WEB APPLICATION HIERARCHY

LUKE WROBLEWSKI
AN EVENT APART, BOSTON 2008

Luke Wroblewski

Yahoo! Inc.
- Senior Principal, Product Ideation & Design

LukeW Interface Designs
- Principal & Founder
- Product design & strategy services

Author
- Web Form Design: Filling in the Blanks (Rosenfeld Media)
- Functioning Form: Web applications, product strategy, & interface design articles
- Site-Seeing: A Visual Approach to Web Usability (Wiley & Sons)

Previously
- eBay Inc., Lead Designer
- University of Illinois, Instructor
- NCSA, Senior Designer

http://www.lukew.com
**OVERVIEW**

**WHY DOES VISUAL HIERARCHY MATTER?**

**HOW DO WE CONSTRUCT A VISUAL HIERARCHY?**

**PUT IT TO USE:** COMMUNICATE MESSAGES, ILLUMINATE ACTIONS, & ORGANIZE INFORMATION

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**How We Use the Web**

“Look around feverishly for anything that is interesting or vaguely resembles what you are looking for, and is clickable.” —Steve Krug

-Steve Krug, Don’t Make Me Think: A Common Sense Approach to Web Usability
Design Considerations

- **Presentation**: How your application appears to your audience
- **Interaction**: How your application behaves in response to user actions
- **Organization**: The structure of your application

Presentation

- All interactions occur through the presentation
- Inform users
  - Establish relationships between content
  - Guide users through actions
- Make organizational systems clear
  - Provide situational awareness
  - Maintain consistency to create a sense of place
- Effectively convey brand message to your audience
  - Emotional impact
  - Engage and invite
  - Provide a unique personality

What Makes a Great Presentation?

- Visual Organization
  - Communicates the relationships between user interface elements
  - Enables Interaction Design
  - Information Design
- Personality
  - Communicates the brand essence of a product
  - Visceral design
  - Color, font, image, pattern selection
The End Goal

- Quickly Communicate
  - What is this? Usefulness
  - How do I use it? Usability
  - Why should I care? Desirability
ABC Export Inc.

Code: ABCExp
Type: Beneficiary

Frank St Branch
123 Frank St.
Atlanta, GA 30314
United States of America

Phone: 513-234-7777
Fax: 513-234-7775
http://www.abceports.com/

Add Alias
Add Contacts

Operational Notes

Add Note Cancel

March 9 2007 12:52 PM by Gina Longa
"Customer called to say order #25456 has not yet arrived on site despite being shipped on Thursday. Let customer know delivery is imminent."

February 23 2007 12:21 PM by Tina Youthers
"Initial order to customer has been processed and will be sent on March 1, 2007. If customer calls, reference billing invoice 2456."

February 20 2007 10:23 PM by Tina Youthers
"Item 2456 added to customer inventory."
What is this?

Communicate function
Before Visual Hierarchy

After Visual Hierarchy
HOW DO WE CONSTRUCT A VISUAL HIERARCHY?

PHOTO BY MATTEO PENZO

How We See

• How we make sense of what we see
  • Recognizing similarities & differences
  • This allows us to group information
  • And give it meaning

• Relationships
  • Between individual elements
  • To the whole (story)
Understanding Perception

• Several principles tell us how (why) we group visual information
  • Proximity - elements close together are perceived as a group
  • Similarities - of shape, size, color can group elements
  • Continuance - grouped through basic patterns
  • Closure - group elements by space filled between them

Forming Relationships

• Creating relationships requires an understanding of what makes things different
• Introducing variations in one or more of the above categories creates visual contrast
• Also created through positioning
Using Relationships

• Use visual relationships to
  • Add more or less **visual weight** to objects
  • Difference is created by contrast between objects
  • Why do we want to vary the visual weight of objects...


Visual Hierarchy

• Creates a center of interest that attracts the viewer’s attention
• Creates a sense of order and balance
• Establishes a pattern of movement to guide a viewer through a composition
• In other words, it tells a story
  • Like all good stories it has a beginning, end, and a point.
Hierarchy Applied

- Visual weight guides you through
  - Image
  - Title
  - Date & Location
  - Ticket Information

- Building an effective hierarchy
  - Involves use of visual relationships to add more or less visual weight to elements

Building Effective Hierarchies

- Distribution of visual weight
  - Visually dominant images get noticed most
  - Focal point, center of interest

- Distinct visual weight guides you through narrative
  - Essential to keep it balanced
Effective Hierarchy

No Clear Hierarchy
No Clear Hierarchy

H Foret Interactive Patient Education Service

Health Information Foret (HiF) provides you, the healthcare professional or healthcare facility, with content-rich, web-based patient education materials that are personalized to you and your patients. We enable you to deliver the highest quality of health information and education to your patient on the Internet, and we assist you in achieving HIPAA requirements.

HiF was founded and is led by an interdisciplinary team of physicians, clinical educators, nurses, and librarians. HiF offers a wide range of products that are developed, reviewed, and updated by our team of experts.

HiF's comprehensive education materials are designed to help you enhance your patients' understanding of their health conditions, while improving patient satisfaction and health outcomes. Our products include interactive modules, patient education resources, and comprehensive reference materials.

Available resources include:
- Adult Health
- Women's Health
- Children's Health (Pediatrics)
- Chronic Disease
- Mental Health Reference
- Ophthalmology

No Hierarchy

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Effective Hierarchy

To Summarize

- **Visual Communication** is part
- **Visual Organization** and part personality.
- **Visual Hierarchy** is a deliberate prioritization of
- **Visual Weight** enabled by the manipulation of
- **Visual Relationships** to create
- **Meaning** for users.
Now we know how to construct a visual hierarchy. But what do we do with it?

Communicate messages. Illuminate actions. Organize information.
COMMUNICATING A CENTRAL MESSAGE

WHAT IS THIS?
EXPLAIN & DIFFERENTIATE

Web Applications

- Hosting costs are extremely affordable
- Free open source platforms
- Development toolkits increasingly available
- Instant global audience: 1.4B people use the Internet (March 2008)
Not enough hierarchy

Too many visual differences
Meeting Expectations

- Prioritization becomes especially important when you consider how people access content
  - Content Aggregators
  - Display Surfaces
  - Content Creation Sites
  - Search
  - Communication Tools
  - More...

Accessing Content
- Content Aggregators: Digg, Delicious, etc.
Accessing Content
• Display Surfaces: Facebook, MySpace, etc.

Accessing Content
• Content Creation Sites: Blogs, Wikis
Accessing Content

- Search
- Communication: Email, Instant Messenger, etc.

From: Bob Stanley  
Subject: Web form article  
Date: September 26, 2007 8:01:00 AM PDT  
To: LukeW

Figured you’d be interested in this form design study (with eye-tracking to boot!)

Primary & Secondary Actions in Web Forms  

... Bob
24% CONTENT
76% SITE OVERHEAD
TAKE ACTION  WHAT DO I DO NOW?

USER NEEDS & BUSINESS GOALS
Form Messaging

Email call to action

--- Forwarded message of existing email ---

From: Renny Rue <rreyrue@gmail.com>
Date: Sep 13, 2016 2:31 PM
Subject: Rya wants to have lunch in Atherton, California at House of Openikke, Friday September 15, 2016 at 12:30pm.

Rya wants to have lunch in Atherton, California at House of Openikke, Friday September 15, 2016 at 12:30pm.

Please follow this link to reply: http://cremkee.com/sen.php

OR

Use this form to request to the event:

- The invite!
- Sorry, can't make it this time.
- I want to come but have a constraint.

Response message:

Speak:
Email call to action

From: Adair at Remoon.com <mccarty@remoon.com>
Reply To: "Adair" <mccarty@remoon.com>
Date: Fri, Sep 15, 2006 2:23 PM
Subject: Adam sent you a Renkoo invite to Adams Pool Party.
To: luke@lyke.com

Adam Rifkin invites you to a party at House of Fluff in Millbrae on Thursday, October 15 at 04:00pm
Let Adam know if you can make it:
☐ I'm there!
☐ Sorry, can't make this time.
☐ Maybe, depends on...
Add a message:

Respond to this Invitation.

Adams says:
OHIOHIOHIOHK: The summer of Operative is coming to an end, and half our crew will be going back to Chicago this weekend. Come see the team, the house we've been working in, and the site we've been working on, while chowing down on some BBQ!
For more details on what, when, and where check out: http://renkoo.com/open.php

P.S. Have extra? Get lift or text message invitations instead

Renkoo Like used Renkoo to plan this event. It's how friends arrange when and where!

Take action?

[Image of eBay affiliate program page]
Take action: download

Firefox 2

Enjoy a Better Web Experience
Firefox 2 delivers helpful new features to make your online experience more productive.

Stay Secure on the Web
Firefox continues to lead the way in online security, and now includes active protection from on-line scams to keep you safe.

Personalize Your Browser
Choose from over a thousand useful add-ons that enhance Firefox. It's easy to customize Firefox to make it your own.

Copyright © 2007-2008 Mozilla. All rights reserved.

Take action: download

Firefox 3

Can a browser really make the Web better?
Try Firefox and see for yourself. Learn more.

Download Firefox - Free

What's Happening at Mozilla?

Mozilla Announces Firefox 3
Introducing the newest, fastest, most powerful Firefox yet.

Firefox 3.0
A quick reference to all the features new to Firefox.

It's Easy!
A quick reference to all the features new to Firefox.

Mozilla Store
Support Mozilla. Get stuff.

We're Hiring
South Africa, South Africa, South Africa.

Copyright © 2007–2009 Mozilla. All rights reserved.
Clear path to completion

ORGANIZE INFORMATION

WHAT CAN I FIND HERE?

PRESENT DATA
A Simple Table

<table>
<thead>
<tr>
<th>General Statistics</th>
<th>General Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current CaseLoad:</td>
<td>10</td>
</tr>
<tr>
<td>Number of Admissions Today:</td>
<td>5</td>
</tr>
<tr>
<td>Number of Admissions This Month:</td>
<td>35</td>
</tr>
<tr>
<td>Number of Admissions Last Month:</td>
<td>30</td>
</tr>
<tr>
<td>Number of Discharges Today:</td>
<td>3</td>
</tr>
<tr>
<td>Number of Discharges This Month:</td>
<td>22</td>
</tr>
<tr>
<td>Number of Discharges Last Month:</td>
<td>34</td>
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After Visual Communication?

- “I think I found an even better solution to simplify this part of user interface.” -One Creative Director’s Journal

http://andreysmagin.com/blog/redesigning-a-simple-table

- “This way I think users will need even less time to see all the information presented in the table especially frequent users. For new users or users in doubt once they rollover the number for which they don’t know the meaning, they will see a description.”

http://andreysmagin.com/blog/redesigning-a-simple-table
After Visual Communication?

- Is there a prioritization of the data?
- Is everything equally important?
- Introducing size and color variations might add visual noise instead of bringing extra attention to really important data.
Focus on the data?
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  • Illuminate actions
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For more information...

• **Functioning Form**
  • www.lukew.com/ff/
• **Site-Seeing: A Visual Approach to Web Usability**
  • Wiley & Sons
• **Web Form Design: Filling in the Blanks**
  • Rosenfeld Media
• **Drop me a note**
  • luke@lukew.com