Introducing me

Web Strategist and CKO

Co-Founder of NodeOne/Wunderkraut

Worked with Drupal since 2005

Studied cognitive science and computer science

jakob@nodeone.se

http://www.twitter.com/realsolipsist

http://drupal.org/user/37564
Stuff we’ve done
card games...

Hi, I’m Dries!*

* No he’s not really Dries, but you knew that already.

www.drupalcardgame.com
Druplicons wielding nun-chuks...
Drupal rock stars...

“The Kitten Killers” Live at DrupalCon Copenhagen (photo by Dries)
Drupal air fresheners...
Druplicon cookie cutters
Strategy and Usability
Web strategy, usability studies and effect mapping

Design and UX
User experience, GUI and graphic design

Development
Modules, themes, distributions and install profiles

Hosting and scalability
Hosting, optimization and monitoring

Training
Courses, books, screencasts and learning library

Consulting
Technical consulting and solution architecture
THE MYTHS
Myth #1

“UX is nothing but EYE CANDY”
Why was UX invented?
New country: Don’t cover me
Primera, segundo, tercero, cuarto, quinto?
Our menus
1 – “just the sub?”
2 – “just a soda?”
3 – “chips and a cookie?”

“But I WANT ALL OF IT!”
In e-commerce, poor usability is clearly and measurably expensive.
In e-commerce, poor usability is clearly and measurably *expensive*.
Things on the front page of a university website:
- Campus photo slideshow
- Alumni in the news
- Promotions for campus events
- Press releases
- Statement of the school's philosophy
- Letter from the president
- Virtual tour

Things people go to the site looking for:
- List of faculty phone numbers and emails
- Campus address
- Application forms
- Academic calendar
- Campus police phone number
- Department/Course lists
- Usable campus map

Full name of school:
Can these issues really be resolved using eye candy alone?
Understand the needs and goals of users
Translate needs and features into requirements
Design interactive solutions to meet requirements
Evaluate solutions iteratively
Do these terms overlap?

Let’s Google!
Clearly.
Let’s define this.
Information Design

INFORMATION ARCHITECTURE

Usability Engineering

Interaction Design

Experience Design

Graphic Design

Activities
User Experience  Usability

Qualities
But how do they relate?
Adopted from Interaction Design, Reece, Rogers, Sharp, 2002
Usability Goals

- Usability goals
  - easy to learn
  - easy to remember how to use
  - entertaining
  - enjoyable
  - helpful
  - motivating
  - emotionally fulfilling
  - rewarding
  - supportive of creativity
  - aesthetically pleasing
- Have good utility
- Efficient to use
- Effective to use
- Safe to use
User Experience Goals

- enjoyment
  - entertaining
  - enjoyable
- satisfaction
  - satisfying
  - rewarding
  - emotionally fulfilling
- usability
  - efficient to use
  - effective to use
  - safe to use
- creativity
  - motivating
  - supportive of creativity
- aesthetics
  - aesthetically pleasing
- helpfulness
  - helpful
- motivation
  - motivating
- emotion
  - fun
- utility
  - have good utility
easy to remember how to use

motivating satisfying

effective to use

rewarding
non-easy to use emotionally fulfilling
As UX practitioners we apply

Usability Engineering

Information Design

Interaction Design

Graphic Design

Experience Design

– in order to achieve –

great usability

great user experience
**UX**  
**User eXperience**

- **Understand** the needs and goals of users
- **Translate** needs and features into requirements
- **Design** interactive solutions to meet requirements
- **Evaluate** solutions iteratively
- **Implement** solutions
Myth #2

"A shovel is a shovel regardless of whether it’s RED OR BLUE."

www.flickr.com/photos/27986671@N00/273563886/
UX concerns how something works, not how it appears.
Visitors Overview

Oct 12, 2011 - Nov 12, 2011

1,627 people visited this site

- Visits: 3,563
- Unique Visitors: 1,627
- Pageviews: 13,773
- Pages/Visit: 3.87
- Avg. Visit Duration: 00:04:45
- Bounce Rate: 39.91%
- 40.08% New Visitor
- 59.92% Returning Visitor

Export → Add to Dashboard
Audience
- Demographics
- Behavior
- Technology
- Social
- Mobile
Visitors Flow
Advertising
Traffic Sources
Content
Conversions
Help
The Visitors Overview Report
Comparing Metrics
Using the Interactive Table
Common Report Controls
Video: Add Advanced Segments
Find Your Old Reports in the New Interface

Hourly Day Week Month
Usability Engineering

Experience Design

Information Architecture

Information Design

Interaction Design

Graphic Design
Information design is the skill and practice of preparing information so people can use it with efficiency and effectiveness.
Experience design is the practice of designing with a focus placed on the quality of the user experience and culturally relevant solutions.
Information architecture (IA) is the art and science of organizing and labelling websites, intranets, online communities and software to support usability.
Usability engineering is a field that is concerned generally with human-computer interaction and specifically with making human-computer interfaces that have high usability.
Interaction design (IxD) is "the practice of designing interactive digital products, systems, and services." It has an interest in form but its main focus is on behavior.
Graphic design is a creative process focused on creating the visual style and look and feel of a web site or software application, such as colors, shapes and icons.
Tremendous business value can be achieved by understanding how something has to work in order to be usable, and a pleasure to use.
We have the tools to

**understand**
the strategic goals of the investment in a website.

**identify**
what users need, want and expect from the website.

**design**
the website in order to meet users’ needs.
As many as 82% of IT projects are considered unsuccessful

Source: http://www.umsl.edu/~sauterv/analysis/6840_f03_papers/frese/
33% are cancelled before completion

Source: http://www.umsl.edu/~sauterv/analysis/6840_f03_papers/frese/
25% delivered on time/budget by results are not what’s expected
25% delivered what was expected but broke the budget
Lack of user input and involvement.
INCOMPLETE REQUIREMENTS
Unrealistic Expectations
Introducing Effect Mapping

Every website is built for a reason and to meet a goal.

Goals are achieved when the site is being used by its end users.
Effect map for an intranet

Employees
- Want to collaborate with others
  - 50% of users post in a discussion group at least twice a week
  - Be able to create forums or discussion groups
  - Be able to share files
  - Be able to chat realtime
  - Receive updates on what colleagues are doing right now
  - Be able to post comments on content
  - 80% of searches result in relevant matching search results
  - Search text, keywords, tags or facets
  - Browse content by category or tag
  - Be able to favorite/bookmark content
- Need to find information
  - All content has an editor assigned
  - Be able to see when something was last updated and by whom
  - Be able to easily contact the content author
- Need to be sure information is accurate and up to date

Administrators
- Want to replace paper forms with online forms
  - 50% of forms should be on the intranet
  - Be able to create forms for common applications and requests
  - Make it possible for users to digitally sign forms
- Need to avoid a lot of emails and phone calls just to forward documents and applications
- Want to be able to answer administrative queries on the intranet
  - 90% of administrative questions are made through the intranet
  - Receive messages sent from a contact form

Editors
- Want feedback on the quality of content
  - No more than 5% of pages have been reported to contain out of date content
  - Be able to set publication and unpublishation or expiration dates
  - Be alerted when content "expires"
  - Be alerted when dead links are detected (happens automatically)
  - Be able to list the pages he/she edits by age, oldest first
  - 20% of users have rated content
  - Be able to see how users rate content (1-10)
  - Be able to receive comments from users on the quality of content
- Need to reach users effectively
  - Directly targeted content is seen by 80% of targeted users
  - Be able to direct content to specific groups through forums and categories
  - Be able to post news that everyone sees
  - Be able to post high priority content that is highly visible

70% of staff should log in to the intranet at least once every day
Employees report being more effective as a result of using the intranet
Employees prefer to use intranet than paper-based manuals or email

Easy access the tools and information you need in your daily work
“We need a better website!”

“It’s really hard to find out who we are and there’s no way to post comments and feel involved!”

“A big share of our customers want to feel involved.”

“We need to reach those customers in order to channel more sales through our site.”
What you need to do

“...reach those customers in order to channel more sales through our site.”
Let’s write that as an effect

\{
\}

**Concise**
Not more than a few sentences

**Measurable**
You need to be able to evaluate whether the website achieves the effect using metrics and KPI’s

**Long-term**
The effect should reflect change over long time and be strategic, not tactical
“Offer a low threshold to interaction and convert interaction by users into sales.”

<table>
<thead>
<tr>
<th>What to measure</th>
<th>How to measure</th>
<th>When to evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of visitors comment, share and like content on the site.</td>
<td>Review search logs and use tracking.</td>
<td>Every six months</td>
</tr>
<tr>
<td>What percentage of users who interact end up buying something.</td>
<td>Track users and use funnels to track conversions.</td>
<td>Every six months</td>
</tr>
<tr>
<td>The percentage of visitors who interact more than once.</td>
<td>Track interaction using Google Analytics.</td>
<td>Every six months</td>
</tr>
</tbody>
</table>
Easy access the tools and information you need in your daily work
Metrics

- 70% of staff should log in to the intranet at least once every day.
- Employees report being more effective as a result of using the intranet.
- Employees prefer to use intranet than paper-based manuals or email.
“Offer a low threshold to interaction and convert interaction by **users** into sales.”

Who are they?
Questions answered:

Who are the users?
What goals do they need to achieve using the site?
What tasks do they need to carry out?
What are their needs and requirements?
Users

- Easy access the tools and information you need in your daily work

Employees

- Need to find information
- Search text, keywords, tags or faceted search
- Browse content by category or tag
- All content is publicly accessible
- Need to be sure information is accurate and up to date

Administrators

- Want to replace paper forms with online forms
- All content is publicly accessible
- Need to avoid a lot of emails and phone calls just to forward documents

Editors

- Want feedback on the quality of content
- Be able to set publication or expiration dates
- Be able to be alerted when content is updated
- Be able to list the pages oldest first
- 20% of users have rated the content
- Be able to see how users have rated the content
- Be able to receive comments and feedback from targeted users
“Offer a low threshold to interaction and convert interaction by users into sales.”

How do they conceptualize the information they need?
Questions answered:

What content is imported, created and used?
How is it structured, tagged and classified?
How is it internally related?
How are content and indices labeled?
“Offer a low threshold to interaction and convert interaction by users into sales.”

What are their goals and behavior?
Questions answered:

How does the user interact with the site?
What are the workflows and modes of interaction?
What is the look and feel like?
Measuring users’ success in achieving their goals

Want to respond to content about things that interest them.

Want to see what their friends like and do.

Want to stay up to date and read and watch relevant and interesting content.

Track the number of users who comment on content.

Track the extent to which a click on a post on a social site leads to interaction.

Survey offered to randomly selected repeat visitors.
User Goals

- Want to replace paper forms with online forms
- Need to avoid a lot of emails and phone calls just to forward documents and applications
- Want to be able to answer administrative queries on the intranet

Other
- Be able to create forms for common applications
- Make it possible for users to digitally sign forms
- 90% of administrative questions should be answered on the intranet
- Receive messages sent from users
- No more than 5% of pages have been reported to contain out of date content
- Be able to set publication and unpublishation or expiration dates
- Be alerted when content “expires”
- Be alerted when dead links are detected
- Need to ensure that content is up to date
**Actions**

- Need to find information
- Need to be sure information is accurate and up to date
- All content has an editor assigned
- Be able to see when something was last updated and by whom
- Be able to easily contact the content author

50% of forms should be on the intranet
- Be able to create forms for common applications and requests
- Make it possible for users to digitally sign forms

90% of administrative questions are made through the intranet
- Survey to users that asks about reduced use of email
- Be able to create administrative workflows
- Being able to notify others about pending tickets/forms/issues

No more than 5% of pages have been reported to contain out of date content
- Be able to set publication and unpublication or expiration dates
- Be alerted when content "expires"
- Be alerted when dead links are detected (happens automatically)
- Be able to list the pages he/she edits by age, oldest first

20% of users have rated content
- Be able to see how users rate content (1-10)
- Be able to receive comments from users on the quality of content

Want feedback on the quality of content
- Need to replace paper forms with online forms
- Want to be able to answer administrative queries on the intranet
- Need to avoid a lot of emails and phone calls just to forward documents and applications

**Operators**
UX is key to making sure websites achieve intended business goals by bridging the gap between business requirements and implementation by capturing the needs of users.
The UX value proposition
A simple way to visualize estimated and expected improvements from UX work

The UX Value Proposition diagram is a great way to communicate the value of UX to clients and stakeholders

Adapted from "Communicating the UX Value Proposition" by Dilworth and Miller.
Step #1

Identify key business objectives

Example objectives for a simplified e-commerce project

1. Migrate users from brick-and-mortar stores toward online self-service
2. Increase conversion rates from home page to checkout
3. Increase awareness of new products and special promotions
4. Increase overall customer satisfaction with online purchases
5. Decrease number of customer support calls
**Step #1**

*Identify key business objectives*

---

### The UX Value Proposition

<table>
<thead>
<tr>
<th>Key business objectives &amp; UX attributes that influence success</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Migrate users from brick-and-mortar stores toward online self service</td>
<td>poor</td>
</tr>
<tr>
<td>2. Increase conversion rates from home pages to checkout</td>
<td></td>
</tr>
<tr>
<td>3. Increase awareness of new products and special promotions</td>
<td></td>
</tr>
<tr>
<td>4. Increase overall customer satisfaction with online purchases</td>
<td></td>
</tr>
<tr>
<td>5. Decrease number of customer support calls</td>
<td></td>
</tr>
</tbody>
</table>

**STEP 1**

Document the key business objectives and validate these with your client and stakeholders.
Step #2

**Identify the UX attributes that will influence the success**

✓ **Usability**
✓ **Appeal**
✓ **Accessibility**
✓ **Performance**
✓ **User Assistance & Help**

1. **Migrate users from brick–and-mortar stores toward online self-service**
   1.1 *Usability* equivalent or better than brick-and-mortar
   1.2 *Appeal* to audiences currently not using online shopping
   1.3 *Accessibility* of site for disabled audiences
   1.4 *Accessibility* of site on mobile devices
   1.5 *Performance* of site must feel quick and responsive to user input
Step #2

**Identify the UX attributes that will influence the success**

<table>
<thead>
<tr>
<th>The UX Value Proposition</th>
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<tr>
<td>1.4 Accessibility of site on mobile device</td>
</tr>
<tr>
<td>1.5 Performance of site must</td>
</tr>
<tr>
<td>2. Increase conversion rate</td>
</tr>
<tr>
<td>2.1 Find products quickly and easily</td>
</tr>
<tr>
<td>2.2 Access and digest all information</td>
</tr>
<tr>
<td>2.3 Simple and easy to use checkout</td>
</tr>
<tr>
<td>2.4 Get help and resolve issues quickly</td>
</tr>
</tbody>
</table>

**STEP 2**
Document the UX attributes that are critical to success in context of the key business objectives that they support
Step #3

**Identify the current success of these UX attributes**

- Poor
- Excellent

**Value Proposition**

<table>
<thead>
<tr>
<th>UX attributes that influence success</th>
<th>Assessment</th>
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<tr>
<td>current state of success</td>
<td></td>
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**STEP 3**

Determine the current state of success for each UX attribute and plot it on a scale from poor to excellent.
Step #4

Identify the desired state of these UX attributes

**STEP 4**
Determine the desired state of success for each UX attribute and plot it on a scale from poor to excellent.
Step #5

Identify the activities and design work that can be done to improve the state of the UX

Gain/Potential

Cost/Investment
Communicating the UX Value Proposition

by John Dilworth, Matt Miller

http://uxmag.com/articles/communicating-the-ux-value-proposition
The $3,000,000,000,000 button

based on an article by Jared Spool
### Shopping Cart

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Total</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch Hotch Potch</td>
<td>1</td>
<td>5 €</td>
<td></td>
</tr>
<tr>
<td>Shipping</td>
<td></td>
<td>4 €</td>
<td></td>
</tr>
</tbody>
</table>

**Grand Total**

|          |          | 9 €   |        |

Meanwhile in IT...

Susie, annoyed customer
Meanwhile in IT...
+ Repeat customers purchase faster
+ No biggie for new users.

Everybody wins! Gosh I’m smart!

Email Address

Password

Forgot password?

Susie, annoyed customer
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Meanwhile in IT...
+ Repeat customers purchase faster
+ No biggie for new users.

Everybody wins! Gosh I’m smart!

Email Address

Password

Forgot password?

Login

Register

Susie, annoyed customer

God how annoying! I’m not here to enter into a relationship. I just want to buy something!
Wait, I’ve ordered here before. What was my password? When was it? Can I get it by email or has my email address changed since?
Wait, I’ve ordered here before. What was my password? When was it? Can I get it by email or has my email address changed since?

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<td>hp!!!!</td>
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<tr>
<td><a href="mailto:hpisthebest@hotmaol.com">hpisthebest@hotmaol.com</a></td>
<td>hp yeah!</td>
<td>2007-05-23</td>
</tr>
<tr>
<td><a href="mailto:hprocks@gmail.com">hprocks@gmail.com</a></td>
<td>Hp hp!</td>
<td>2009-11-08</td>
</tr>
<tr>
<td><a href="mailto:hpftw@example.com">hpftw@example.com</a></td>
<td>hp = awesome</td>
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10 minutes and 5 attempts later...
Wait, I’ve ordered here before. What was my password? When was it? Can I get it by email or has my email address changed since?

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10 minutes and 5 attempts later...

Ah screw this! I got better things to do!
Ok, ok! Point taken. What about removing the Register button?
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Shipping

**Grand Total**

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Grand Total

9 €

Email Address

Password

Forgot password?

You do not need to create an account to make purchases on our site. Simply click Continue to proceed to checkout. To make your future purchases even faster, you can create an account during checkout.
45% increase

$300,000,000 annually

http://www.uie.com/articles/three_hund_million_button
Summary

✓ UX provides the tools we need to understand actual users and design for them.

✓ Using effect mapping you can visualize the relations between users and business goals to see whom you need to design for in order to achieve those goals.

✓ The value proposition diagram gives a good overview of what gains are to be made from UX efforts.

✓ There are 300,000,000+ reasons why UX helps customers increase revenue.
Thank you for listening!

Please provide feedback on this session

email          jakob@nodeone.se

twitter        http://www.twitter.com/realsolipsist

Drupal.org account  http://drupal.org/user/37564