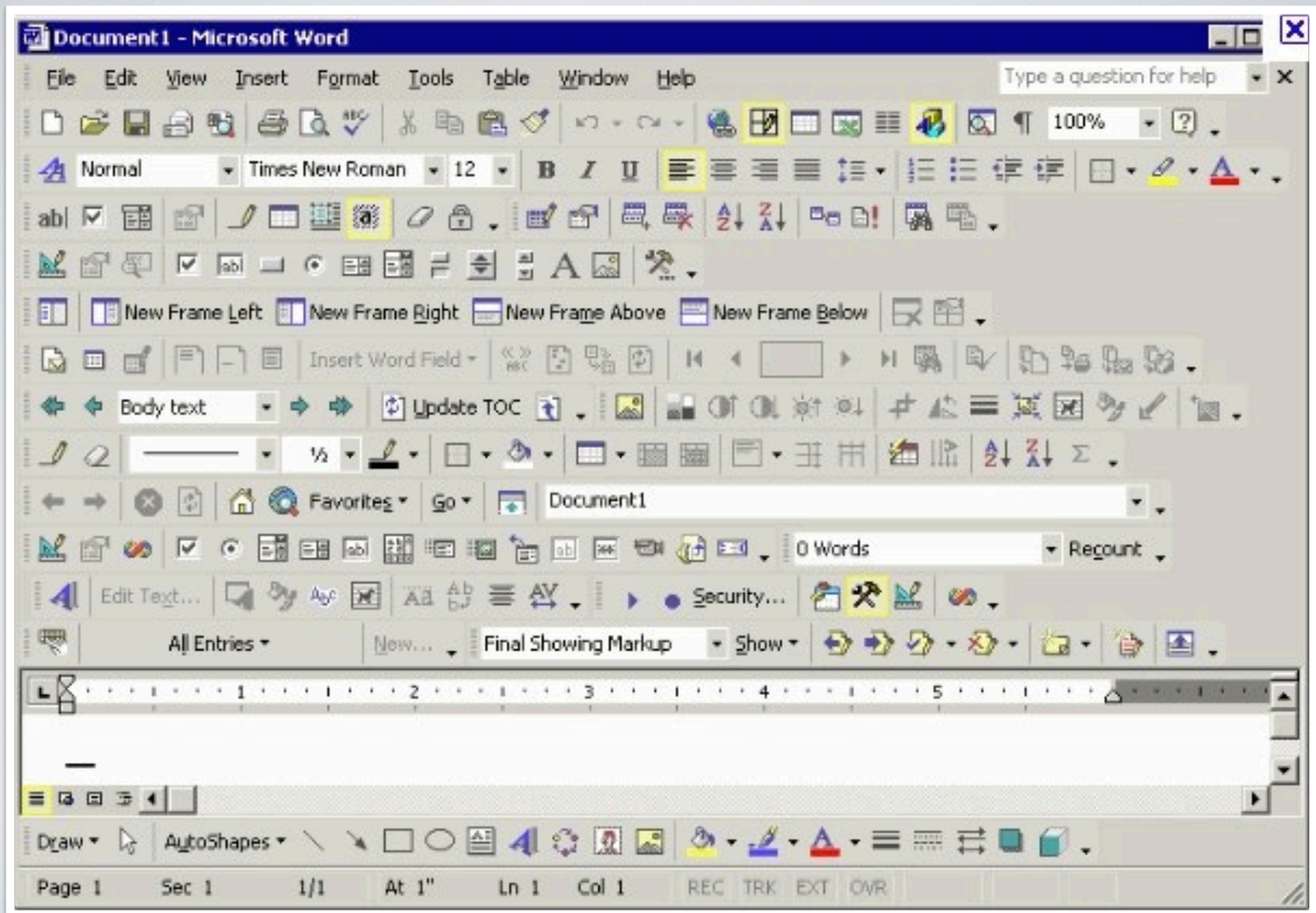


# Creating & Measuring The User Experience

**Jeff Noyes** Director of User Experience Acquia











To find the right solution (the "How"), we need to prioritize the features we invest in (the "What"). To determine our priorities, we need to define the problem (the "Why"). To define the problem, we need to identify the intended audience (the "Who").

– Whitney Hess, Happy Cog



# Who & Why



# Contextual Inquiry

## What is it?

- ❖ Field research in a natural setting (also called ethnography)
- ❖ 1-2 moderators observe users in their home, work or other natural setting

## What's it good for?

- ❖ Understanding natural behaviors, '**why**' a participant has a need.
- ❖ Finding hidden users

## What's it cost?

- ❖ A moderator
- ❖ Participation compensation



# Surveys

## What is it?

- ❖ Online or printed questionnaires

## What's it good for?

- ❖ Flushing out '**who**' might use your product, and what problems respondents have
- ❖ Finding hidden users

## What's it cost?

- ❖ Free - \$75 a month

## Services





# Interviews

## What are they?

- ❖ 1-on-1 interviews with target users

## What's it good for?

- ❖ In-depth understanding of '**why**' a user has needs
- ❖ Ideal for sensitive topics like finances

## What's it cost?

- ❖ Free - moderation & analysis fees
- ❖ Participation compensation



# Usability tests

## What is it?

- ❖ Observing your target audience while they use your Web site. Tests can be moderated or through a self moderated service.

## What's it good for?

- ❖ Flushing out 'why' people are struggling (or not) on your site
- ❖ Flushing out emotional responses
- ❖ Flushing out drivers

## What's it cost?

- ❖ Free - \$200 per test

## Moderation tools



## Self moderation services





# Analytics

## What is it?

- ❖ Provides insights into your website traffic and marketing effectiveness by letting you see and analyze traffic data

## What's it good for?

- ❖ Flushing out '**why**' people are finding, browsing or leaving your site
- ❖ Understanding demographics
- ❖ Understanding ad success

## What's it cost?

- ❖ Free - \$500 mo

## Similar tools





# What



# Design principles

## What is it?

- ❖ Guiding principles that pick up when personas or business goals fall down
- ❖ A project charter

## What's it good for?

- ❖ Staying on point

## Acquia's goals

- ❖ Drupal is our DNA
- ❖ Embrace community
- ❖ Be worthy of peoples trust
- ❖ Beauty should be effortless, ugliness should require work
- ❖ First impressions are lasting impressions
- ❖ Simple on the surface, powerful underneath
- ❖ Every millisecond counts
- ❖ Pave the cowpaths
- ❖ Don't make me think
- ❖ Be approachable



# Ideation



## What is it?

- ❖ Collaborative brainstorming with informed stakeholders
- ❖ 6 participants max (unless you have a lot of time)
- ❖ A creative brief outlining the problem/goals
- ❖ Each participant sketches a solution to the problem in 15 minutes
- ❖ Each participant presents, while others critique (3 positives, 3 negatives)
- ❖ Presenter collects feedback capturing multiple pros with + and multiple negatives with -

## What's it good for?

- ❖ Rapid idea generation
- ❖ Rapid group level setting

## Services





# Results: Controlling Width/Height

## George

- Hard to find controls
- Use image styles
- Are we concerned about controlling region heights?
- Would image styles be enough?
- + Contain styles in one place
- ++ Slider on layouts
- + Keeps existing areas
- ++ Integration w/ layout
- + Integration w/ image styles
- ++ Warn user
- + Call out another way to manage images
- Where to handle image management?
- Not just sliders - also typing
- ++ Make controls scarier
- Can we fit w/h in box model control?
- + Conditional tag handling

## Jeff

- +++ drag regions (+ scaling for all regions)
- ++ drag regions in screen (might be confused with the DOM navigator) (might be brought out in stages, i.e, just sidebars first)
- need to enter vaules into sizing areas
- +++ layouts tab
- another model in the overlay to drag regions
- + auto sizing
- auto sizing (sprites could be a problem) (maybe ask to auto size) (small images could be bad)
- + per region draggable (might be problematic across layouts)
- I dont want to develop it.
- ++ locked access under advanced (as long as it looks advanced)
- locked access doesn't repel moths enough.

## Paul

- +Hiding the width/height control in box model
- ++++Fit controls on image upload
- Checkbox for agreeing to terms
- No more lawyers
- Not sure people will figure out to use margin/padding instead of width/height
- Should not expose at all.
- +Restrict to single page
- per page settings

## Kevin

- ++Setting only the width
- +Handled setting page width
- +fluid widths
- Should have a unit dropdown
- ++++showing all regions
- +per page settings
- +Using layout tab
- complexity simplify too many settings
- doesn't solve for images
- prefer to set size in content area, abstraction is too small,
- +fields for values
- postntial confusion in setting thigs you can't see
- hidden
- new tab is not associated with currently selected layout
- + i like the region slider in the tool
- design feels complex (maybe its just a drawing
- + per page options



# Task flows

## What is it?

- ❖ A method of flushing out interaction at the site level

## What's it good for?

- ❖ Outlining a flow of events across a task
- ❖ Discovering touch points
- ❖ Thinking big
- ❖ Identifying page count

## Tools

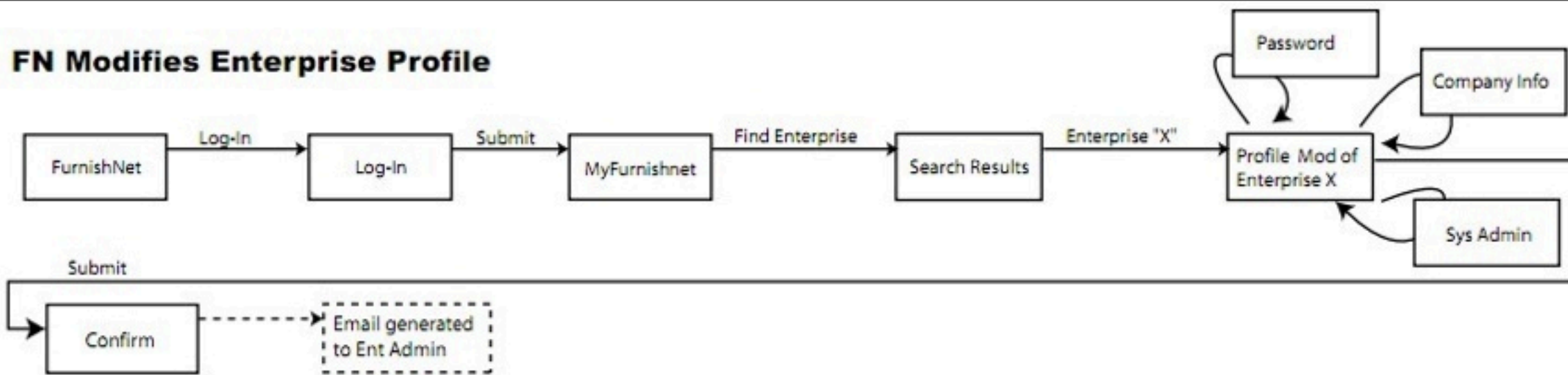


## Services



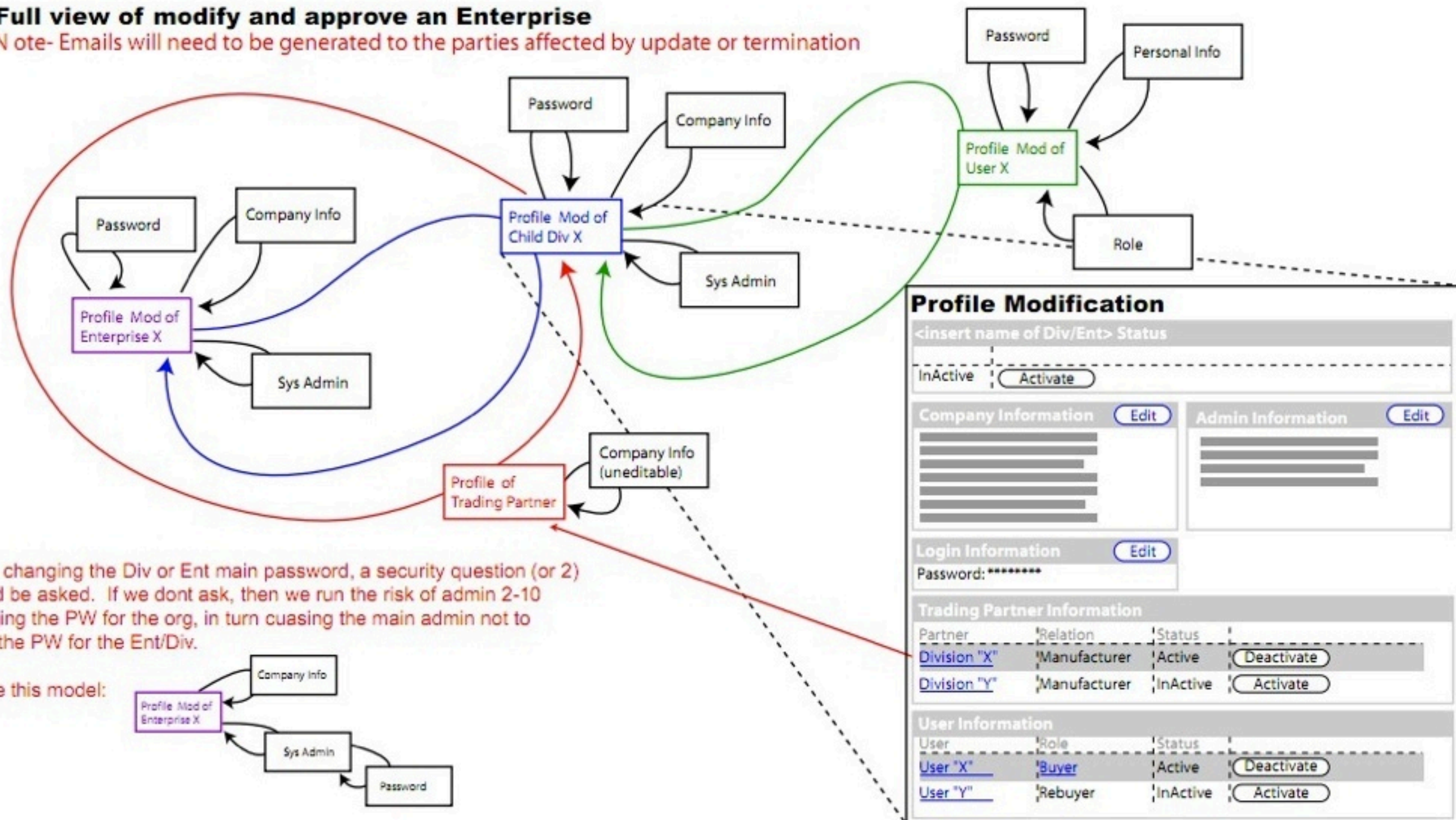


## FN Modifies Enterprise Profile



### Full view of modify and approve an Enterprise

\*Note- Emails will need to be generated to the parties affected by update or termination





# Gray boxing

## What is it?

- ❖ A method of flushing out interaction at the page level
- ❖ A method of orienting stakeholders of design intentions without focusing on brand or minutia

## What's it good for?

- ❖ Revealing interaction touch-points and layout on a page
- ❖ Thinking big without committing to details
- ❖ Engaging a customer without focusing on brand

## Tools







Tincidunt

Odio Iusto

Voluptat Blandit

Laptatum

Delenit Dolor

Odio Iusto

*Lorem > Ipsum > Dolor*

Promo / Focus Area

## Omnicos Aliquip Commodo Adispiscing

### Intro Text Omnicos Directe Desirabilit H2

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue dui dolore te feugait nulla facilisi.

[more...](#)

#### Block Header Style



##### Ma Quande Lingues Coalesc

Li European lingues es membres del sam familie. Lor separat existentie es un myth. Por scientie, musica, sport etc, li tot Europa usa li sam vocabularium.

[more...](#)

#### Block Header Style



##### Ma Quande Lingues Coalesc

Li European lingues es membres del sam familie. Lor separat existentie es un myth. Por scientie, musica, sport etc, li tot Europa usa li sam vocabularium.

[more...](#)

#### Block Header Style



##### Ma Quande Lingues Coalesc

Li European lingues es membres del sam familie. Lor separat existentie es un myth. Por scientie, musica, sport etc, li tot Europa usa li sam vocabularium.

[more...](#)

Courtesy of  
**Floor Van Herreweghe**



# Storyboards



## Tools



Views

LIST

SETTINGS

Breadcrumb

+ Create a new view

+ Browse view templates

+ Import

VIEW NAME	DISPLAYS	TYPE	TAG	PATH	UPDATED	OPERATIONS
Contractor listings						

Add a new view

Breadcrumb

Choose content you want to show, then choose whether to show it on a page, block or both. More can be added later.

View name \*

Contractor listings

☒ View description

Show

Content

of type

article

☒ Create a page

Page title

Contractor listings

Path

/contractor\_listings

Display format

unformatted list

of

teasers

with links

Items per page

25

☐ Create a menu item

☐ Include an RSS feed

☐ Create a Block

Save & exit

Continue & edit

Contractor Listings (node)

Breadcrumb

\* All changes are stored temporarily. Click Save to make your changes permanent. Click Cancel to discard the view.

Save

Cancel

Modify the display(s) of your view below or add new displays.

Displays

Page 1

Block 1

Feed 1

+ Add

edit view name & description

▼ Page1 details

Display name: Page

live preview

TITLE

Title: Contractor Listings

FORMAT

Format: Unformatted List | settings

Show: Content | settings

FILTERS

Content: Type = article

Content: Published = true

SORT CRITERIA

add

PAGE SETTINGS

Path: Contractors

Menu: Main menu

Access: Not set

HEADER

add

FOOTER

add

PAGER

Use pager: Paged, 25 items

More link: No

Advanced

DYNAMIC FILTERS

add

RELATIONSHIPS

add

NO RESULTS BEHAVIOR

add

EXPOSED FORMS

add

OTHER

Use AJAX: No

Distinct: No

Use grouping: No

Query settings: Not defined

Caching: Not defined

☒ Auto preview



# Which tests/sells better?

## Add a new view

Breadcrumb

Choose content you want to show, then choose whether to show it on a page, block or both. More can be added later.

**View name \***  
Contractor listings

☒ **View description**

Show Content of type article tagged with term1 ☐ sorted by newest posts first

☒ **Create a page**  
Page title  
Contractor listings  
Path  
/contractor\_listings  
Display format  
unformatted list of teasers with links (allow users to add comments, etc.) with comments  
Items per page  
25  
☐ Create a menu item  
☐ Include an RSS feed

☐ **Create a Block**

Save & exit Continue & edit





# Which took more time

## Add a new view

Breadcrumb

Choose content you want to show, then choose whether to show it on a page, block or both. More can be added later.

**View name \***  
Contractor listings

☒ **View description**

Show Content of type article tagged with term1 ☐ sorted by newest posts first

☒ **Create a page**  
Page title  
Contractor listings  
Path  
/contractor\_listings  
Display format  
unformatted list of teasers with links (allow users to add comments, etc.) with comments  
Items per page  
25  
☐ Create a menu item  
☐ Include an RSS feed

☐ **Create a Block**

Save & exit Continue & edit





# Drupal Gardens

## Building Drupal websites just got easier.

Launch a product, promote an event, engage a community -  
You can create socially smart websites and microsites that  
accelerate your business with Drupal Gardens.

**Get started for free!**  
Design to online in 15 minutes.

Get started



Watch the phenomenon in action!  
(a brief overview)



**See what's inside**  
Discover Drupal as a service



**Theming made easy**  
Discover Drupal as a service





# Example: Views



# Example: Marketplace



# Prototypes



## What is it?

- ❖ A clickable version of your design. Can be low or high fidelity.
- ❖ A method of using a product without the cost of a complete build
- ❖ A method of capturing user feedback

## What's it good for?

- ❖ Feeling your designs out. Often static fails to reveal true interactions
- ❖ Selling others on ideas. The ability to visualize interactions is not a skill everyone possesses
- ❖ Validating your designs with your target customers
- ❖ Spec'ing interaction
- ❖ Saving money by validating before building

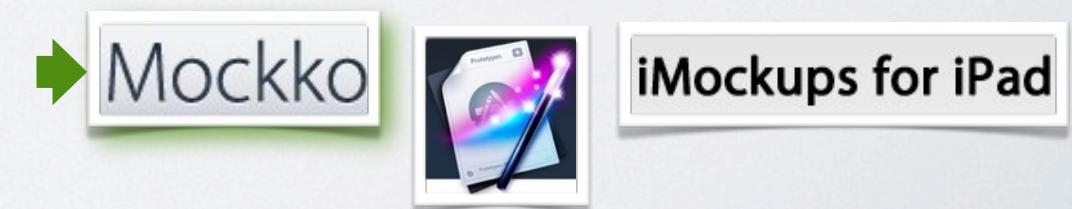
## Tools



## Services



## Mobile Services





# Validate

"An expert is a man who has  
stopped thinking-he knows!"

– Frank Lloyd Wright



# Moderated tests

## What is it?

- ❖ A test focused on one or more tasks where a moderator guides the test.

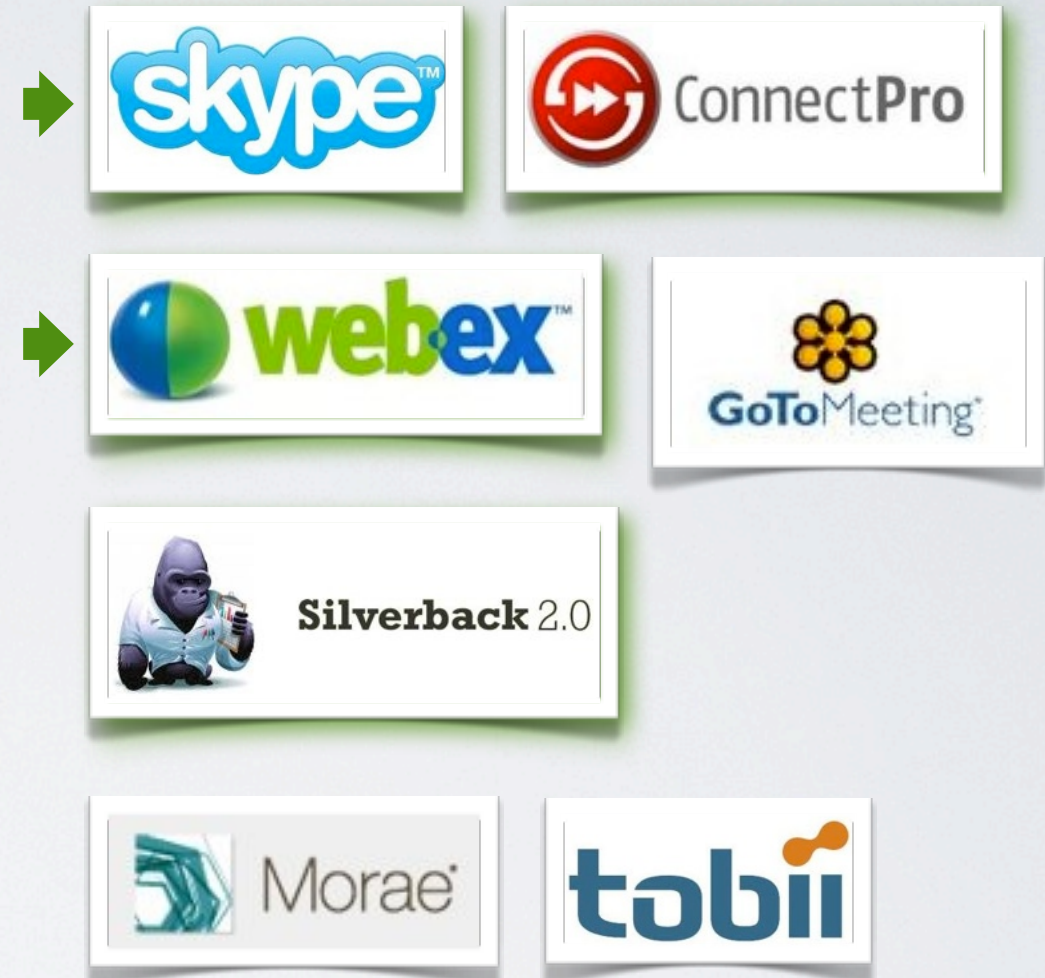
## What's it good for?

- ❖ Flushing out '**why**' people are struggling (or not) on your site
- ❖ Flushing out emotional responses
- ❖ Flushing out drivers
- ❖ Keeping participants from wondering
- ❖ Complex, multi-task tests

## What's it cost?

- ❖ Moderator & Analysis costs
- ❖ Analysis costs
- ❖ Lab costs (if used)
- ❖ Participant compensation (\$25 - \$75)

## Tools





# Self-moderated tests

## What is it?

- ❖ A test focused on one or more tasks where a participant reads a task and tries to complete in a self guided fashion

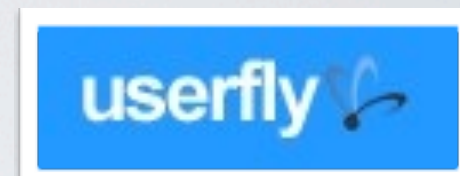
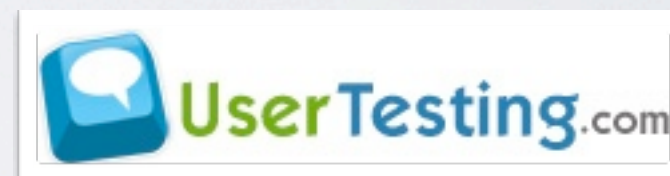
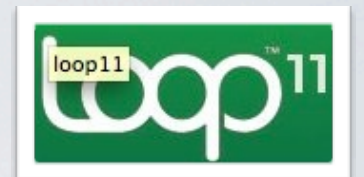
## What's it good for?

- ❖ Flushing out 'why' people are struggling (or not) on your site
- ❖ Flushing out drivers
- ❖ Simple, smallish-multi-task tests

## What's it cost?

- ❖ Ustesting: \$39 - \$31 per user
- ❖ Loop11: \$350 per test

## Services





# Static image, self moderated tests

## What is it?

- ❖ A test focused on a single static image

## What's it good for?

- ❖ Testing comprehension
- ❖ Testing for triggers
- ❖ Identifying labels

## What's it cost?

- ❖ Free - \$140 mo

## Services





# Navigation tests

## What is it?

- ❖ A test focused on the information architecture of your site

## What's it good for?

- ❖ Testing findability
- ❖ Testing for triggers
- ❖ Identifying labels

## What's it cost?

- ❖ Free - \$140 mo - \$1000 yr

## Services





# DIY Testing

Target Audience    Be unbiased    Listen    Document patterns



# Which tests better?

**to Find Employees**

**Post a job online**  
Post your job online today. Interview and hire tomorrow. Expose your open job to over 17 million candidates.  
[Buy a Job Posting for \\$389](#) | [Learn More](#)

**Get Resume Database Access**  
Find candidates now by searching over 11 million resumes (15,000+ new resumes added daily).  
[Buy Access for \\$500](#) | [Test Drive](#) | [Learn More](#)

**Save with a 4 Job Pack**  
Save your recruiting budget with a Job Pack. Buy 4, 30 day job postings now and save over \$250.  
[Buy Now for \\$1299](#) | [Learn More](#)

**Learn About All Job Products**  
Post your job on niche sites, have intelligently matched resumes sent to you, post in print and online, etc.  
[Learn More](#)

**Small Business Need?**  
We'll help you find the right business solution.

**Enter the Fortune 500**  
Know your company's place in the market.

**Staffing Solutions**  
Our professional business needs.

GSA: Federal Acquisition Regulation (866) 600-0000  
Need Int

A

**to Find Employees**

**Post a job online**  
Post your job online today. Interview and hire tomorrow. Expose your open job to over 17 million candidates.  
[Buy a 30-day Job Posting for \\$389](#) | [Learn about Online Job Posting](#)

**Get Resume Database Access**  
Find candidates now by searching over 11 million resumes (15,000+ new resumes added daily).  
[Buy Resume Database Access for \\$500](#) | [Free Resume Database Test Drive](#) | [Learn about Resume Searching](#)

**Save with a 4 Job Pack**  
Save your recruiting budget with a Job Pack. Buy 4, 30 day job postings now and save over \$250.  
[Buy a Job Pack for \\$1299](#) | [Learn about Job Packs](#)

**Learn About All Job Products**  
Post your job on niche sites, have intelligently matched resumes sent to you, post in print and online, etc.  
[Learn about CareerBuilder Recruiting Solutions](#)

**Small Business Need?**  
We'll help you find the right business solution.

**Enter the Fortune 500**  
Know your company's place in the market.

**Staffing Solutions**  
Our professional business needs.

GSA: Federal Acquisition Regulation (866) 600-0000  
Need Int

B

– Jared Spool, UIE Brainsparks 2006



“Everybody on Mr. DeHaven’s staff who saw version “B” said it was too crowded and people would feel overwhelmed with links, so they expected version “A” to win the A/B Test.”

As we would’ve predicted based on [our work with link-rich home pages](#), version “B” should do better. And we were right. Version “B” won more customer accounts than “*the cleaner, more graphical design*”.

– Jared Spool, UIE Brainsparks 2006



“It seems that **business executives prefer to look at fairly plain textual content online** rather than cheerful graphical interfaces. Plus, **they prefer vertical to horizontal groupings** of options and longer, wordier textual click links.

“After I thought about it awhile, it made total sense. Users are trained to allow their eye to scan down something that looks like search results - which is what this looks like. **Graphics and images are not what the eye's trained for online.**

“It was a HUGE finding. Really exciting.”

– Jared Spool, UIE Brainsparks 2006



# Finding users

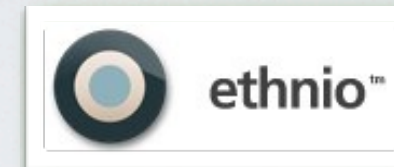
## Where can they be found?

- ❖ Facebook
- ❖ Twitter
- ❖ LinkedIn
- ❖ Myspace
- ❖ Ning
- ❖ Ethnio
- ❖ Mining your own data
- ❖ Professional recruiting
- ❖ Friends (snowball sampling)

## What's it cost?

- ❖ Free - \$150 per participant
- ❖ Participation compensation

## Services





**If you've solved the  
problem - build it!**



# If not - iterate

"An architect's most useful tools are an eraser at the drafting board and a wrecking ball at the site."

– Frank Lloyd Wright



# Case study

In 5 seconds, what does Drupal Gardens do?



# What do you remember of this screen?

## 60 create a free site



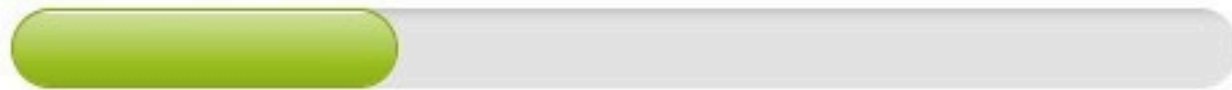
create free website in 15 minutes, beautiful websites, drupal website, website, free site,...

## 42 drupal gardens



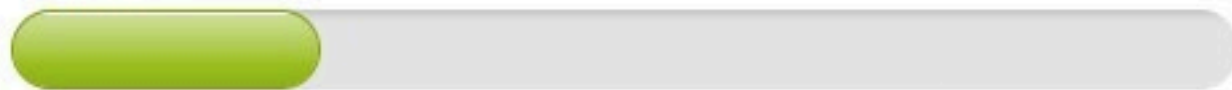
drupal, drupal garden, Brand Name was Drupal Gardens., the name of the company is d...

## 16 facebook



facebook icon, Facebook logo, facebook , sharing options - facebook, twitter, Facebook l...

## 12 free



it was free., Orange Button: Create a free \_\_\_\_\_, it's free, hassle free, create free button,...

## 12 orange button, blue flowers



flowers, icon of flower, have a strange lollipop type flower in the background., flowers an...

00:00:00 [reset](#) COMPLETED

180  
VIEWS

80  
RESPONSES

0  
TESTER DATA



### Age

Under 18	25%
25-30	23%
30-40	22%
21-25	16%
18-21	7%

Showing 5 of 8. [Show All...](#)

### Country

USA	48%
THE NETHERLANDS	7%
CANADA	6%



Verify

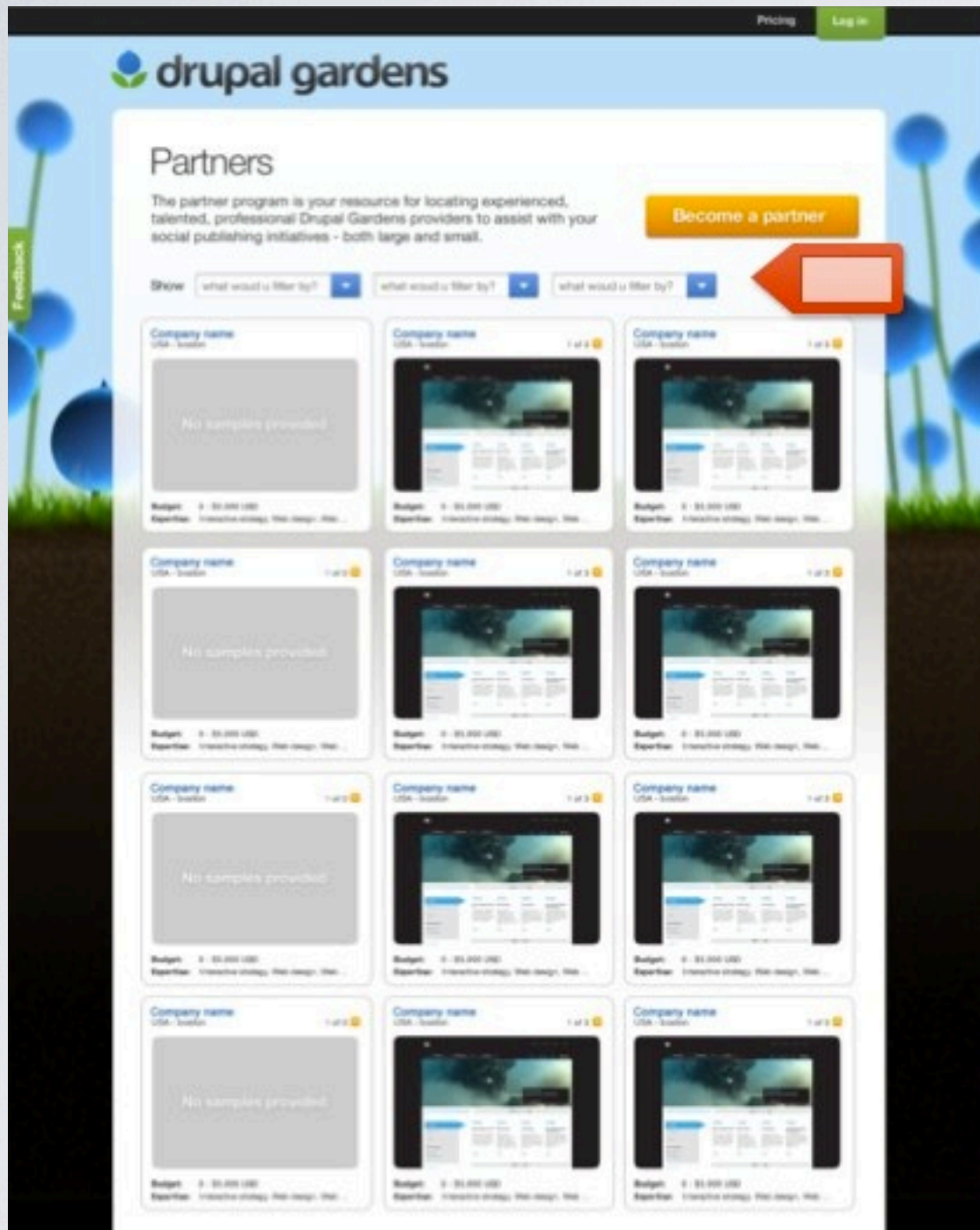


# Case study

What filter criteria would you use to find Drupal  
Gardens service providers



# What filter criteria would you use to find Drupal Gardens service providers



## Results

- Country/City/State
- Price
- Skills

### Others that placed high

- Years of experience/in business
- Around me
- Rating
- No of testimonials
- Language
- Company Size

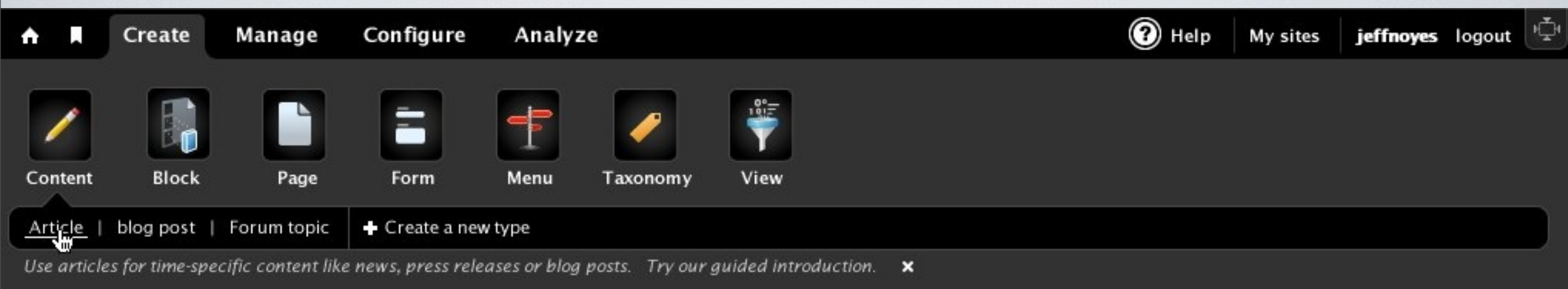




# Case study

Comparative study between toolbars (production and concept)





## Study

8 participants did the same set of tasks on each of the toolbar. To avoid bias, half started with the current toolbar, and visa-versa.

## Tasks

1. write a blog entry for your magazine website.
2. You have an unpublished article. How would you publish it?
3. Give the “Editor” permission to edit their own articles.



# Current toolbar

## Positives

1. “This is a lot more straightforward. There are not million options. Just two options – Add content / Find content” (P2)
2. “I like this because it says ‘Add Content’...It’s clear to me” (P3)
3. “The titles (labels) are clear, more descriptive [than the proposed toolbar]” (P3)

## Negatives

1. Terminology: “I am lost. I do not know what ‘People’ is” (P5))
2. Navigation: “It is too wordy. I don’t like a lot of words [instead] I like to click and then break down” (P6)
3. Mental Model: “The order is not the way I think” (P1)
4. Visual Design: “Busy, convoluted” (P8)



# Proposed toolbar

## Positives

1. Participants who clicked 'Permissions' in the proposed toolbar found it easier to edit roles, as they did not go through the list page.

2. "Buttons (icons) are clear. [It is] little easier to know where to go" (P1)

3. "Simple" (P4)

4. "Love it... It's consolidated... Small and simple. I like that I do not have many options... It is more inline to what I have been seeing [elsewhere]" (P5)

5. "[I] Like the icons and wordings. They give more value... easier to understand what I have to do" (P6)

6. "[It's] much easier to find and investigate" (P8)

## Negatives

1. Visual Design: "I do not like the wide spacing between the options. In these days of wide monitors, people's eyes do not rest for long" (P4)

2. Navigation: "The second level has too many options. It could be parsed" (P8)



**Most participants (5 of 7) preferred the proposed toolbar to the current toolbar.**

To understand as to how much they liked one toolbar over the other, participants were asked to split 100 points giving more points to the design they like. On an average, **participants gave 66 points to the proposed toolbar and 34 to the current one.**



## Study

8 participants did the same set of tasks on each of the toolbar. To avoid bias, half started with the current toolbar, and visa-versa.

## Tasks

1. write a blog entry for your magazine website.
2. You have an unpublished article. How would you publish it?
3. Give the “Editor” permission to edit their own articles.



# Proposed toolbar (preliminary)

## Positives

1. “More streamlined” (P3)
2. “Much cleaner ... a huge improvement ... wonderful” (P4)
3. “It’s a better design” (P6)
4. “It’s utilitarian” (P7)
5. “Looks ‘cooler’... more responsive” (P7)
6. Hover based help is helpful

## Negatives

1. Dashboard, and collapsing icons unclear
2. Finding content could be faster
3. Hover help at times out of context



# Summary

**Most participants (6 of 7) preferred the proposed toolbar to the current toolbar.**

To understand as to how much they liked one toolbar over the other, participants were asked to split 100 points giving more points to the design they like. On an average, **participants gave 66 points to the proposed toolbar and 34 to the current one.**



# Case study

Comparative study of Views 2 to Views 3



## Study

6 participants did the same set of tasks on each of version of Views. To avoid bias, half started with Views 2, and visa-versa.

All participants had some familiarity with Drupal or Drupal Gardens, but had never used Views before.

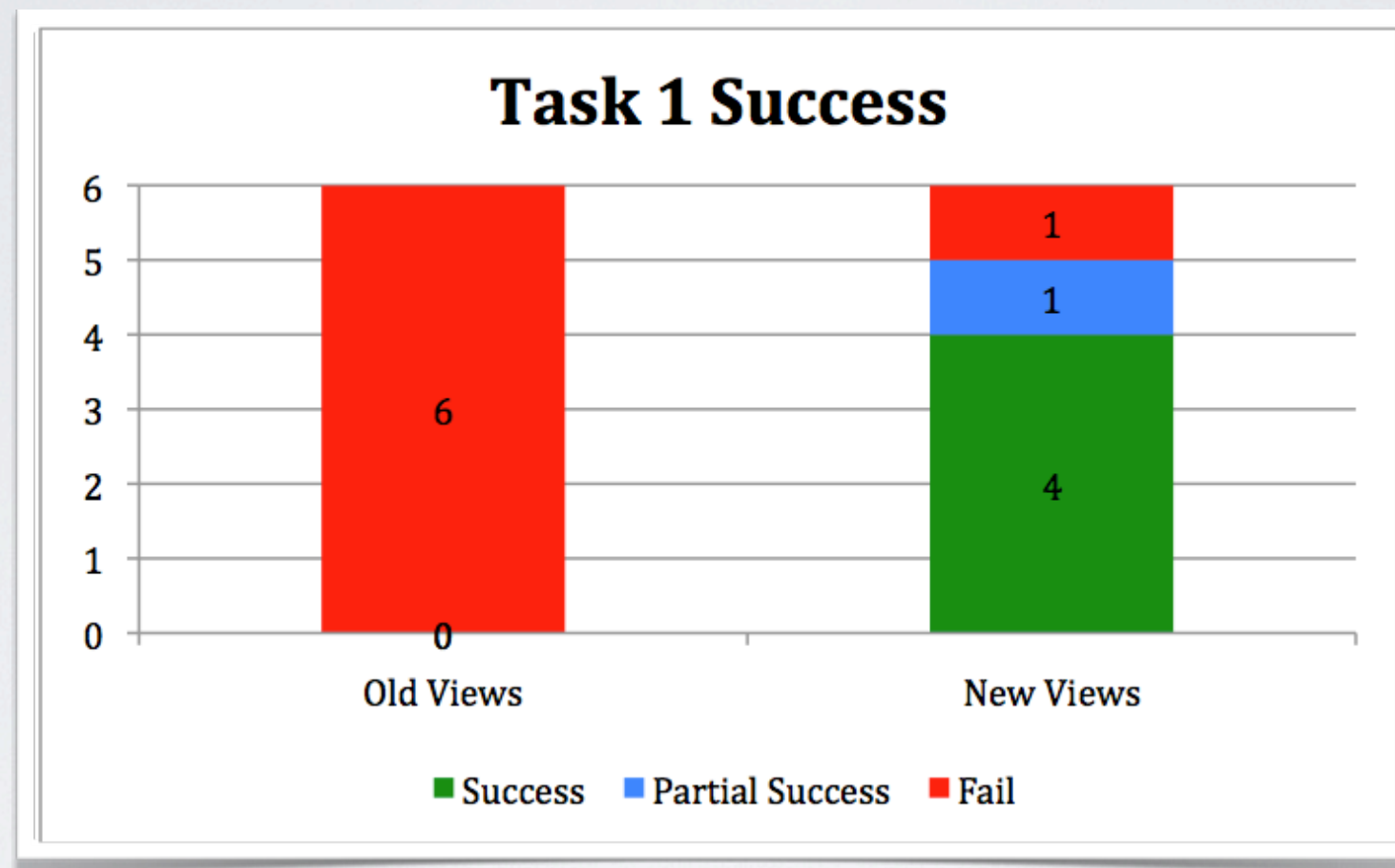
## Tasks

1. Create a page of 'news' items tagged with 'Politics' and 'USA.' Link the page to the main menu
2. Create a block of the same, but limit to only linked titles



**All participants preferred Views 3 to Views 2  
- including participants that partially failed.**

Participants gave 81 points to Views 3 and 19 to the Views 2



Create a page of “Political News” items tagged with  
“Politics” and “USA” and link the page to the



# Continuos improvement

## What is it?

- ❖ List of 80% tasks
- ❖ Tracks task test date, effectiveness, satisfaction
- ❖ Tracks ID's for cross testing purposes

## What's it good for?

- ❖ Benchmarking over time

ID	Tasks	Last test date	Effectiveness (1-5)	Satisfaction (1-5)
	▼ Content			
	▼ Create			
	<i>publish/unpublish , assign to menu</i>			
1	• Create a unpublished article			
2	▼ Create a published article			
3	• optimise for SEO			
4	• Create a page, close its comments and assign to a menu	May 17-18, 2011	2.6 (8)	2.5 (8)
5	• Create a comment (anonymous)			
6	• Create a contact form			
	▼ Manage			
	<i>filter, perform an 'update' action</i>			
7	• Locate and edit a media asset			
8	• Locate and edit a content asset			
9	▼ Locate and edit a comment			
10	• Approve			
	▼ Edit			
	<i>Create revision</i>			
11	• Create a URL alias			
	▼ Structure			
	▼ Blocks			
	▼ Create			
12	• Create and place a block.	May 17-18, 2011	2.1 (8)	2.0 (8)
	▼ Manage			
13	• Locate and edit a block, restrict its location and relocate it			
14	• Enable a disabled block			
	▼ Content types			
	▼ Create			
15	▼ Create a content type	May 17-18, 2011	2.7 (3)	2.3 (3)
	▶ participants on 4/5/2001			
16	▼ ...with new and existing custom fields (tagging capabilities)			
17	• Date			
18	• Image	May 17-18, 2011	2.0 (2)	3.0 (2)
	• Media (DG only)			
19	• Form element			
	▼ Manage			
20	• Locate a content type and change a fields label			
	▼ Menus			
	▼ Create			
21	• create and place menu to navigate.			
	▼ Manage			
22	• Edit links in a menu			
	▼ Taxonomy			



# Summary

## Ideate & validate by: Accelerate by:

- Collaborative brainstorming
- Storyboarding
- Prototyping
- Testing

- Collaborative brainstorming
- Hiring visual/technical interaction designers
- Switching to Fireworks
- Validating before building



# Sampling techniques

- <http://www.statpac.com/surveys/sampling.htm>

## Credits

- [Statpac](#)
- [Jared Spool, User Interface Engineering](#)
- [Whitney Hess, Happy Cog](#)