

What Users Do

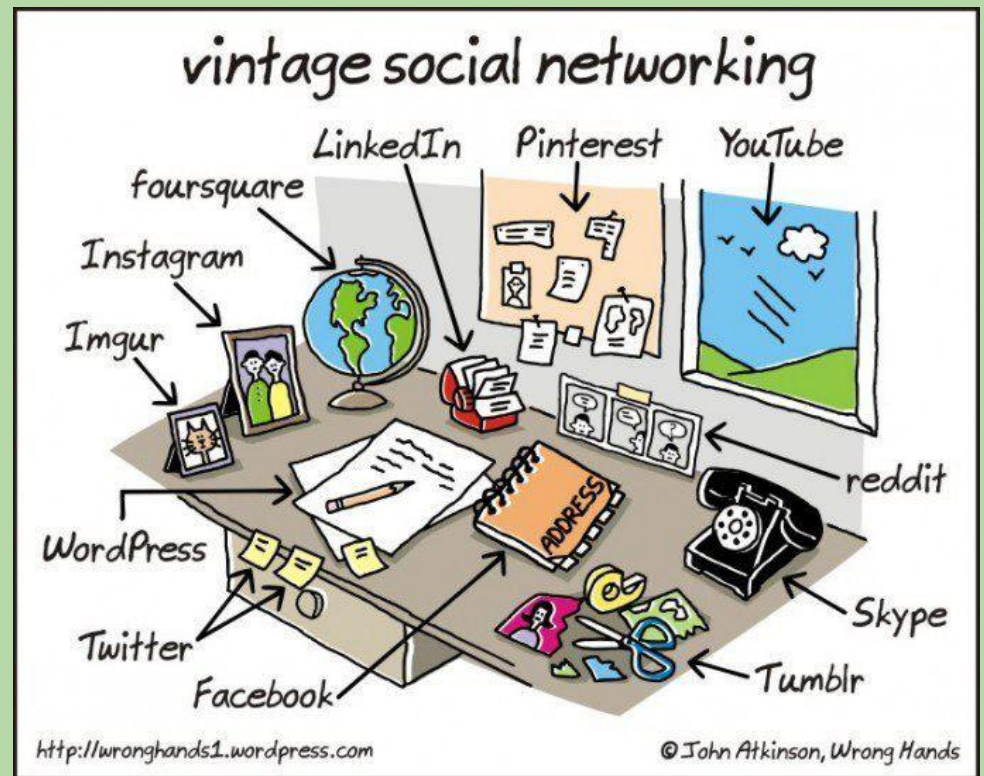
Presentation originally created for
CS286 Visual Programming
Spring 2015 based on content from

"Designing Interfaces: Patterns for Effective
Interaction Design",
Second Edition
by Jenifer Tidwell



Tidwell Chapter 1

Prof. Lehman



Why use software?

1. Finding some fact or object
2. Learning something
3. Performing a transaction
4. Creating Something
5. Controlling or Monitoring Something
6. Conversing with other people
7. Being Entertained

User Research

- Who are my users?
 - User goals
 - Tasks to complete
 - Language and Words used
 - User skill-level
 - Attitude towards software/computers
- “Know thy users, for they are not you!”
- See the world as it is, not as you think it is
- Research takes time

User Research

Direct Observation

Interviews, onsite visits, Timed Tasks

Case Studies

Look at users/groups in-depth

Surveys

Data from a large number of people quickly

Personas

Fictitious person that wants to accomplish X

User Motivation to Learn

Freedom to act arbitrarily

little (restrictive)

a lot (overwhelming)

Complexity and Time to Learn

high - Photoshop, Excel, Code Development

middle - Email, Facebook, Blogging Tools

low - Information Kiosk, Installation Wizard

Pattern - Safe Exploration

Try something, back out, try something else

On web, if I click on something, can I get back easily?

Does “Cancel” get me back to where I started without altering my data?

Pattern - Instant Gratification

Make it “easy” to quickly accomplish tasks

Do not hide basic functionality

Limit instructions, start-up screens, other distractions

Make the start-up tasks easy and automated

- Web page creator begins with basic HTML template
- Code IDE begins with template code
- Drawing program offers basic tools

Pattern - Satisficing

People are willing to accept “good enough” instead of “best” if learning all the alternatives might cost time or effort.

- Herbert Simon, Social Scientist, 1957

People do not want to think more than they have to.

-Steve Krug, Book “Don’t Make Me Think”

Satisficing = “Satisfying” and “Sufficing”

Pattern - Changes Midstream

Allow users to make changes

Keep options open

Cost for “re-entrance” low

Quit (or pause), save form data

Allow multiple projects open at one time

Pattern - Deferred Choices

Limit upfront choices (if it can wait, let it wait)

Limit required fields

Good Defaults

Easy to “come back” to complete or change choices

Web/Mobile - complete transaction, then register

Pattern - Incremental Construction

Easy to see results quickly

Preview mode if possible

Promote small changes

Pattern - Habituation

People develop “habits” when working with software, thus expect commands to be consistent ie. Cntrl-A select all, Cntrl-X cut, etc..

Expect commands to be the same for all applications, but at a minimum consistent within single application.

Soon learn to “ignore” dialog boxes

Pattern - Microbreaks

Does your application support “microbreaks”?

Could a user open your application and do something useful in 30 seconds or less?

Load content quickly (may need to limit data)

Restore previous states/data

Pattern - Spatial Memory

We expect things to be in the same locations

Keep menus in same location/order for all pages

Remember items at the top and bottom of lists
File menu (top?, bottom?, middle)

Allow user to “arrange” items

Pattern - Prospective Memory

Give users “reminder” tools

Tab open in browser

Documents store on desktop

Flagged email

Notes within apps “to do”

Pattern - Streamlined Repetition

Automate repetitive tasks to reduce time,
eliminate errors

Record macros

Find/Replace

Shell scripts

Pattern - Keyboard Only

Some users may not be able to use mouse

(physical limitation, vision, user-preference)

Keyboard commands essential

short-cuts, tab, shift-tab, enter, etc...

??? Create and Save a Word file keyboard only

Interface Design Matters

Subject: Re: Accuplacer on Chrome Books?

From: Laurie Cigan <laurie.cigan@paradisevalley.edu>

Date: Mon, 23 Mar 2015 12:03:29 -0700

X-Message-Number: 1

Just so you know, **students will lose their essay when they hit the tab key on ANY computer**, not just Chromebooks. We finally figured this out after having it happen numerous times. It's because it's web based. When you're on any web page, hitting the tab key has the function of tabbing to the next control. This is handy when you're filling out a web form but **in the case of the Accuplacer essay, the next control on the page is the "Submit" button**. So if you hit tab, you submit your essay. Accuplacer needs to **add a message** in there to ask if you really want to submit, and then the student can choose **"yes-submit now"** or **"no-return to essay"** with the **default set to no**.

We now include "don't hit the tab key" in with our instructions before they start the essay and explain that they do not need to tab or indent paragraphs, that formatting is not counted in the grading. It happens much less frequently now.

Laurie Cigan

Paradise Valley Community College

Phoenix, AZ

Pattern - Other People's Advice

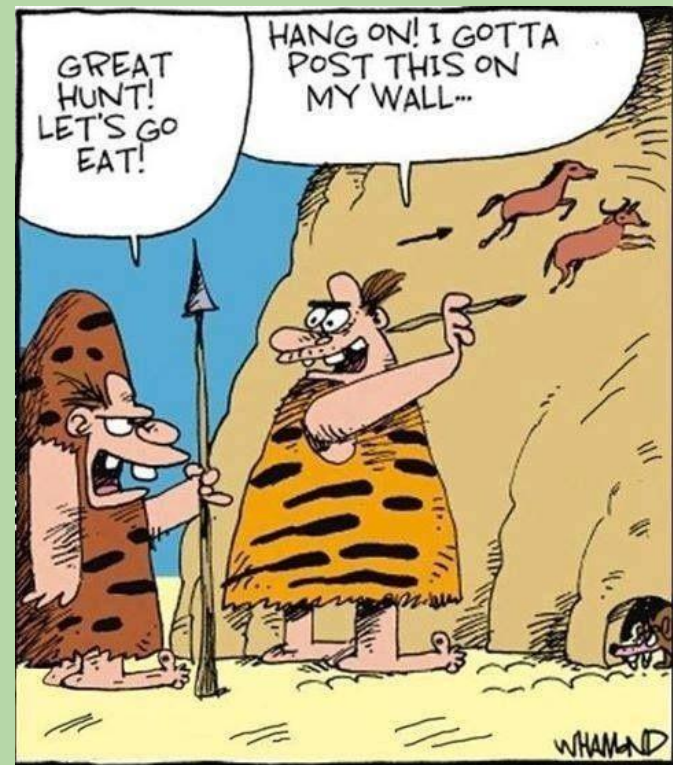
How can you create a “community” of users for your application?

Website

Wiki

Post User Examples

Contests/Awards



Early Facebook

Personal Recommendations

Social Media

Integrate
within
application

