"...is used to evaluate a product by testing it with representative users. In the test, these users will try to complete typical tasks while observers watch, listen and take notes."

-usability.gov

#### **HOW USABILITY TESTS WORK**

Whole team watches from separate room

Product Managers: Feature ideas

Testers: Use cases, bugs

Developers: Additional user empathy

If your audience finds your document difficult to use, it doesn't mean that they've failed.

### It means that you failed them.

## Organizations are paying more and more attention to their audiences.

### and they're willing to pay for it.

#### CONSULTING

- Independent expert review of the user experience of your website or intranet: \$38,000. (Lower prices for small focused reviews, like a mobile app.)
- User testing: typically \$25,000 to test a website or intranet; \$45,000 for a competitive study. Less for a mobile app or other small UI.

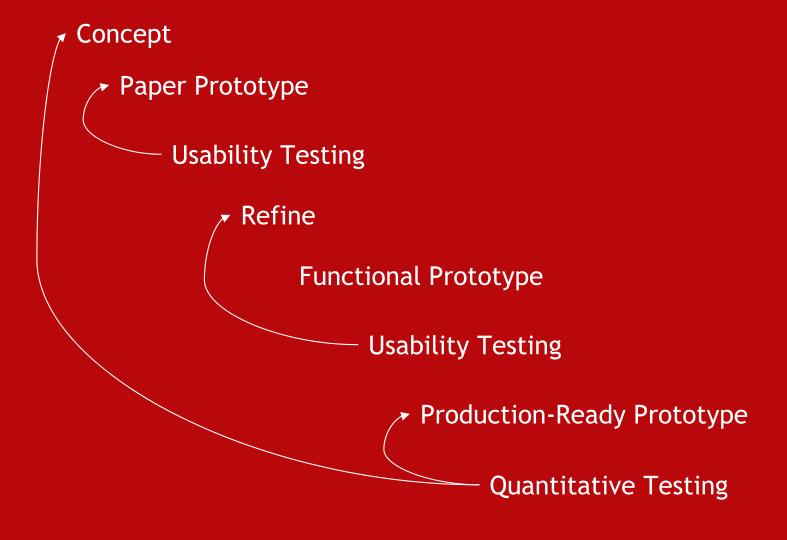
### © usabilityhub

### NETFLIX



### 

#### Product Development Lifecycle



Full Release



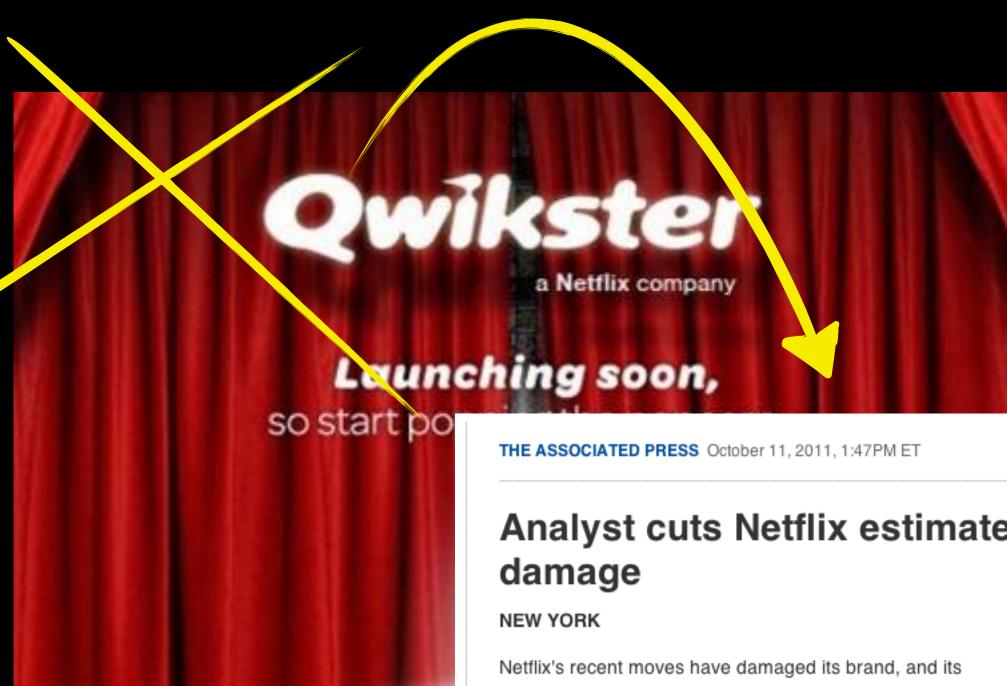
#### Developing a Great User Interface A Netflix Case Study

Innovative techniques Netflix uses to make finding movies an easy, personalized experience.

Sean Kane
Director, User Interface Engineering

The Ajax Experience - San Francisco July 2007

NETELLX



text size: T T

### Analyst cuts Netflix estimate, citing brand

subscriber growth may slow, said an analyst as he cut his 2012 earnings estimate for the online video and DVD by mail company. Shares fell 5 percent, deepening the stock MORE FROM BUSINESSWEEK

**Boeing Army Radio Program** Said to Face Termination for Cost

Panetta Says Weapons Buying, Operations Face 'Targeted' Changes



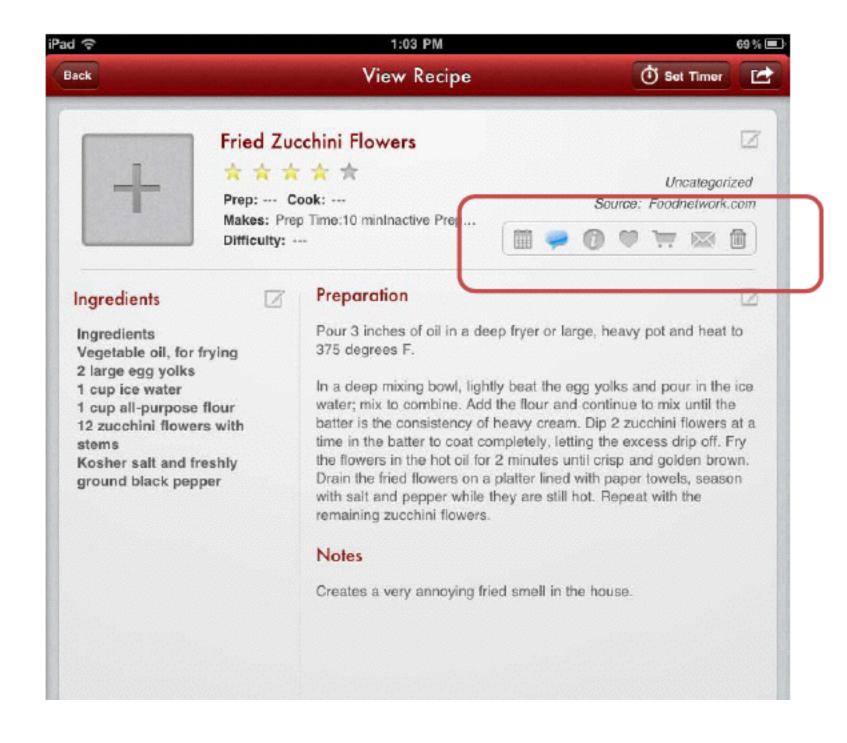
### iPad

# What does usability testing tell us about reading and writing on the iPad?

### Too much navigation overwhelms users.



### Spacing matters.



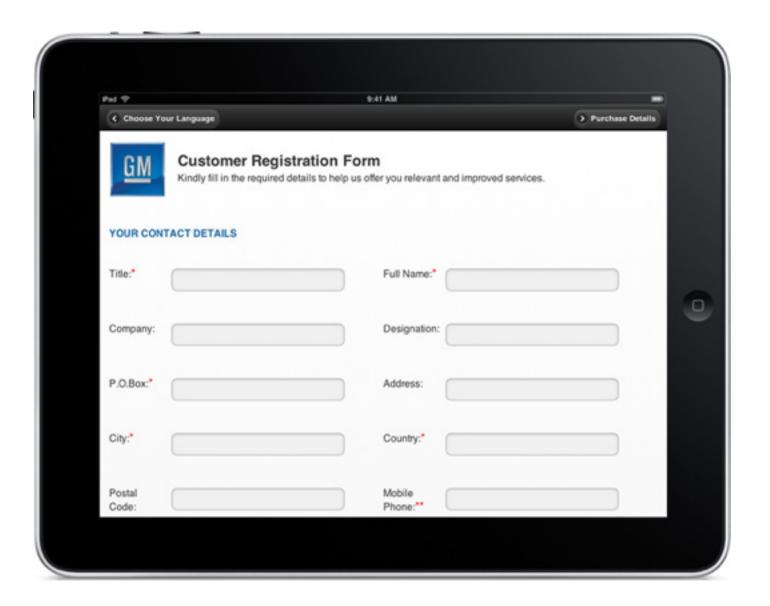
Not every org needs an app.



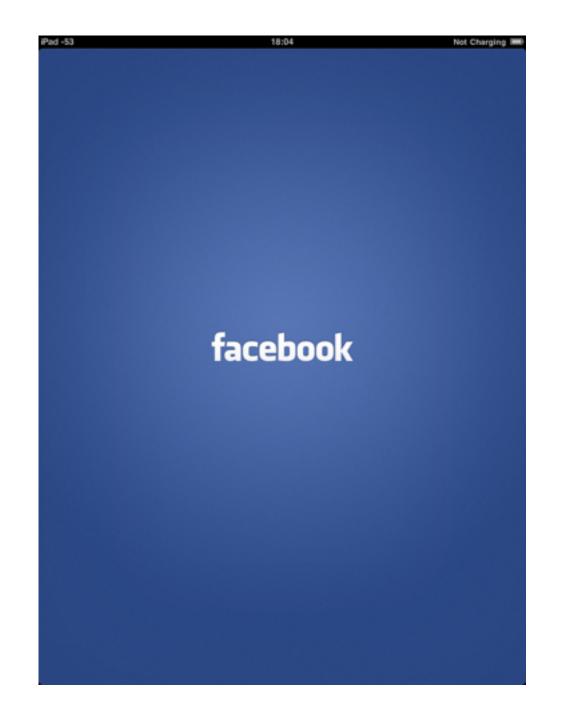
## Users need discoverability.



### Users dislike writing.



### Splash screens suck.



# Users often experience swipe ambiguity.



# Your report

The goal of a usability report is "to collect quantitative data on participants' performance (e.g., time on task, error rates), and determine participant's satisfaction with the product."

-usability.gov

# Step one: Focus groups and objectives

The purpose of a **focus group** is to determine a rough idea of who the users are and what they need.

- It is often useful to have some background knowledge about your test subjects.
- You can prepare a questionnaire with questions about their preferences such as visual, verbal, or hands-on learning styles.
- This way you can better weigh conflicting needs of different users.

#### Method

Each session was divided in several parts:

- Participants were asked a few questions related to how they use their iPad:
  - "Please tell me what kinds of activities you do on your iPad."
  - "Is there anyone else who uses your iPad?"
  - "Do you take your iPad with you when you are away from home?"
- Participants were asked to talk briefly about different apps that they had installed on their iPad. We only inquired about apps that (a) were designed specifically for the iPad; (b) were not games. For some of these apps, the facilitator created some adhoc tasks and asked the users to perform them.

Objectives help you determine how those needs are measurable and observable.

"Our goal was to determine how long construction of the set would take..."

Once those have been written, they must be quantified in a way that they can be tested.

# They must be quantified so that you know if you met your objective.

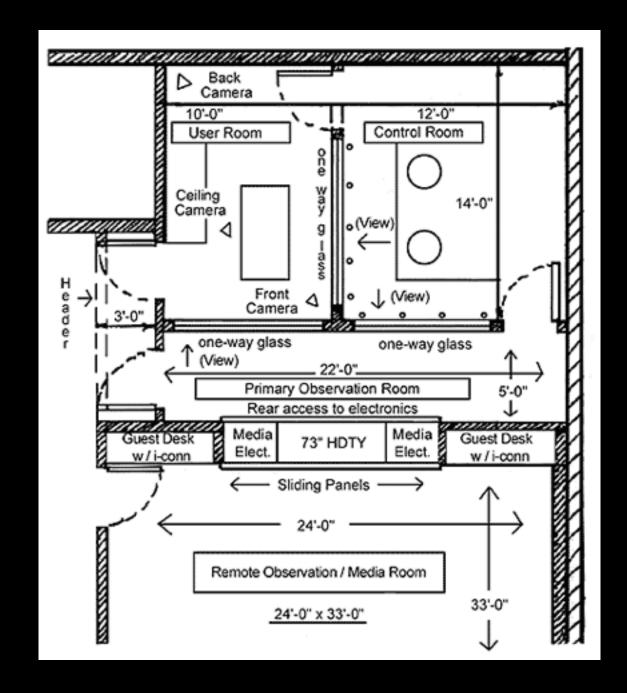
How can we quantify this objective? How would you know if you met your objective?

"Our goal was to determine how long construction of the set would take..."

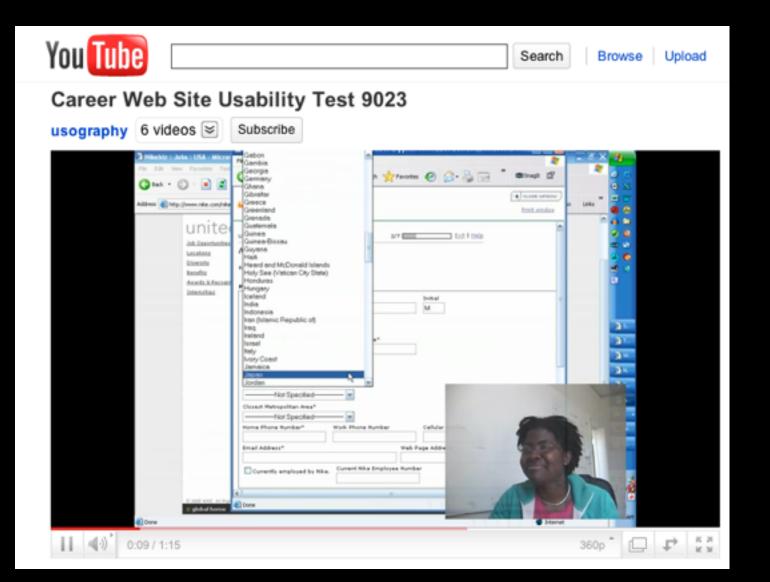
Ideally, testing is done in the context the document will be used and with subjects who reflect the fundamental attributes of your users.

#### (Obviously, that's not possible in this class.)





Most usability tests are done in labs where factors can be controlled and careful observations can be made.



[example 1]
[example 2]

# Method: Observation

# Develop a protocol with your team.



#### In other words

Standardize your approach, especially if more than one member is recording results.

- You might write "T" when the subject stops reading and does not perform any action to signify that they were thinking
- You might write "F" when the subject flips or clicks back and forth to locate something within your instructions
- You might write "A" when the subject performs the assembly.

To use this method, start a table with the elapsed time in one column and the action which occurs in the other.

Time	Notes
:10 :15 :30	F looked for title and step A started with first piece T (long pause) Problem could not find Hex piece

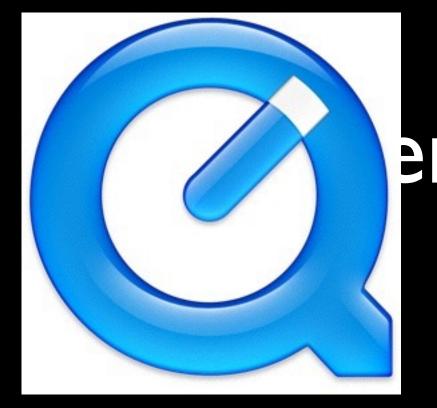
Take careful notes or record the subject's comments to provide an adequate report of the findings.

You <u>cannot</u> rely on your memory to reconstruct this afterwards, especially since you will be working with multiple test-subjects.

besides...

## you need quantitative data!

By carefully noting what the subject does at each stage, you can locate the difficult parts.





Welcome • Go Pro!

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#### Method:

"Talk aloud" or "think aloud"

In the second part of the session, we asked users to perform specific tasks. A moderator sat next to the participant, and observed, listened, and took notes. Users commented on:

- What they were looking for or reading;
- What they liked or did not like about the site or app;
- What made it easy or difficult for them to accomplish the task.

The participants' interaction with the iPad was recorded using a document camera (Elmo TT-02RX). Each individual session lasted 90 minutes; participants were compensated for their time, as well as for the cost of any paid apps that they were asked to download or any purchases that they were asked to make during the session.

3. The facilitator gave the participant one task at a time and asked them to (a) first download the corresponding app if they did not already own it; (b) carry out each task as far as they would if they were on their own. The participant was encouraged to think aloud while performing the task.

## It's possible to use both approaches at the same time.

## but

## you've got to have a plan.

Method:

Exit poll

like satisfaction surveys, these can give you overall and/or attitudinal feedback on your site.

Solid test results balance the needs of all users involved to achieve more uniform results in real world circumstances.

## Nobody produces a perfect product the first time.

#### Difficulties don't mean that you suck.

Test results tell you how to target revisions.

This project is designed to give you experience in getting better results.

### And design with users in mind.

- Set design goals
- Test those goals and reevaluate them
- Redesign your document and adjust the goals accordingly
- Test again!

### Your report should be full of details.

- Details of your objectives
- Details of your methods and protocol including iterations of the product/design

Remember that the testing phase is a significant part of your final report on the instructions project.