with similar content

Design Resources

- Persona
- scenario

Personas Example

(Cooper, About Face, Chapter 5)

- Goal: Building a car that **pleases everyone**



Marge, mother of three children

Marge wants safety and room for many passengers. A minivan meets her needs.



Jim, construction worker

Jim wants cargo space and the ability to carry heavy load. A pickup truck meets his needs.



Alesandro, software engineer

Alesandro wants sporty looks and speed. A two-door sports car meets his needs.

Personas Example

(Cooper, About Face, Chapter 5)

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Personas Example

(Cooper, About Face, Chapter 5)

- Goal: Building a car that **pleases everyone**



Building a car based on three personas (representing larger groups)



Marge, *mother of three children*

Marge wants safety and room for many passengers. A minivan meets her needs.



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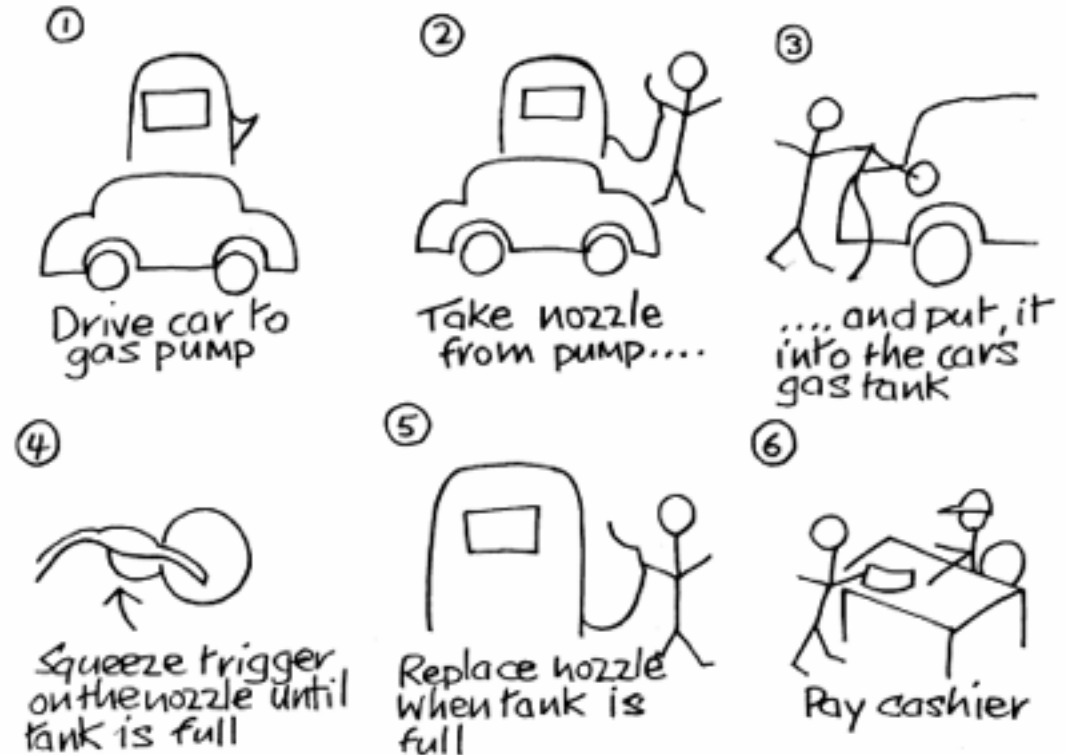


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Representations of Scenarios

- Text
- Storyboards
- Video mock-ups
- Scripted prototypes
- Physical situations



- Different levels of detail possible
- Expanding scenarios if needed

Example storyboard

Scenario Perspective

- User's point of view of:
 - **what** happens,
 - **how** it happens
 - and **why** it happens
 - User **motivations** toward the system
 - User **actions** taken
 - User's **reasons** why actions were taken
 - User's **perception**
 - Results in terms of user's motivations and expectations

Questions



Questions

- What is the most important until now?
 - Know and find the user(S)



Questions

- What is the most important until now?
 - Know and find the user(S)
- How to capture information about users?
 - Introspection
 - Questionnaire
 - Interviews
 - Observations



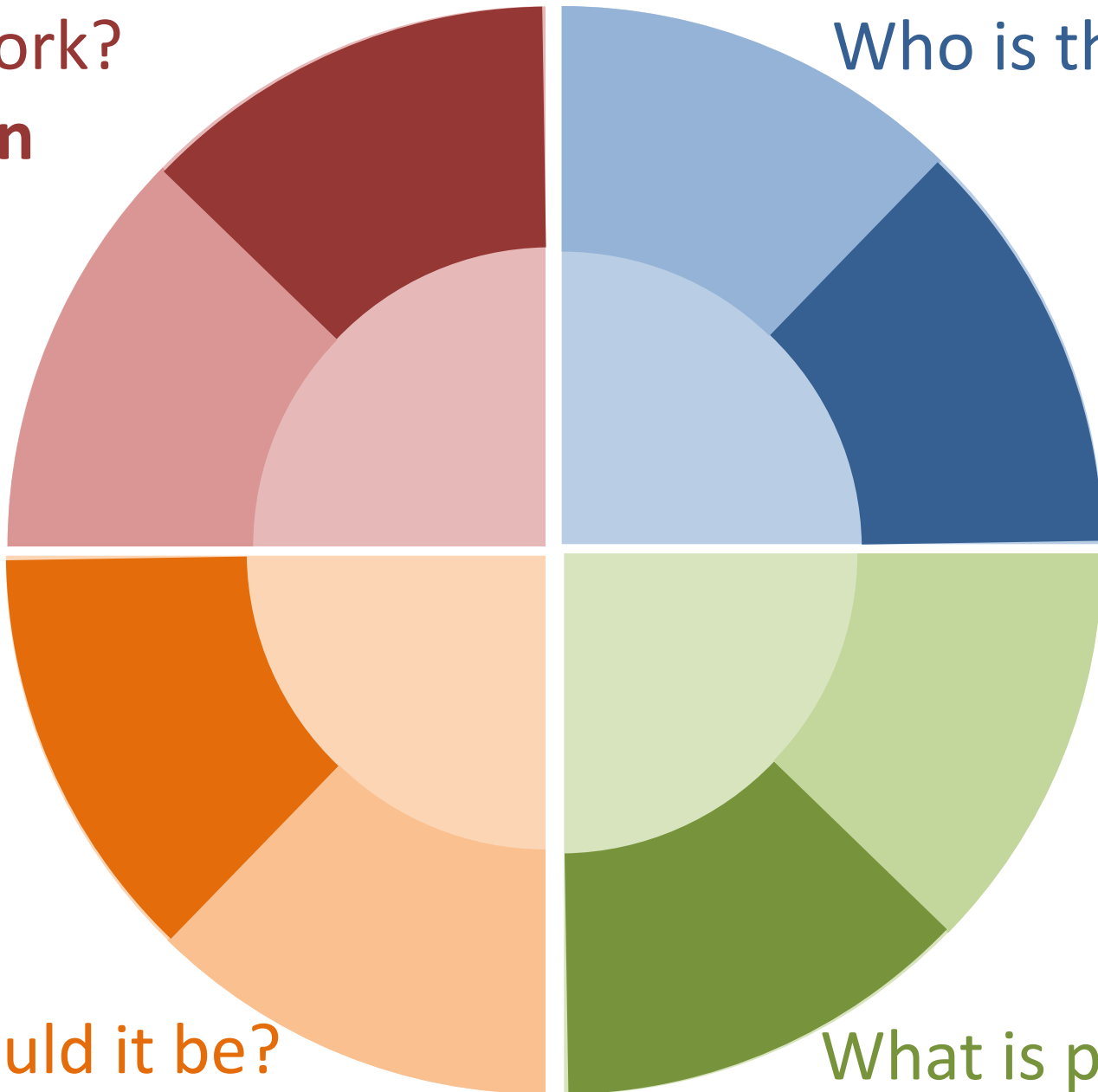
Questions

- What is the most important until now?
 - Know and find the user(S)
- How to capture information about users?
 - Introspection
 - Questionnaire
 - Interviews
 - Observations
- How to create resources for design?
 - Persona
 - Scenario



Does it work?
Evaluation

Who is the user?
Discover

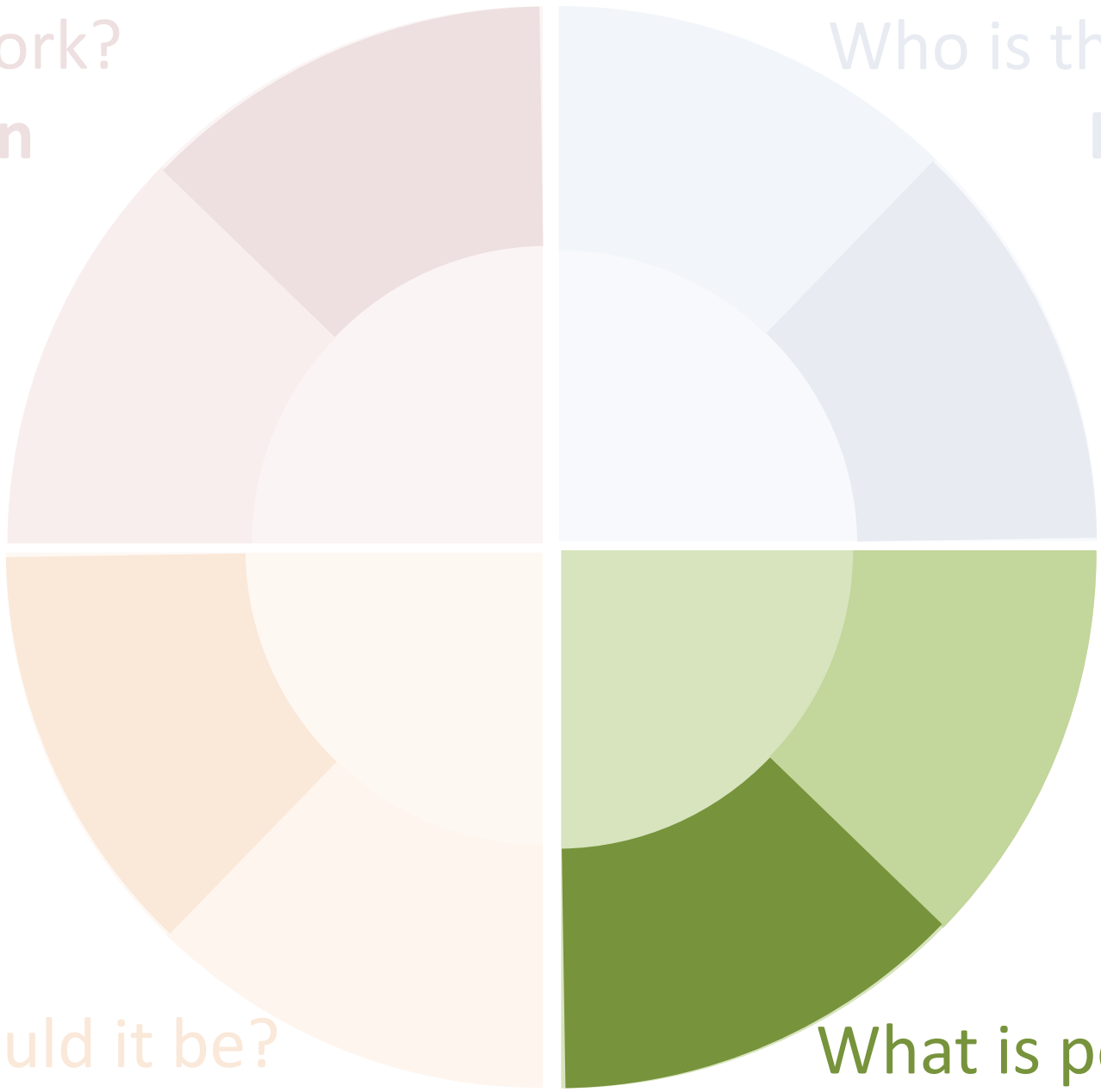


What should it be?
Design

What is possible?
Invention

Does it work?
Evaluation

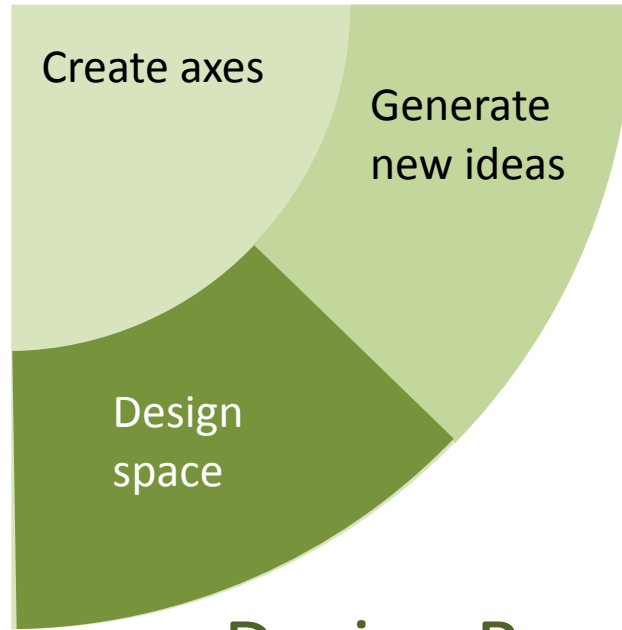
Who is the user?
Discover



What should it be?
Design

What is possible?
Invention

Analyze information



Collect information

- Web search
- Brainstorming

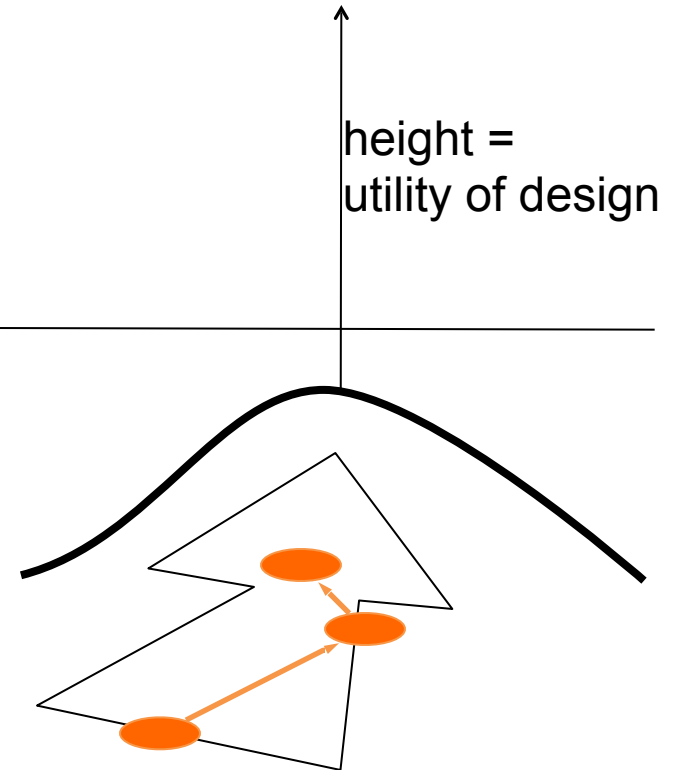
Design Resources

- Key ideas
- Design space

What is possible?
Invention

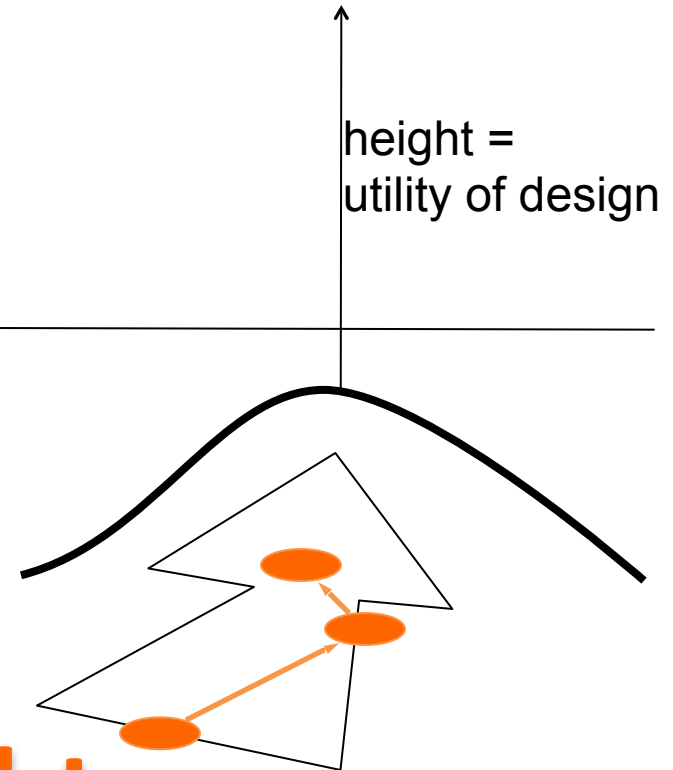
Engineering iteration

- (1) **create** design / generate an idea
 - (2) **iterate** by hill climbing
- this process finds the top of a hill



Engineering iteration

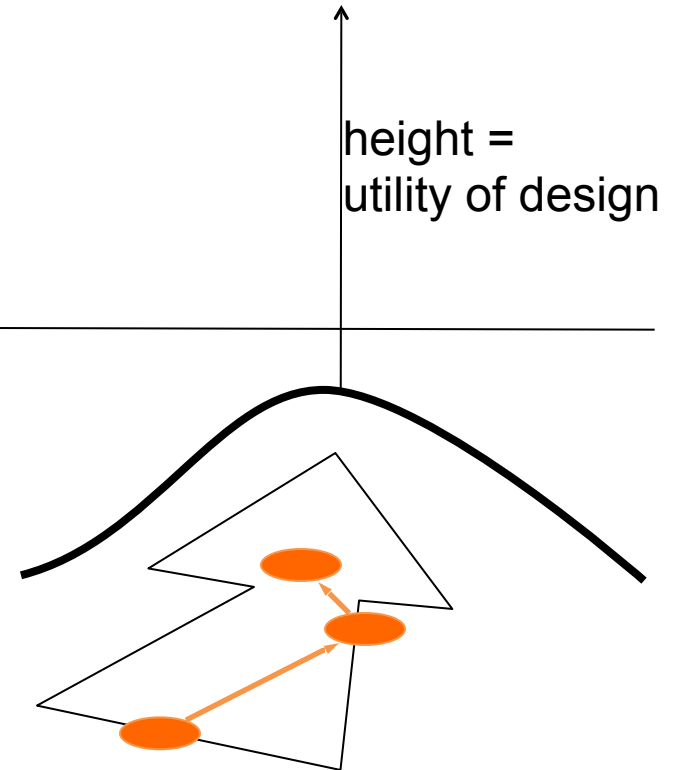
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Design Right

Engineering iteration

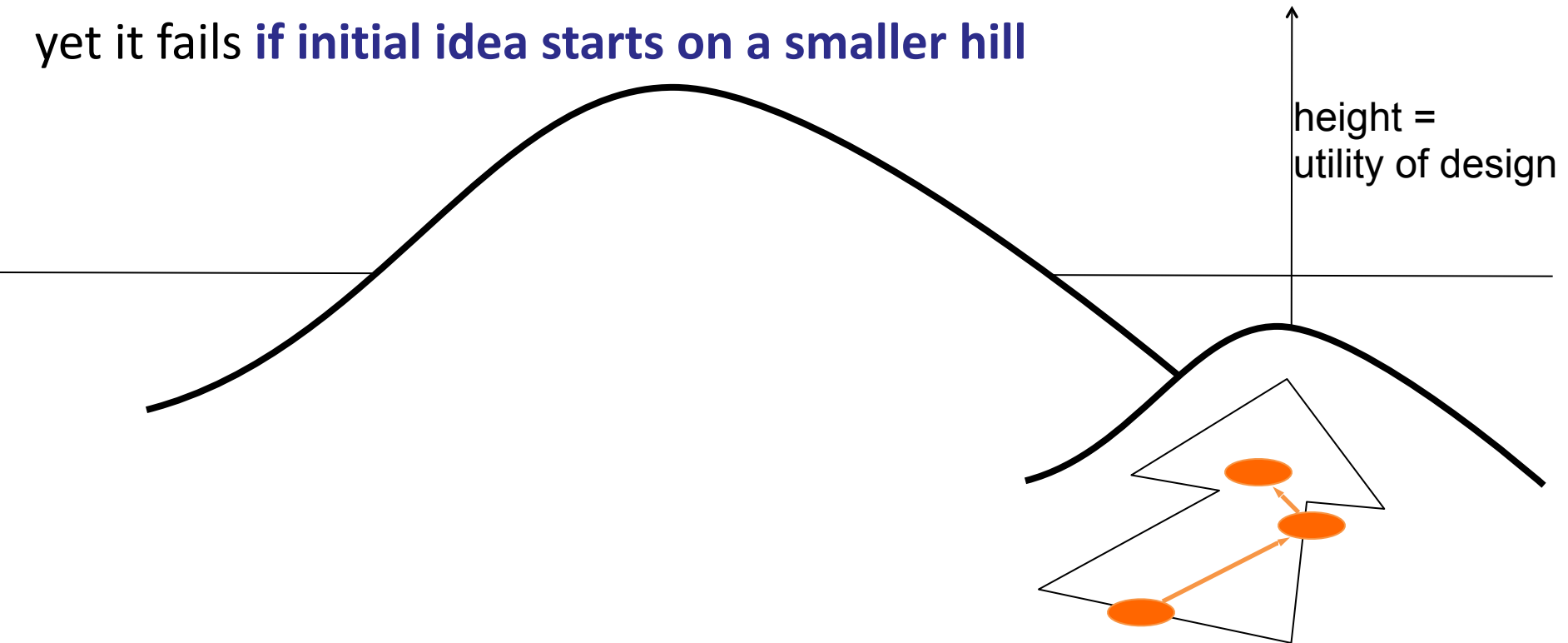
- (1) **create** design / generate an idea
 - (2) **iterate** by hill climbing
- this process finds the top of a hill



Engineering iteration

- (1) **create** design / generate an idea
 - (2) **iterate** by hill climbing
- this process finds the top of a hill

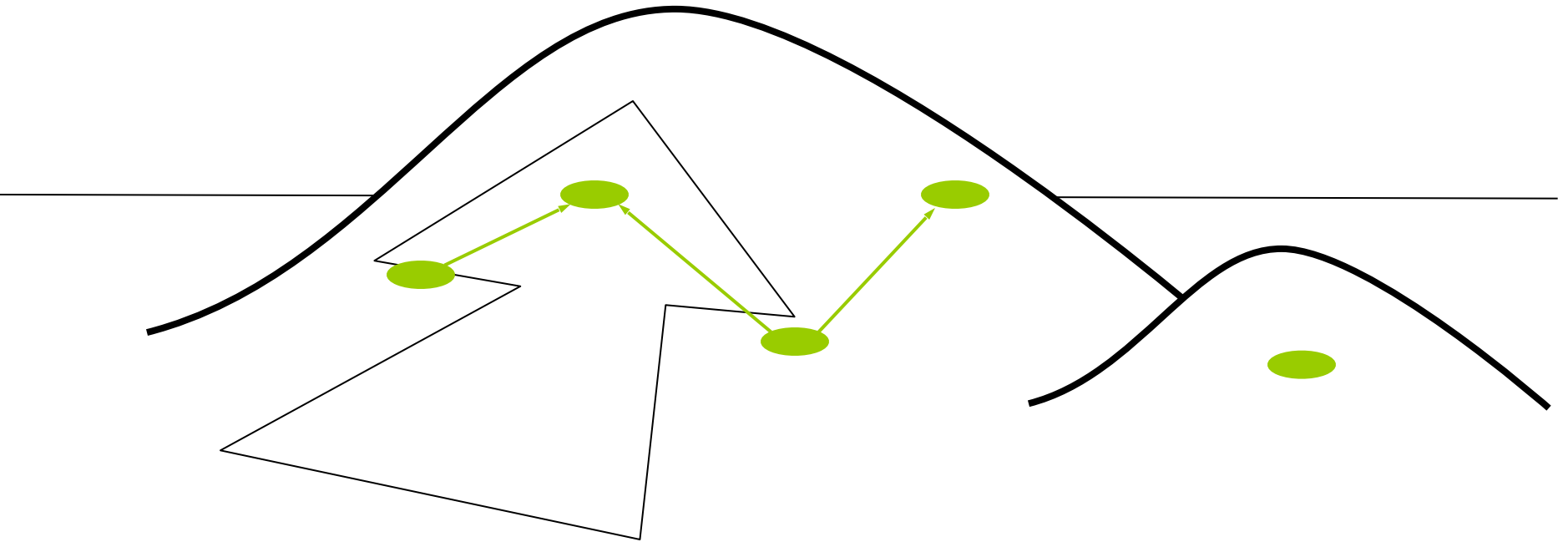
yet it fails **if initial idea starts on a smaller hill**



Design Process

- (1) create k new designs;
- (2) drop $k-1$ worst designs

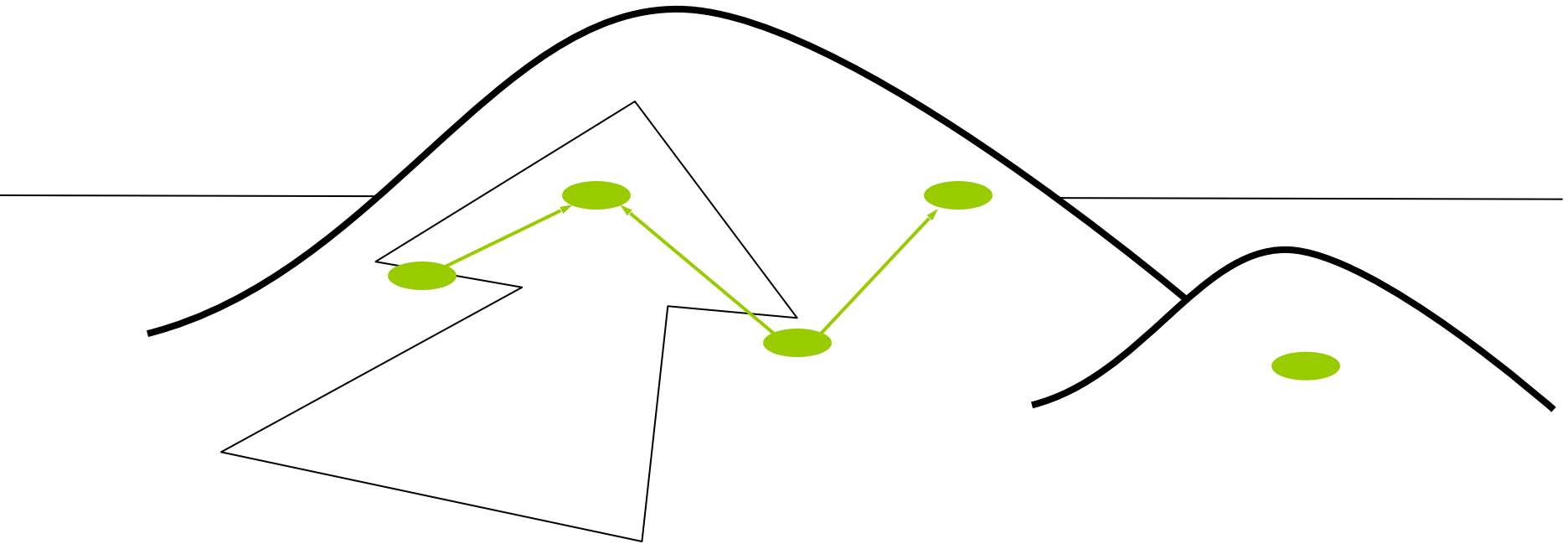
this process finds the **tops of multiple hills**
and works with “distracter” hills



Design Process

- (1) create k new designs;
- (2) drop $k-1$ worst designs

this process finds the **tops of multiple hills**
and works with “distracter” hills



Right Design

Brainstorming



Brainstorming

- Collect as **many ideas** on a given topic as possible
- **Quantity**, not quality; include crazy ideas
 - Go for a large number of ideas
 - “To get a good idea, get lots of ideas” (Marc Rettig)
- **!!!!No judgments!!!!**
 - Do not criticize or argue
- How: Scribe collects ideas **visible for all: Whiteboard & Post-it.**
- Limit to **5-10** minutes

Opposite Technique

If you get stuck, push existing ideas in new directions

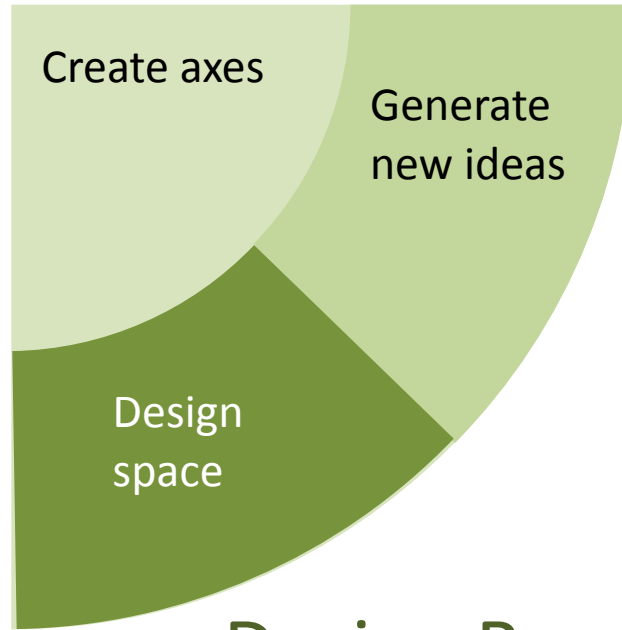
Opposites:

- Simple vs. Complex
- Short vs. Long
- Direct vs. Indirect
- Text vs. Graphic
- Funny vs. Serious
- Process vs. Object
- Start vs. End
- Single vs. Sequence

- Growth = Opportunity
- Constraints = Focus
- Capabilities = **Innovation**

Web products should be designed for **mobile first**.

Analyze information



Collect information

- Web search
- Brainstorming

Design Resources

- Key ideas
- Design space

What is possible?
Invention



Questions?



Questions?

- How to get the RIGHT design?
 - Brainstorming



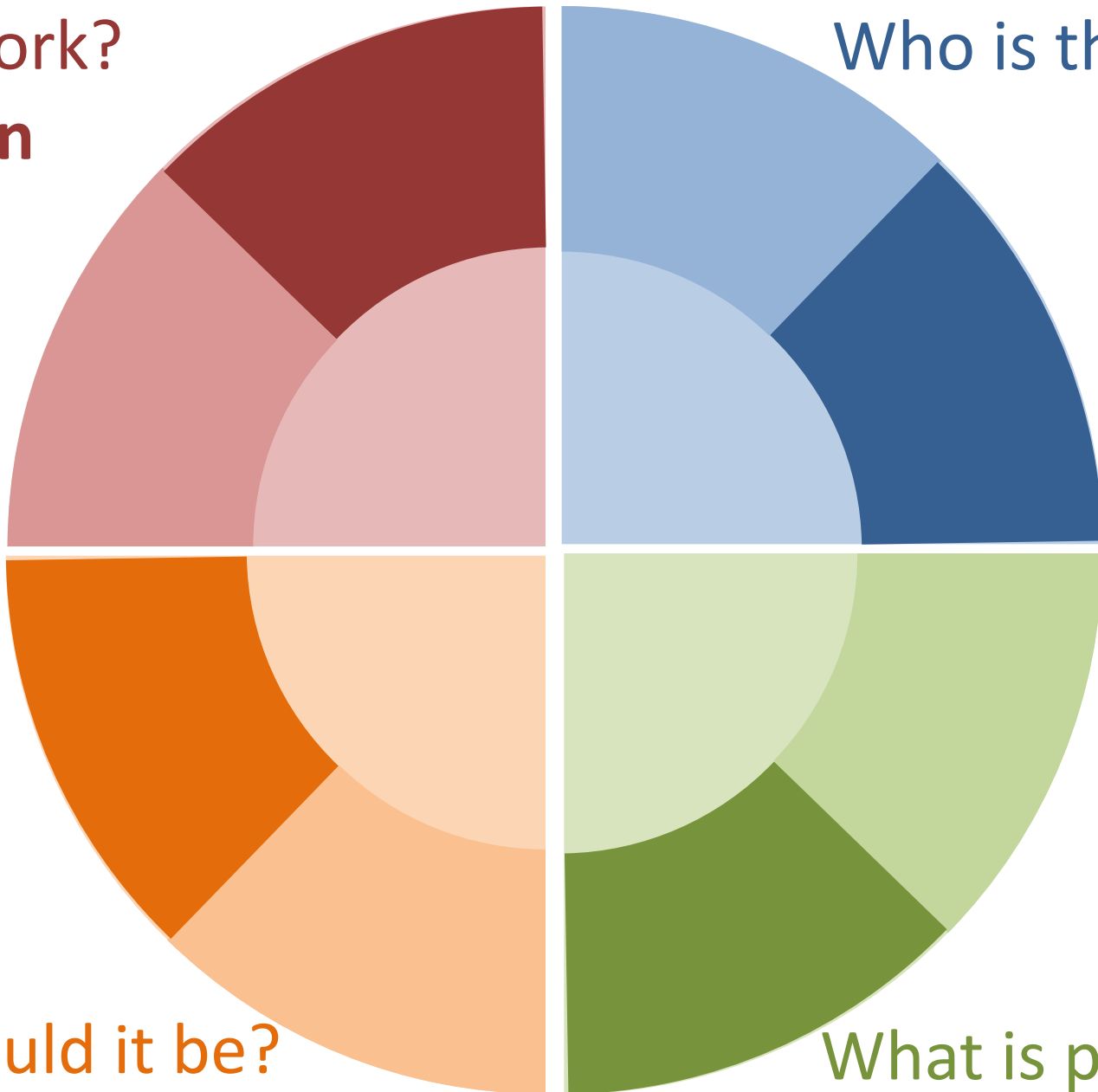
Questions?

- How to get the RIGHT design?
 - Brainstorming
- What are the three rules?
 - Quantity not quality
 - No judgement
 - Keep it short



Does it work?
Evaluation

Who is the user?
Discover



What should it be?
Design

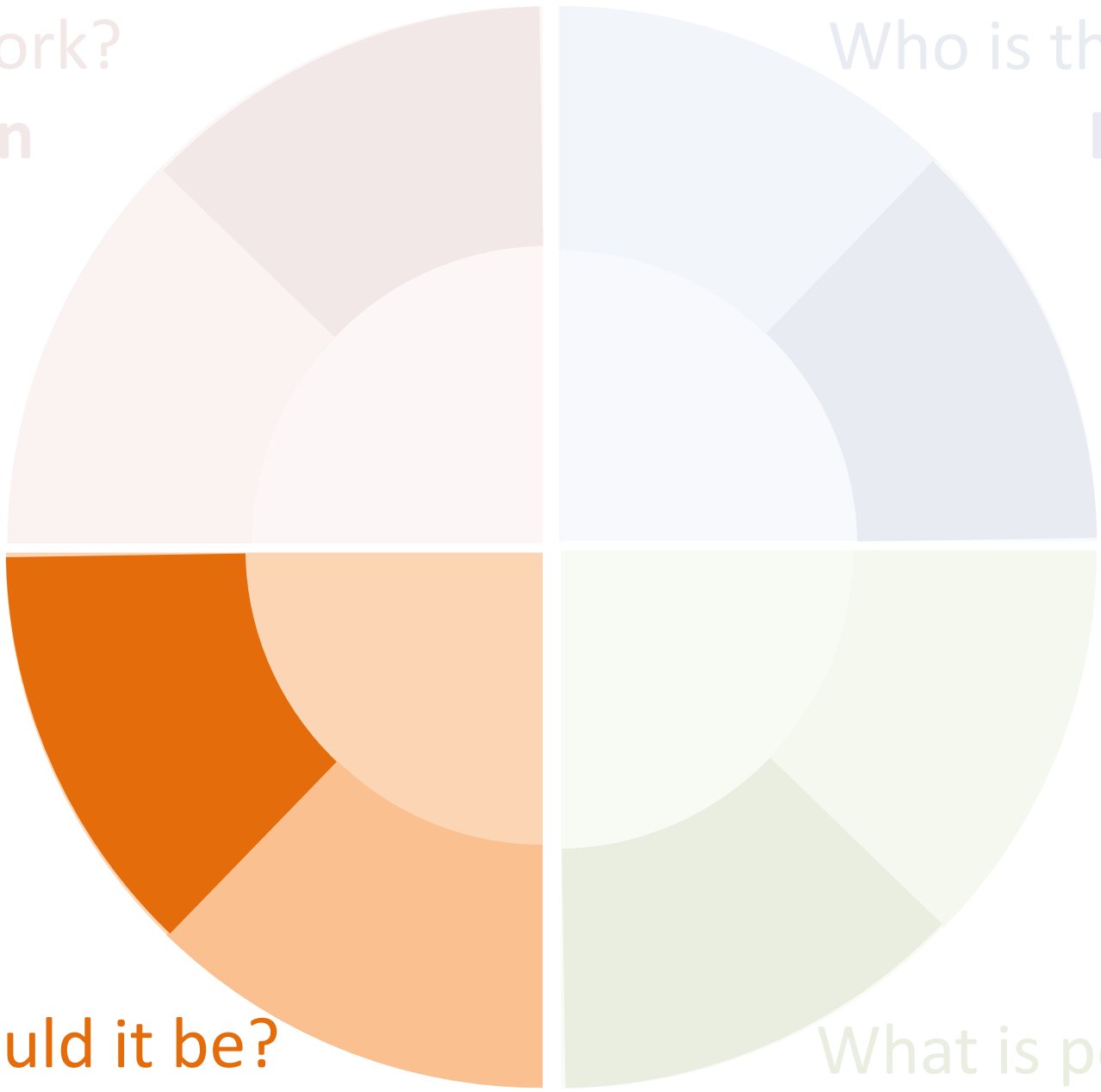
What is possible?
Invention

Does it work?
Evaluation

Who is the user?
Discover

What should it be?
Design

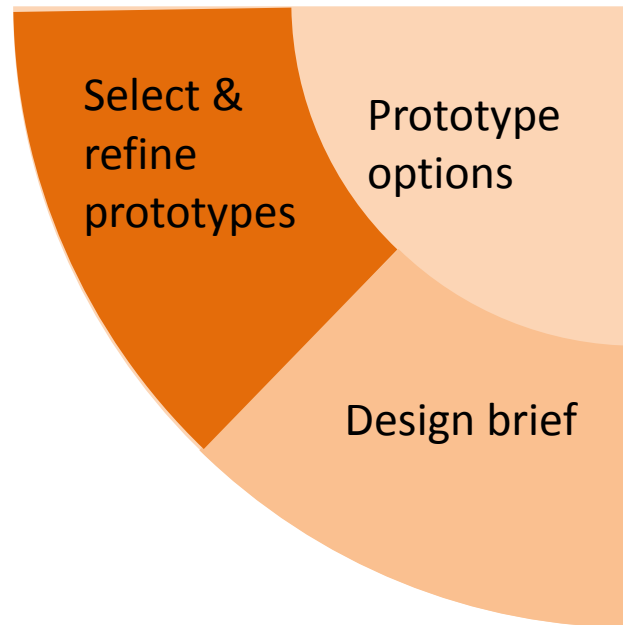
What is possible?
Invention



Design Resources

- Low-fidelity prototype
- Medium-fidelity prototype
- High-fidelity prototype

Analyze information



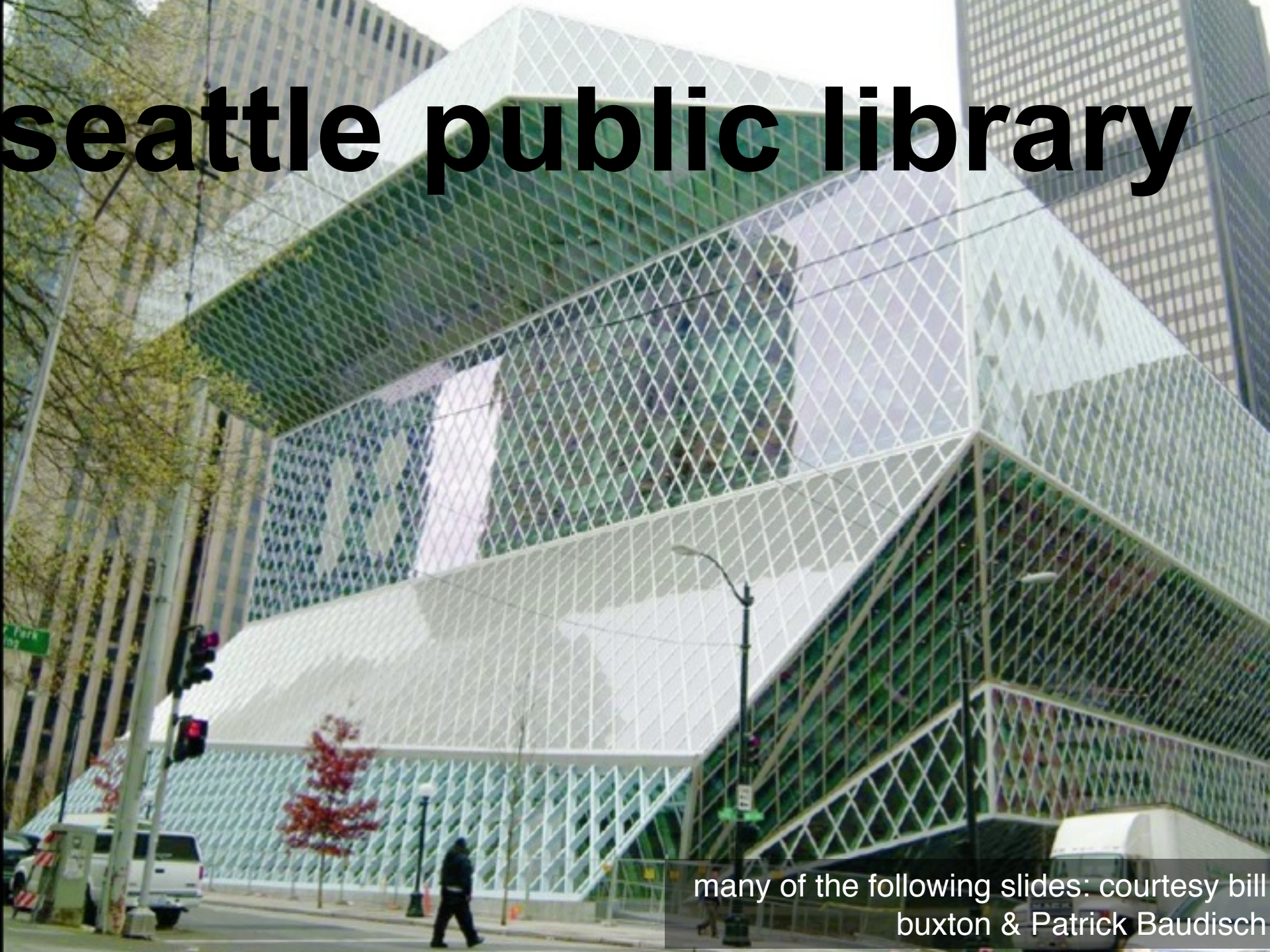
Collect information

- sketches

What should it be?

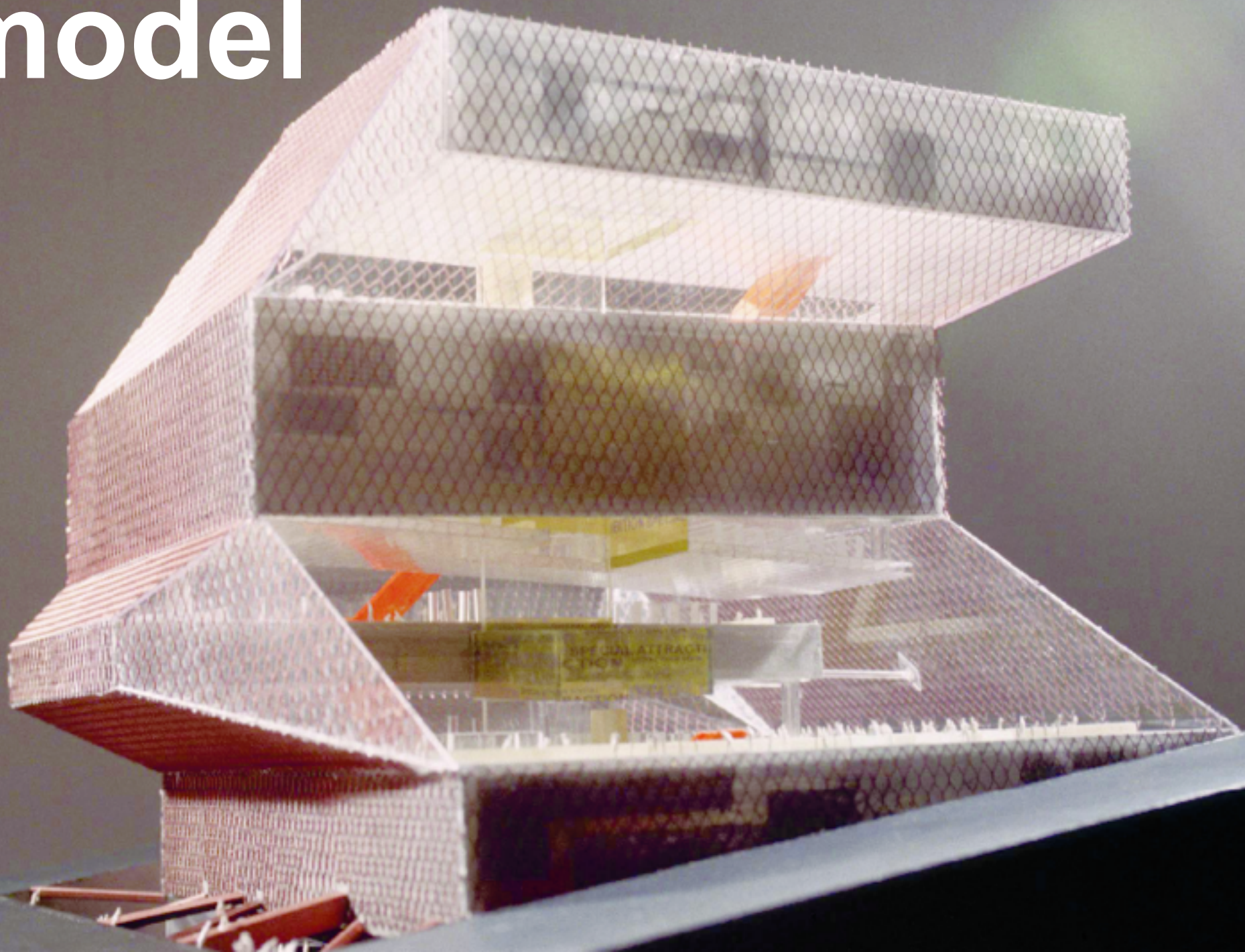
Design

seattle public library

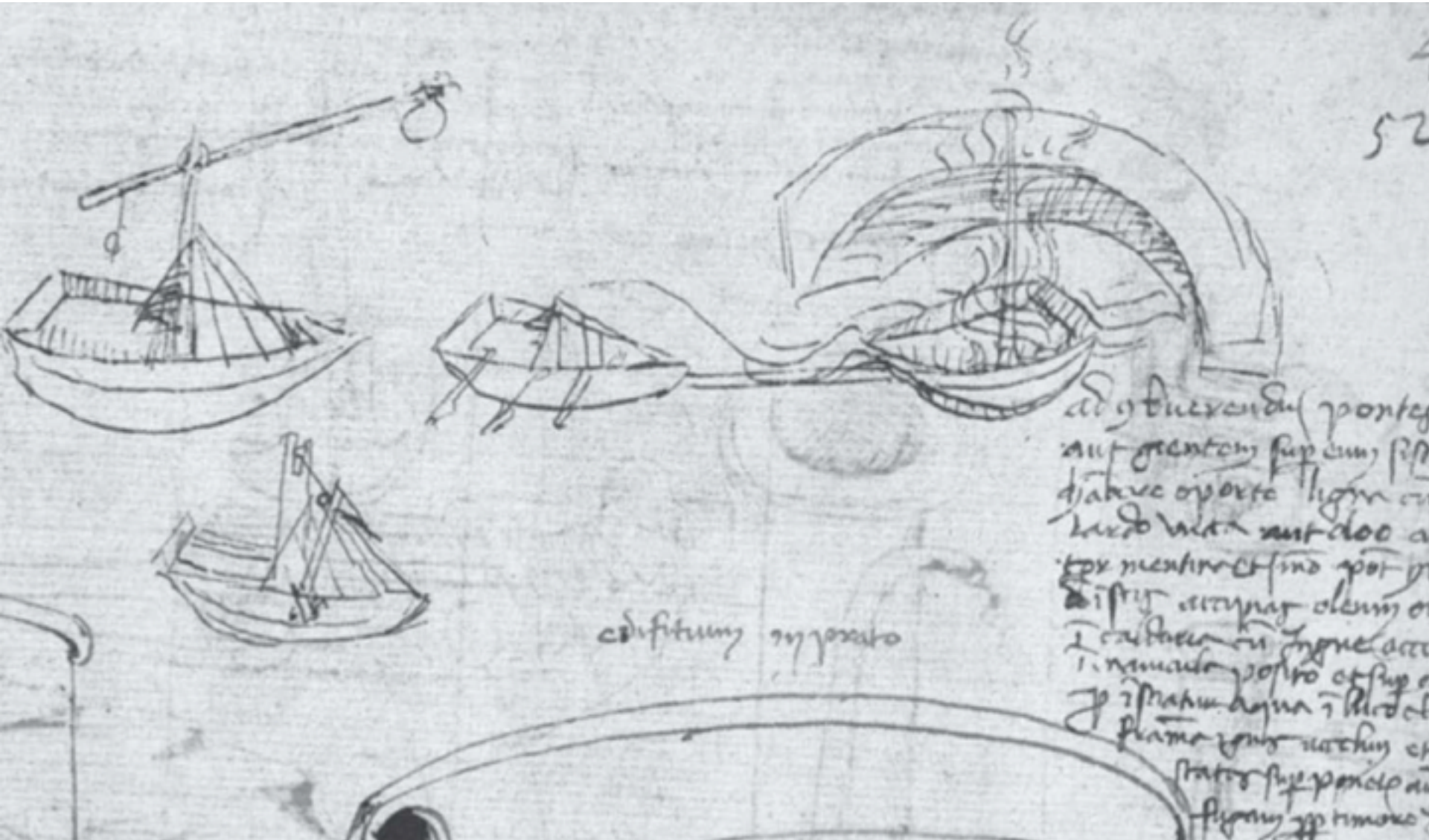


many of the following slides: courtesy bill
buxton & Patrick Baudisch

model



Sketching is a tool of thought



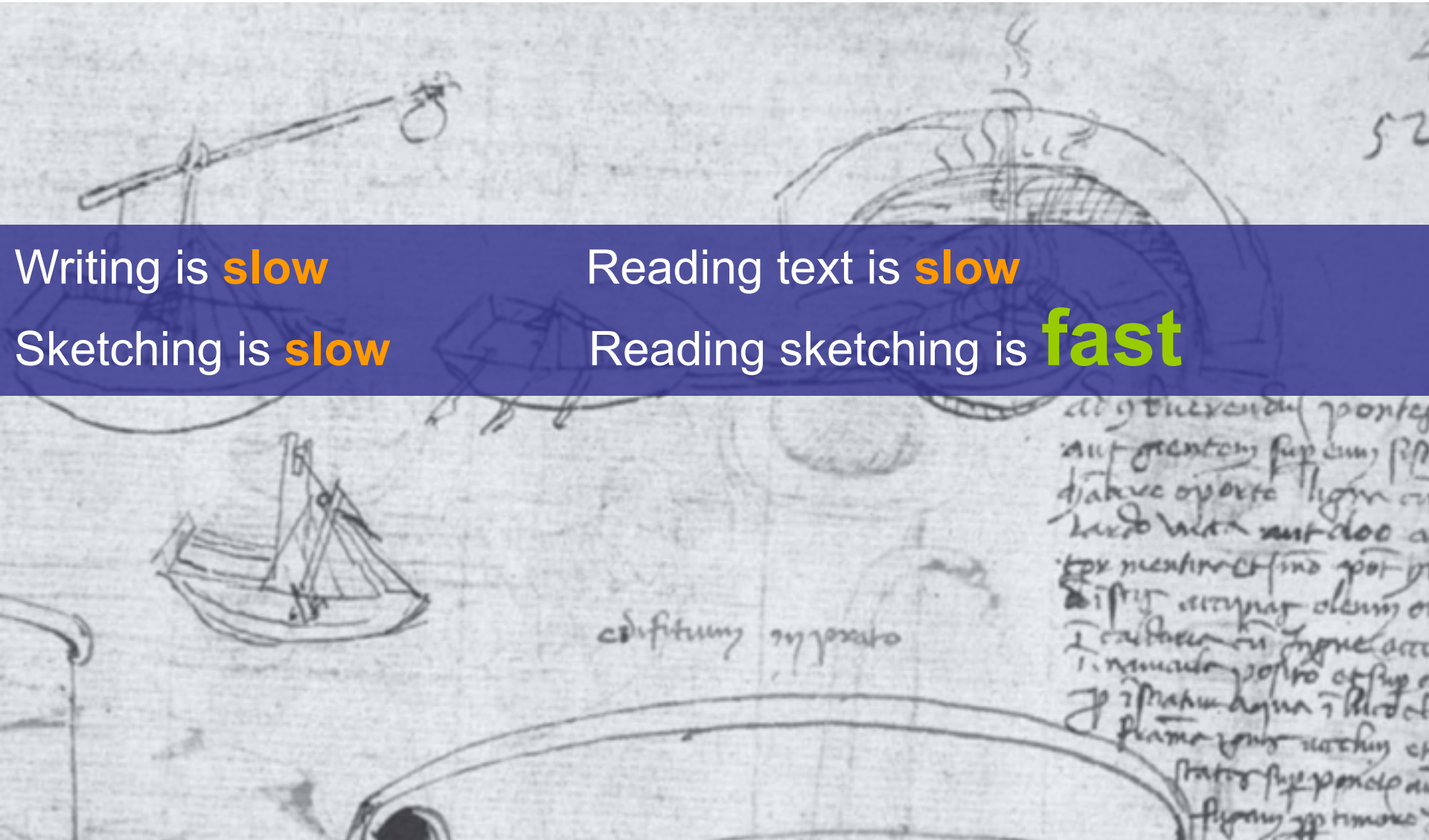
Sketching is a tool of thought

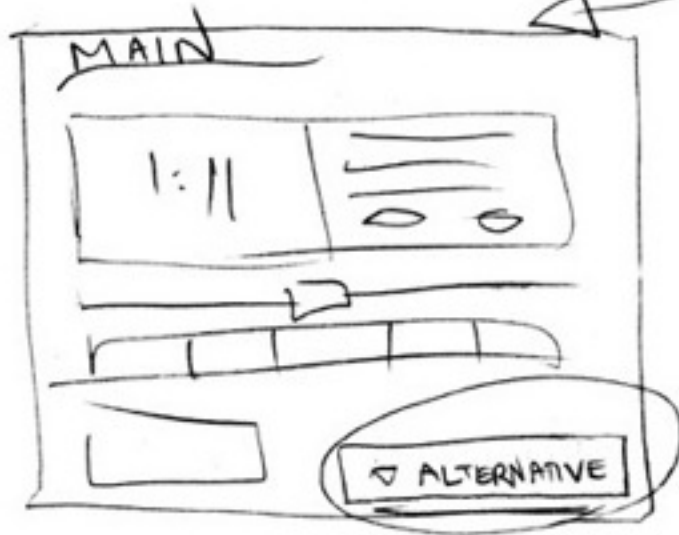
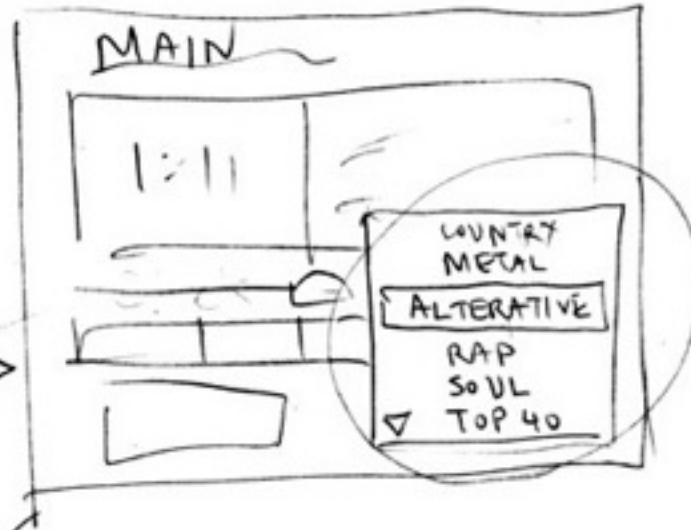
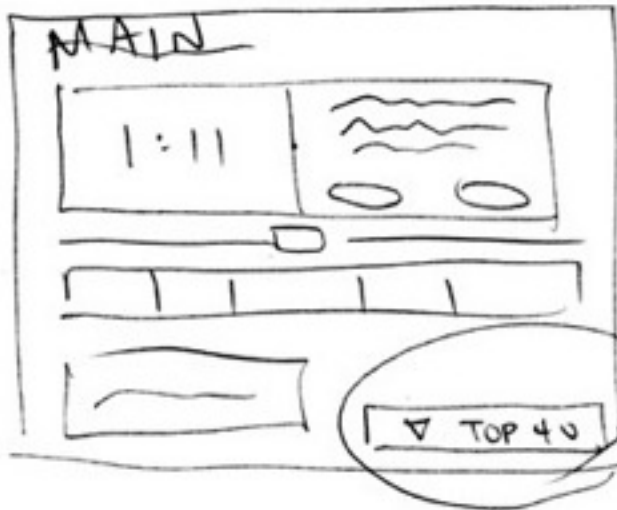
Writing is **slow**

Reading text is **slow**

Sketching is **slow**

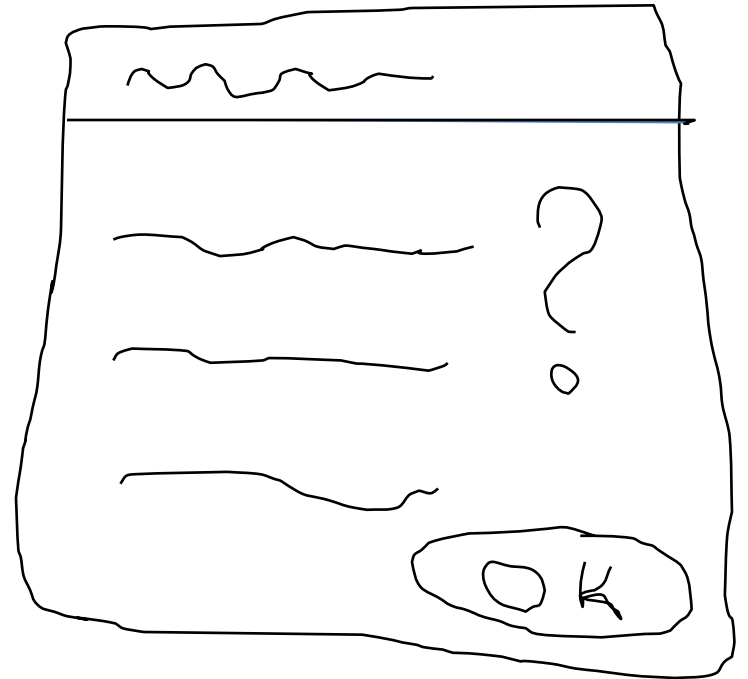
Reading sketching is **fast**





The Attributes of Sketches

- **Quick**
 - To make



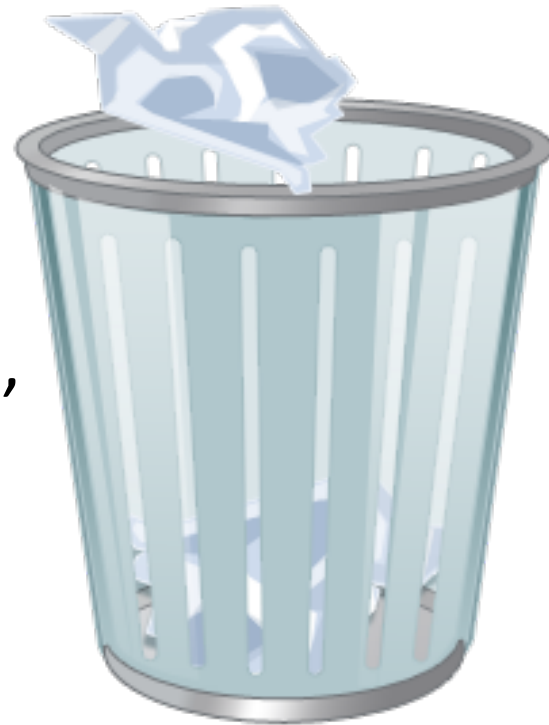
The Attribute of Sketches

- Quick
 - To make
- **Timely**
 - Provided when needed



The Attribute of Sketches

- Quick
 - To make
- Timely
 - Provided when needed
- **Disposable**
 - Investment in the concept, not the execution
 - Inexpensive



The Attribute of Sketches

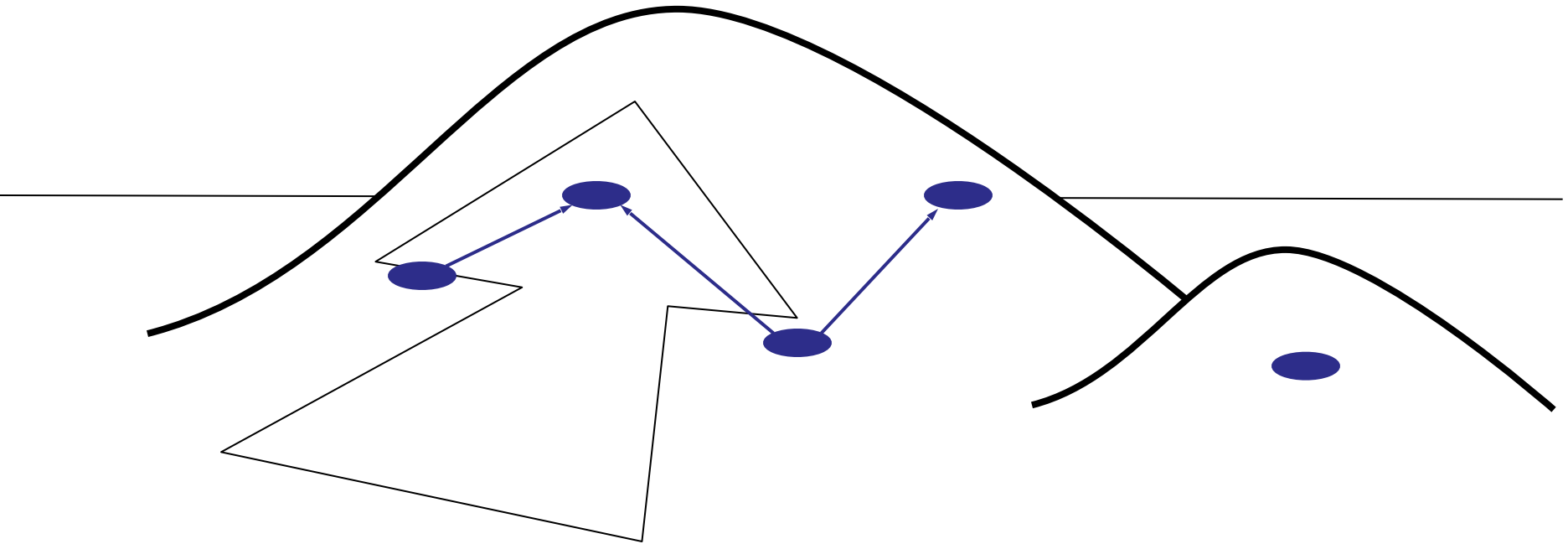
- Quick
 - To make
- Timely
 - Provided when needed
- Disposable
 - Investment in the concept, not the execution
 - Inexpensive
- **Plentiful**
 - They make sense in a collection or series of ideas.



Design Process (Right design)

- (1) create k new designs, add to set;
- (2) drop k worst designs

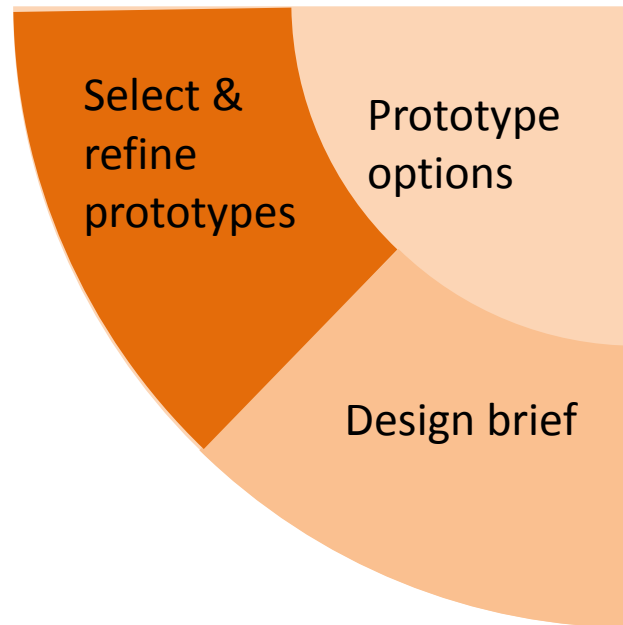
this process finds the **tops of multiple hills**
and works with “distracter” hills



Design Resources

- Low-fidelity prototype
- Medium-fidelity prototype
- High-fidelity prototype

Analyze information



Collect information

- sketches

What should it be?

Design

Starting point



Ideas generate more ideas

Focal point



Ideas selected and refined

Sketch

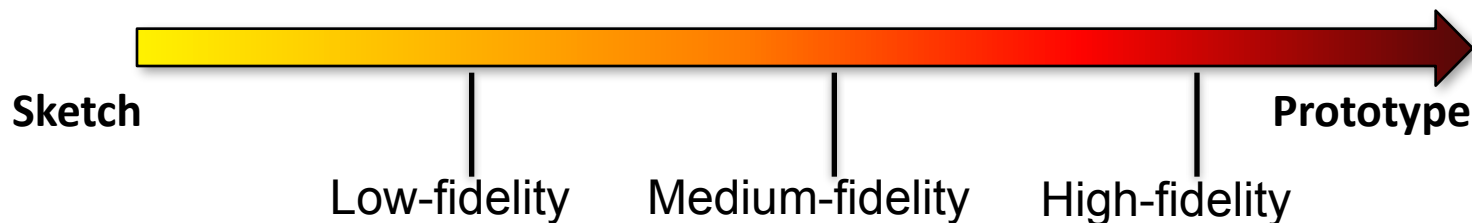


Prototype

Low investment
More opportunities to explore
Fail early... learn

Forms of Prototyping

- **Low-fidelity** prototyping
- **Medium-fidelity** prototyping
- **High-fidelity** prototyping



Limiting Prototypes

- Vertical prototypes

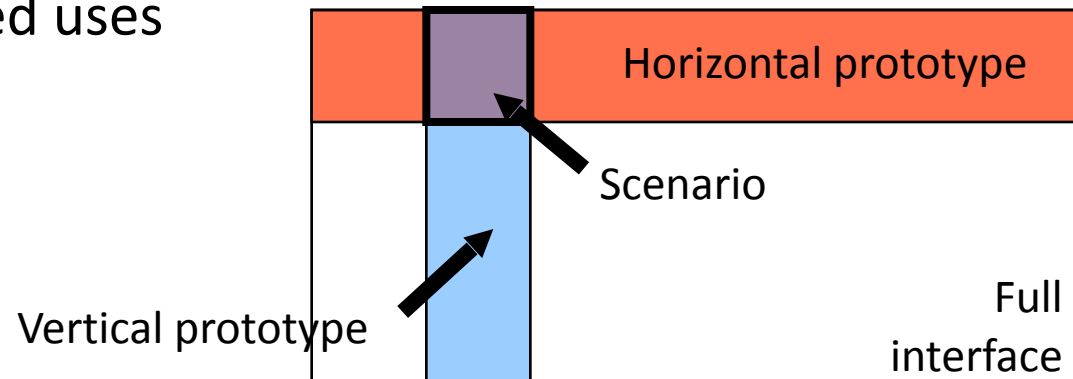
- Includes in-depth functionality for only a few selected features
- Common design ideas can be tested in depth

- Horizontal prototypes

- The entire surface interface with no underlying functionality
- A simulation; no real work can be performed

- Scenario

- Scripts of particular fixed uses of the system; no deviation allowed





Expire my Profile

News Feed

- Messages 25
- Friends 5
- Events 1

- Business no longer
- Create a Group scroll
- Application 3
- More 1

News Feed

Top News **300+**

What's on your mind?



CAPOTEIRA BEGOUO
PATRADO TOMORROW!



SALTA WZIA ANON PIR AGVI
CAY SEU CUALPIMO
COMENSO CAPIM.



IT WAS A LOOOONG DAY...!



BRUH.
DON'T TRY THIS AT HOME



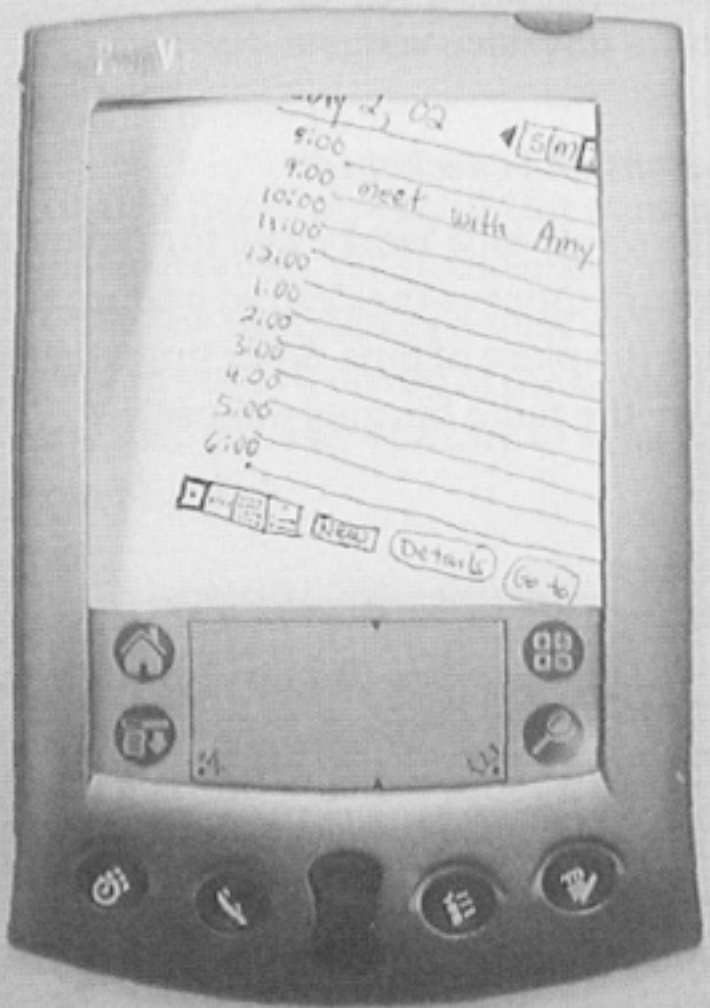
SWEET LIKE CANDY TO MY
SOUL / SWEET YOU ROCK /
AND SWEET YOU ROLL.



oh yeah I'm AWESOME!

- TEXTS
- 5 PHOTO UPLOADS
- 1 VIDEO UPLOAD
- 1 EVENT
- 1 LINK

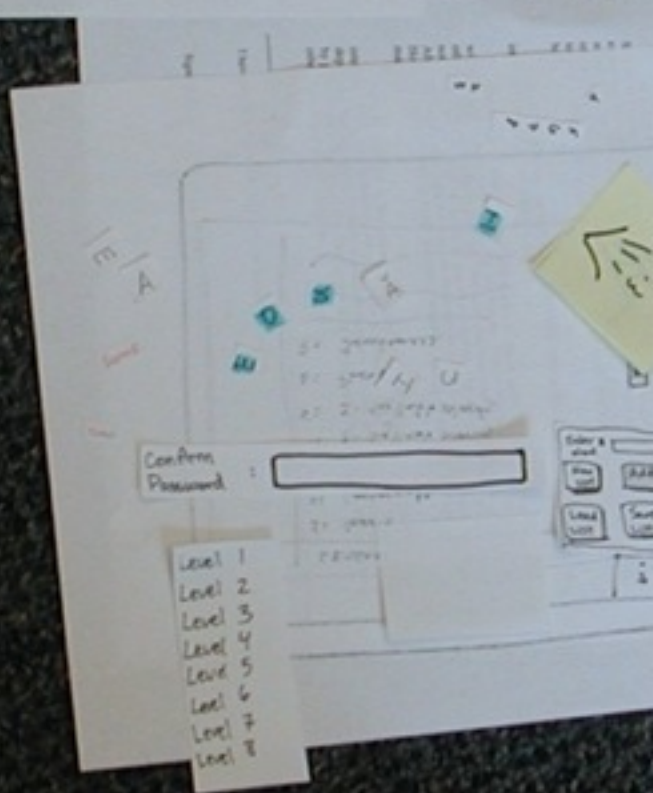
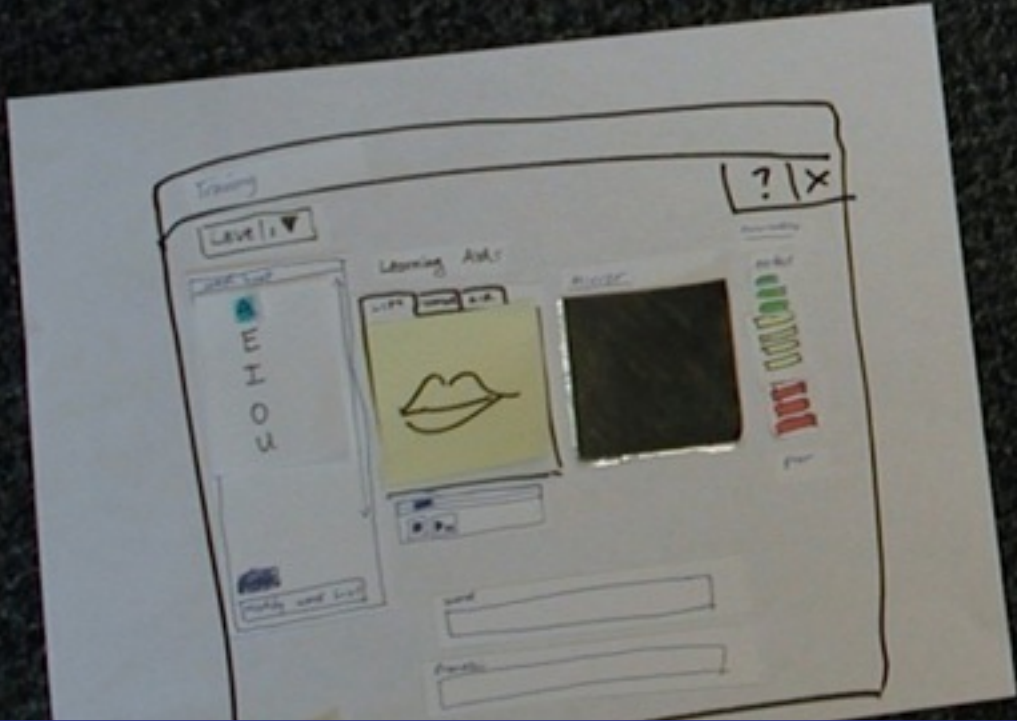
- HELP
- PRIVACY
- SECURITY
- ACCOUNT
- MOBILE
- FEEDBACK



9:00
 9:00
 10:00 meet with Amy
 11:00
 12:00
 1:00
 2:00
 3:00
 4:00
 5:00
 6:00

[Signal] (S/M)
 [New] [Details] [Go to]





Add post-its etc for interactive widgets

WELCOME TO...
... STEAKIT!
In order for SteakIT to work, please first complete diagnostic test

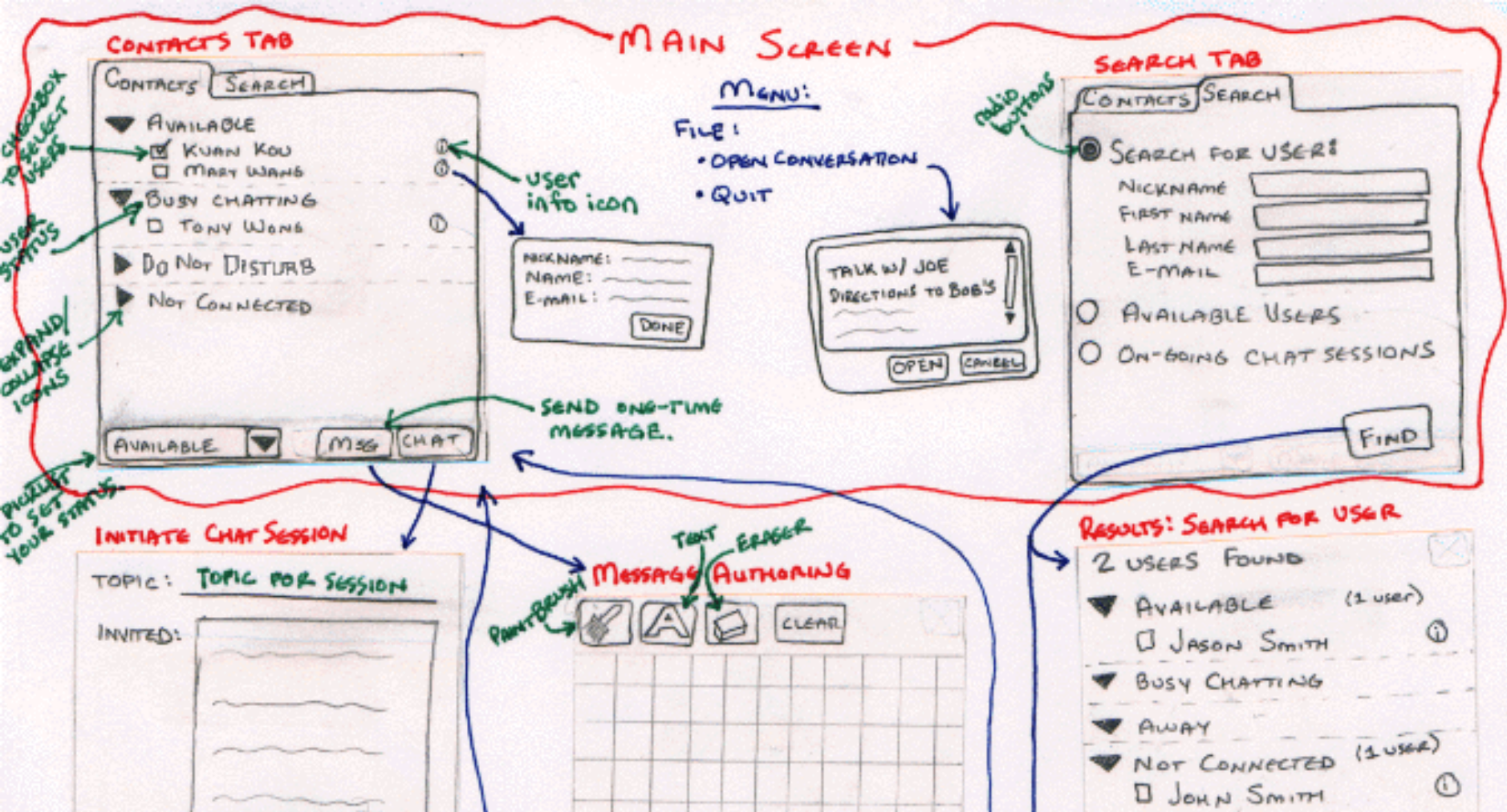


interviewer

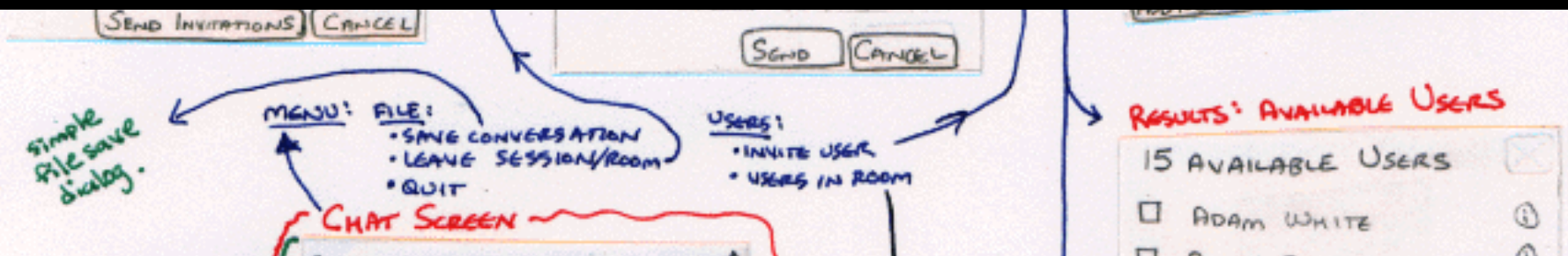
computer

participant

Play it out with paper as if it was real

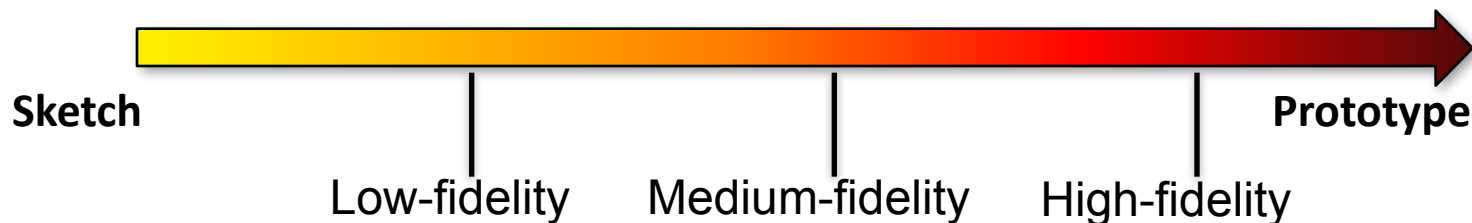


here: blue = links between pages



Forms of Prototyping

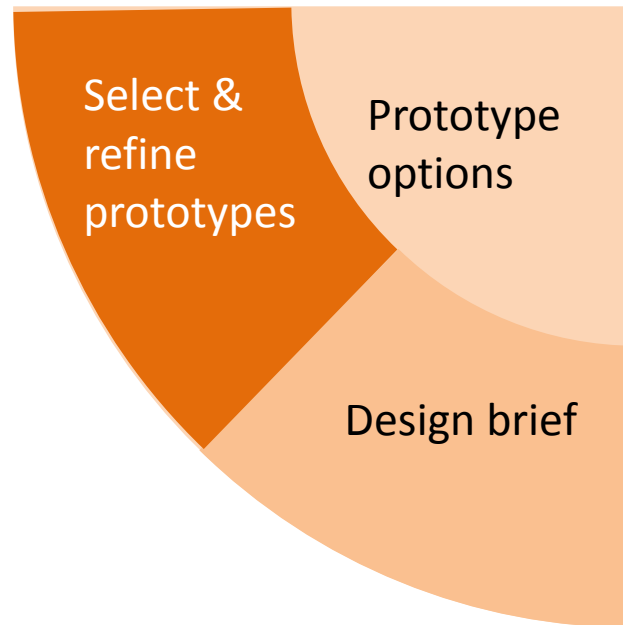
- **Low-fidelity** prototyping
- **Medium-fidelity** prototyping
- **High-fidelity** prototyping



Design Resources

- Low-fidelity prototype
- Medium-fidelity prototype
- High-fidelity prototype

Analyze information



Collect information

- sketches

What should it be?

Design

Questions?



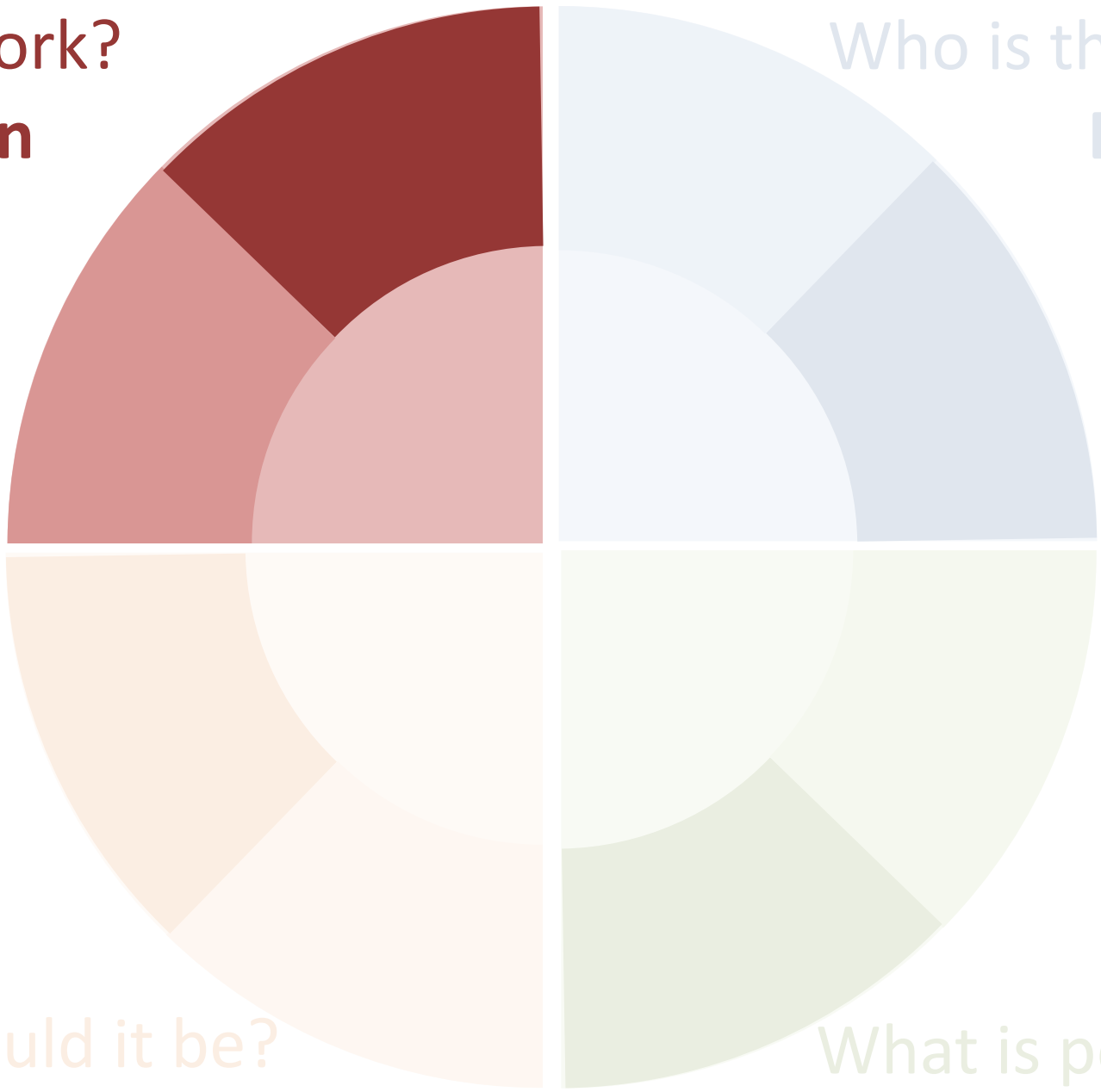
Questions?

- Why should we use paper?
 - Sketches and prototypes
 - Quick and cheap
 - Easy to communicate
 - Support evaluation



Does it work?
Evaluation

Who is the user?
Discover



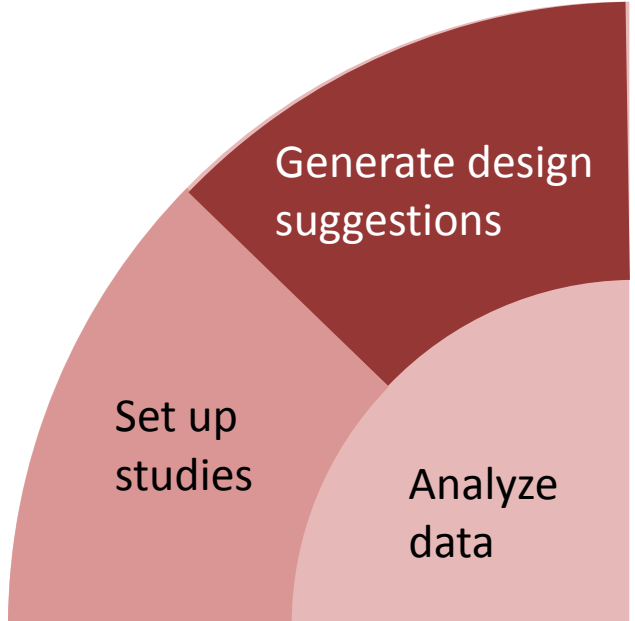
What should it be?
Design

What is possible?
Invention

Does it work? Evaluation

Design Resources

- list of problems found
- implications for re-design



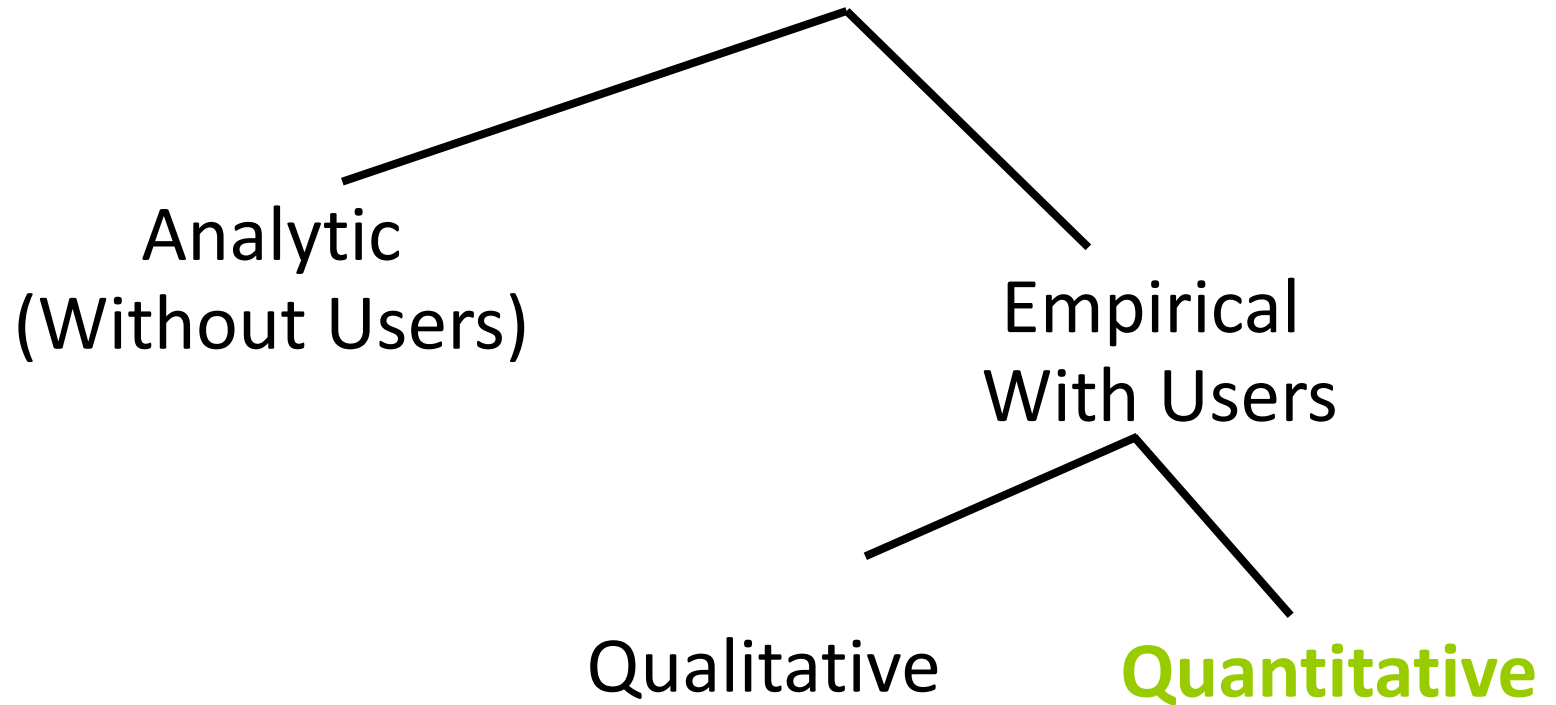
Collect information

- Empirical evaluation
- Analytical evaluation

Analyze information

- statistic analysis

Evaluation Methods



flooz
The better way to gift.

ABOUT US HELP FEEDBACK

HOME Send SOME FLOOZ Spend YOUR FLOOZ ACCOUNT

SPECIALS WHAT IS FLOOZ? SECURITY GUARANTEE



The online gift currency that's thoughtful to send anytime, and fun to spend every time.

What does 'flooz' mean? Meet Fez, your gift genie; he'll explain it all.

Security Guarantee
flooz is 100% secure. Read about our security commitment to you.

MasterCard American Express VISA

TRUST VeriSign

flooz nooz

NEW THIS WEEK!
Gap Joins flooz
Gap joins the flooz crew. Another great place to shop with flooz.
[FLOOZ MERCHANT LIST](#)

FATHER'S DAY DILEMMA
A Tie Rack?
With flooz, email Dad a groovy card, then let him choose the gift he really wants.
[SEE ALL OUR CARDS](#)

flooz
The better way to gift.

about feedback help!

HOME send flooz shop with flooz ACCOUNT

The better way to gift!



Flooz is the online gift certificate that lets receivers choose the perfect gift everytime.

[Meet Fez!](#)

Father's Day is tomorrow!
but don't worry - there's still time to send flooz!
[choose a card to send](#)

Never miss an event or occasion again!
[register for reminders](#)

MasterCard American Express VISA

VeriSign

THE STORY OF FLOOZ:
Ages ago, traders in the Mesopotamian valley used the word "Flooz" as slang for "cash" in the markets of ancient Persia.
[read the full Flooz story](#)

IN THE NOOZ:
The Gap is floozed!
Cool fashions with flooz-friendly gifting now available!
[view merchants](#)

GIFTAMONIAL:
I forgot my mother's birthday! It was a disaster. When I looked in my pilot, it was already too late to send a gift. But...
[submit your own giftamonal](#)

Between groups



Between groups



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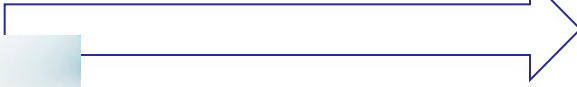
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flooz nooz

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FLOOR MERCHANT LIST →→

FATHER'S DAY DELIVERS
A Tie Rack? (yawn)
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SEE ALL OUR CARDS →→



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about feedback help

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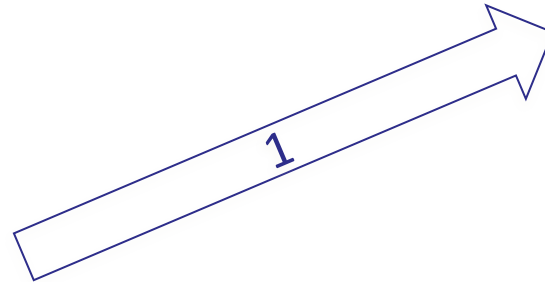
MasterCard VISA American Express

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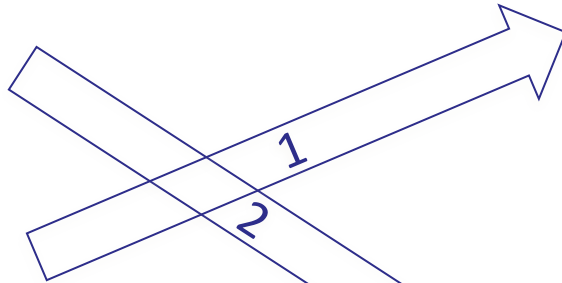
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SEE ALL OUR CARDS



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about feedback help

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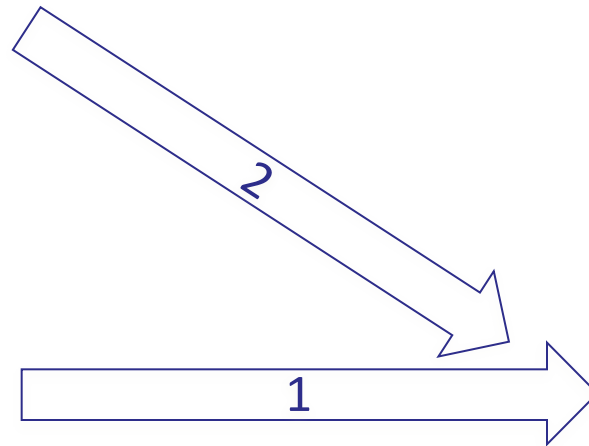
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new merchants

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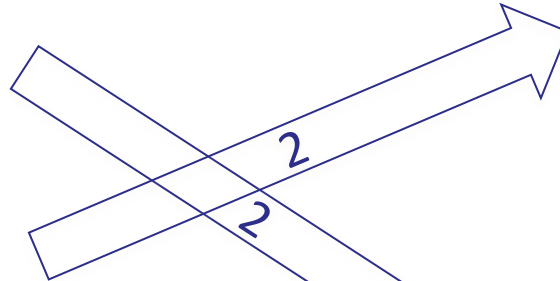
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read the full Flooz story

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SPECIALS | WHAT IS FLOODZ? | SECURITY GUARANTEE

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Security Guarantee
floodz is 100% secure. Read about our security commitment to you.

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Gap joins the floodz crew. Another great place to shop with floodz.

FATHER'S DAY DELIVERS
A Tie Rack? (gator)
With floodz, email Dad a grocery card, then let him choose the gift he really wants.

floodz
The better way to gift.

HOME | send floodz | shop with floodz | ACCOUNT

The better way to gift!

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that lets receivers choose the perfect gift everytime.
meet best!

IN THE NOOZ: The Gap is flooded!
Cool fashions with floodz-friendly gifting now available!
new merchants

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read the full Floodz story

Wake up
the red
in your hair.



SUNMILK

Wake up
the red
in your hair.



SUNMILK



[Source : James Hudson, PayPal]

Before



Extra gentle for the most sensitive skin.

Start with ultra sensitive skin, add the chemicals and moisture of urine and stools, and you have diaper rash.

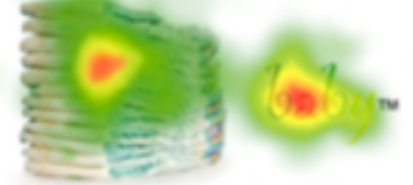


After



Extra gentle for the most sensitive skin.

Start with ultra sensitive skin, add the chemicals and moisture of urine and stools, and you have diaper rash.



Home

Personal

Business

Products & Services

Shopping


Get Started

Send Money

Request Money

Sell on eBay

Integrate

Account login 

Email address

PayPal password

Go to

 ▾[Log In](#)Forgot your [email address](#) or [password](#)?New to PayPal? [Sign up](#).

Top questions

- [Why use PayPal when I have credit cards?](#)
- [What can I do with PayPal?](#)
- [Is PayPal free to use?](#)



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- [Accept payments](#) for your eBay listings.
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- [See all the ways](#) to get paid online.

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drugstore

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[Home](#) | [Personal](#) | [Business](#) | [Products & Services](#) | [Shopping](#)[Get Started](#) | [Send Money](#) | [Request Money](#) | [Sell on eBay](#) | [Integrate](#)Account login 

Email address

PayPal password

Go to

[Log in](#)Forgot your [email address](#) or [password](#)?New to PayPal? [Sign up](#)

Top questions

- [Why use PayPal when I have credit cards?](#)
- [What can I do with PayPal?](#)
- [Is PayPal free to use?](#)



PayPal Shopping

Get up to
20% off top brands.

It's like music to your ears.

[Find Deals](#)

Pay With:

VISA



BANK

Pay online

- [Learn how](#) PayPal works.
- [Shop without exposing](#) your financial information.
- [Send money](#) to friends and family around the world.

[Sign up](#)

Get paid online

- [Accept payments](#) for your eBay listings.
- [Start accepting credit cards](#) on your website.
- [See all the ways](#) to get paid online.

[Sign up](#)

PayPal Shopping

Get up to **20% off** top brands.[Find Deals](#)

Affordable Dog Insurance - Covers 80% Of Your Vet Bill; Request A Free Quote & Start Your Pets Coverage Today!

Get Your Free Quote



Pet Name:

Pet Type: Dog Cat

Select Breed:

Spayed/Neutered? Yes No

Pet Date of Birth:

Gender: Female Male

Your Zip Code:

Email:

We value your privacy and will not sell or give your information to anyone. Period.

[Get My Free Quote](#)



Le Laboratoire des Usages en Technologies d'Information Numériques (LUTIN - Dir.: Charles Tijus; Dir. Scientifique: Thierry Baccino), est un [LIVING LAB](#) européen des Universités Paris 8, Paris 6, UTCompiègne et de Universcience, dédié à l'étude des usages des nouvelles technologies dans le cadre de recherches académiques et industrielles.



Actualités

Signature d'un Memorandum of Understanding avec Hong Bang au Vietnam



Un Memorandum of Understanding (MOU) a été signé entre le LUTIN et la société Hong Bang, d'Hanoï, chargée de la promotion et du financement des nouvelles technologies au Vietnam. L'objectif de cet accord vise à un étroit partenariat entre les parties, portant sur le **développement d'un Living Lab**, nommé **Tinh Nghich**, situé à Hanoï et dédié aux tests d'usage et aux technologies de détection (sensors technology).

Accord de coopération entre le LUTIN et l'Université Sungkyunkwan



Un accord de coopération a été signé entre le LUTIN et le département [Interaction Science](#) (IS) de l'[Université de Sungkyunkwan](#), située à Séoul, en Corée du Sud. Cet accord vise à renforcer la collaboration de recherche et d'enseignement entre les deux laboratoires. Ils décident mutuellement de promouvoir les échanges afin que

Eye tracking Lab

8 Eye trackers permettent de comprendre ce que regarde l'utilisateur dans toutes les situations

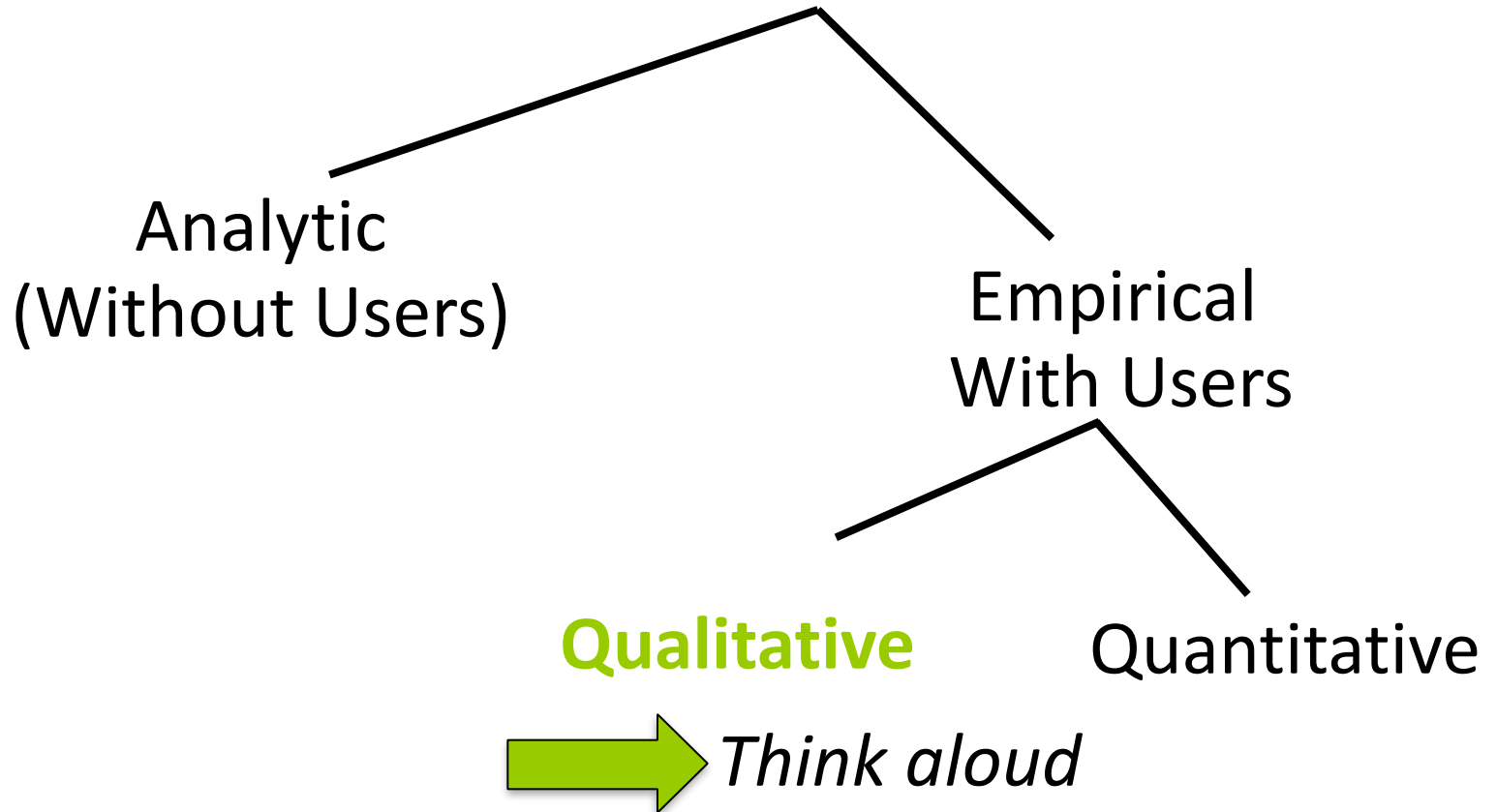
Game Room

Découvrez la plateforme et les méthodes d'analyse du jeu vidéo pour améliorer l'ergonomie et le gameplay des jeux en cours de développement

Mobility Lab

Techniques et méthodes d'observation pour étudier et accompagner l'innovation dans les

Evaluation Methods



Nouvelles mises à jour
 Votre ordinateur redémarrera pour terminer...
 Détails Redémarrer



WhizzGo.com Test participant: James.

from nicepaul 5 years ago NOT YET RATED

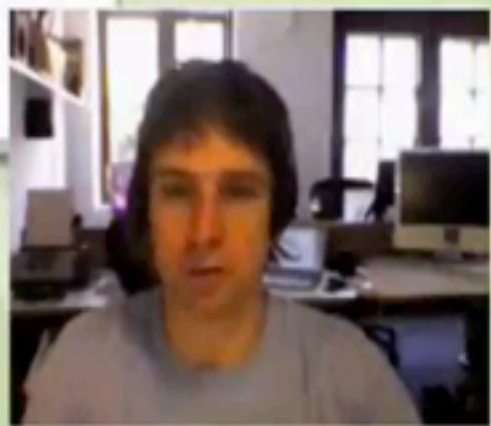
Nouvelles mises à jour
 Votre ordinateur redémarrera pour terminer...
 Détails Redémarrer

whizzgo pay as you go cars

find out more join up book a car

WhizzGo Plans...
 car hire and environmentally friendly green energy powered

WhizzGo Car Hire...
 pay as you go cars



WhizzGo.com Test participant: James.

from nicepaul 5 years ago NOT YET RATED



agility feat
www.agilityfeat.com

**Arin tries to plan a route:
Is there a train
from Linz to Zurich?**



agility feat
www.agilityfeat.com

**Arin tries to plan a route:
Is there a train
from Linz to Zurich?**



screen capture

+



live video & audio



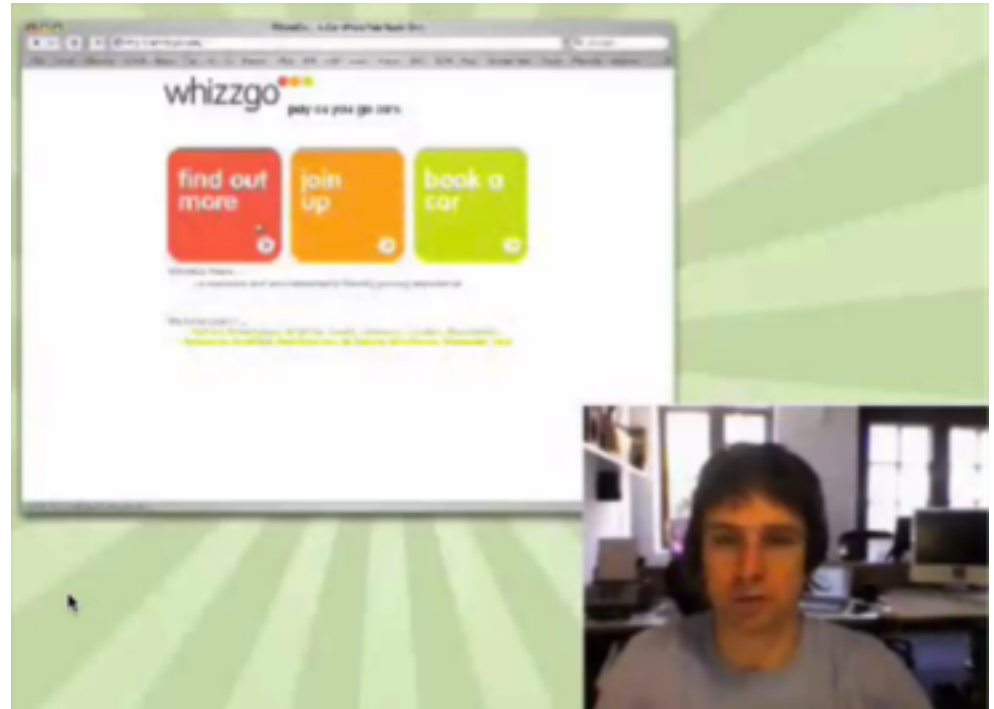
Silverback



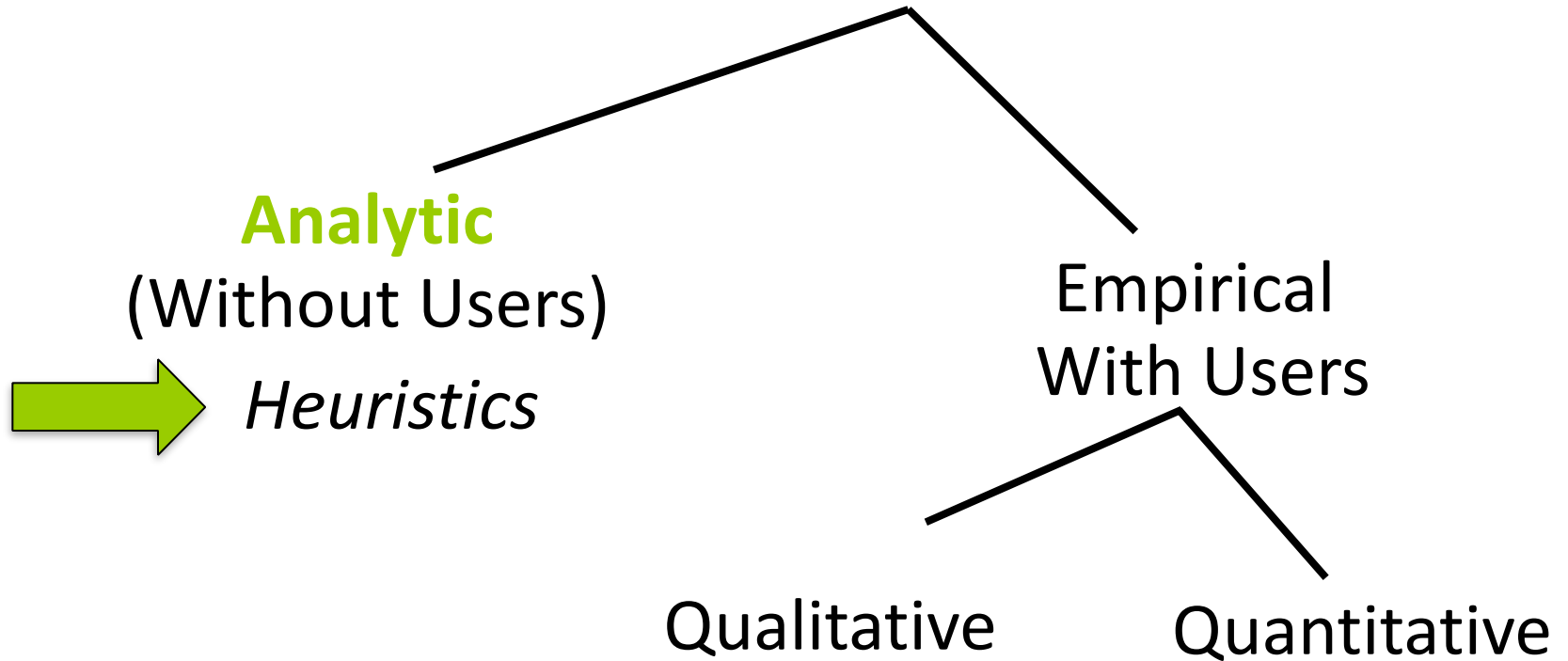
Quicktime
composite

Describe

- What you **see**
- what you **do**
- what you **expect** to get



Evaluation Methods



Top five plausible excuses for not testing web sites

- We don't have the time
- We don't have the money
- We don't have the expertise
- We don't have a usability lab
- We wouldn't know how to interpret the results

Heuristic Evaluation

1. recruit a small set (3-5) of “**evaluators**”
2. evaluators independently check for **compliance with usability principles (“heuristics”)**
3. different evaluators will find **different problems**
4. evaluators **only communicate afterwards**
5. findings are then **aggregated**

  → use list of problems
to redesign/fix application

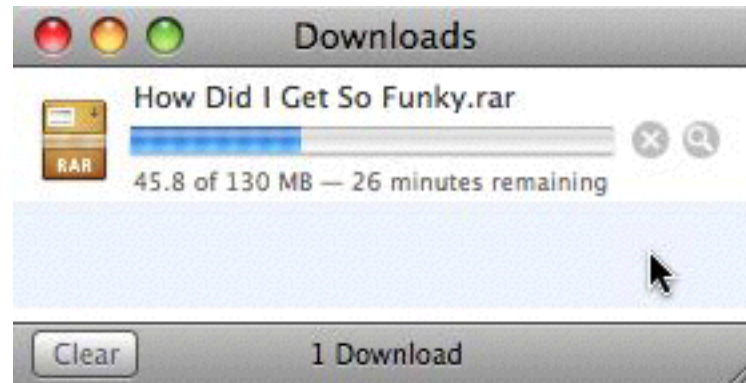


The heuristics

- H2-1 : visibility of system status
- H2-2 : match between system & real world (speak the users' language)
- H2-3 : user control and freedom
- H2-4 : consistency and standards
- H2-5 : error prevention (minimize users' memory load)
- H2-6 : recognition rather than recall
- H2-7 : flexibility and efficiency of use (shortcuts)
- H2-8 : aesthetic & minimalist design
- H2-9 : help recognize, diagnose, & recover from errors
- H2-10 : help and documentation



visibility of system status



- pay attention to response time
 - 0.1 sec: no special indicators
 - 1.0 sec: user tends to lose track of data
 - 10 sec: max. duration if user to stay focused on action
 - for longer delays, use percent-done progress bars



100ms delay results in 1% sales loss.
(potential \$191M in lost revenue in 2008)



400ms delay results in 5-9% drop in full-page traffic.



500ms delay drops search traffic by 20%.
The cost of slower performance increases over time.



1s delay results 4% drop in revenue



Fastest 10% of users stay 50% longer than slowest 10%

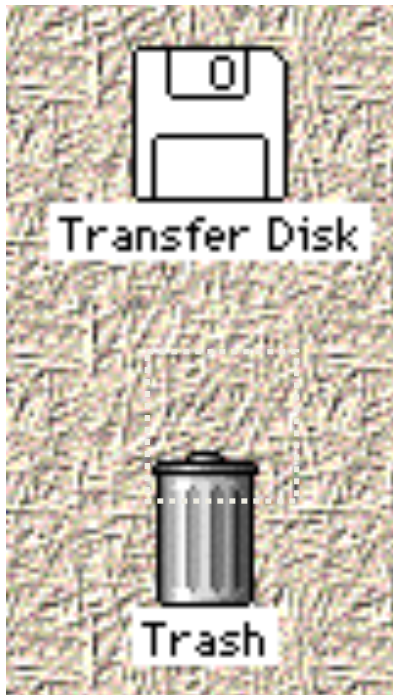


Your password has been emailed.

Theresa Neil sign in

match between system & real world

bad



- speak the users' language
- follow real world conventions

•**example of violation:**
dragging disk to Mac trash
should delete it, not eject it

LIBRARY



Music



Movies



TV Shows



Podcasts



Audiobooks



Applications



Radio

STORE



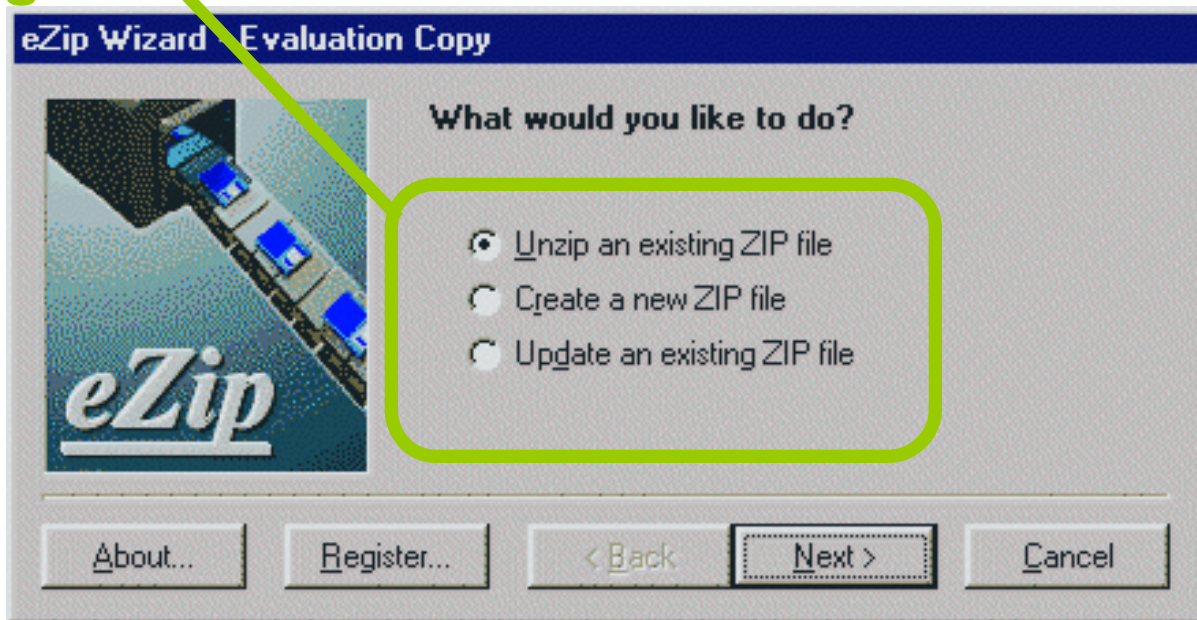
iTunes Store



Purchased

user control & freedom

good



—offer “exits” for mistaken choices, undo, redo

- **wizards:** must respond to question before going to next
- good for infrequent tasks (e.g., modem config.) and beginners
- not for common tasks and experts → **have 2 versions (WinZip)**

The Wufoo
FORM
GALLERY

Search

Forms

Surveys

Invitations

Registrations

Lead Generation

Online Orders

Survey
TEMPLATES

1 Customer Satisfaction Survey

2 Cancellation Survey

3 Business Demographic Survey

4 Web Site Visitor Survey

5 Tech Support Satisfaction Survey

6 Health Survey

Download HTML

Add to Wufoo

WUFOO

Customer Satisfaction Survey

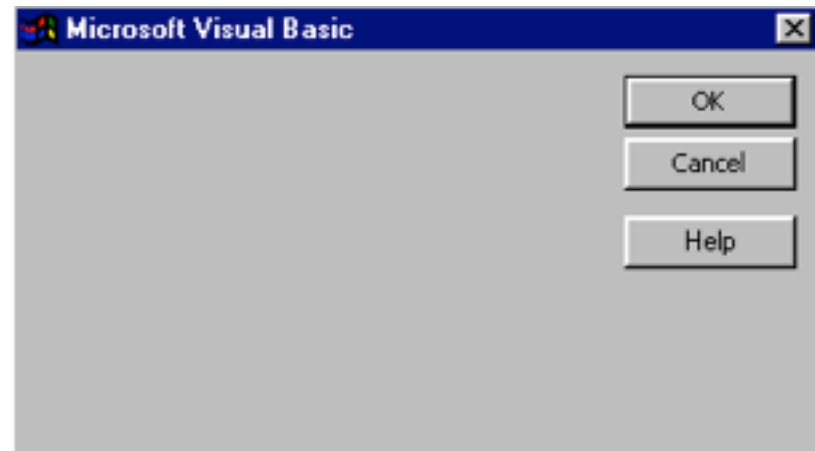
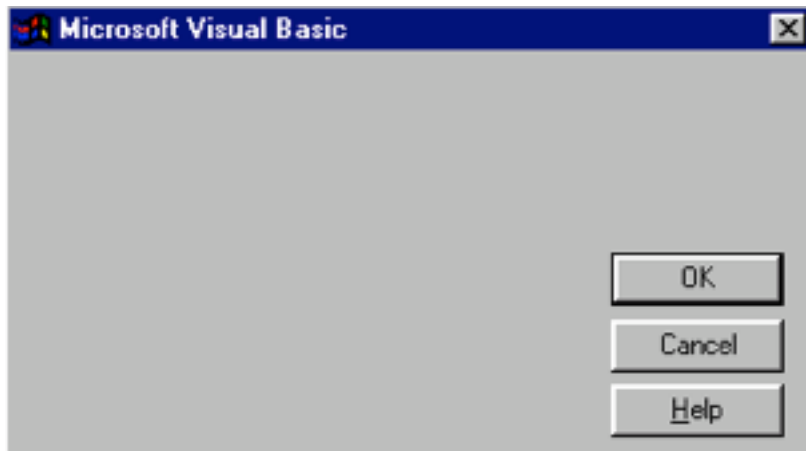
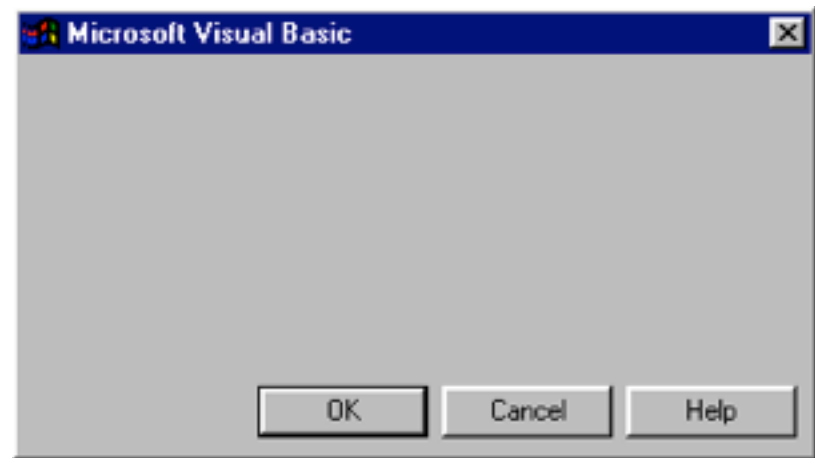
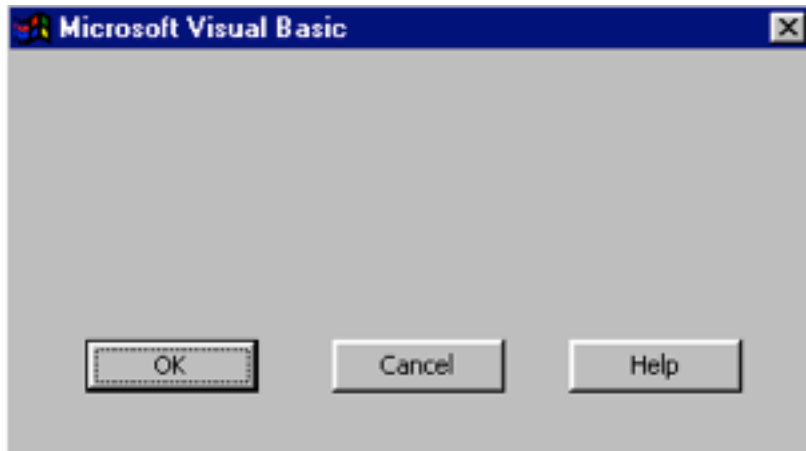
Please take a few moments to complete this satisfaction su

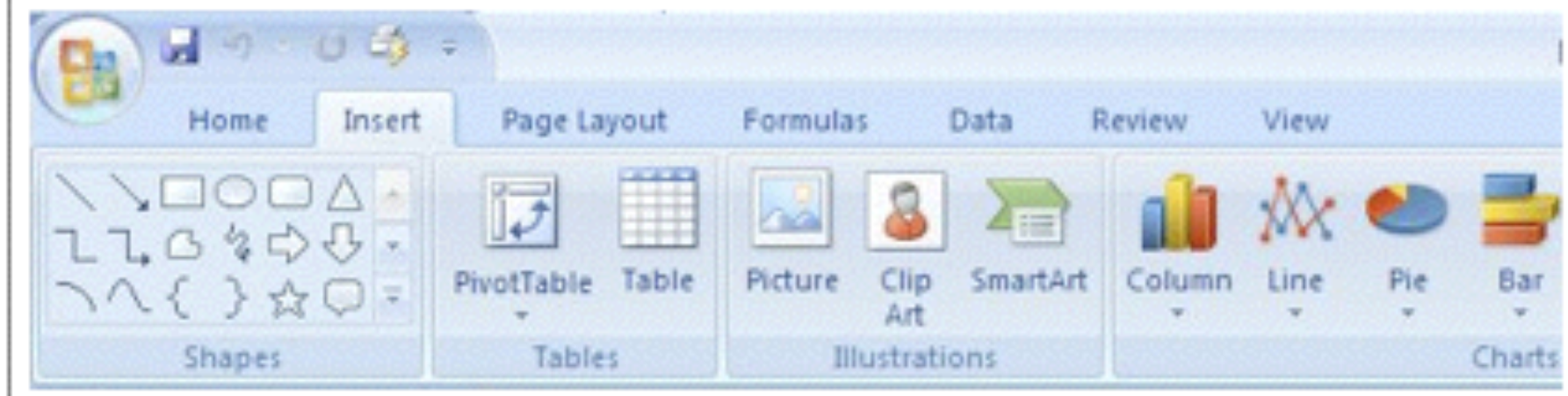
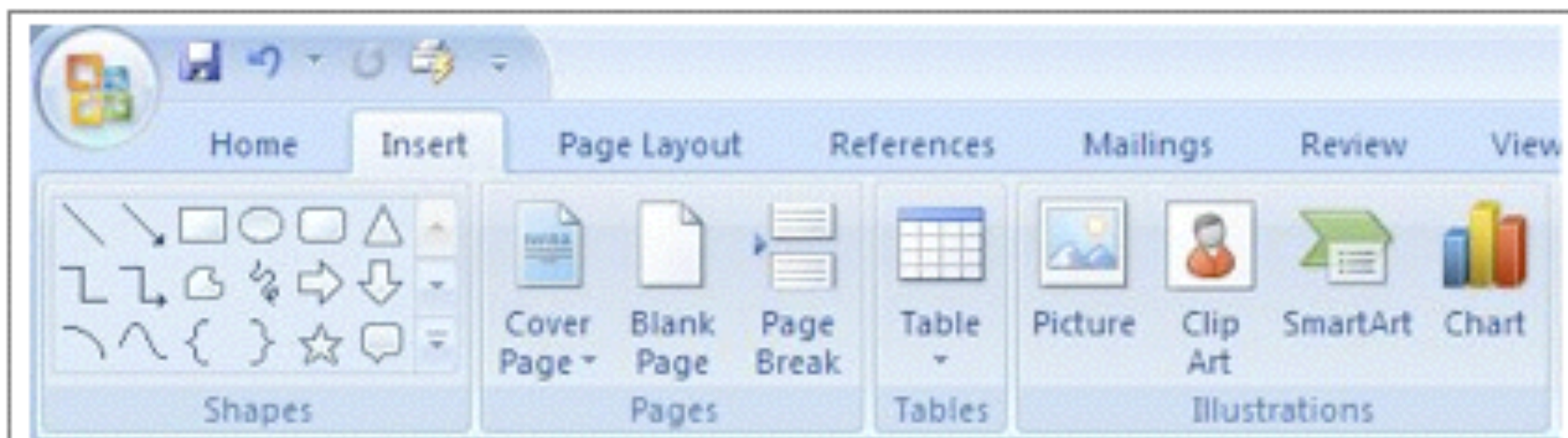
How long have you used our product / service?

- Less than a month
- 1-6 months
- 1-3 years
- Over 3 Years

consistency & standards

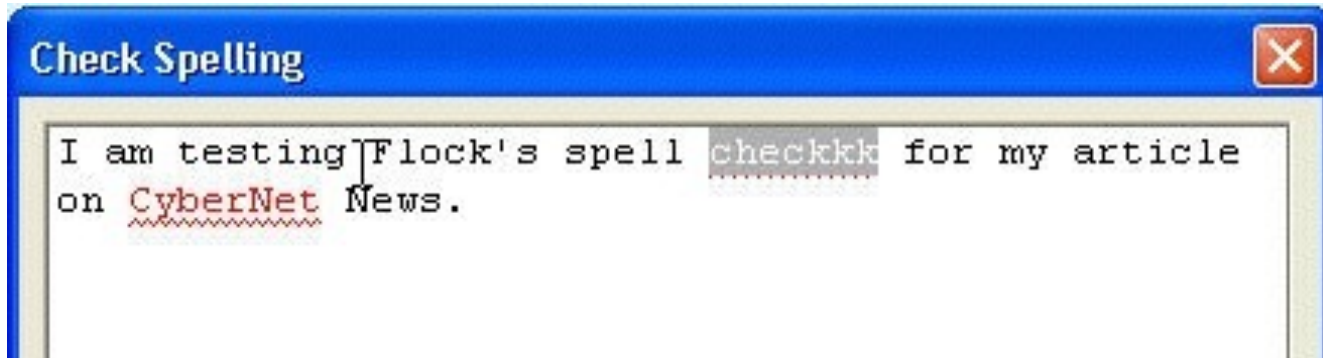
bad





error prevention

good



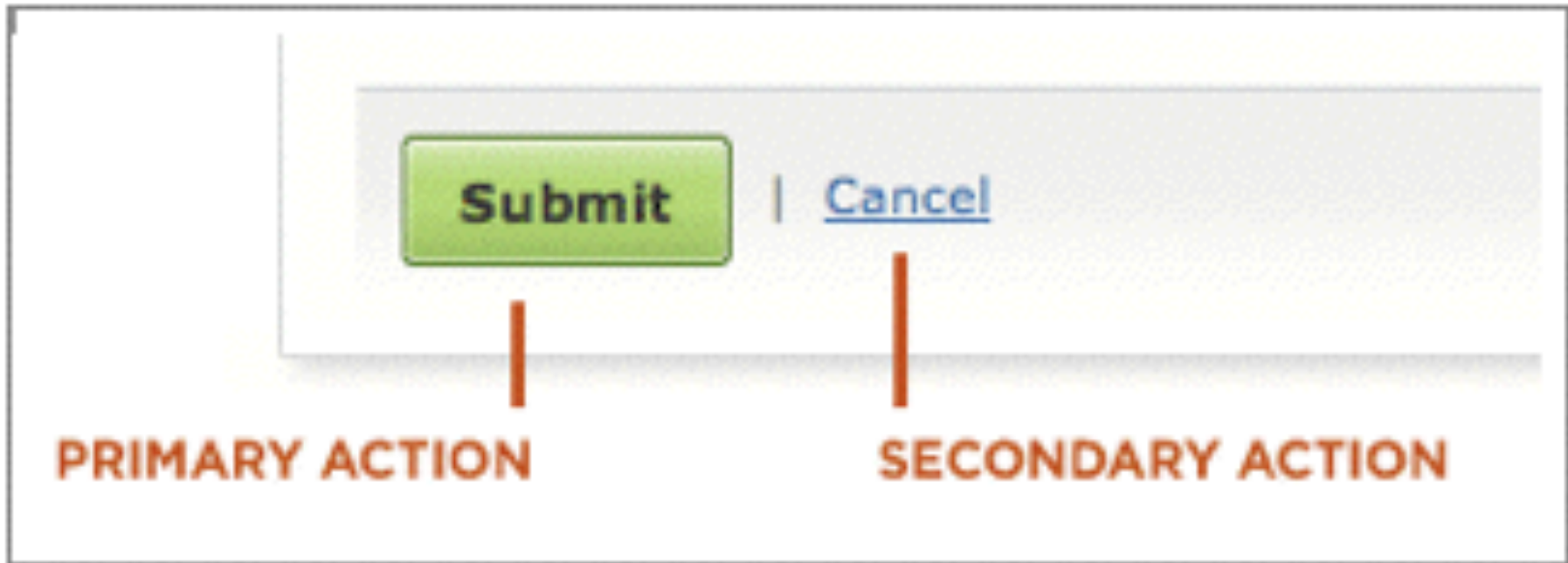
error prevention

Share something with Usabilitypost:

Update

 Attach file

error prevention

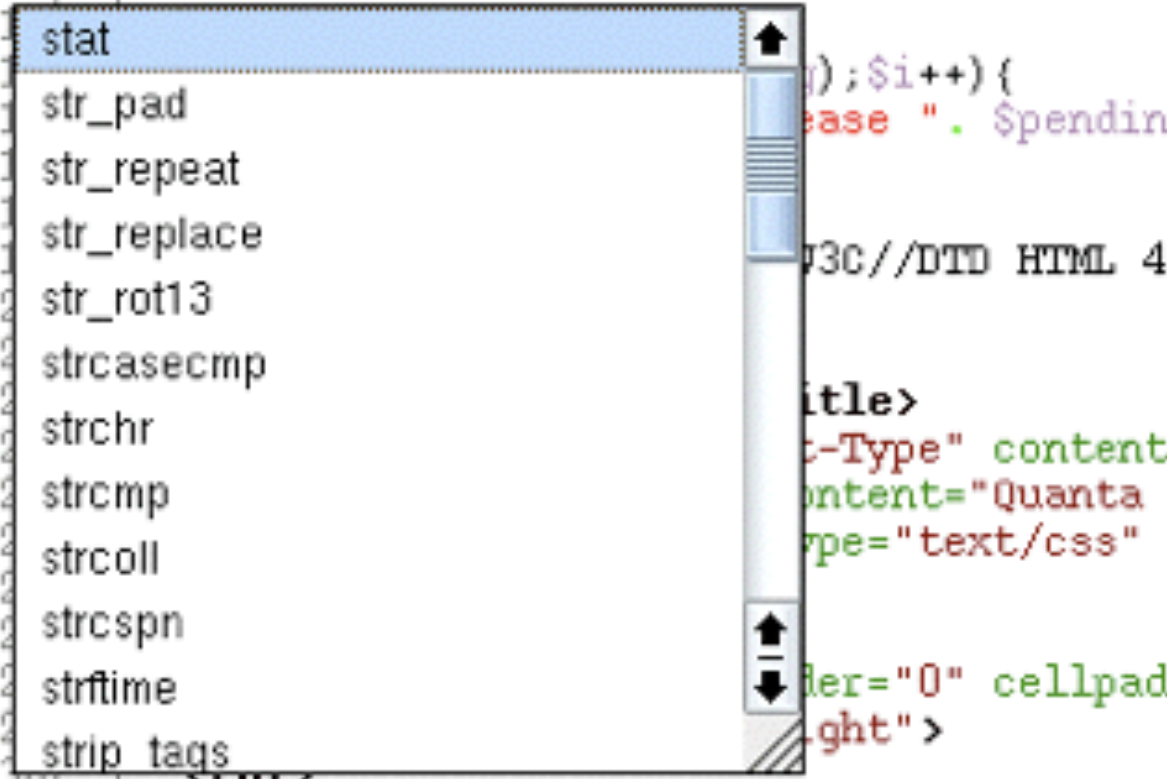


error prevention

design]		Advanced Search
		Preferences
		Language Tools
design within reach	6,350,000 results	
designer handbags	3,430,000 results	
designer shoes	2,630,000 results	
designer clothes	3,120,000 results	
designer dresses	1,110,000 results	
design sponge	9,930,000 results	
designer	265,000,000 results	
design museum	13,600,000 results	
designers guild	530,000 results	
designer jeans	2,010,000 results	
		close

recognition, not recall

```
12 | $maxcol = 5;  
13 | st  
stat  
str_pad  
str_repeat  
str_replace  
str_rot13  
strcasecmp  
strchr  
strcmp  
strcoll  
strcspn  
strftime  
strip_tags
```



The image shows a code editor window with a dropdown menu open. The menu lists various string functions: stat, str_pad, str_repeat, str_replace, str_rot13, strcasecmp, strchr, strcmp, strcoll, strcspn, strftime, and strip_tags. The 'stat' function is currently selected and highlighted in blue. The background code includes a line with '\$maxcol = 5;', followed by 'st'. Below the dropdown, there is HTML code: '<title>', '<meta charset="utf-8" content="Quanta" type="text/css" ...', and '<td border="0" cellpadding="0" cellspacing="0" style="width: 100%; height: 100%; text-align: center; vertical-align: middle;">'. The editor has a scrollbar on the right side of the dropdown menu.

Please select your country or territory

Please select your country or territory

United States
United Kingdom
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua and Barbuda
Argentina
Armenia
Aruba
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh

Arno Pro

Ayuthaya

Baghdad

✓ **BANK GOTHIC**

Baskerville

Baskerville Old Face

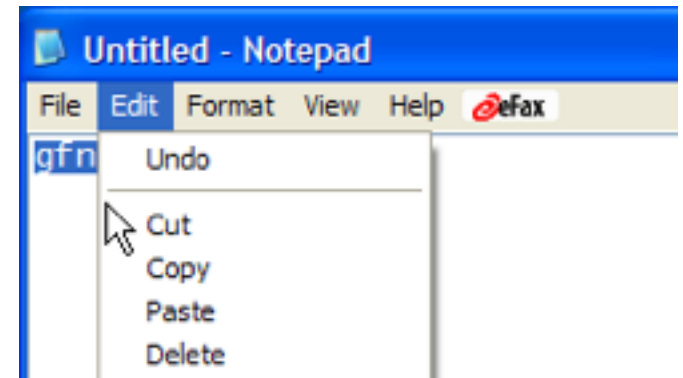
Bastion

Batang

flexibility and efficiency of use

Google Docs Keyboard Shortcuts		dashkards http://dashkards.com/	
File		Editing	
Open...	⌘O	Insert Comment	⌘⌘M
Print	⌘P	Insert Link	⌘K
Save	⌘S		
Formatting		Find	⌘F
Bold	⌘B	Select All	⌘A
Italic	⌘I	Copy	⌘C
Underline	⌘U	Cut	⌘X
Header Style n <small>n=1...6</small>	⌘⌘n	Paste	⌘V
Normal Paragraph Style	⌘⌘0	Undo	⌘Z
Toggle Numbered List	⇧⌘7	Redo	⌘Y
Toggle Bulleted List	⇧⌘8	Define...	⇧⌘Y
Align Left	⇧⌘L	Word Count	⇧⌘C
Align Centered	⇧⌘E		
Align Right	⇧⌘R		
Justify	⇧⌘J		
Clear Formatting	⌘\		
Superscript	⌘.		
Subscript	⌘,		
	⌘ Command	⇧ Shift	⇐ Tab
	⌘ Option	^ Control	↵ Enter

bad



- accelerators for experts (e.g., gestures, kb shortcuts)
- allow users to tailor frequent actions (e.g., macros)

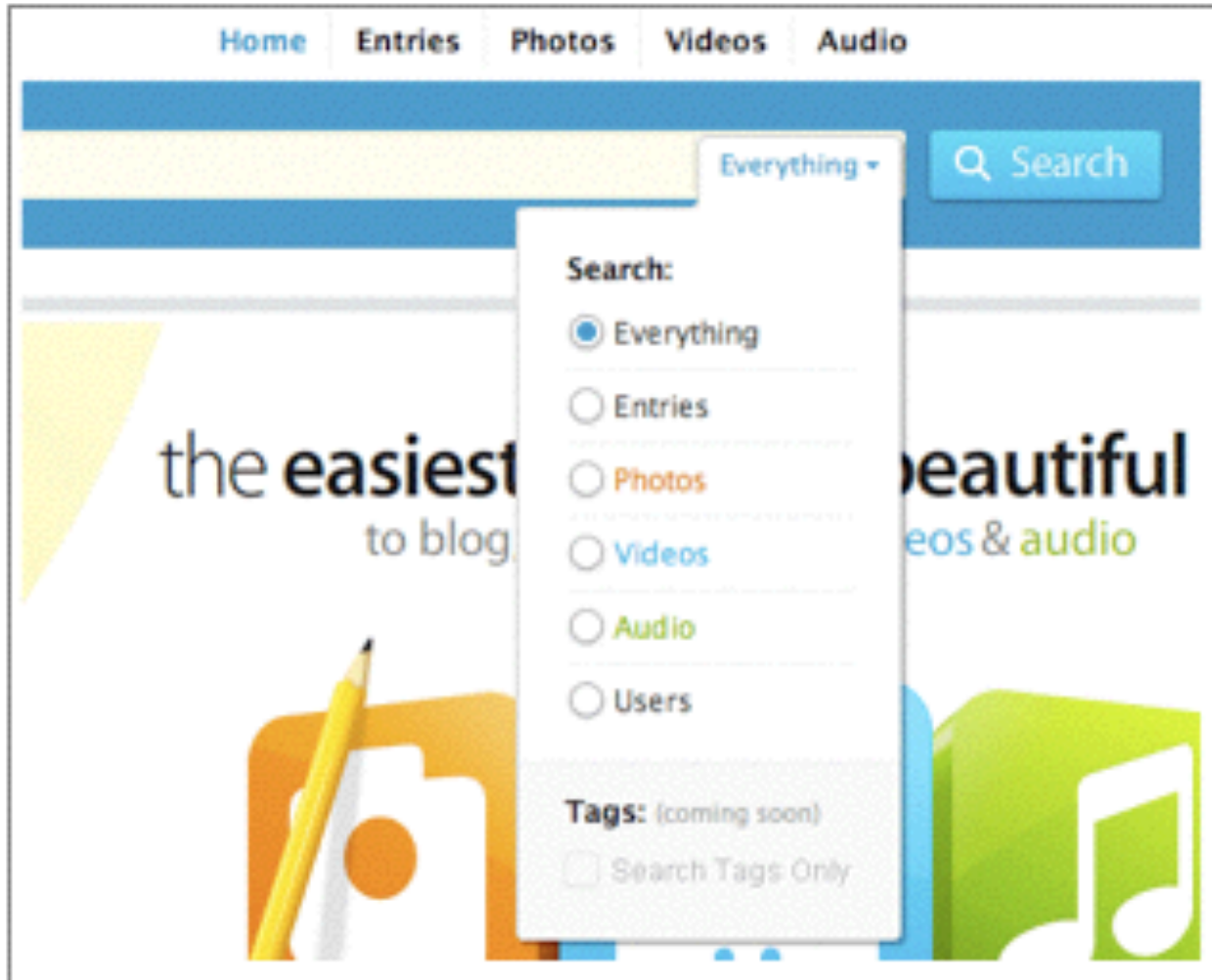
aesthetic & minimalist design

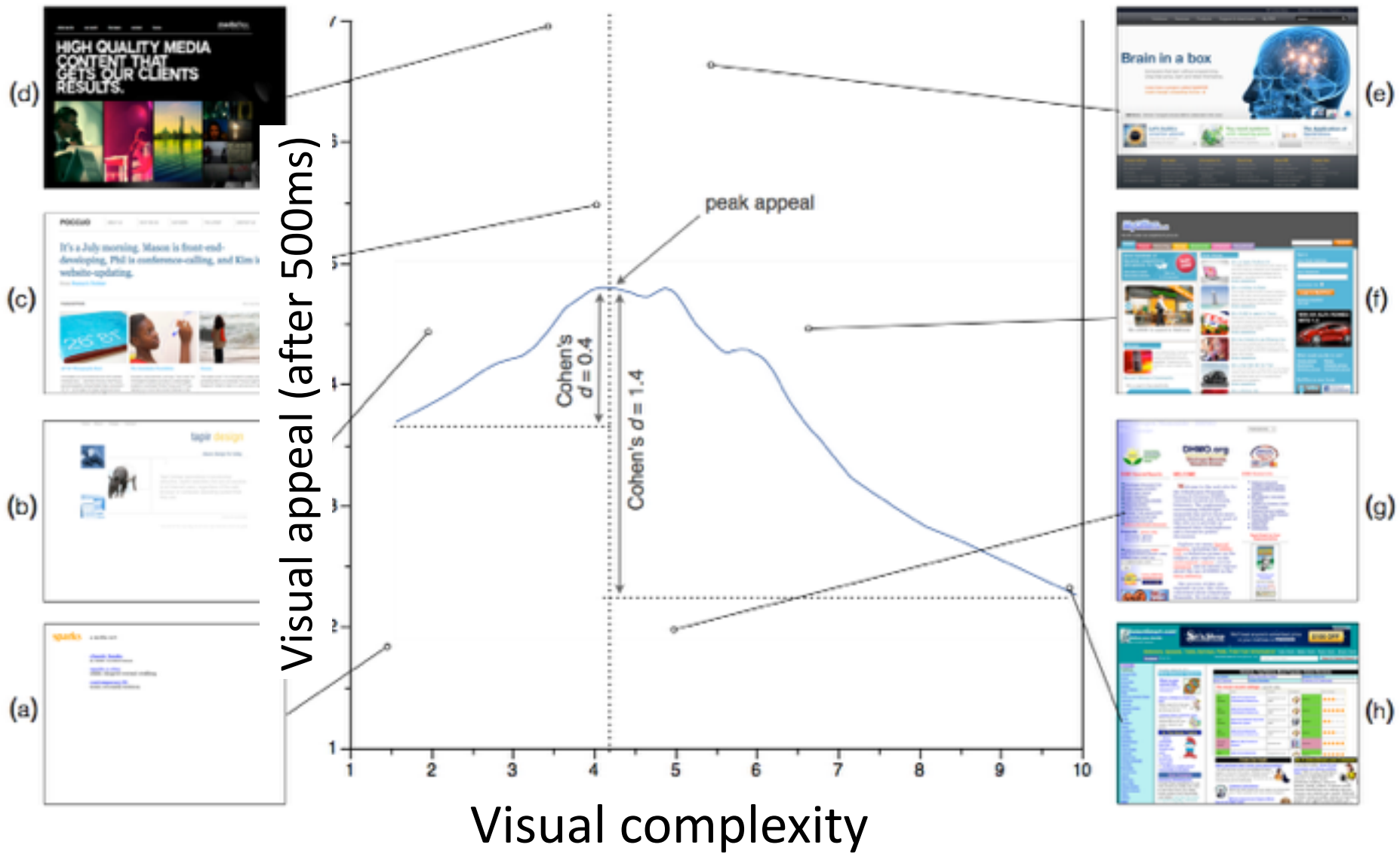
bad

Form Title -- (appears above URL in most browsers and is used by WWW search)		Background Color:
Q&D Software Development Order Desk		FFFBF0
Form Heading -- (appears at top of Web page in bold type)		Text Color:
Q&D Software Development Order Desk <input checked="" type="checkbox"/> Center		000080
E-Mail responses to (will not appear on)	Alternate (for mailto forms only)	Background Graphic
dversch@q-d.com		
Text to appear in Submit button	Text to appear in Reset button	<input type="radio"/> Mailto
Send Order	Clear Form	<input checked="" type="radio"/> CGI
Scrolling Status Bar Message (max length = 200 characters)		
****WebMania 1.5b with Image Map Wizard is here!****		
<input type="button" value=" << Prev Tab"/>		<input type="button" value=" Next Tab >>"/>

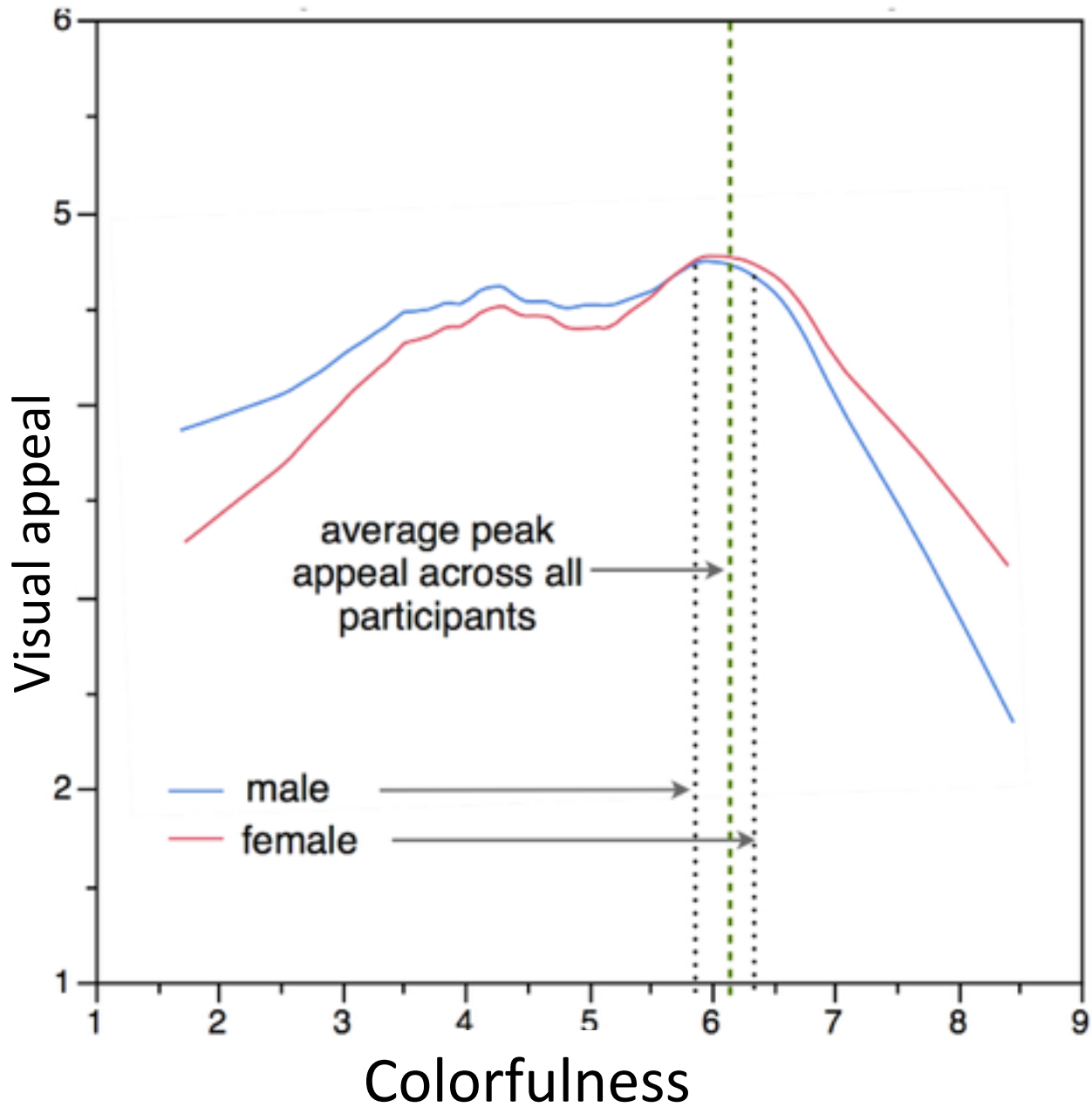
– avoid irrelevant information in dialogues

aesthetic & minimalist design

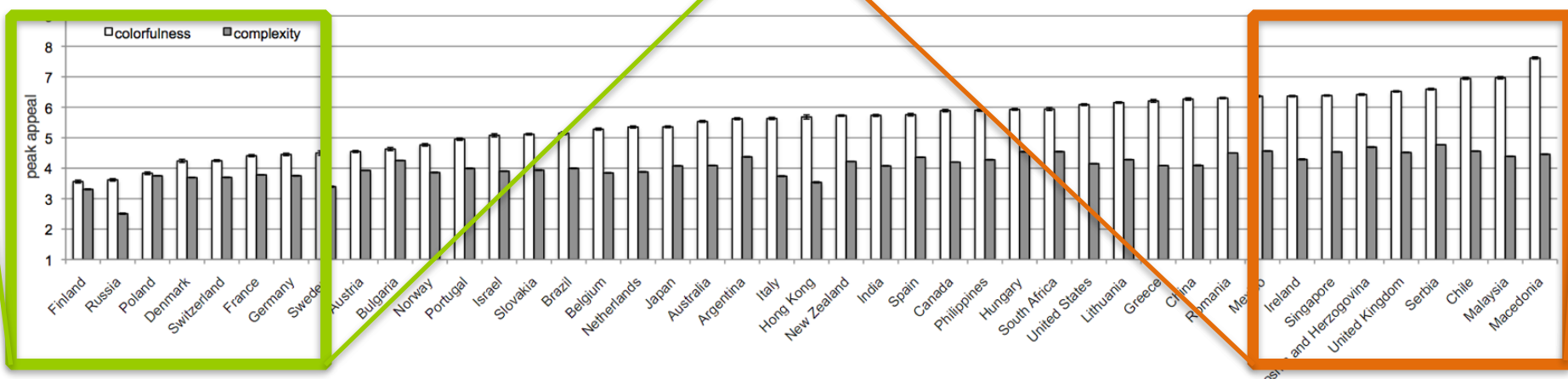
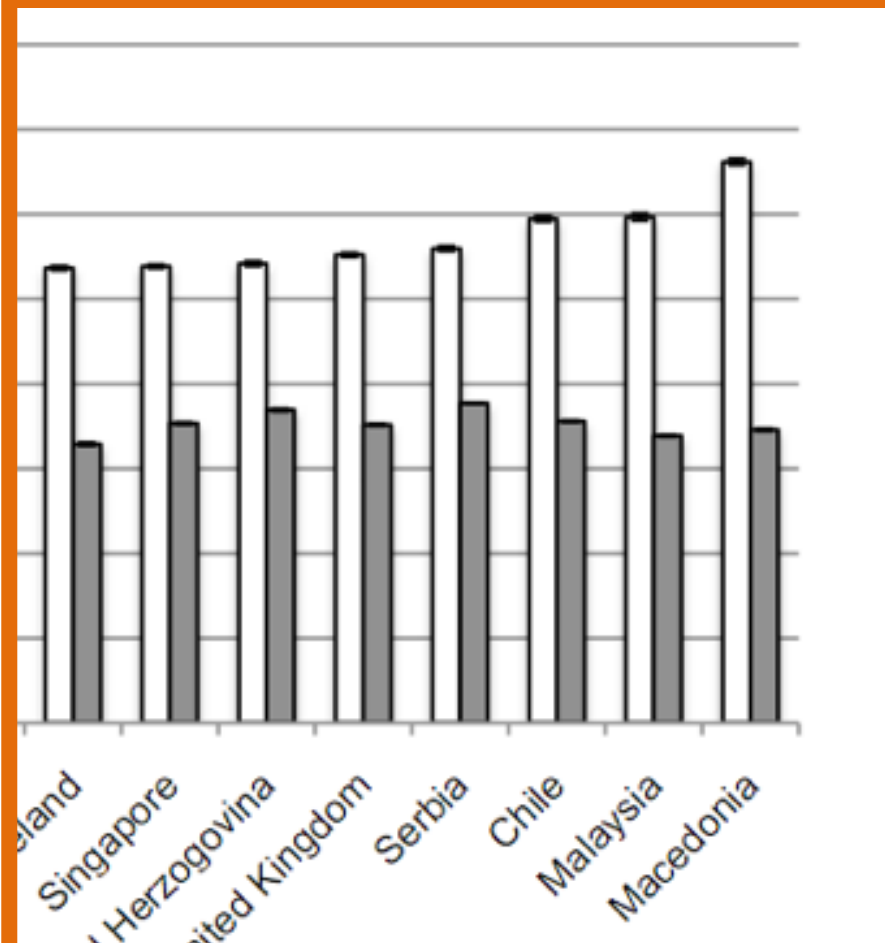
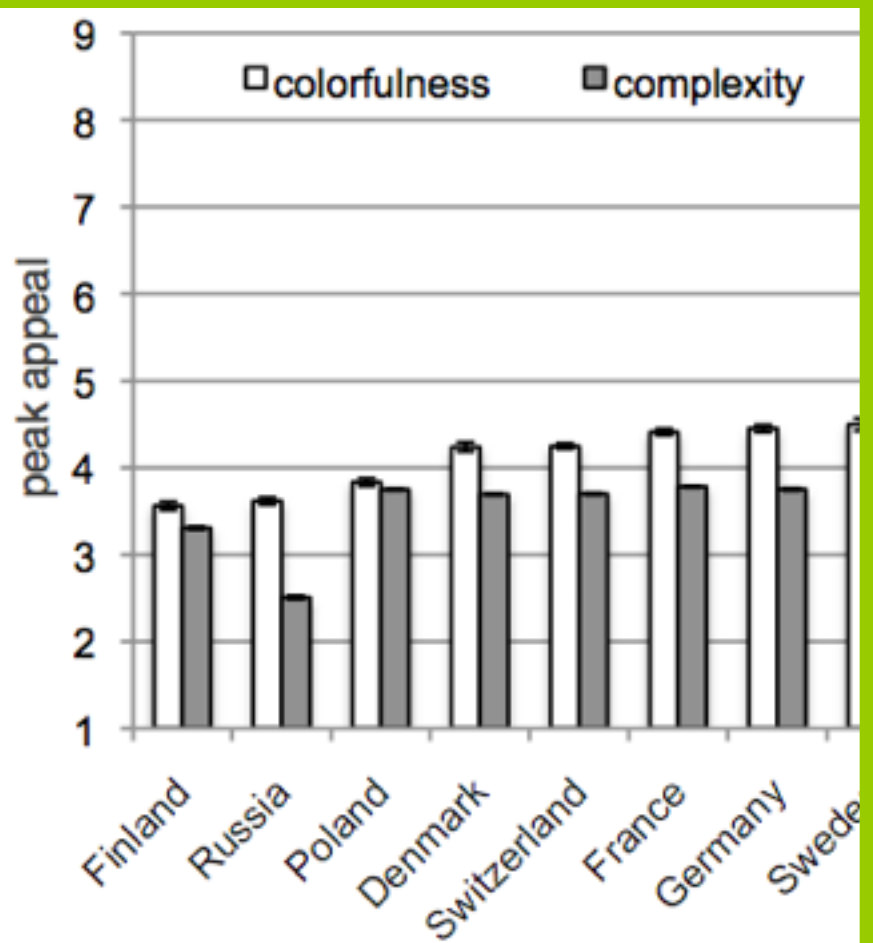




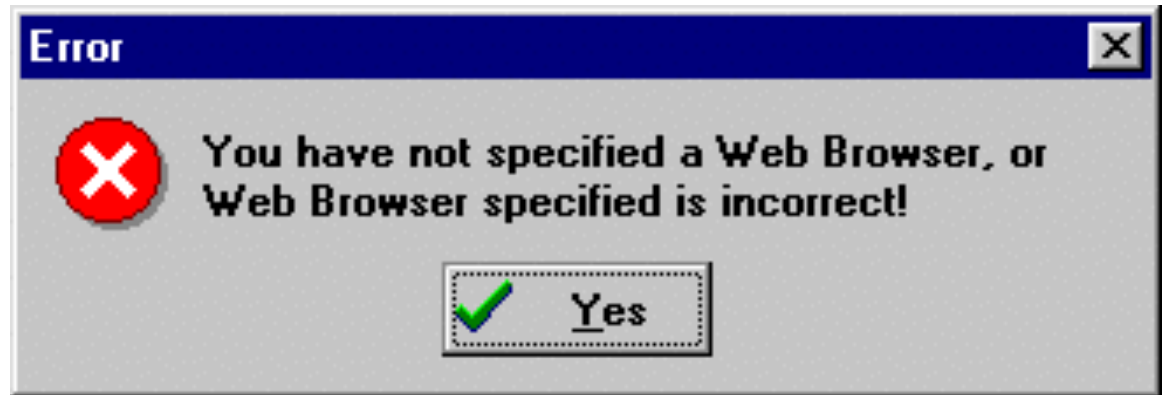
Katharina Reinecke and Krzysztof Z. Gajos. 2014. Quantifying visual preferences around the world. ACM CHI '14 11-20.



(b) Gender differences



help recognize, diagnose, & recover from errors




- error messages in plain language
- precisely indicate the problem
- constructively suggest a solution

help & documentation


Or start a new account

Choose a username (no spaces)

bert

 bert is already taken. Please choose a different username.


Choose a password

 Passwords must be at least 6 characters and can only contain letters and numbers.

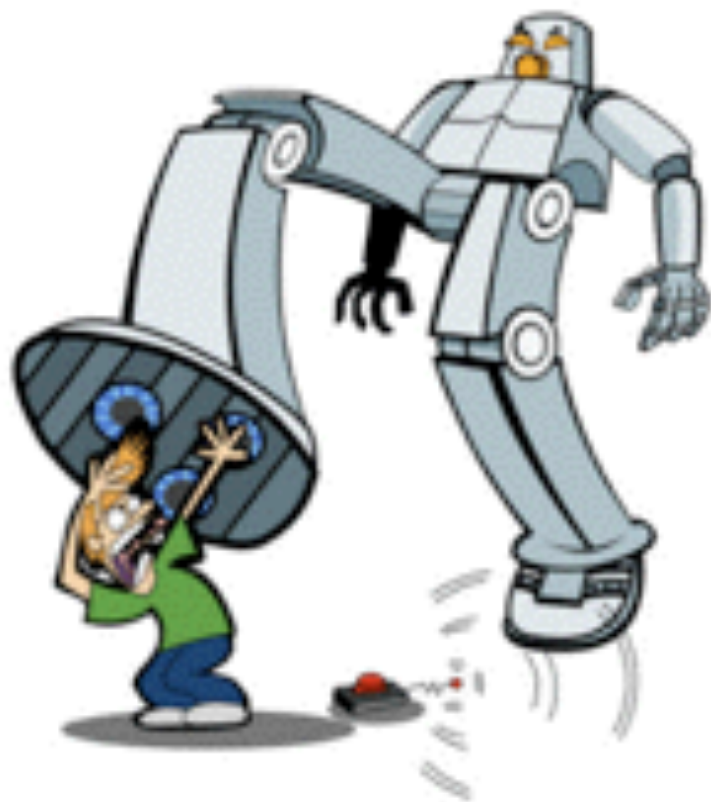
Retype password

Email address (must be real!)

not an email

 The email provided does not appear to be valid

Send me occasional Digg updates.



Oh no!

It seems the page you were trying to find on my site isn't around anymore (or at least around here).

[Report it missing using my contact form](#) and I'll see what I can do about it.

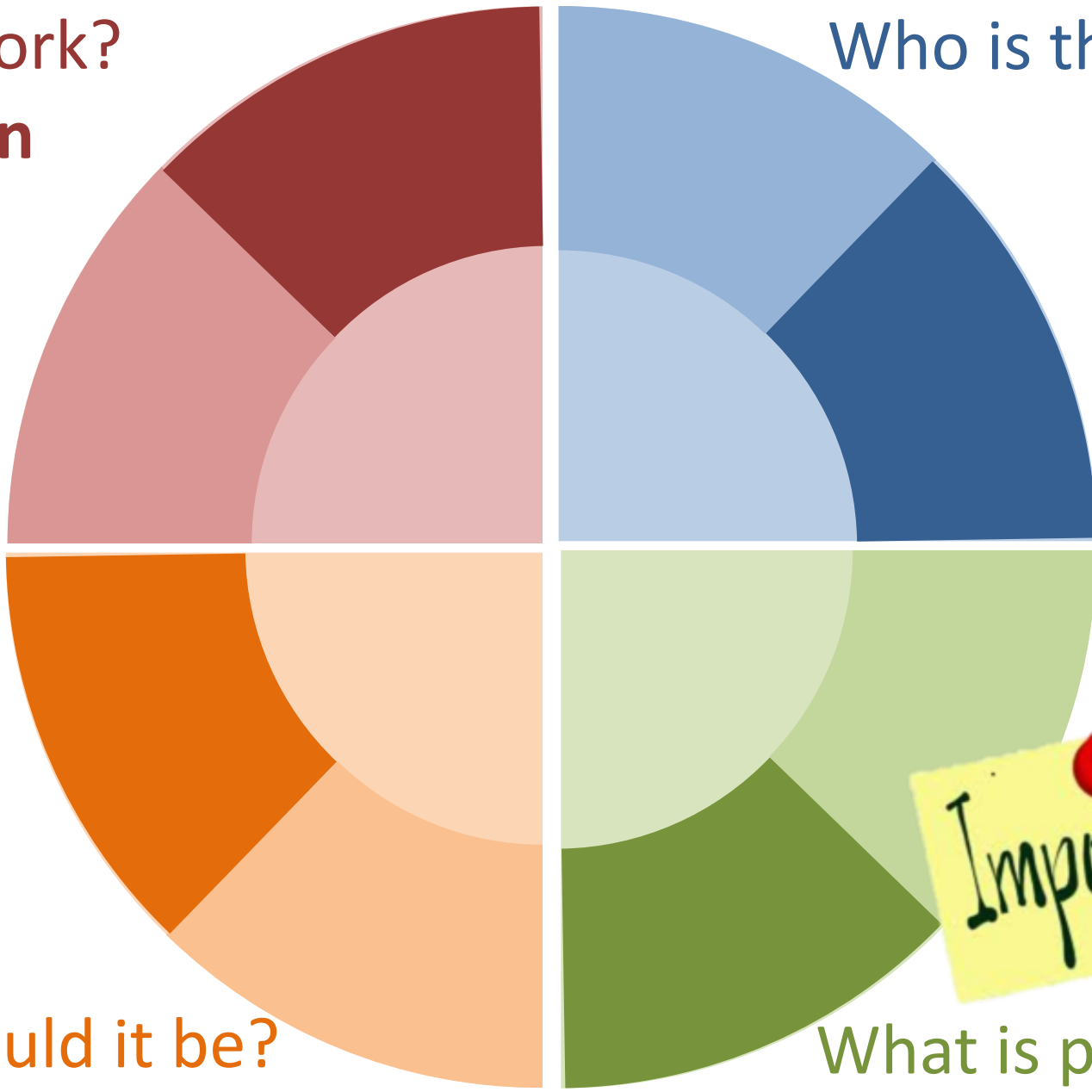
Whilst your here why not check out my [articles listing](#) or [browse my blog](#)? You never know - you may just

Does it work?
Evaluation

Who is the user?
Discover

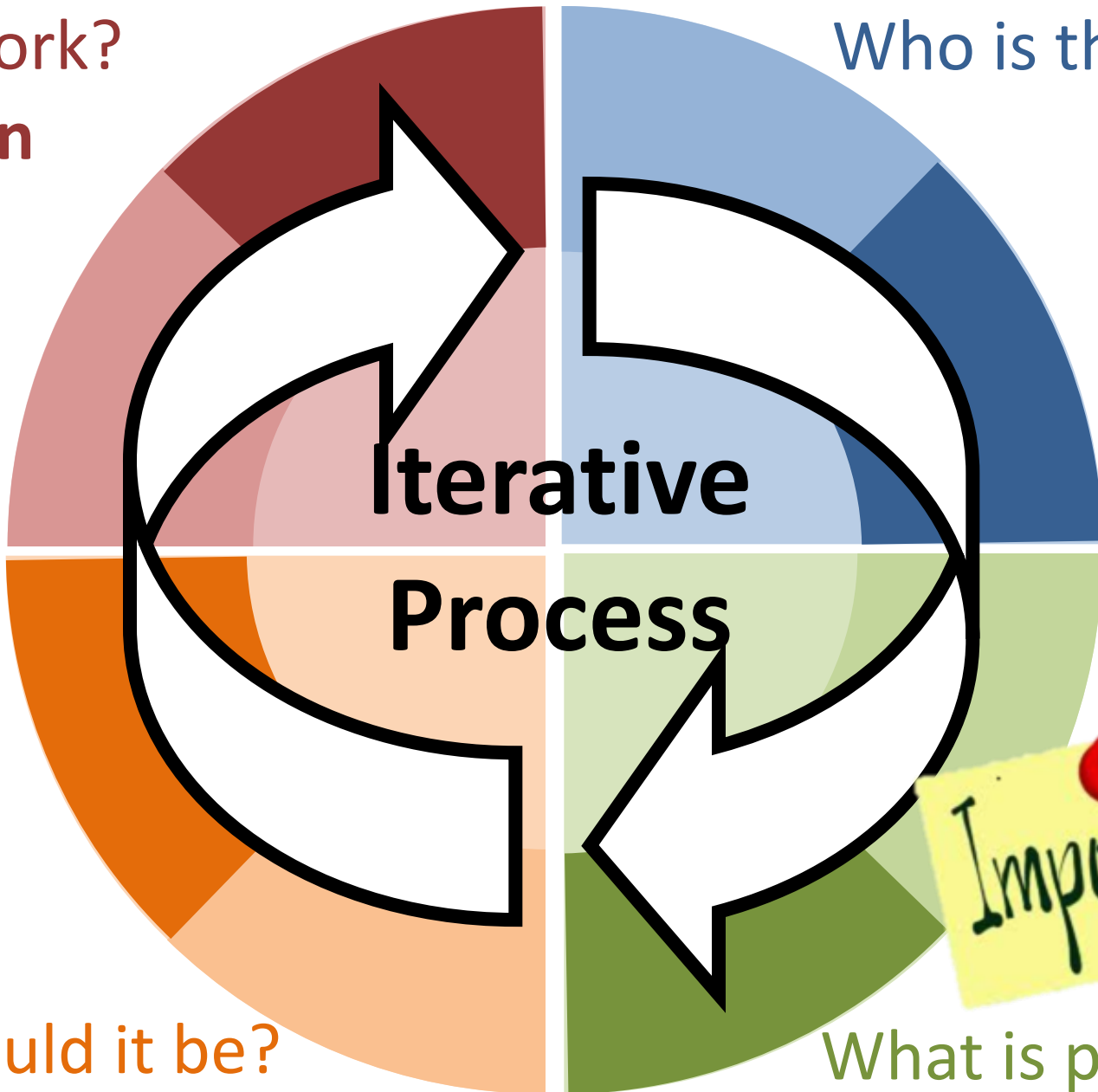
What should it be?
Design

What is possible?
Invention



Does it work?
Evaluation

Who is the user?
Discover



What should it be?
Design

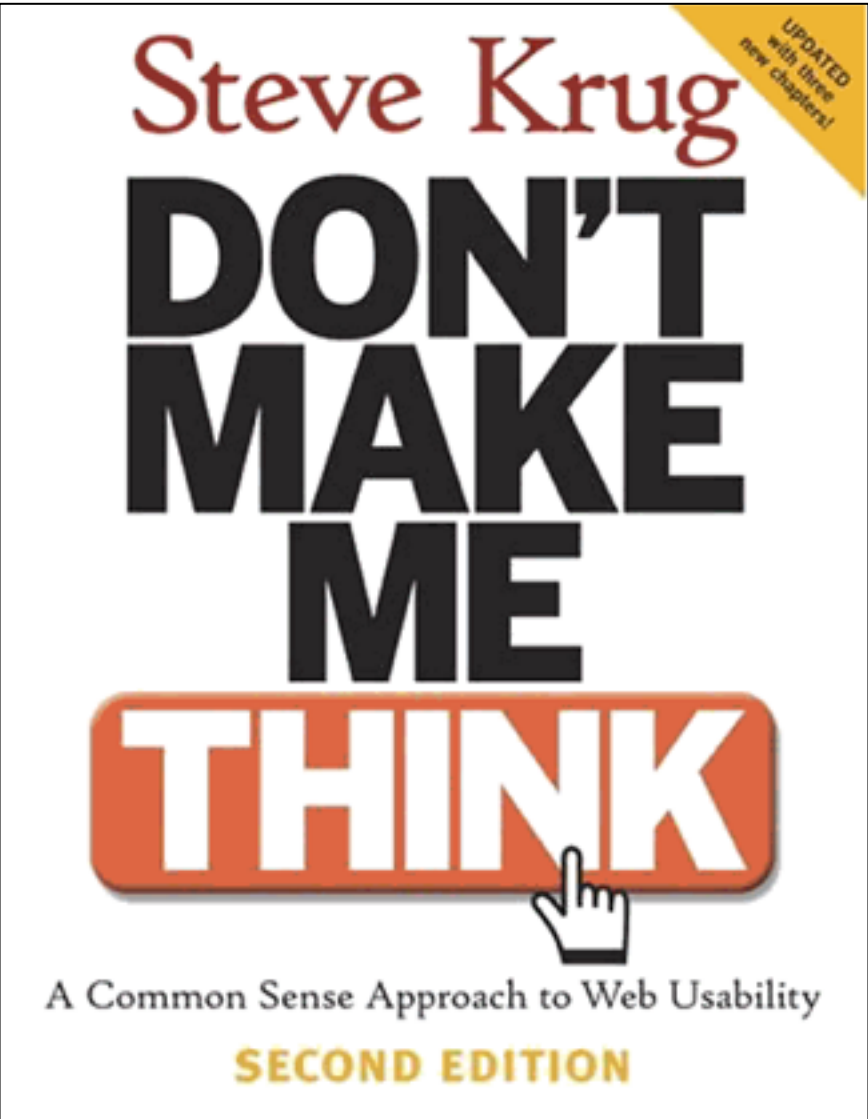
What is possible?
Invention



Design guidelines

Gilles Bailly

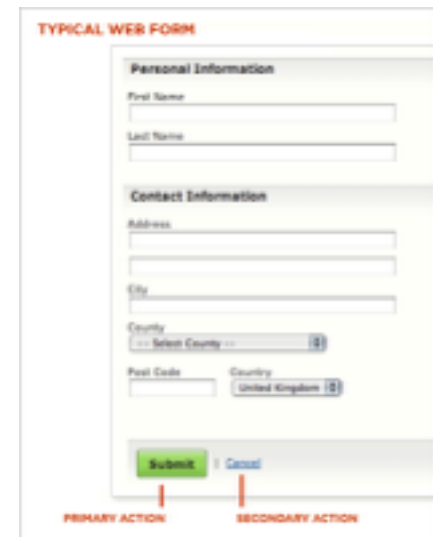
gilles.bailly@telecom-paristech.fr



SIGCHI is the the premier international society for professionals, accademics and students who are interesteed in human-technology & human-computer interaction (HCI)



Web site



Web form



blog






smartphone

Do not make me think !

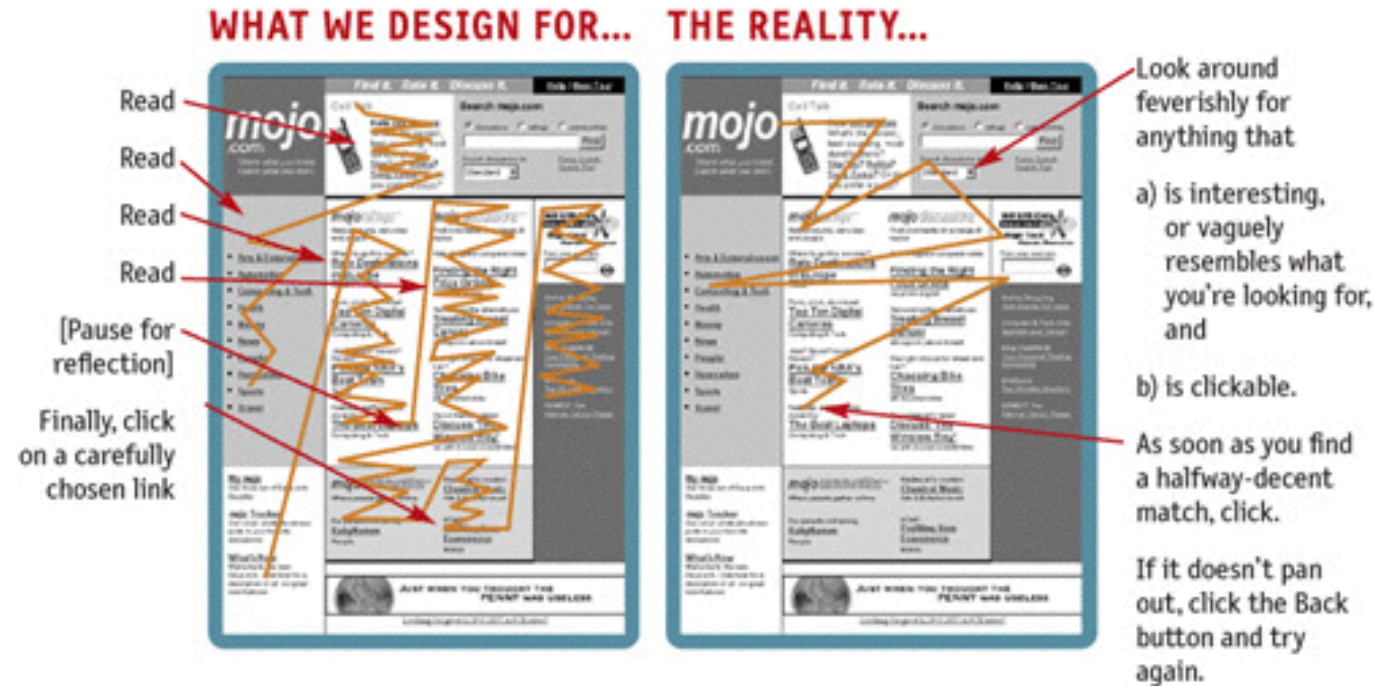
Semantic

< OBVIOUS	REQUIRES THOUGHT >	
<p>Jobs! <i>Click</i></p>  <p>Jobs</p>	<p>Hmm. <i>[Milliseconds of thought]</i> Jobs. <i>Click</i></p>  <p>Employment Opportunities</p>	<p>Hmm. Could be Jobs. But it sounds like more than that. Should I click or keep looking?</p>  <p>Job-o-Rama</p>

Affordance

< OBVIOUSLY CLICKABLE	REQUIRES THOUGHT >	
<p><i>Click</i></p>  <p>Results</p>	<p>Hmm. <i>[Milliseconds of thought]</i> I guess that's a button. <i>Click</i></p>  <p>Results</p>	<p>Hmm. Is that a button?</p>  <p>▶ Results</p>

Observations



- We don't **read** pages. We **scan** them.
- We don't make **optimal** choices. We **satisfice**.
- We don't **figure out** how things work. We **muddle** through.

Reasons: hurry; no penalty; guessing is fun; habits

Create a clear visual hierarchy



Font size

Organization

Very important

A little less important

Nowhere near as important

Computer Books

One Particular Computer Book

Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab
Blab Blab Blab

\$24.95

Conventions are your friends



The screenshot shows the Sina.com website interface with the following elements:

- Header:** Sina logo and navigation links: 新浪新闻中心, 电子邮箱, 电子邮箱, 免费注册, 网站导航.
- Search Bar:** A search bar with the text "请输入您要查找的关键词" and a "GO" button.
- Navigation Bar:** A row of buttons: 新浪首页, 新闻中心, 搜索引擎, 生活服务, 聊天交友, 金融理财, 购物商城.
- Main Content Area:**
 - News Section:** Features a photo of a man in a suit and text about a "National Day" event.
 - Video Section:** A section titled "今日精彩视频" with a list of video thumbnails.
 - Search Section:** A section titled "今日热搜新闻" with a list of trending news items.
 - Shopping Section:** A section titled "今日热卖商品" with a list of products.
- Footer:** Copyright information: Copyright © 2005 SINA.com. All rights reserved. Includes a PowerEdge logo.

Make it obvious what's clickable

PRESIDENT
HATCH
WWW.ORRINHATCH.ORG

**The Republicans:
A New Hampshire Forum**

The Dec. 2 Debate
The first all-candidate GOP debate this Thursday heats up the political style wars as Senator Hatch fights to keep substance in Campaign 2000. [FULL STORY](#)

THIS WEEK
Hatch Campaign 2000
CAMPAIGN NEWS
ONLINE PRESS ROOM
CAMPAIGN SPEECHES
CAMPAIGN NEWS ARCHIVES

HATCH toons

The Experienced Candidate
ABOUT ORRIN HATCH FOR THE RECORD
LEADING THE CHARGE

Be One Voice That Matters!
[Click here to CONTRIBUTE!](#)
CONTRIBUTOR LISTS
E*THE PEOPLE
WRITE THE MEDIA
GOP SITE LINKS
VOLUNTEER
CONTACT US

ONLINE POLLS

MCIC K2
INTERNET AND NETWORK SOLUTIONS

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P.O. Box 3636
Salt Lake City, UT 84101-3636
[Site Managed by MCIC02 - A Web Development Company](#)

Omit needless words

verizon

Verizon
For Your Home

Site Survey

For Your Home
State Selector
Area Codes
Site Survey
En Español
Contact Us

The following questionnaire is designed to provide us with information that will help us improve the site and make it more relevant to your needs. Please select your answers from the drop-down menus and radio buttons below. The questionnaire should only take you 2-3 minutes to complete.

At the bottom of this form you can choose to leave your name, address, and telephone number. If you leave your name and number, you may be contacted in the future to participate in a survey to help us improve this site.

If you have comments or concerns that require a response please contact Customer Service.

1. How many times have you visited this site?

This is my first visit

Please help us improve the site by answering these questions. It should only take you 2-3 minutes to complete this survey.

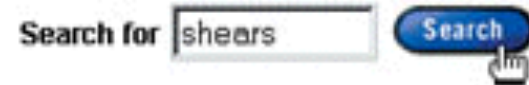
NOTE: If you have comments or concerns that require a response don't use this form. Instead, please contact Customer Service.

Speak the user language

Product:	NAV for Windows 95/98
Language:	English, US
<input type="button" value="Next"/>	

Navigation

- Search-dominant users
- Link-dominant users



You are not signed in.

[Register](#) [Sign In](#)



[MEN'S](#)

[WOMEN'S](#)

[GIFTS](#)

[SHOPPING BAG](#)

[CHECKOUT](#)

[HELP](#)

[What's New](#)
[Men's Sale](#)

[Jeans](#)
[Khakis](#)
[Pants/Shorts](#)

[Shirts/Polo](#)
[T's](#)
[Sweaters](#)

[Leather/Outerwear](#)
[Activewear/Logo](#)
[Accessories](#)

[GapBody Underwear](#)
[Loungewear/Sleepwear](#)

\$100
gets you click for details
\$20

JEANS

[view as images](#)

jeans

[water resistant new](#)
[slim fit jeans](#)
[original fit jeans](#)
[original fit jeans](#)
[easy fit jeans](#)
[boot fit jeans](#)
[dark wash boot fit jeans](#)
[boot fit cord](#)
[leather boot fit jeans](#)
[loose fit jeans](#)
[vintage soft jeans](#)
[relaxed fit jeans](#)
[bobby fit jeans](#)
[wide leg jeans](#)
[water jeans](#)
[separate jeans](#)
[easy fit jean shorts](#)
[separate jean shorts](#) **sale**

jean jackets

[jean jacket](#)
[leather jean jacket](#)

More sizes.
More fits.
More options.

[pants@gap.com](#)

Now more jeans sizes,
washes, and fits online—
plus tools to help you shop.

SELECT A TOOL BELOW:

[find the right size](#)

[find the right wash](#)

[find the right fit](#)

hassle-free returns: return it to any [Gap store](#) or [by mail](#).
 Questions? Feedback? [Email](#) us or call 1-800-GAP-STYLE anytime.

sites: [[usa](#) | [austria](#) | [belgium](#)]
services: [[help](#) | [store locator](#) | [site directory](#) | [company](#) | [all services](#)]



Les services en ligne

• Estimer vos droits

- [Accéder à une demande en ligne](#)
- [Télécharger un formulaire](#)

Connaître vos droits selon votre situation

S'informer sur les aides

Estimer vos droits

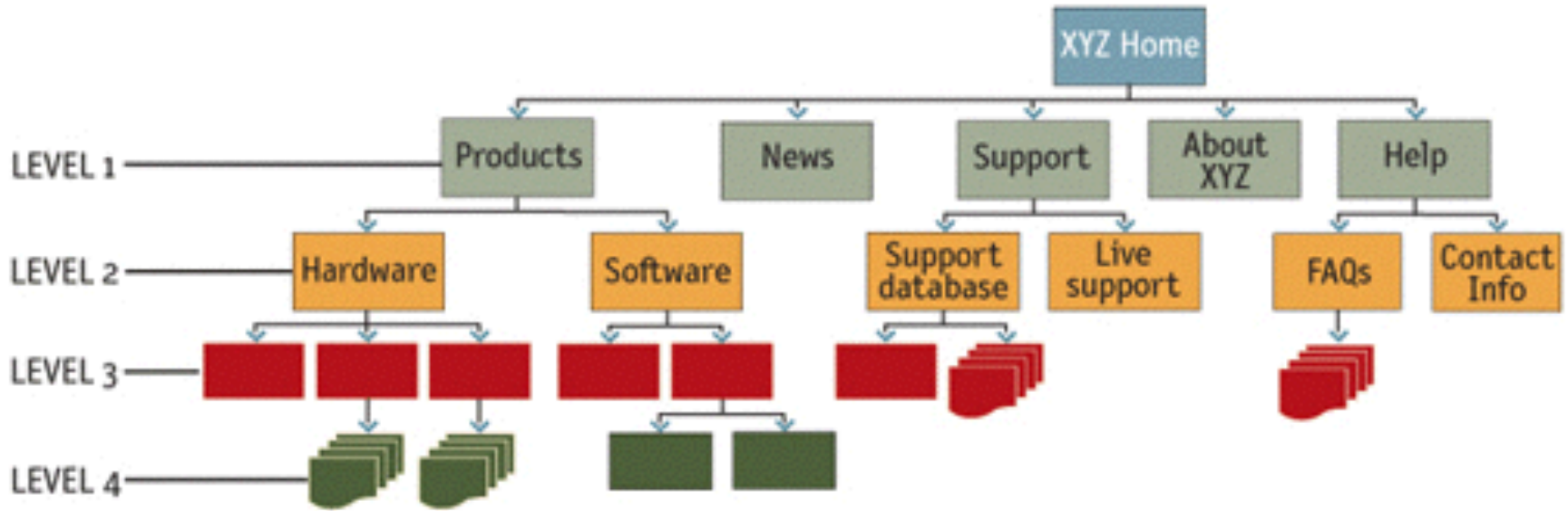
Vous êtes allocataire

Nous utiliserons des informations de votre dossier pour vous éviter de les saisir à nouveau

- [Le RSA](#)
- [La Paje](#)
- [Le logement](#)

Vous n'êtes pas allocataire

- [Le RSA](#)
- [La Paje](#)
- [Le logement](#)



Home page

What is this?



What can I do here?



What do they have here?

Why should I be here - and not somewhere else?

DEPARTMENTS

- [Audio / Video](#)
- [Business / Education](#)
- [Cameras](#)
- [Clothing](#)
- [Communications](#)
- [Computers](#)
- [Electronics](#)
- [Factory Serviced](#)
- [Gift Shop](#)
- [Golf Shop](#)
- [GPS Navigation](#)
- [Housewares](#)
- [Outdoors](#)
- [Sports / Recreation](#)
- [Tools](#)
- [Telephones](#)



CLICK HERE To View Our Home Appliance Selection 

DVD Players
[Audio/Video Main](#)



Toshiba DVD Players



Go.Video DVD Players



JVC DVD Players



Pioneer DVD Players



Samsung DVD Players



Sharp DVD Players



Philips DVD Players



Panasonic DVD Players



Surge Suppressors

30s Brainstorming



Global Mart[®]
The Only Way To Shop™



Search

[Current Specials](#)

[Customer Service](#)

[Order Tracking](#)

[View Cart/Checkout](#)

DEPARTMENTS

- [Audio/Video](#)
- [Business/Education](#)
- [Cameras](#)
- [Clothing](#)
- [Communications](#)
- [Electronics](#)
- [Factory Serviced](#)
- [Gift Shop](#)
- [Golf Shop](#)
- [GPS Navigation](#)
- [Housewares](#)
- [Musical](#)
- [Instruments](#)
- [Outdoors](#)
- [Sports/Recreation](#)
- [Telephones](#)
- [Tools](#)



[Audio/Video](#)

DVD Players



Toshiba DVD Players



Go.Video DVD Players



JVC DVD Players



Pioneer DVD Players



Samsung DVD Players



Sharp DVD Players



Philips DVD Players



Panasonic DVD Players



Aiwa DVD Players



Sony DVD Players



Surge Suppressors



Web site



Web form



smartphone



blog

Why?

The screenshot shows the 'Create your Vox account' page. It features a registration form with fields for email address, password, confirm password, first and last name, address, city, state, ZIP code, country, and phone number. A CAPTCHA image is visible at the bottom of the form. The page includes a 'Sign In' link for existing users and a 'Continue' button at the bottom.

Access

User: enable participation
Business: grow community

The screenshot shows the 'Enter Your Information' page on eBay Express. It includes a form for creating an account with fields for name, address, city, state, ZIP code, and phone number. There are also fields for email address and password. A 'Register' button is located at the bottom of the form. The page includes a 'Sign In' link for existing users and a 'Continue' button at the bottom.

Shopping

User: enable purchasing
Business: Maximize sales

The screenshot shows a table titled 'Approval Routing Data'. The table has columns for 'Item Item', 'Amount Limit', 'Auto Stop', 'Approval Fee', 'Weeks', 'Required Date', 'Date', and 'Ship Method'. The table contains several rows of data, each representing a different item and its associated approval routing information. The table is part of a larger interface with a 'Special Features' sidebar on the right and a 'Back' button at the bottom.

Item Item	Amount Limit	Auto Stop	Approval Fee	Weeks	Required Date	Date	Ship Method
1			\$1.00	2	1/1/10	1/1/10	Standard
2			\$1.00	2	1/1/10	1/1/10	Standard
3			\$1.00	2	1/1/10	1/1/10	Standard
4			\$1.00	2	1/1/10	1/1/10	Standard
5			\$1.00	2	1/1/10	1/1/10	Standard
6			\$1.00	2	1/1/10	1/1/10	Standard

Data

User: enable information entry
Business: accumulate data

Forms: Best practices

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- Actions
 - Primary & secondary
- Helps & Tips
- Feedback
- Number of fields

Vertical labels

Label

Longer Label

Even Longer Label

One More Label
 Value 1
 Value 2

Primary Action

- When data being collected is familiar
- Minimize **completion time**
- **Flexibility** for complex input
- Require more **vertical space**
- **Spacing or contrast** is vital to enable label scanning

Vertical labels



- When data being collected is familiar
- Minimize **completion time**
- **Flexibility** for complex input
- Require more **vertical space**
- **Spacing or contrast** is vital to enable label scanning

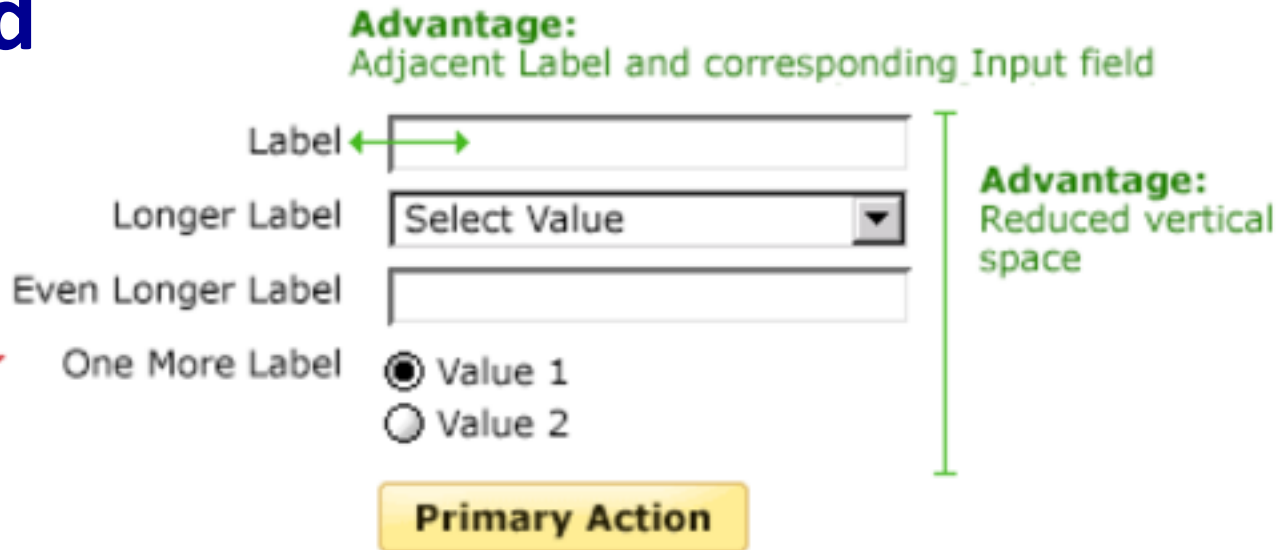
Right-aligned labels

Label	<input type="text"/>
Longer Label	<input type="text" value="Select Value"/>
Even Longer Label	<input type="text"/>
One More Label	<input checked="" type="radio"/> Value 1 <input type="radio"/> Value 2
	<input type="button" value="Primary Action"/>

- Clear **associations** between label and field
- Require less **vertical space**
- Fast **completion time**
- Difficult to just **scan** labels

Right-aligned labels

Disadvantage:
Reduced readability



- Clear **associations** between label and field
- Require less **vertical space**
- Fast **completion time**
- Difficult to just **scan** labels

Left-aligned labels

Label:

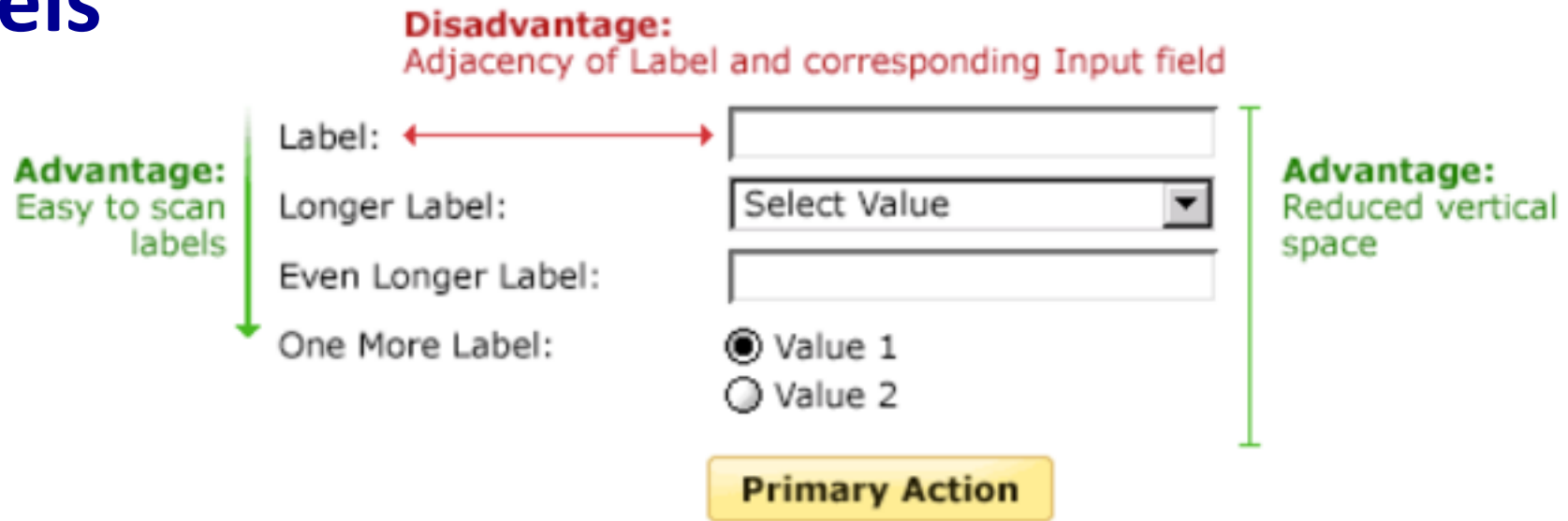
Longer Label:

Even Longer Label:

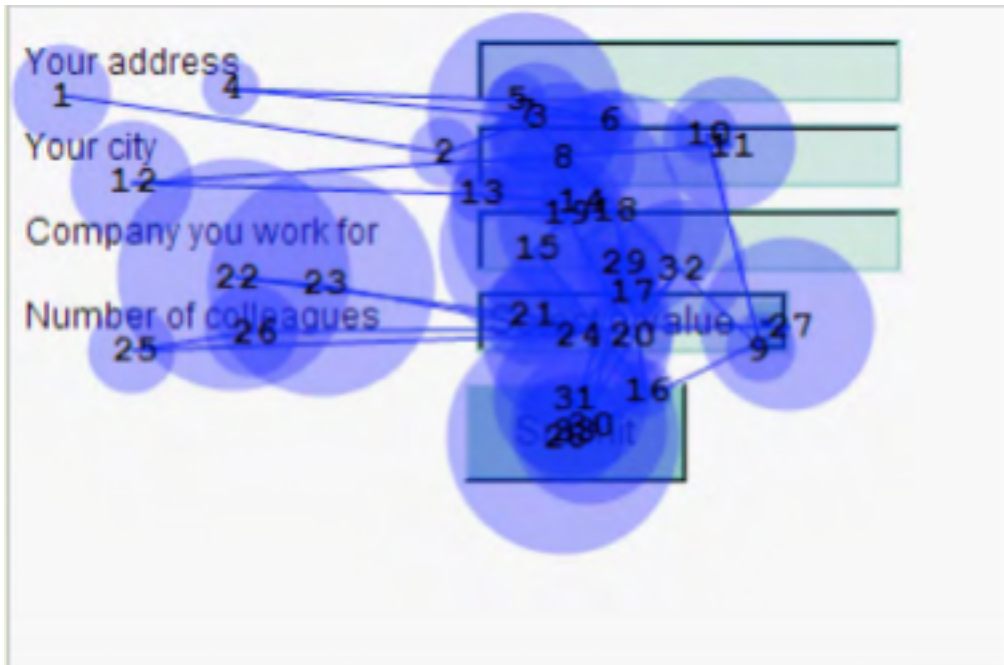
One More Label: Value 1
 Value 2

- When data required are unfamiliar
- Enables label **scanning**
- Less clear **associations**
- Require less **vertical space**
- Changing **label length** may impair layout

Left-aligned labels



- When data required are unfamiliar
- Enables label **scanning**
- Less clear **associations**
- Require less **vertical space**
- Changing **label length** may impair layout



Left-aligned labels



Top-aligned labels

Grouping

Label:

Longer Label:

Even Longer Label:

One More Label: Value 1
 Value 2

Label:

Longer Label:

Even Longer Label:

Primary Action

Good

■資料送付先

現住所に送付する
 その他住所（勤務先など）に送付する

■現住所以外の資料送付先住所

氏名（漢字）	氏 <input type="text"/> 名 <input type="text"/> 例) かもめ 太郎
氏名（フリガナ）	氏 <input type="text"/> 名 <input type="text"/> (姓フリガナ) 例) カモメ タロウ
住所	郵便番号 <input type="text"/> - <input type="text"/> (※) 例) 000-0000
	都道府県 <input type="text"/> (選択して下さい)
	市区郡 <input type="text"/> (選択して下さい)
	字丁目以降 <input type="text"/> 例) 緑道7-3-5
建物名 <input type="text"/> 例) かもめマンション203号室	
電話番号	<input type="text"/> - <input type="text"/> - <input type="text"/> (※)
FAX番号	<input type="text"/> - <input type="text"/> - <input type="text"/> (※)

Bad

Excessive visual noise

Backgrounds & Rules

Label:	<input type="text"/>
Longer Label:	<input type="text" value="Select Value"/>
Even Longer Label:	<input type="text"/>
One More Label:	<input checked="" type="radio"/> Value 1 <input type="radio"/> Value 2

Additional Visual Elements

1 —	Label:	<input type="text"/>	— 9
2 —	Longer Label:	<input type="text" value="Select Value"/>	— 10
3 —	Even Longer Label:	<input type="text"/>	— 11
4 —	One More Label:	<input checked="" type="radio"/> Value 1	— 12
5 —		<input type="radio"/> Value 2	— 13
6 —			— 14
7 —			— 15

8

Impaired Scanning

↓	Label:	<input type="text"/>
↓	Longer Label:	<input type="text" value="Select Value"/>
↓	Even Longer Label:	<input type="text"/>
↓	One More Label:	<input checked="" type="radio"/> Value 1 <input type="radio"/> Value 2

Layout: Best practice

Label positionning

- Familiar data input => Top aligned
- Limited vertical space => right aligned
- Unfamiliar data input => left aligned

- Grouping
 - Use relevant groupings
 - Minimize the amount of visual elements



Forms: Best practice

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- Actions
 - Primary & secondary
- Helps & Tips
- Feedback
- Number of fields

Input affordance: required/optional fields

ENTER NEW SHIPPING ADDRESS

* FIRST NAME:

MIDDLE NAME/INITIAL:

* LAST NAME:

ATTENTION:

* ADDRESS:

* CITY:

* STATE:

* ZIP CODE:

AREA CODE & PHONE:

[Clear Form](#)

Check here to use this address as your billing address.

BACK ONE STEP

SAVE & CONTINUE

Input affordance: field length

- Use field length as an affordance (when possible)
- Consider length that provides enough room for inputs



The image shows a light blue web form with the following elements:

- Name:** A single-line text input field.
- Street Address:** A single-line text input field.
- City:** A single-line text input field.
- State:** A dropdown menu with a downward arrow and two dashes "--" as a placeholder.
- ZIP Code:** A single-line text input field.
- Phone Number:** A single-line text input field.
- Website:** A single-line text input field.
- Make this place public**
- Add Place** (a pink button) and **Cancel** (a blue button).

Forms: Best practice

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- **Actions**
 - Primary & secondary
- **Helps & Tips**
- **Feedback**
- **Number of fields**

30s Brainstorming

Personal Information

First Name

Last Name

Contact Information

Address

City

Country
-- Select Country --

Post Code

Country
United Kingdom

?

A

Post Code

Country United Kingdom

Submit Cancel

B

Post Code

Country United Kingdom

Submit Cancel

C

Post Code

Country United Kingdom

Submit Cancel

D

Post Code

Country United Kingdom

Submit Cancel

E

Post Code

Country United Kingdom

Cancel Submit

F

Post Code

Country United Kingdom

Submit Cancel

Please fill out the information below.

Personal Information

First Name

Last Name

Contact Information

Address

City

County

Post Code

Country

Submit

Cancel

Please

Please fill out the information below.

Personal Information

Personal Information

First Name

First Name

Last Name

Last Name

Contact Information

Contact Information

Address

Address

City

City

Country

Country

Post Code

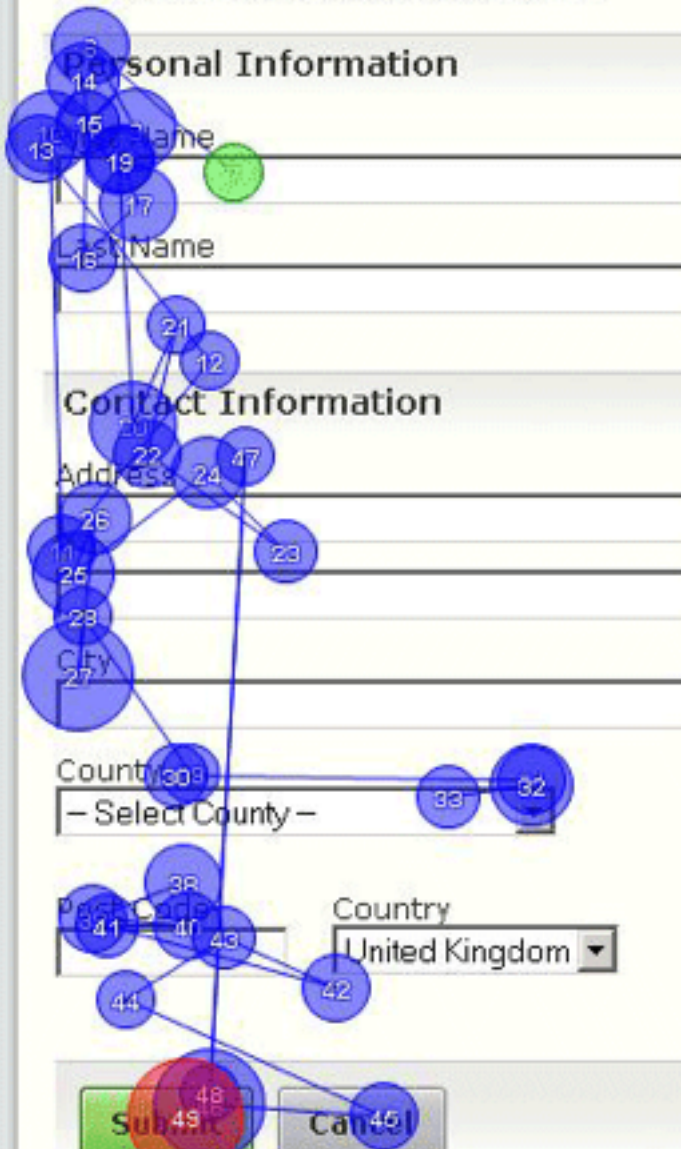
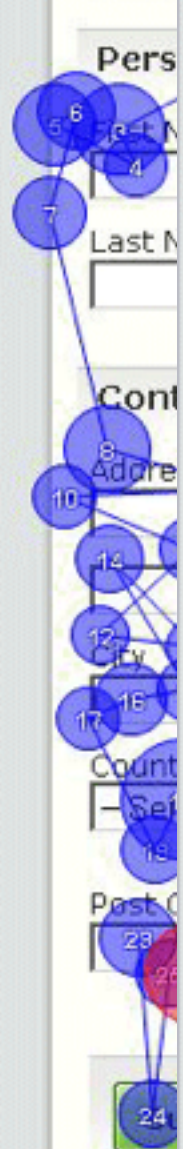
Post Code

Country

United Kingdom

Submit

Cancel



B: FIXATIONS

C: FIXATIONS

Eye Tracking by Etre

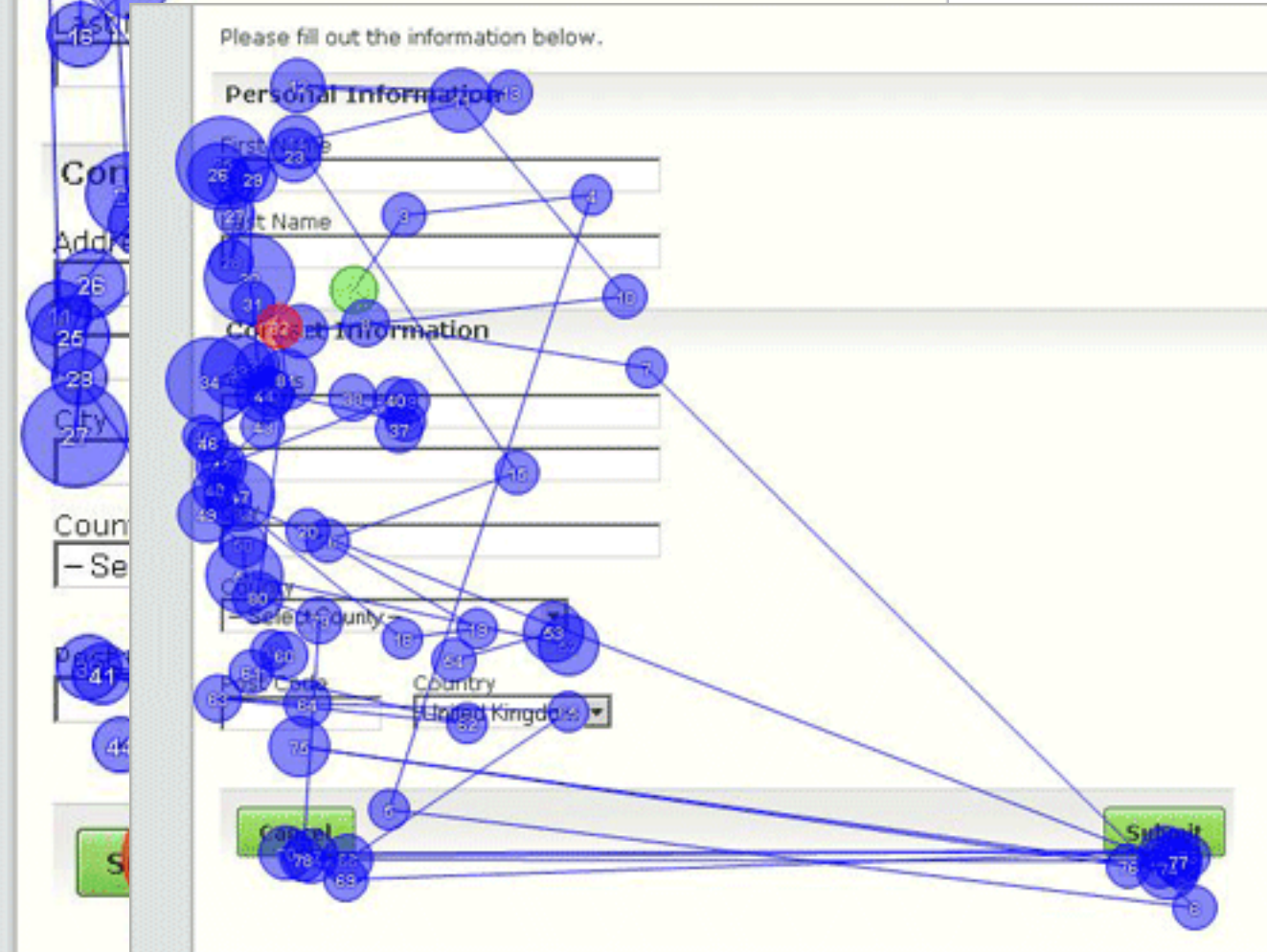
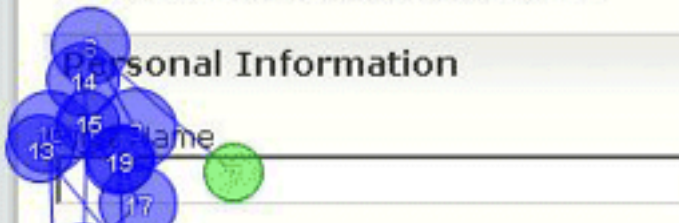
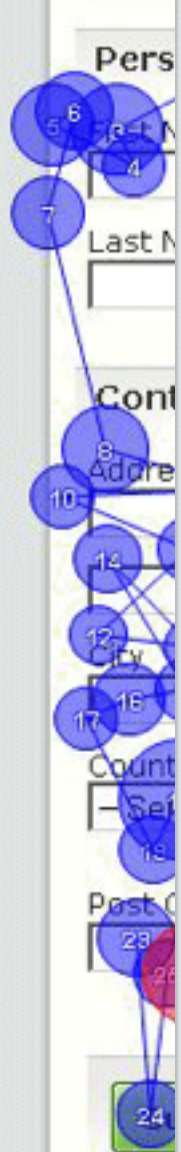
Eye Tracking by Etre | www.etre.com

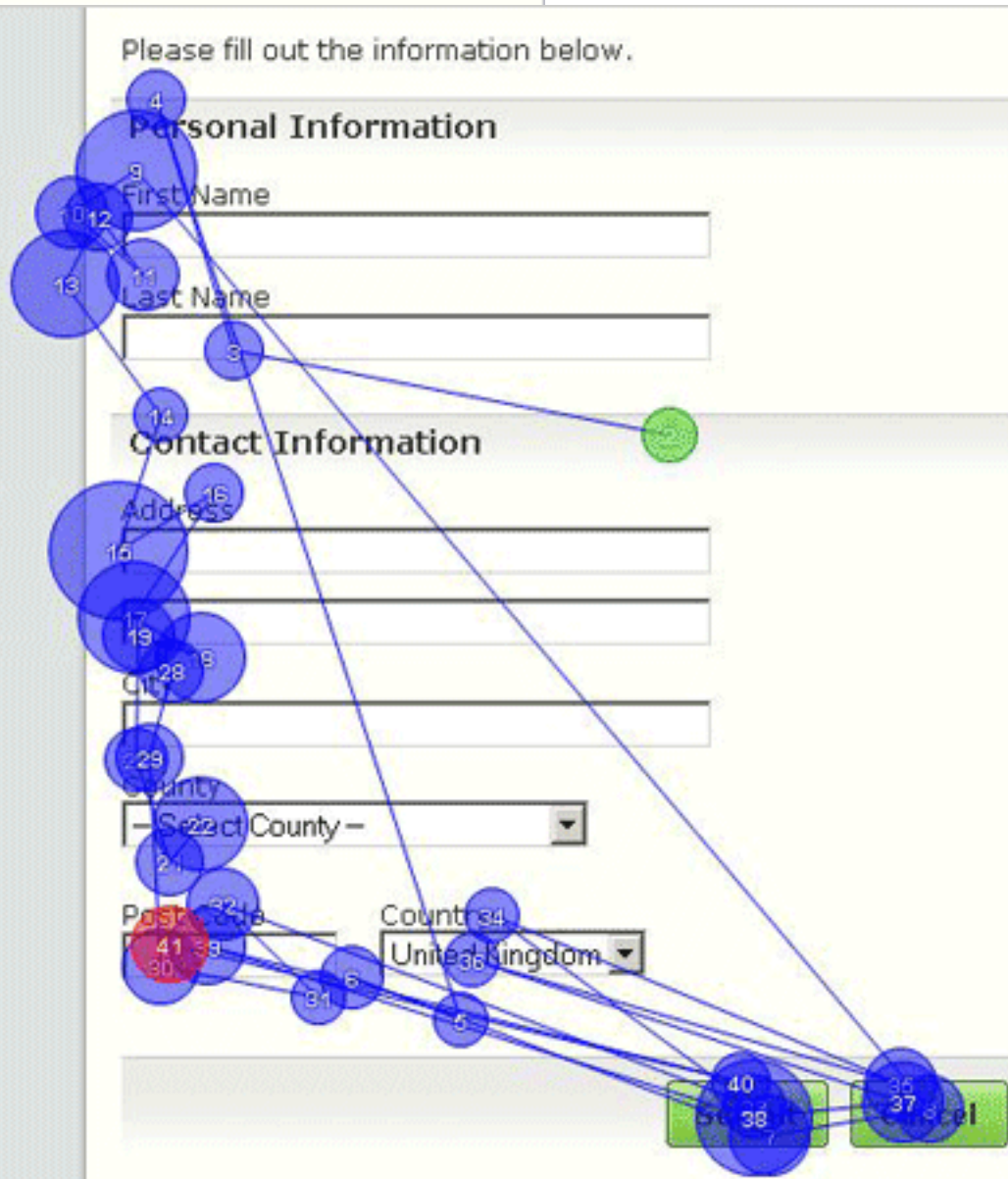
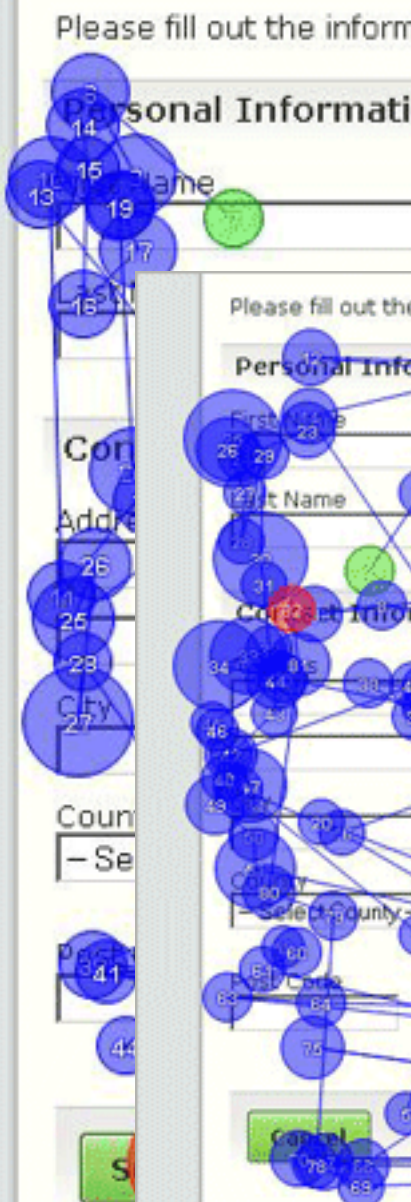
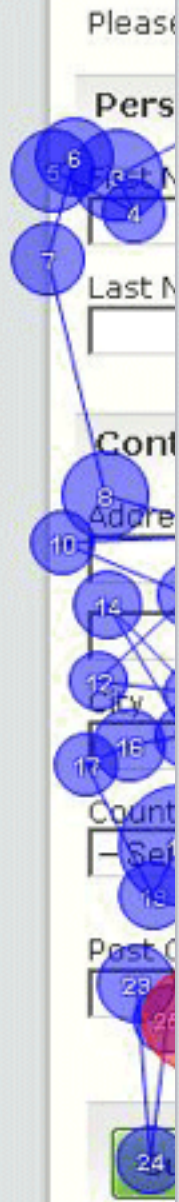
Please

Please fill out the information below.

Pers

Personal Information





B: FIXATIONS
Eye Tracking by Etre

C: FIXATIONS
Eye Tracking by Etre

E: FIXATIONS
Eye Tracking by Etre

F: FIXATIONS
Eye Tracking by Etre | www.etre.com

Please fill out the information below.

Personal Information

First Name

Last Name

Contact Information

Address

City

County

– Select County –

Post Code

Country

United Kingdom

Submit

[Cancel](#)

A: HEAT MAP

Eye Tracking by Etre | www.etre.com

Actions



[home](#) | [pay](#) | [register](#) | [services](#) | [site map](#)

Start new search

Search

Buy

Sell

My eBay

Community

Help

[Advanced Search](#)

Hello, wookash! (Not you? [Sign in.](#))



Sell Your Item: Add Subtitle

Add Subtitle (\$0.50)

Add a subtitle (searchable by item description only) to give buyers more information. [See example.](#)

Cancel

Confirm

[About eBay](#) | [Announcements](#) | [Security Center](#) | [Policies](#) | [Site Map](#) | [Help](#)

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[My Account](#)[Send Money](#)[Request Money](#)[Merchant Tools](#)[Auction Tools](#)

Jason, please confirm this secure transaction

You're about to send
\$37

To: lucky@37signals.com (a verified member)

Source: \$37 from your PayPal balance (pay another way)

Email

Email subject: Here's the cash I owe ya

Note: Thanks for bailing me out! I also included \$7 for the cab ride. Thanks again!

Shipping Information

Ship to: 400 N. May Street, #301, Chicago, IL 60622, USA (Confirmed)

or [add a new address](#)

I'm not shipping anything, no address required.

[Send the \\$37](#)

[Edit transaction](#)

[Cancel transaction](#)

[My Account](#)[Send Money](#)[Request Money](#)[Merchant Tools](#)[Auction Tools](#)

Check Payment Details

Secure Transaction

Payment Details

Pay To: paypal.jf@spinfree.com (a [verified member](#))**Amount:** \$37.00**Source of Funds:** PayPal balance [more funding options](#)**Email Subject:** Here's the cash I owe ya**Note:** Thanks for bailing me out! I also included \$7 for the cab ride.
Thanks again!

Shipping Information

 Ship to [Add Address](#) **No shipping address required**[Send the \\$37](#)[Edit Transaction](#) | [Cancel Transaction](#)

Actions: Best practice

- Avoid secondary actions if possible
- Ensure a clear distinction between primary and secondary actions
- Align primary actions with input fields for a clear path to completion



Forms: Best practice

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- Actions
 - Primary & secondary
- Helps & Tips
- Feedback
- Number of fields

Sign up here.

VideoEgg is all about VideoEgg Publishing Over Easy. We're simply the best and easiest way to upload and share videos on the internet. To get started, create an account below, and we'll have you sharing your videos in no time!

Desired Login:

Choose a Password:
(4 or more characters)

Confirm Your Password:

Email:

We don't spam. Period.

Sign Up

I know you said you don't spam, but really, will you spam me?

No way! SPAM is for mortgage companies, fake watches and people pimping Viagra. We'd never give your address to someone or send you unsolicited emails. We hate getting them, and we won't send them.

Sign in.

Username:

Password:

remember me

Sign in

[Sign up](#) | [Lost Login](#)



[home](#) | [pay](#) | [services](#) | [site map](#)

Start new search

Search

[Buy](#)

[Sell](#)

[My eBay](#)

[Community](#)

[Help](#)

[Advanced Search](#)

Hello, skitterball! ([Sign out.](#))

Powered By

Sell Your Item: Choose a Selling Format

[Live help](#)

To begin, select a [format](#) and click the **Continue** button. Please make sure your item is [allowed](#) on eBay first.

Sell item at online Auction

Allows bidding on your item(s). You may also add the Buy It Now option. [Learn more.](#)

Sell at a Fixed Price

Allows buyers to purchase your item(s) at a price you set. [Learn more.](#)

Advertise your Real Estate

Allows advertising of property to generate multiple leads. Real estate sellers may also sell at an online Auction or Fixed Price. [Learn more.](#)

Sell your items in your own eBay Store

Your own storefront on eBay, plus features to help you sell more.
Learn more [about eBay Stores.](#)

Want someone else to sell for you? Find a [Trading Assistant.](#)

New Sellers, before you sell...

- [Learn how to sell](#)
- Review the [seller's checklist](#)
- Learn about [selling fees](#)

[Ramp up your business with new tools & services!](#)

Continue >



Registrering

Skapa ett Wishlistr-konto

Har du redan ett konto? [Klicka här för att logga in.](#)

Steg 1: Dina uppgifter

DITT NAMN:

För- och efternamn tack.

DIN E-POSTADRESS:

Vi gillar inte spam och lovar att aldrig använda din e-postadress för något annat än det som har med ditt Wishlistr-konto att göra.

Steg 2: Välj användarnamn och lösenord för ditt konto

VÄLJ ETT ANVÄNDARNAMN:

Användarnamnet får innehålla bokstäver, siffror, understreck och blanksteg. Så "Apollo 13" eller "Lucky Luke" är till exempel helt okej.

VÄLJ ETT LÖSEWORD:

Lösenordet måste vara mellan 3-15 tecken långt. Blanksteg är inte tillåtna.

UPPREPA LÖSEWORDET:

Så att du kan vara säker på att du skrev rätt.

Registrera mig!

Klicka på knappen och du är klar!

II. User Registration

1. Enter Your Email Address

You must supply a valid email address. We will never sell or disclose your email address to third parties.

2. Choose a Password

Verify Password

3. Pick your Wufoo Name / URL

<http://username.wufoo.com>

Keep me updated about Infinity Box projects.

I agree to Wufoo's [Terms of Service](#).



Create Account



Cancel

Phone Details

IMEI Code: ?

PAC Code: ?

Submit

Phone Details

IMEI Code: ?

Explanation of IMEI Code

The International Mobile Equipment Identity (IMEI) number is a unique 15-digit code used to identify an individual GSM mobile telephone. The number can be found on most mobiles by typing in *#06#. If this combination doesn't work on your mobile phone, please call our support centre on +44 (0) 1252 xxxx xxx.

[Back to IMEI input field.](#)

PAC Code: ?

Submit



Assess Your Needs

[Reasons to Insure](#)[Assess Your Needs](#)[Get a Quote](#)[Insurance Carriers](#)[Insurance Types](#)[Learn More](#)[Glossary](#)

Calculate how much life insurance

This calculator will help you determine how much life insurance you might consider in order to:

- Replace your income for a specific number of years
- Pay off major expenses, including mortgage and college educations.

What is your personal [monthly net income](#)?

For how [many years](#) would you want to replace that income?

What is your outstanding [mortgage balance](#)?

How many children will be attending [college](#)?

Estimated expense for college:
([Determine college expenses](#))

What is your current [outstanding debt](#)?

Estimated [final expenses/estate settlement expenses](#):

[Other major expenses](#) you may want to cover

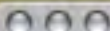
Total Expenses:

How much [life insurance](#) do you currently have?

[Retirement Savings](#):

[Education Fund](#):

[Other Assets](#) (excluding primary residence):



Help College Costs

Saving for College

How much money will you need?

Just how much will it cost for your child to attend college? The table below shows what the average costs may be.

Projected cost of college

Your child begins college in	Type of college		
	4 years public school (in-state)	4 years public school (out-of-state)	4 years private school
2 years	\$81,100	\$121,200	\$166,300
4 years	\$91,200	\$136,200	\$186,900
10 years	\$129,400	\$193,200	\$265,200
14 years	\$163,300	\$243,900	\$334,900
18 years	\$206,200	\$307,800	\$422,800

Source: Annual Survey of Colleges, The College Board. Chart assumes a 6% average annual increase in tuition, fees, books, room and board, and other expenses.

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Sell: Create Your Listing

Tell buyers about your item.

- To get help: Click [?](#)
- To show or hide optional features, e.g. International Shipping, on this page, click the [Show/Hide Options](#) link.



Help



Show/Hide Options

What you're selling [?](#)

Category [?](#)

Collectibles > Animals > Fish
[Change category](#)

Describe your item [?](#)

Title * [?](#)

Subtitle (\$0.50) [?](#)

Pictures (First picture is free. Each additional picture is \$0.15.) [?](#)

Add Pictures

12 remaining

Remove



[Live help](#)

Creating Your Listing

On this page you'll provide **all the content of your listing**, such as a description and pictures of your item.

You'll also choose how you want to sell the item, known as the **selling format**. For example, you can have buyers bid in an auction-style listing to determine the final sale price.

You'll be able to review and enhance your listing on the next page after you click the **Save and Continue** button.

Related topics

- [Topic Index](#)

Help & Tips: Best practice

- Minimize the amount of help & tips required to fill out a form
- Help visible and adjacent to a field is most useful
- When lots of unfamiliar data is being requested, consider using a dynamic help system

Forms: Best practice

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- Actions
 - Primary & secondary
- Helps & Tips
- Feedback
- Number of fields

Feedback: inline validation

Create Password <input type="text"/> Must be at least 6 characters, including a number or special character. Example: eXpr3\$\$	How secure is your password? <input type="text"/> Check your password strength - the higher, the better.
Re-enter Password <input type="text"/>	

Create Password <input type="text" value="*****"/> Must be at least 6 characters, including a number or special character. Example: eXpr3\$\$	How secure is your password? <input type="text" value=""/> Check your password strength - the higher, the better.
Re-enter Password <input type="text"/>	

Create Password <input type="text" value="*****"/> Must be at least 6 characters, including a number or special character. Example: eXpr3\$\$	How secure is your password? <input type="text" value=""/> Check your password strength - the higher, the better.
Re-enter Password <input type="text"/>	

Feedback: inline validation

Getting a free account on Newsvine takes less than a minute.

As a community member, you can comment, chat, and create your own column.

Simply fill out the short form below and you'll be on your way!

Private Information

Email Address:

Password:

Confirm Password:

I certify that I am at least 13 years of age and have read and agree to the terms of the [Newsvine User Agreement](#).

Public Information

Display Name:

Available! (How you will be seen on the site — e.g. *John Smith* or *supergerbil420*)

Newsvine Domain: .newsvine.com

(The address for your column — e.g. *jim.newsvine.com*)

[Register for Newsvine](#)

Feedback: inline validation

Round-trip One-way Multi-city

From (city or airport)
SJC
 show nearby airports

Leave 24 Dec 2006 **Time** Anytime

Travelers 1 **Cabin** Economy

[More search options](#) (flexible dates, preferred airlines)

To (city or airport)
chi

- Chicago, IL USA - All airports (CHI)
- Chicago, IL USA - O'Hare International (ORD)
- Chicago, IL USA - Midway (MDW)
- Taipei, Taiwan - Chiang Kai Shek (TPE)
- Chiang Mai, Thailand - International (CNX)
- Chisinau, Moldova (KIV)
- Chico, CA USA (CIC)
- Chihuahua, Mexico - Fierro Villalobos (CUU)
- Sapporo, Japan - Chitose (CTS)
- Sault Ste Marie, MI USA - Chippewa County (CIU)

Search for flights from 120+ websites

Get more out of Kayak.
[Sign up for free](#) to track fares, get fare alerts by email, share tips in forums, get personalized results and access your search history from anywhere.

Buzz - San Jose (SJC) to Kayak Top 25

1. Philadelphia, PA (PHL) \$230
2. Las Vegas, NV (LAS) \$158
3. Paris, France (CDG) \$619
4. Honolulu, HI (HNL) \$258
5. Santa Ana, CA (SNA) \$119

[Get the full buzz for SJC](#)

Forums
[22 hours](#)
I have a 22 hour layover in Amsterdam. Any ideas on what to do to pass the time. ...
[Amsterdam](#) - 9 replies
[Visit Kayak Forums](#)

Feedback: inline validation

Message

1000 characters left (Limit is 1000 characters)

Message

After typing a few words I get a sense of how much room I have left to type...

922 characters left (Limit is 1000 characters)

Feedback: Errors

E050920054-00: LC Details Home > Documents > Letters of Credit > E050920054-00 > LC Details

Please correct the following before continuing.
Required: Applicant (50)

Letter of Credit
LC Details
Checklist
File Repository
Draws
Parties & Alerts

Draws
09/20/2005
E050920054-01
\$2,000.00

09/18/2005
E050920054-02
\$3,000.00

09/12/2005
E050920054-03
\$5,000.00

SWIFT Messages
09/20/2005
MTT700 (Processed)

09/18/2005
MTT699 (Processed)

SWIFT Information

Balance & Draws Hide

Type	Commercial LC	Total Transaction Value	0.00	Workgroup	SCTest
State	New	Cash in Advance	0.00	Owner	Poopak Tamah
Number	04ADDH250221	LC Value	1,072,500.00		
Latest Shipment	11/01/2005	Under Reserve	0.00		
Expiration	09/29/2005	Draws Total (3)	10,000.00		
Currency	USD	Balance	1,072,500.00		

Parties Hide

Availability (41A)
 Freely Negotiable

Negotiating Bank

Issuing Bank (51A)

Applicant (50)

Beneficiary (59)

Drawee (42A)

Consigned to

Notify

Forms: Best practice

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- Actions
 - Primary & secondary
- Helps & Tips
- Feedback
- **Number of fields**



Registration



Check email



User ID & Password

Welcome! Let's begin.

Please enter your contact information below. All required fields have an asterisk, * * *

Note: You must be at least 18 years old to register on eBay.

Personal Contact Information

Email address *

e.g. joecool@aol.com

Note: In order to complete registration, we'll send a confirmation message to the email address you enter above.

Be sure to include your "@serviceprovider.com" domain.

Retype your email address *

Please re-enter your email address.

Full name *

e.g. John H. Doe

First name MI Last name

Company

Address *

City *

State *

Zip *

Primary phone # *

e.g. (408) 555-1234

 () () - Extension

Secondary phone #

 () () - Extension

Also register me at eBay's Half.com, a place to buy without bidding and sell without listing fees. This will allow you to use the same User ID and password on both sites.

Optional Information

How did you first hear about eBay?

Date of Birth

 Month Day Year 19

(MM/DD/YY)

Annual Household Income

Gender

If you have a promotional priority code, please enter it:

 - -

Create a Download Request

Select active listings and sales history records that you want to download.

Note: Your sales records are available for the current month and the past three calendar months.

Listings and records

Sold

Date Range

All records

All new records since last download only (Last downloaded: Jan-01-05 00:00:00 PST)

From Yesterday

From April 25 2005 at 12:00 AM US Time (PST)

To April 26 2005 at 12:00 AM US Time (PST)

Email address

jnucci@ebay.com

Your downloads will be sent to this email address. Separate multiple email addresses with commas.

Smart Defaults

Shipping Costs

Shipping Service

[Add another shipping service](#)

Shipping Insurance

 \$

View insurance [rate table](#).

Shipping & Handling

\$

Don't know what to charge? Try the  [Shipping Calculator](#). To offer free shipping, enter 0.00 above.

Sales Tax

I don't charge tax [Change](#)



Secure Payment Info



Name (as it appears on your card)

Card number (no dashes or spaces)

Expiration date

Security code (3 on back, Amex: 4 on front)

Number of fields

- Remove all unnecessary fields
- Enable smart defaults
- Use dynamic forms

Forms: Best practice

- Layout
 - Label positioning
 - Content groupings
- Input affordances
 - Format, required fields
- Actions
 - Primary & secondary
- Helps & Tips
- Feedback
- Number of fields

Sign Up & Pricing Login

Wufoo

Making forms easy - fast - fun.

Build a form.
Gather information.
Use it like a champ.



Sign Up for Free!
Get Up and Running in Minutes

Wufoo is the easiest way to collect information online. Our innovative HTML form builder helps anyone create beautiful forms, online surveys and invitations without writing a single line of code.

[Learn More](#)

Why Wufoo?
The Top 10 Reasons

Form Examples
The Possibilities of Wufoo

Read the Buzz
What are People Saying?

See the Action
Interface Screenshots

Wufoo - Infoblox Inc. - Tampa, FL
Home - Blog - Pricing - Terms - Privacy - Support - Contact

Wufoo

- **Wufoo**
 - <http://www.wufoo.com>
- **Form Assembly**
 - <http://www.formassembly.com>
- **icebrg**
 - <http://www.icebrg.com>

Home About FAQ Contact



What it does How to use it Sign up

CLICK TO ADD A FIELD

- Single Line Text
- Name
- Address
- Phone

icebrg

Web forms made chillingly simple.

1 Design your form

2 Share on your website

3 Get your results

Have an account? Log in to work on your forms. Email Password Search

Build your own forms in minutes.
Making lists, surveys, contact web forms that look great and work even better. See how >

[CLICK for a video demo](#)

Publish to your website or blog.
When you've created your forms, you can easily post them on your web, website or blog. Making lists and surveys. Alternatively, to share your help, promotional web forms, surveys, your forms are automatically included into the look of your own site. [Learn More >](#)

What makes icebrg unique?
icebrg offers seamless integration with our complete website management software solutions. [Learn More >](#)


Water
for Forms

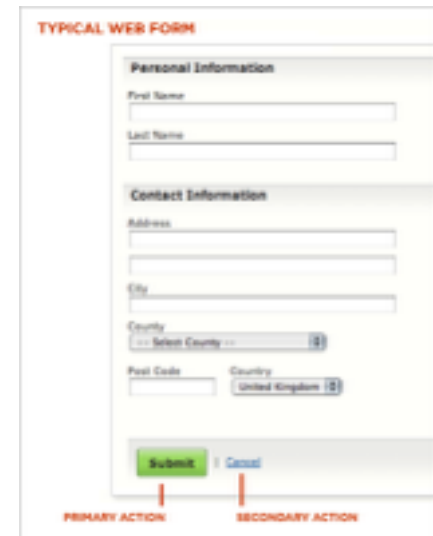

Light
for Design


Sky
for Mobile

Home About FAQ Contact
icebrg is another sophisticated web design and product from Business Builder. ©2009 BusinessBuilder, LLC. All Rights Reserved.



Web site



Web form

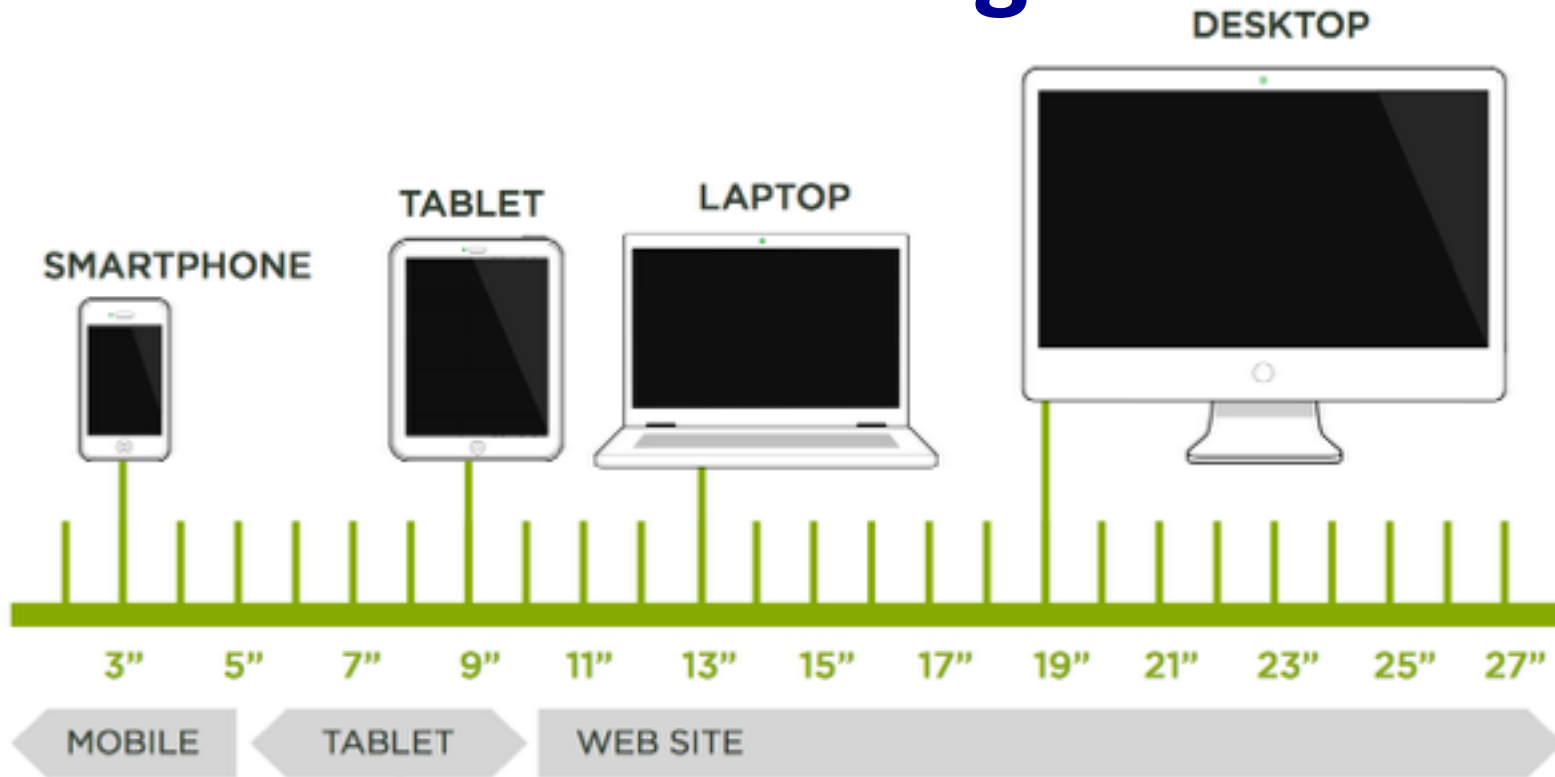


smartphone



blog

Multi Device Design



Multi Device Design

SMARTPHONE



3.5"



4.0"



4.3"



4.5"



4.7"

Multi Device Design

TABLET



7.0"



7.9"

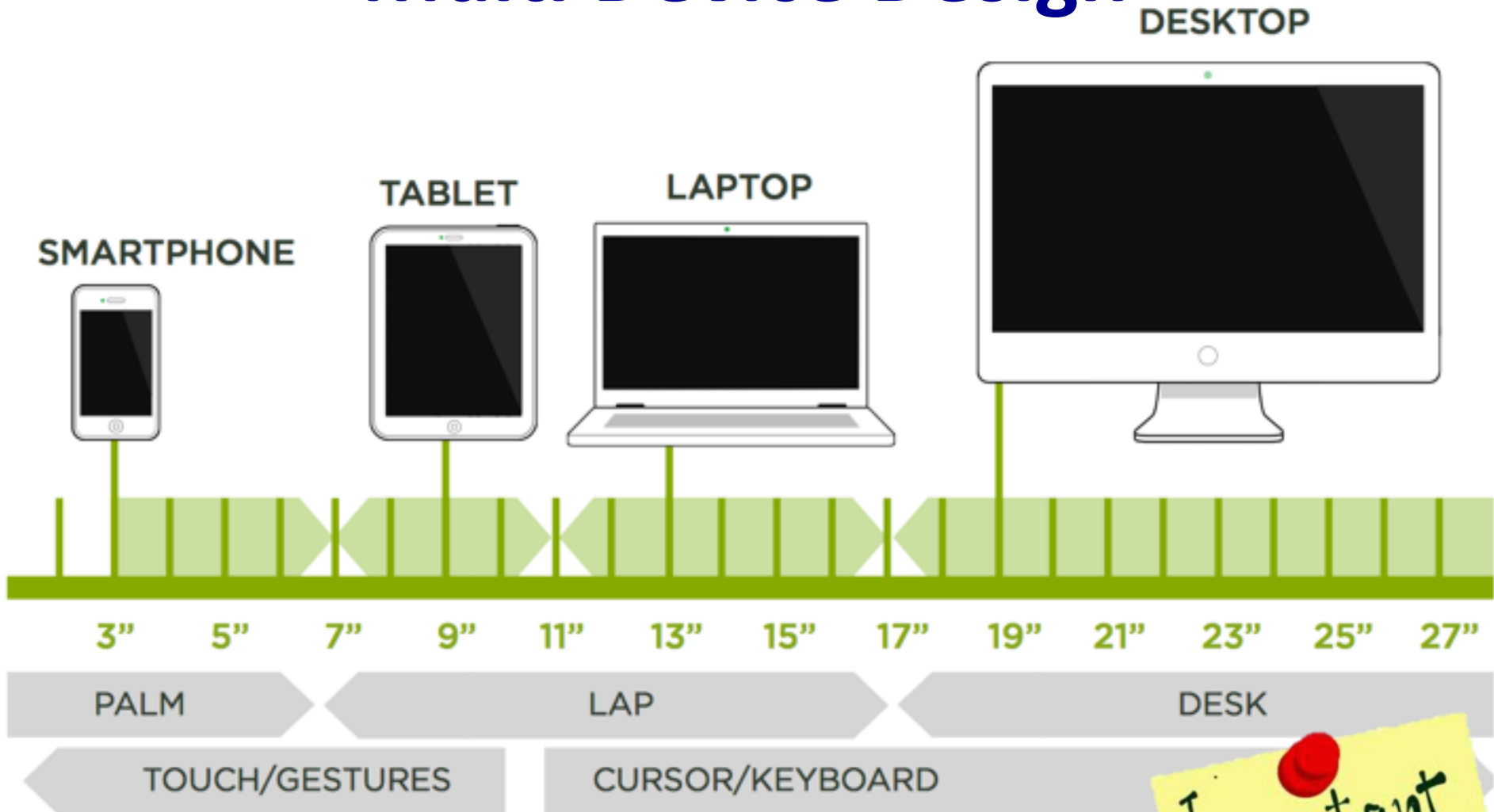


8.9"



9.7"

Multi Device Design



Important

Multi Device Design

Mobile Web growth has outpaced desktop Web growth 8x
Global mobile data traffic should grow 26x over next 5 years

PC
• **100M+**



Desktop Internet
1B+

Mobile Consumer
10B+

1990

2000

2010

2020

Note: PC installed base reached 100MM in 1993, cellphone / Internet users reached 1B in 2002 / 2005 respectively. Source:

Multi Device Design



75%

smartphones shipped at
end of 2012

5.5%

of online 2012 shopping

18%

mobile browser activity

3%

downloads of Adobe digital
magazines



15%

smartphones shipped at
end of 2012

18.7%

of online 2012 shopping

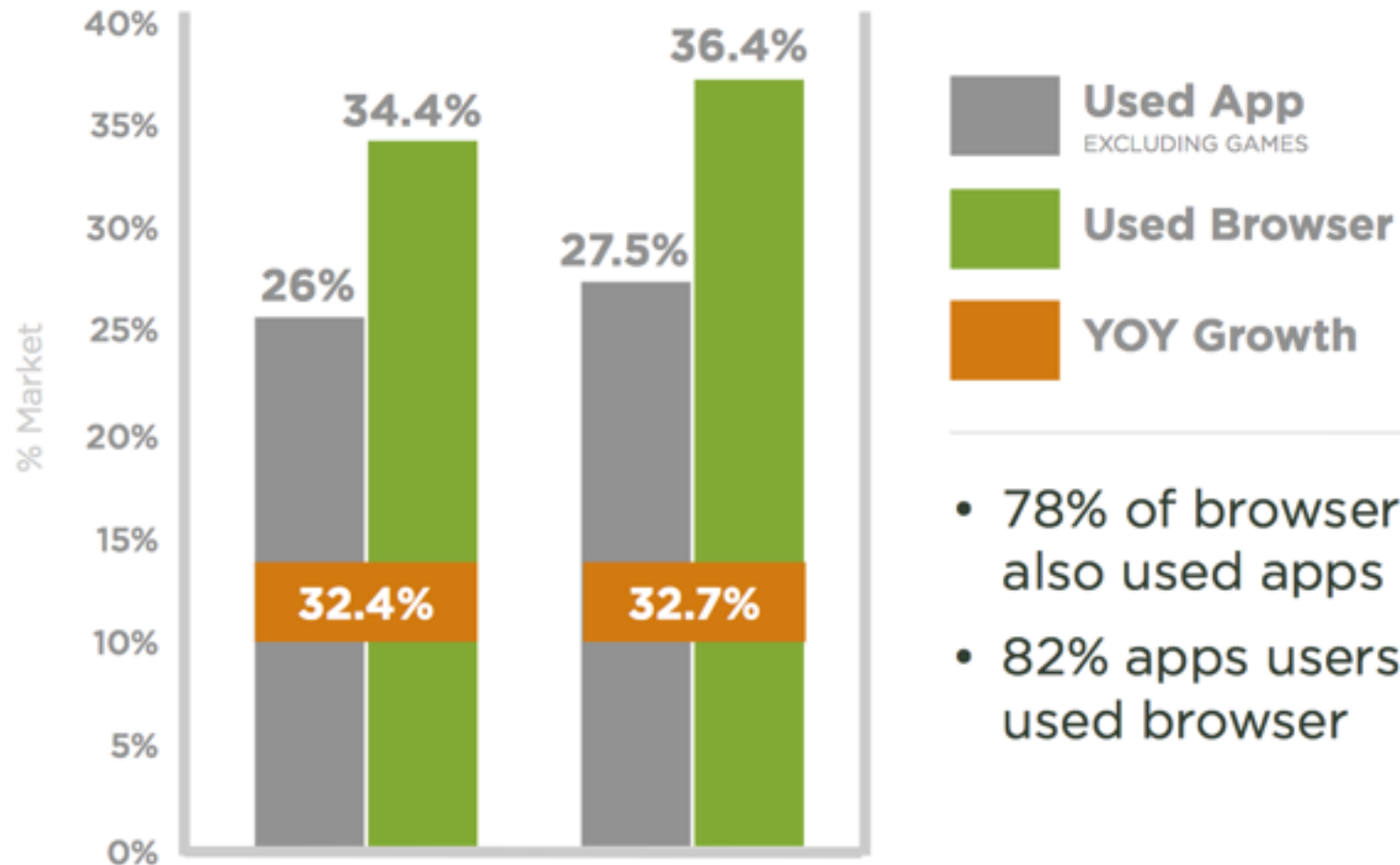
67%

mobile browser activity

97%

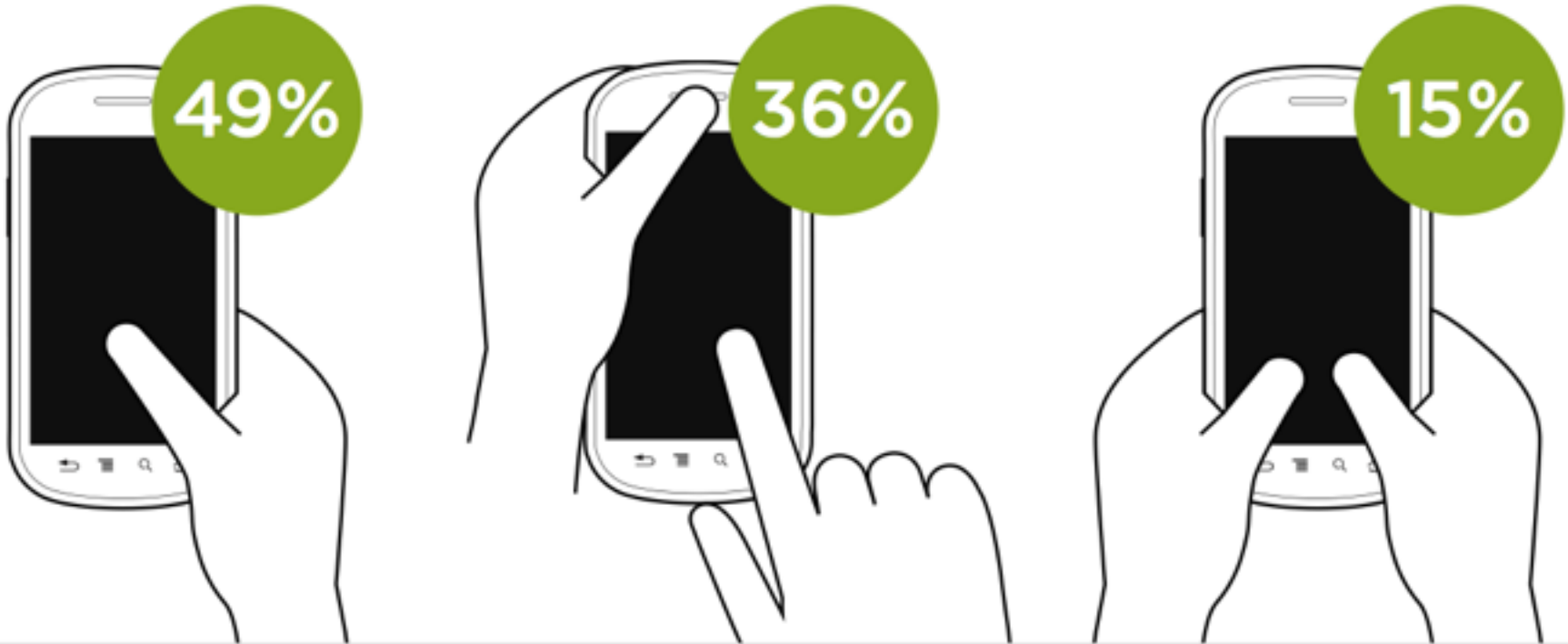
downloads of Adobe digital
magazines

Browser & App Usage



- 78% of browser users also used apps
- 82% apps users also used browser

Interaction



1,333 observations of people using mobile devices on the street.

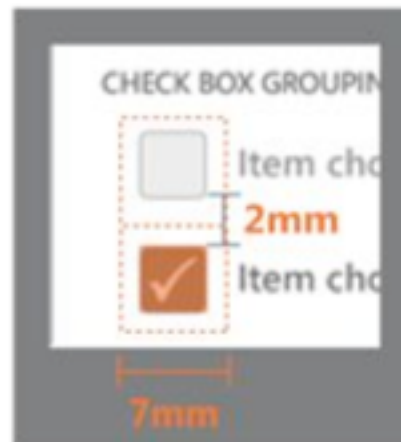
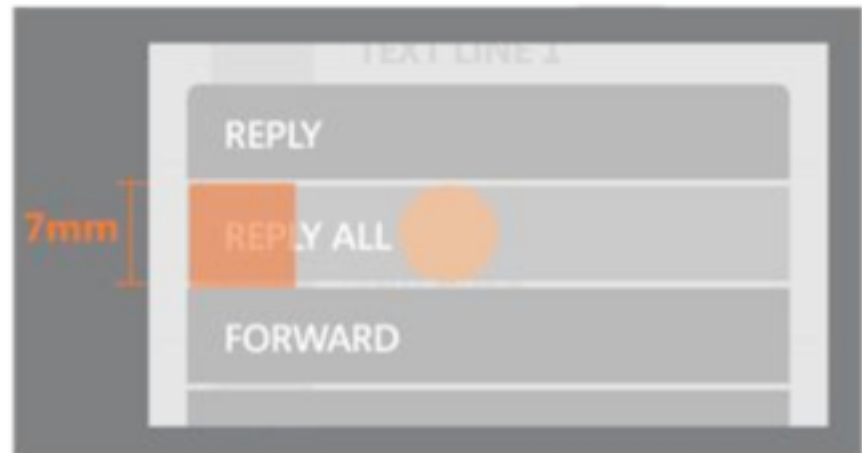
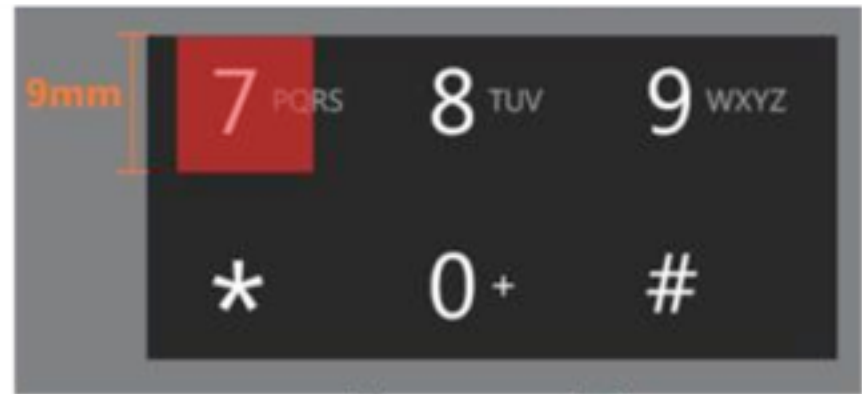
Interaction: Touch

Recommended touch target size is **9mm/34px**

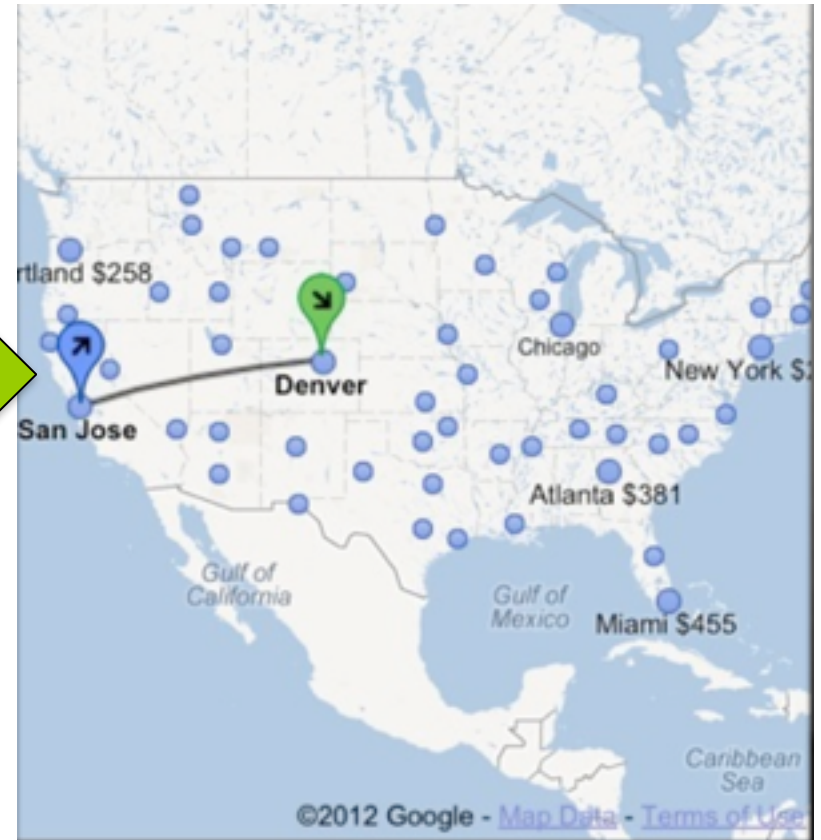
Minimum touch target size is **7mm/26px**

Minimum spacing between elements is **2mm/8px**

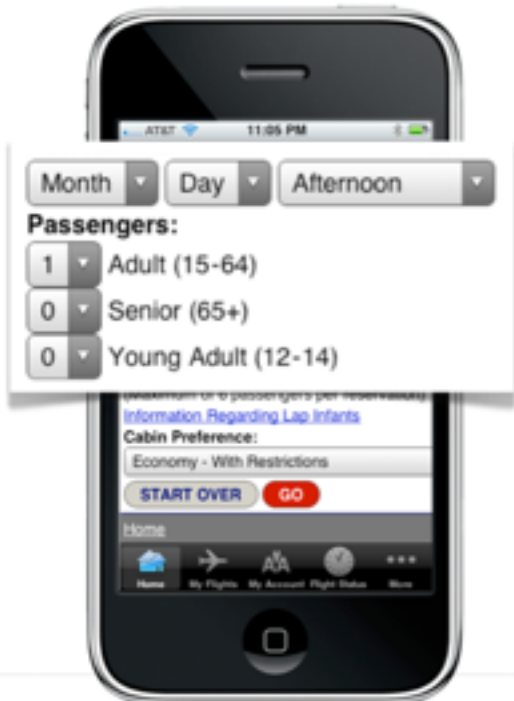
Visual size is **60-100%** of the touch target size



Interaction



Interaction

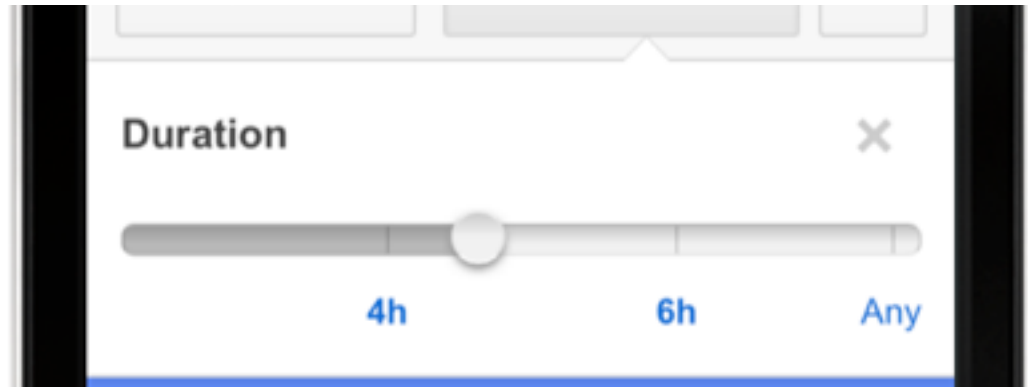
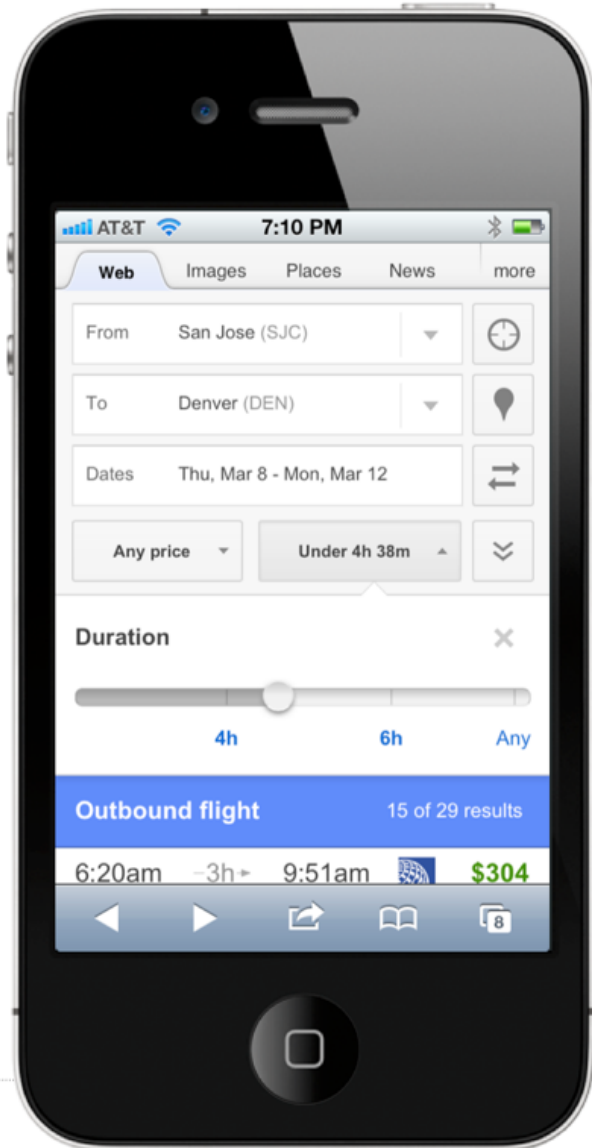


Steppers



Touch Target Sizes

Interaction



Interaction: Minimize the amount of actions

The image shows three sequential mobile app screens for account setup. The first screen, 'Step 1 of 3', features a 'Boingo Mobile' section with a paragraph of text, a 'Change Currency' dropdown set to 'USD', a 'Change Language' dropdown set to 'English Int.', and a 'Promotional Code' input field. The second screen, 'Step 2 of 3', is titled 'Set Up Your Account' and contains a 'Contact Information' section with fields for 'First Name', 'Last Name', and 'Username'. Below this is a note about username requirements. The third screen, also 'Step 2 of 3', is titled 'Credit Card Information' and includes a 'We accept' logo for various cards, a 'Number' field, an 'Expiration' section with 'Month' and 'Year' dropdowns, a 'Country' dropdown set to 'United States of America', and a 'ZIP/Postal Code' field. At the bottom of the third screen are 'BACK' and 'NEXT' buttons. Below the screens, the text '23 INPUTS' is displayed in a large font. In the bottom left corner is the 'LUHEW IDENTATION + DESIGN' logo, and in the bottom right corner is the number '36'.



The image shows a simplified desktop form for account setup. The top header is 'Get Online Now' with the 'boingo' logo. Below the header is a promotional message: 'Unlimited access for 24 hours is \$6.95 for all boingo locations. No monthly fees apply.' The form contains four main input sections: 'Credit or Debit Card' with a card number field containing '1234 5678 9012 3456' and a note to 'enter card number, expiration date, & CVV code'; 'Name on Credit Card' with an empty text field; 'Email Address (optional)' with an empty text field and a note 'if you'd like us to send you a receipt'; and a 'Get Online' button. At the bottom, there is a line of text: 'By selecting "Get Online" I agree to [terms of use](#).' The text '4 INPUTS' is displayed in a large font below the form.

4 INPUTS



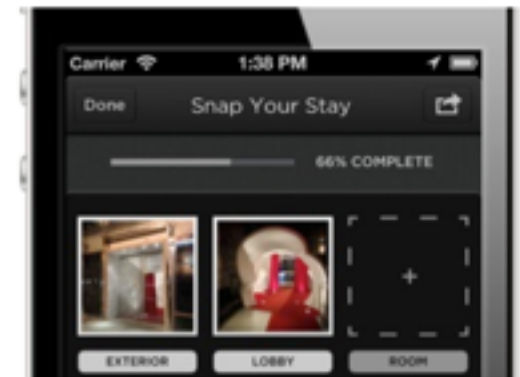
4 taps/swipe
8 seconds

priceline®

52 taps +48
102 seconds +94

Hotels.com

40 taps +36
109 seconds +101



“Instead of typing out a review...
just use photos.”

The rule of thumb is to limit the use of forms in the mobile context.

Mobile Web Design & Development, O'Reilly 2009

Filling out forms for web based services on mobile devices is a very time consuming and frustrating task for users.

ACM Pervasive and Mobile Computing, 2008

In general, using input elements is difficult for users. Avoid text input where possible.

Sprint Web Style Guide, 2005

Interaction:

Mobile Device capabilities

- Device positioning & Orientation & Motion
 - Accelerometer & Gyroscope & Compass
- Localization detection
- Multi-touch sensors
- Video & Image (Camera & dual-camera)
- Audio (micro & Loud-speaker)
- Device connection (bluetooth)
- Proximity
- Ambient light
- RFID readers

Usability guidelines for Website on mobile devices

- Output
 - Support a continuum of screens
 - Account for high resolution
- Input
 - Minimize the number of actions
 - Optimize for Touch
 - Support cursor & keyboard
 - Minimize text entry
 - Take advantage of inbuilt functionality
- Content/Layout
 - Reduce the amount of content
 - Single column layouts work best



- Growth = Opportunity
- Constraints = Focus
- Capabilities = Innovation

Web products should be designed for **mobile first**.

*Google programmers are doing work on mobile applications **first**, because they are better apps and that's what top programmers want to develop.*

–Eric Schmidt, Google Chairman

*We're just now starting to think about mobile **first** and desktop second for a lot of our products.*

-Kate Aronowitz, Design Director Facebook

*We really need to shift now to start thinking about building mobile **first**. This is an even bigger shift than the PC revolution.*

-Kevin Lynch, CTO Adobe

Designing the mobile app **first** forced us to strip down to essentials.

-Bill DeRouchey, BankSimple

Heuristics for blogs

1. Strategy. No clear Blogging strategy
2. Credibility. Lack of Credibility Cues
3. Headlines. Poorly Written Headlines to Grab
4. Navigation. Using only One Navigation Search schemes
5. Content. Writing Ineffective Content
6. Frequency. Infrequent or Irregular Updates
7. Burying. Classic Hits are Buried
8. Bad Forms. Cumbersome Forms to Use
9. Search. Bad Search Forces Users to Think
10. Unresponsive. Blog can only be viewed on one device



"Design may be our top competitive edge. This book is a joy—fun and of the utmost importance."

TOM PETERS

THE
DESIGN
OF
EVERYDAY
THINGS

DONALD A. NORMAN



Steve Krug

**DON'T
MAKE
ME**

THINK



A Common Sense Approach to Web Usability

SECOND EDITION

Web 2.0

Gilles Bailly

gilles.bailly@telecom-paristech.fr

Google

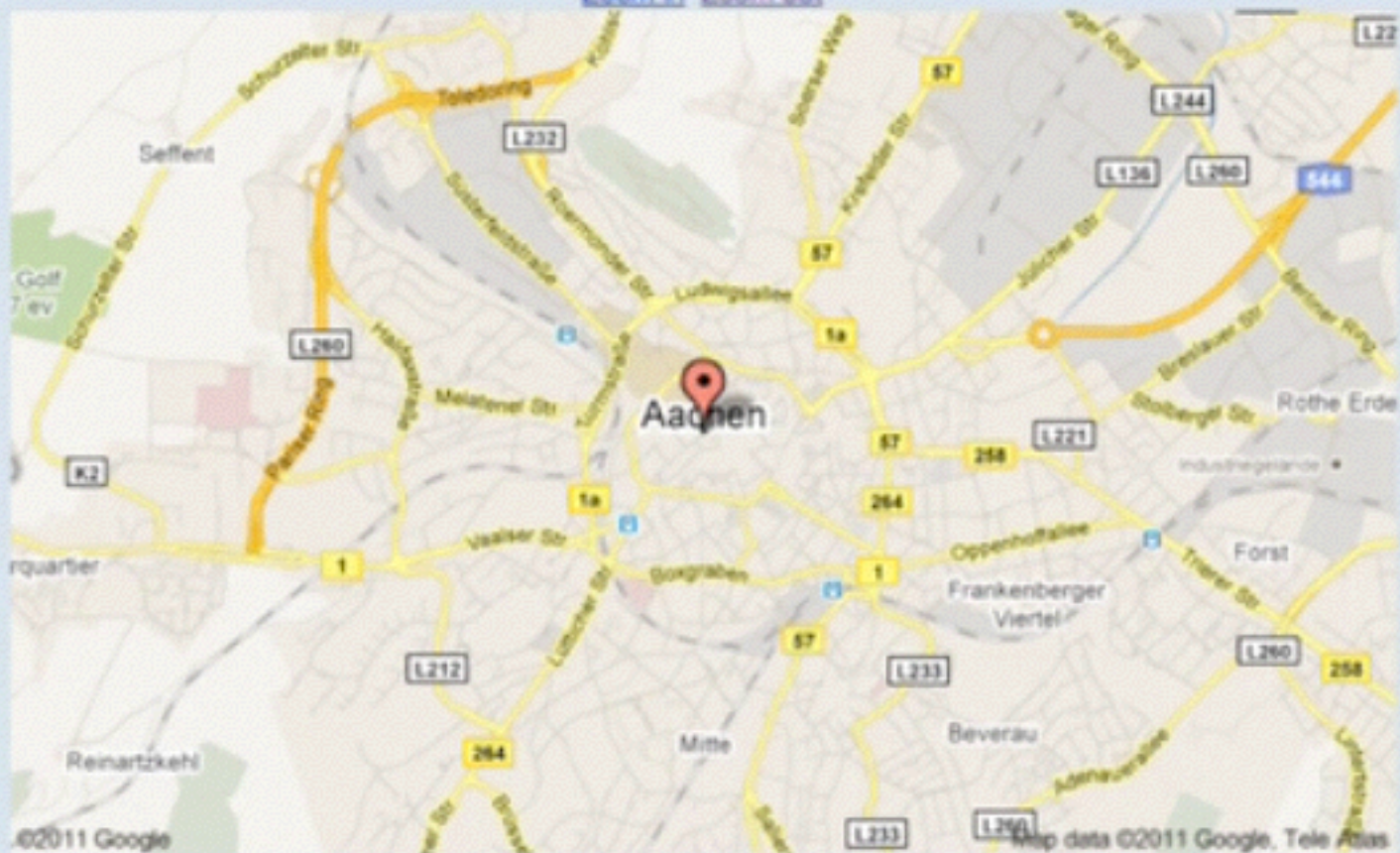
aachen

Search

[Web](#) [Images](#) [Places](#) [News](#)

Aachen, Germany

[Zoom in](#) [Zoom out](#)



Move: [←](#) [→](#) [↑](#) [↓](#)

[Get directions](#)

Itinéraire

Mes adresses

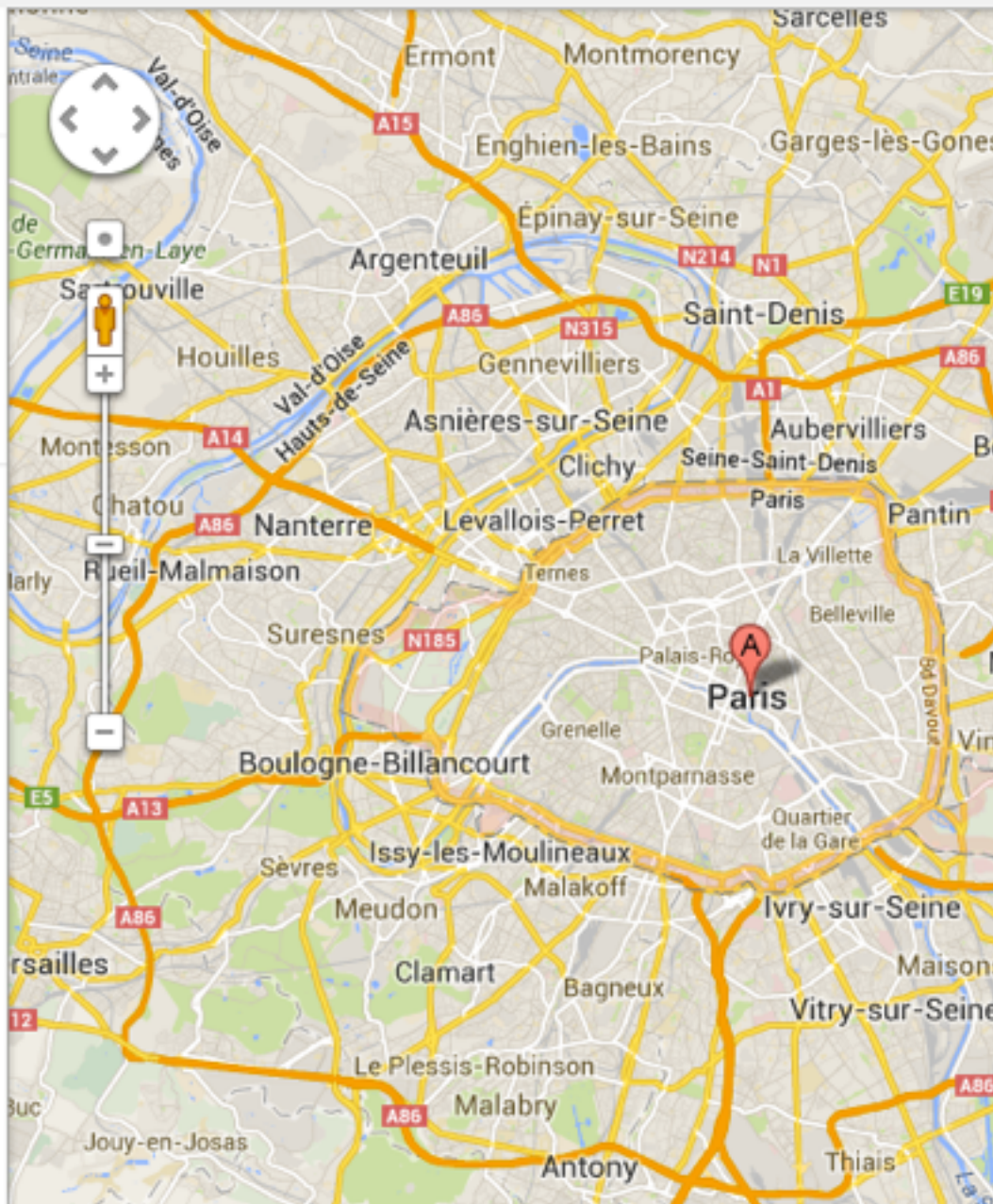


Paris

[Itinéraire](#) [Rechercher à proximité](#) [Ajouter à mes cartes](#) [plus](#)

[Labos de Google Maps](#) - [Aide](#)

Google Maps - ©2013 Google - [Conditions d'utilisation](#) - [Confidentialité](#)



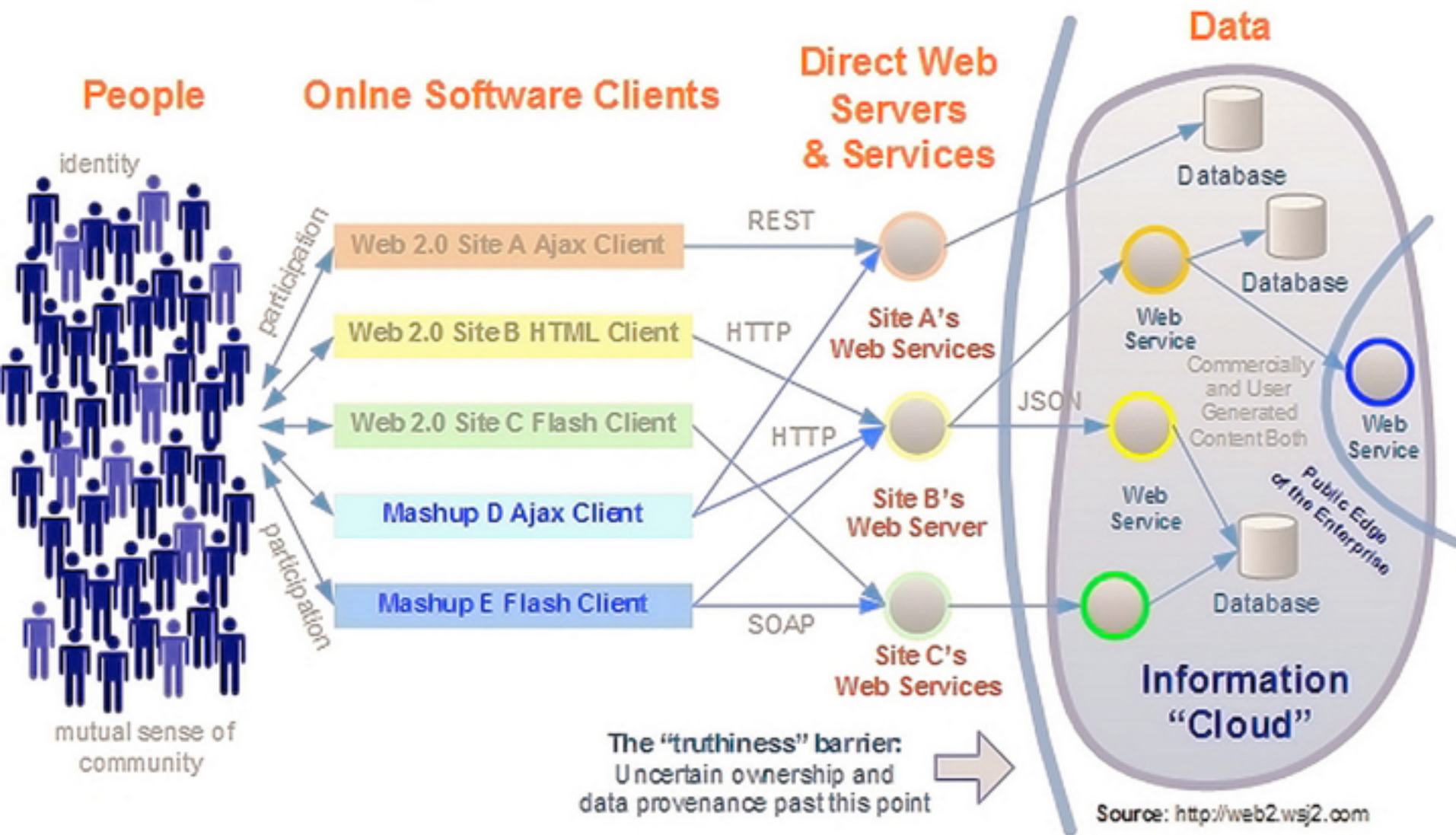


Top sites worldwide by audience December 2012

Source: <http://bit.ly/2FzvdZ>

The Web 2.0 Architecture of Participation:

"People in the Machine Nurture the Cloud"



End of software cycle

- Software must be maintained on a daily basis
- **Real-time** cycle
- Users are treated as co-developers
 - Perpetual beta

Lightweight Programming Models

- **Simplicity** in APIs
- Generates new interesting applications of software
- Barrier to entry is **low**

- Web 2.0 sites have sophisticated databases with valuable information
- Open APIs for non commercial use
- Google Maps API
<http://www.google.com/apis/maps/>

Software above the level of single device

- Web offers a common point for many different devices
- PC as mediator between web and mobile device
- Leverage the power of the Web platform
 - Web become invisible

Rich User Experience

- Full scale applications
- Fluid movements are appealing
- (Re)implementation on the web vs. specialized desktop applications

Examples

- <http://zoom.it/>
- www.simile-widgets.org/exhibit/
- <http://slides.html5rocks.com/#landing-slide>
 - <http://slides.html5rocks.com/#web-storage>
 - <http://slides.html5rocks.com/#web-workers>
 - <http://slides.html5rocks.com/#drag-and-drop>
 - <http://slides.html5rocks.com/#slide-orientation>
 - <http://slides.html5rocks.com/#new-form-types>

Web Usability

Gilles Bailly

gilles.bailly@telecom-paristech.fr