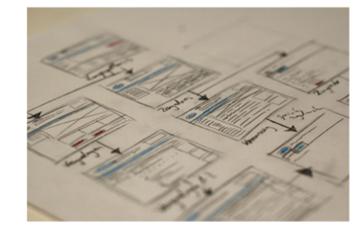


SPT205

User-Centered Design & Lean UX: Designing a Better SharePoint Experience



Mar. 20, 2013

James Neill Consultant - UX Technologist Slalom Consulting, Denver



Who Am I?

James Neill

Currently:

Consultant - UX Technologist @ Slalom Consulting, Denver

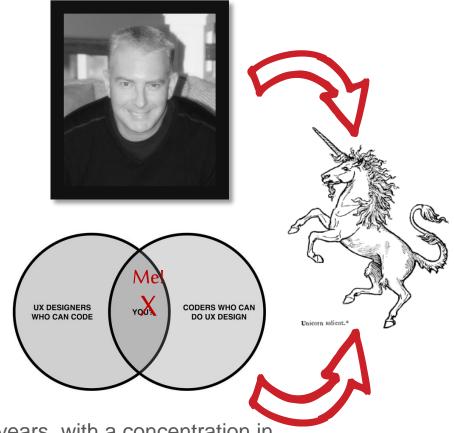
Past:

Neudesic, Directfit, Foster Concepts

What I Do:

- Hybrid user experience (UX) + custom development ("The Unicorn").
- Strong focus on experience design, front-end development technologies (HTML5, CSS3, JavaScript), MS .NET framework, and adaptive/responsive design techniques.
- Worked with SharePoint 2003/2007/2010 in various capacities for over 7 years, with a concentration in UI design & development, custom branding, & information architecture.
- Recent convert to/evangelist for Lean UX methodology.

Sources: http://www.currybet.net/cbet_blog/2011/04/will-we-all-have-to-code.php/; http://monsters.monstrous.com/unicorns.htm



What We'll Be Covering...

- User Experience (UX), User Experience Design (UXD), User-Centered Design (UCD)
- Lean UX
- $\ ^{\rm o}$ Pinpointing the right problems to solve \rightarrow Tasks, goals, and needs
- Requirements Visualization
- ${}^{_{\rm D}}$ Why Testing is Important \rightarrow Ensure UX success criteria are met
- SharePoint UX/UXD \rightarrow General approach, where to focus

...And What We Won't

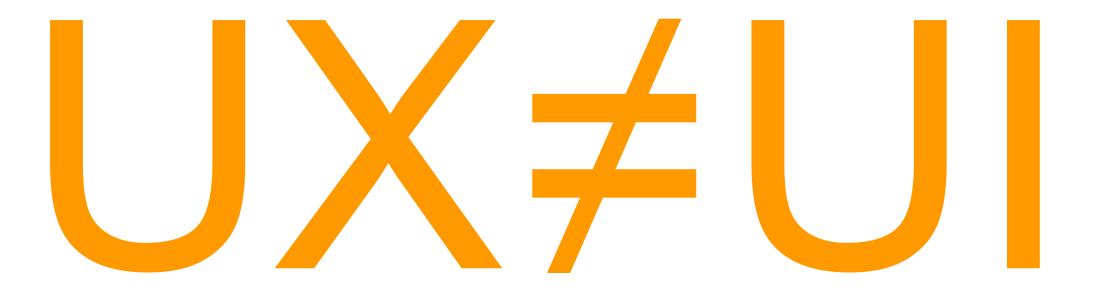
- Visual design theory/principles (Gestalt, C.R.A.P., et al)
- How to wireframe or design an awesome UI
- The "perfect approach" to create "Great UX"
- SharePoint branding/development techniques (Master Pages, Page Layouts, HTML/CSS/JavaScript, etc.)
- SharePoint Designer
- SharePoint taxonomy administration & configuration

= Much more than we'll have time for in a mere one-hour...



600

Let's Get Something Out of the Way...



What It Actually Is



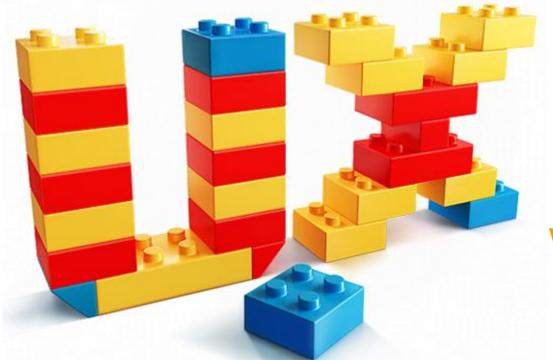
- A mindset
- Focused on delivering value
- Inspires the right kind of ideas
- Guides decisions

Sources: Kate Rutter, LUXr – "Lean + UX = Awesome (and UX is not UI)", Growtalks, Vancouver B.C., Aug. 22 2012

Why Is It So Important?

- We are not our users...so we need a way to understand them
- Aligns strategic goals with user needs
- □ Good UX has become the norm → Shift from luxury to everyday commodity
- Drives adoption, productivity, collaboration, user/customer satisfaction, loyalty, and profitability
- Removes boundaries between businesses and users

Three Essential Questions That UX Asks



Who are the people we are designing for? What is the activity (or activities) they are trying to do?

What are the contexts in which they are trying to operate?

Sources: http://ramotion.com/about/; http://www.poetpainter.com/thoughts/article/ia-summit-2009-the-fundamentals-of-experience-design-

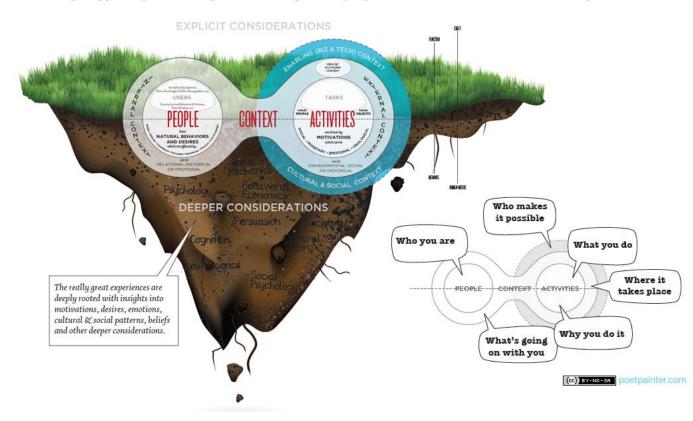
Think About This...

What is the one product you recommend to others without being asked?

UX = The Sum of a Series of Interactions

THE FUNDAMENTALS of EXPERIENCE DESIGN

"Designing for experiences is fundamentally about people, their activities, and the context of those activities..."



People

Context

Activities

Sources: http://www.poetpainter.com/thoughts/article/ia-summit-2009-the-fundamentals-of-experience-design-

Many Forms of Human-System Interactions



"The experience is about how we get there, not the landing place."

Bill Buxton, Author & Principal Researcher, Microsoft Research - *"From the Materialistic to the Experiential: A Changing Perspective on Design"*



Sources: Bill Buxton - "From the Materialistic to the Experiential: A Changing Perspective on Design", UsabilityNJ – PhillyCHI, Apr. 21, 2009; http://www.anandtech.com/show/4191/motorola-xoom-review-first-honeycomb-tablet-arrives, http://www.tripadvisor.com/LocationPhotos-g274887-d2174034-w2-Prime_Steak_and_Wine-Budapest_Central_Hungary.html; http://twinklingalong.blogspot.com/2011/04/ru-at-moment.html

UX Drives Behavior & Action

How a user feels about a system

Affects their behavior & choices

Which impacts time, cost, profit & satisfaction



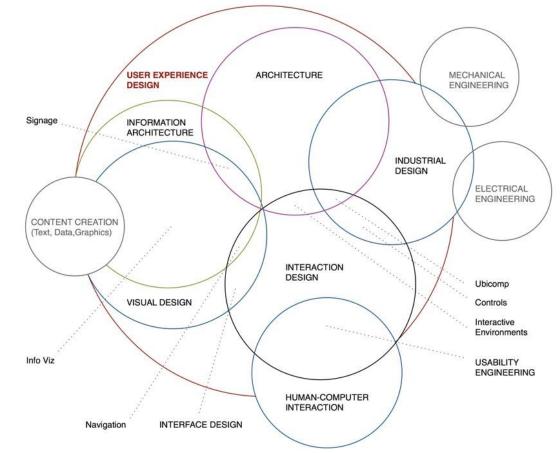
User Experience Design (UXD) = An Application of UX

User Experience (UX) = WHAT

Sum of a users interactions (active, passive, secondary) with a product, website or service.

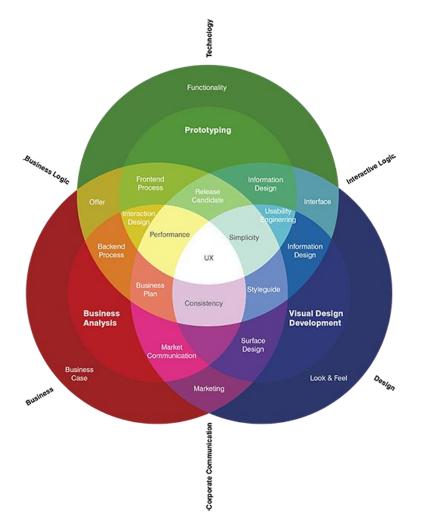
User Experience Design (UXD) = HOW

Defining & coordinating aspects of system interactions, including the presentation layer, functionality and content.



Sources: http://www.thesharepointmuse.com/2012/04/whats-the-difference-between-sharepoint-branding-user-interface-design-and-user-experience/; http://www.fatdux.com/blog/2009/01/10/a-definition-of-user-experience/; http://www.fatdux.com/blog/2009

UX/UXD = Art + Science



Combines Multiple Disciplines Including...

- Visual Design
- Information Architecture
- Technology
- Linguistics
- Cognitive Psychology
- Haptics
- Human Factors
- Ethnography
- Usability
- Storytelling

- Brand Strategy
- Heuristics
- Communication
- Interaction Design
- Service Design
- Perceptual Psychology
- Cognitive Science
- Design Thinking
- Human Factors
- Environmental Design

Sources: http://www.styleandflow.com/wp-content/uploads/2010/02/ux2.jpg; http://en.wikipedia.org/wiki/Experience_design

Tools, Methods & Outputs

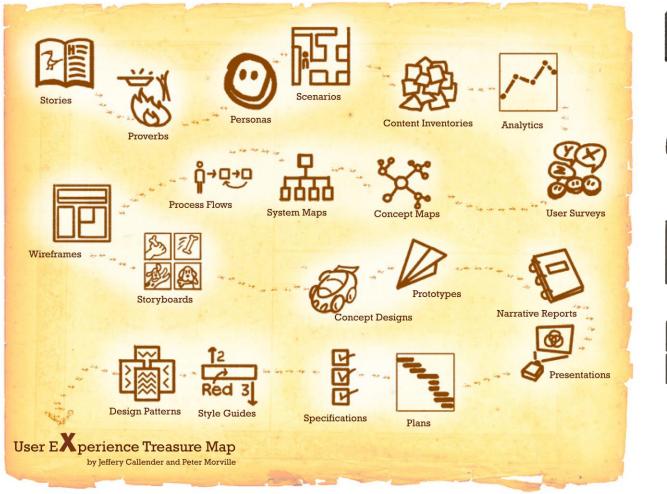
- Heuristic Evaluation
- Expert Review
- Cognitive Walkthroughs
- Contextual Analysis
- User Research
- Task Analysis
- Personas/Proto-Personas
- User Stories & Scenarios
- System Maps
- Focus Groups
- Ethnographic Research
- Competitive/ Industry Analysis
- Web/Application/ Mobile Analytics
- A/B/N Testing
- Conversion Testing

- UX Strategy & Design
- User-Centered Design
- Lean UX
- Content Strategy & Design
- Process Flows
- User Diary Studies
- UX Project Management
- Requirements Gathering
- Requirements Visualization
- Proverbs
- Brainstorming/ Creative Ideation/ Workshops
- Storyboarding
- Sketches
- Social Media & Networking Strategy

- Visual & Interaction Design
- Concept Generation
- Illustrations
- Content Inventories
- Style Guides
- Logos, Branding & Styles
- Information Architecture
- Site Maps
- Content Inventories
- Card Sorts
- Taxonomies
- Application/Process/Task Flows
- Wireframes
- Prototypes
- Usability Testing & Analysis

- Concept/Journey Maps
- Web/Application/ Mobile Governance
- User Surveys
- Design Patterns
- Adaptive/Responsive Design
- Front-End/User Interface Development
- HTML5/CSS3
- JavaScript/jQuery
- SharePoint Custom Branding
- Enterprise Content Management System UI
- Native Mobile (iOS, Android, Windows Mobile)
- Silverlight/XAML

Some of the Most Frequently Used



Sources: http://semanticstudios.com/publications/semantics/000228.php



Stories: A good story about a user's experience can help people to see the problem (or opportunity), motivate people to take action, and stick in people's memories long after we're gone.



Personas: Portraits and profiles of user types (and their goals and behaviors) remind us all that "you are not the user" and serve as an invaluable compass for design and development.



Wireframes: Sketches of pages and screens can focus us on structure, organization, navigation, and interaction before investing time and attention in color, typography, and image.

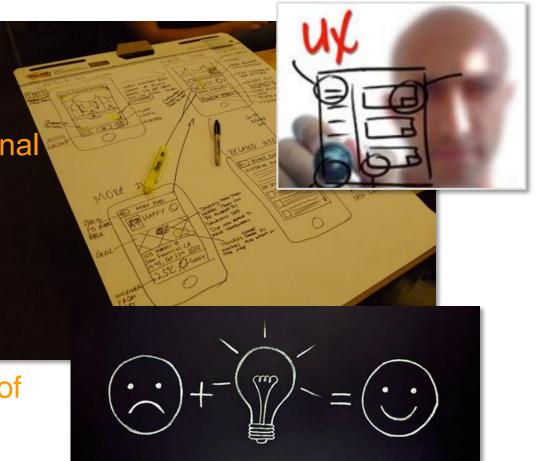


Storyboards: A series of sketches with narrative displayed in sequence can tell a story and paint a picture by showing interaction between users and systems in context over time.

Prototypes: From paper prototypes to pre-alpha software and hardware, working models drive rapid iteration and emotional engagement by showing how a product will look and feel.

UX/UXD: Important Things To Know

- It's an end-to-end process
- Never "one-size-fits-all"
- Often can't be directly accessed with traditional metrics
- It's not the same thing as usability
- It's not just about the user
- Not expensive, but also not easy
- Is the responsibility of every single member of a project team



Sources: http://www.cooper.com/journal/2012/11/what-is-user-experience-design.html



What are UX & UXD?

User-Centered Design & The Lean UX Revolution Requirements Visualization: A New Way

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SharePoint + UX = Aweson Q&A/ Resources

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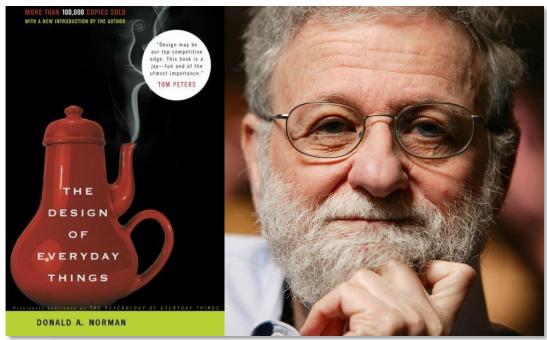
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A Primer on User-Centered Design (UCD)

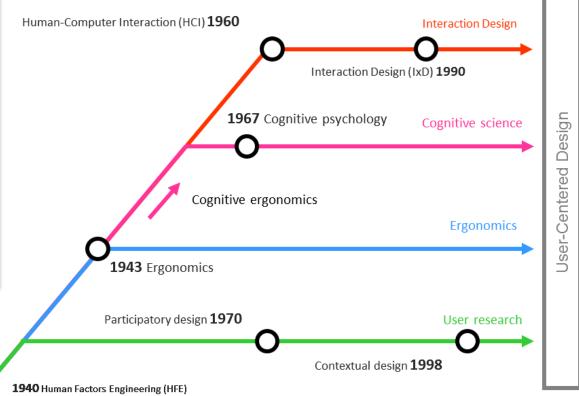
- Among most prevalent UX methodologies today
- Designing with a constant focus on the user
- Tasks, goals, and needs
- Aesthetics secondary
- Multi-stage problem solving process
- Analyze & foresee how users are likely to use a system/product
- Tests validity of design assumptions against behaviors of actual users

Sources: http://en.wikipedia.org/wiki/User-centered_design

Origins of UCD



Donald Norman - Nielsen Norman Group "Godfather of User-Centered Design"



Sources: http://www.amazon.com/Design-Everyday-Things-Donald-Norman/dp/0465067107; http://johnnyholland.org/2011/01/design-research-and-innovation-an-interview-with-don-norman/; http://www.slideshare.net/jonnevalola/roughhistory-of-user-centered-design-disclipines

Key UCD Principles (ISO 9241-210, 2010)

- The design is based upon an explicit understanding of users, tasks and environments.
- Users are involved throughout design and development.
- The design is driven and refined by user-centered evaluation.
- The process is iterative.
- The design addresses the whole user experience.
- The design team includes multidisciplinary skills and perspectives.

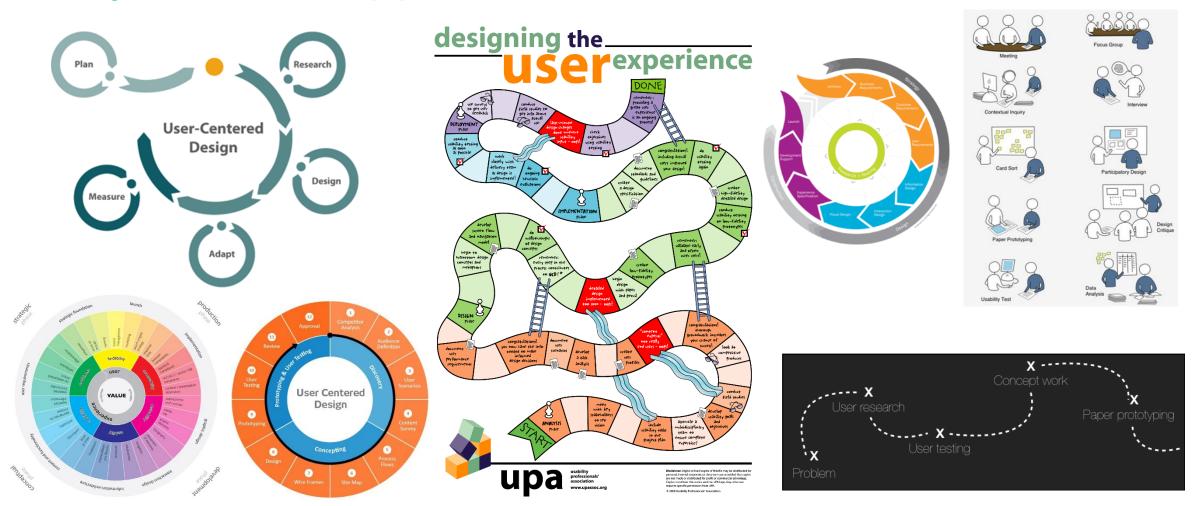
Sources: http://www.iso.org/iso/catalogue_detail.htm?csnumber=52075

Types of Questions UCD Seeks to Answer

- Who are the users of the system?
- What are the users' tasks and goals?
- What are the users' experience levels with the system, and systems like it?
- What functions do the users need from the system?
- What information might the users need, and in what form do they need it?
- How do users think the system should work?
- What are the potential edge cases/error conditions?

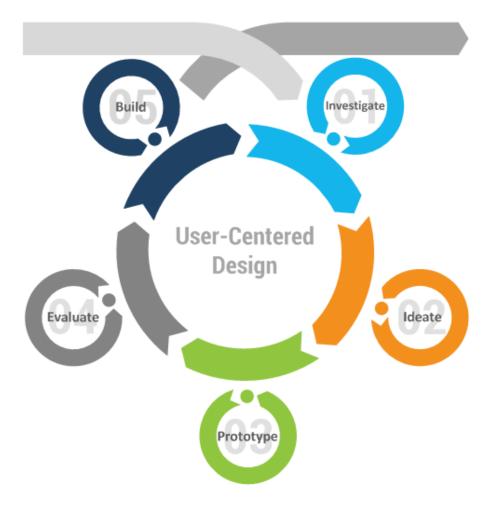
Sources: http://en.wikipedia.org/wiki/User-centered_design

Many Different Approaches...



Sources: http://www.sapdesignguild.org/resources/ucd_process.asp; http://www.kitd.com/what-we-do/services/design/; http://userexperienceproject.blogspot.com/2007/04/user-experience-wheel.html; http://pinterest.com/smazoyer/ui-ux-design; http://uxdesign.smashingmagazine.com/2012/08/29/beyond-wireframing-real-life-ux-design-process/; http://blog.uxpin.com/category/user-experience/page/2/; http://www.akendi.ca/end-to-end-experience-design-process/akendi-experience-design-process.php

...But Essentially All The Same



Step 1: Investigate

- Learn about users & stakeholder
- Discover tasks, goals & needs
- How is it done now?
- What is wanted?
- What else has been tried?
- Research analytics & user patterns

Step 2: Ideate

- Generate multiple concepts & ideas
- Understand issues & potential solutions

Step 3: Prototype

- Produce tangible designs & prototypes
- Identify challenges
- Uncover subtleties

Step 4: Evaluate

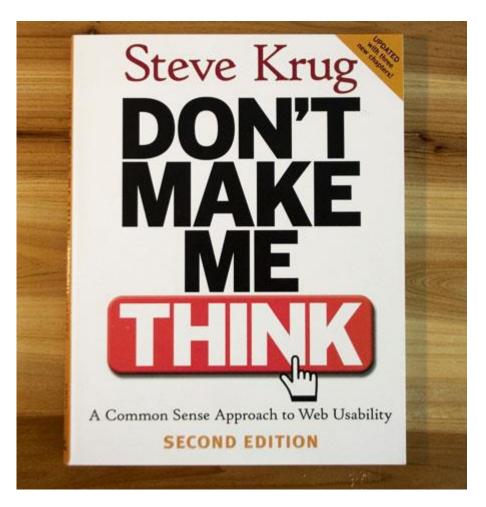
- Discover Problems
- Measure Results
- Assess progress
- Determine next steps

Step 5: Build

- Build final product
- Integrate design & technical assets
- Begin user testing for next iterations

UCD Tactics & Goals

- Analyze \rightarrow Create \rightarrow Test
- Simplify structure of tasks
- Make things visible
- Get mappings right
- Exploit the powers of constraint
- Design for errors & the unexpected
- Don't try to alter user behaviors



Sources: http://en.wikipedia.org/wiki/User-centered_design; Steve Krug – "Don't Make Me Think"; http://www.molblog.nl/bericht/joris-van-heukelom-van-ilse-media-de-do/



What are UX & UXD?

User-Centered Design & The Lean UX Revolution Requirements Visualization: A New Way

SharePoint + UX = Aweson Q&A/ Resources

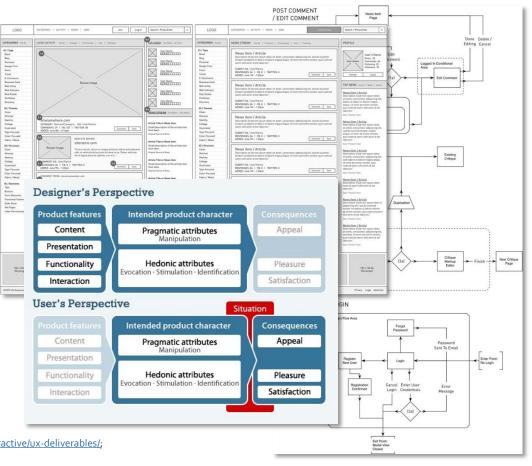


The Rise of Lean UX

- In the beginning, UX begat Information Architecture...
- Deliverables helped to define IA...
- IA evolved into Interaction Design (IxD)...
- Deliverables helped define these emerging practices...
- Value was ultimately (mis)placed on these deliverables...

= "Big design" \rightarrow Heavy, expensive & slow

Sources: Jeff Gothelf – "Lean UX: Building shared understanding to get out of the deliverables business"; <u>http://www.wjlarsen.com/35450/307259/interactive/ux-deliverables/;</u> <u>http://uxdesign.smashingmagazine.com/2011/03/15/why-user-experience-cannot-be-designed/</u>



Eric Ries & "The Lean Startup"



Sources: http://www.autm.net/Meeting_Home2.htm; http://visual.ly/lean-startup; https://evbdn.eventbrite.com/s3-s3/eventlogos/38227092/leanstartupbookcover.jpg/

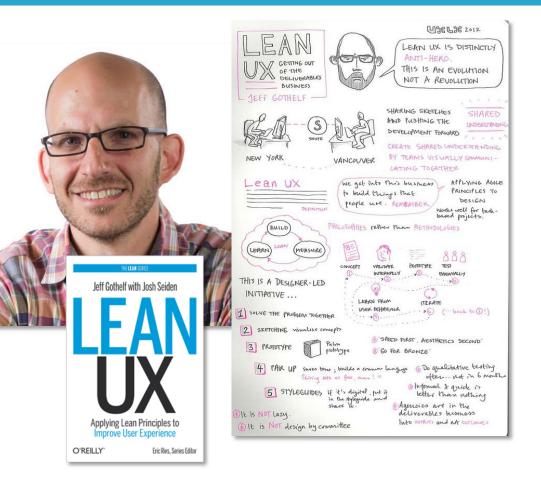
Lean UX – What is It???...



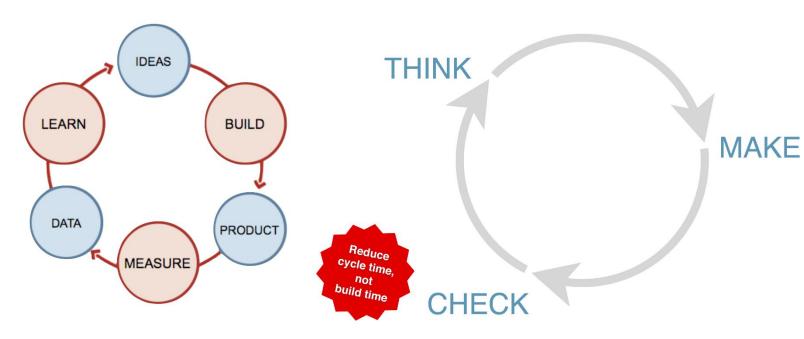
"Inspired by Lean Startup and Agile development theories, (Lean UX is) the practice of bringing the true nature of design work to light faster, with less emphasis on deliverables and greater focus on the actual experience being designed."

Jeff Gothelf, Director of UX at TheLadders.com & Lean UX Evangelist

Sources: http://www.uie.com/events/virtual_seminars/lean_ux/; http://www.flickr.com/photos/francisrowland/7242356194/sizes/c/in/photostream/ http://giffconstable.com/2013/02/book-review-lean-ux/



The Lean UX Cycle



THINK Generative Research · Ideation · Mental models · Participatory Design · Contextual Inquiry · Concept Maps · Behavior Models · Test Results · Competitive Analysis

 MAKE
 Personas · Sketches · Prototypes · Wireframes · Value Prop · Landing View · Hypotheses · Comps · Deployed Code

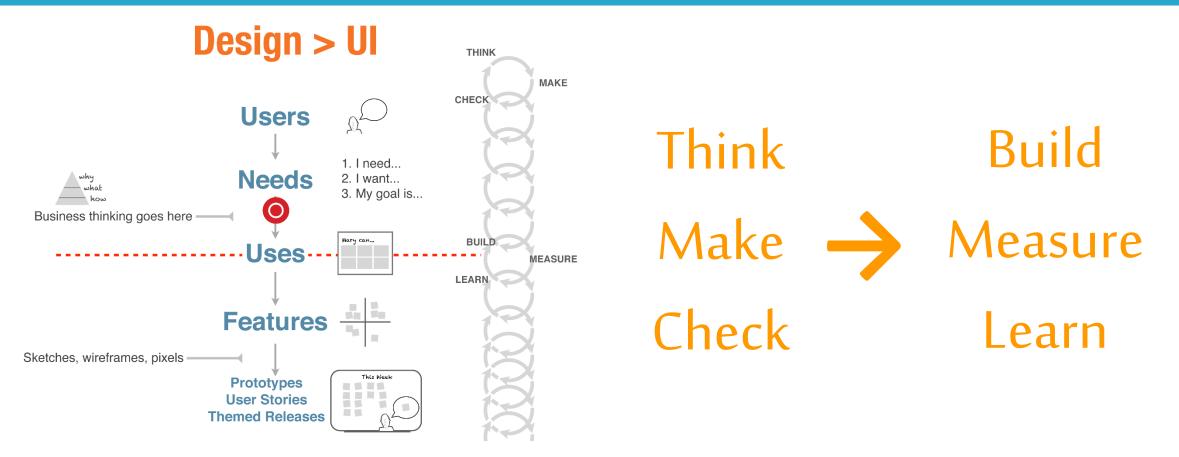
 CHECK
 Evaluative Research · A/B Testing · Site Analytics · Usability Testing · Funnel Analysis · Interruptive Surveys

Sources: LUXr - "LUXr 1-day Workshop," July 18, 2012 [San Francisco]; http://luxr.co/10 principles of lean user experience

10 Principles of Lean UX

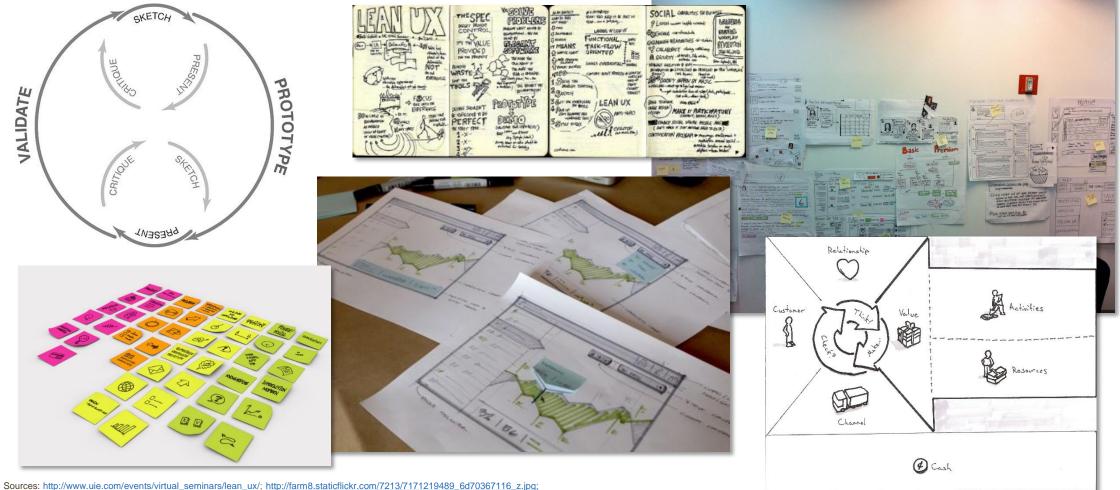
- 1. Design + Product Management + Development = 1 Team
- 2. Externalize!
- 3. Goal-driven & outcome-focused
- 4. Repeatable & routinized
- **5. FLOW:** Think \rightarrow Make \rightarrow Check
- 6. Focus on solving the right problem
- 7. Generate many options
- 8. Decide quickly what to pursue & hold decisions lightly
- 9. Recognize hypotheses & validate them
- 10. Research with users is the best source of information & inspiration

Processes & Methods



Sources: LUXr – "LUXr 1-day Workshop," July 18, 2012 [San Francisco]

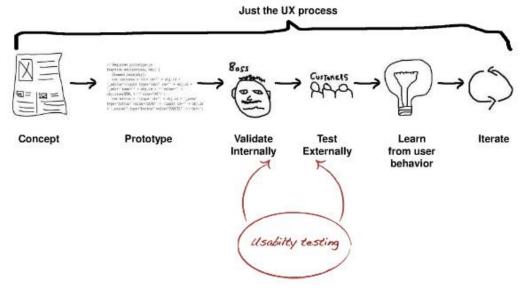
Prototyping: Sketching & Sticky Notes



Sources: http://tarm8.staticflickr.com/7213/7171219489_6d70367116_z.jpg;
http://www.uie.com/events/virtual_seminars/lean_ux/;
http://www.ux.mjolner.dk/en/About/Process.aspx;
http://uxdesign.smashingmagazine.com/2011/2/13/messy-art-ux-sketching/;
http://uxdesign.smashingmagazine.com/2011/2/13/messy-art-ux-sketching/;
http://uxdesign.smashingmagazine.com/2011/2/13/messy-art-ux-sketching/;
http://uxdesign.smashingmagazine.com/2011/2/13/messy-art-ux-sketching/;
http://uxdesign.smashingmagazine.com/2011/2/13/messy-art-ux-sketching/;

Test Everything. Early. And Frequently

- 1 test early > 50 at the end (Steve Krug)
- Crash test dummy Would you trust it?
- Test informally if needed
- Design = Hypothesis → Prove Yourself!





Sources: Steve Krug – "Don't Make Me Think"; http://uxdesign.smashingmagazine.com/2011/03/07/lean-ux-getting-out-of-the-deliverables-business/; http://motasquota.com/2012/09/17/the-most-interesting-man-in-the-world/

It's OK to Fail...Do It Fast & Adjust on the Way



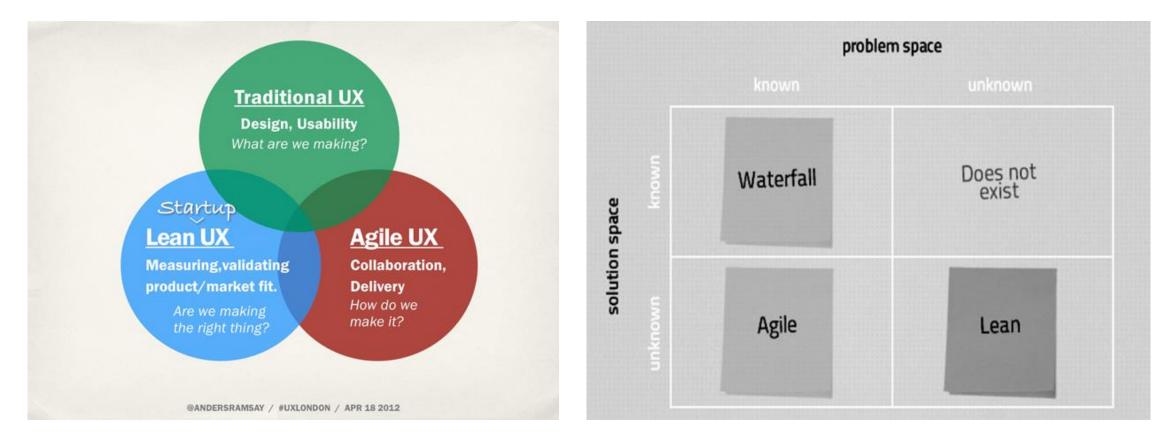
Sources: http://www.guickmeme.com/meme/363hbi/

Critical Lean UX Patterns

- Get out of the deliverables business
- "Get out of the building"
- Make sure it can (and should) be built.
- Iterate rapidly & refine constantly.
- Remove waste. Only use what's necessary.
- Specs != Control
- Get designs out in public fast.
- MVP → Your narrative (80/20 Rule)
- Sources: http://www.uie.com/events/virtual_seminars/lean_ux/

- Keep everybody moving forward
- Speed first. Aesthetics second.
- Prototype & test immediately.
- Customer validation → Your design is hypothesis.
- Once validated, demo designs to the team.
- Fill in the gaps with shared understanding.

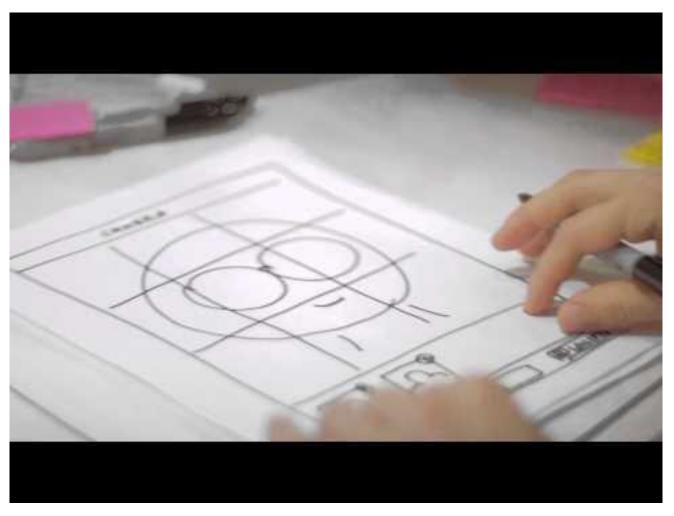
"Ideal" Lean UX Work Spaces



...Ummm...But what exactly is "ideal"???

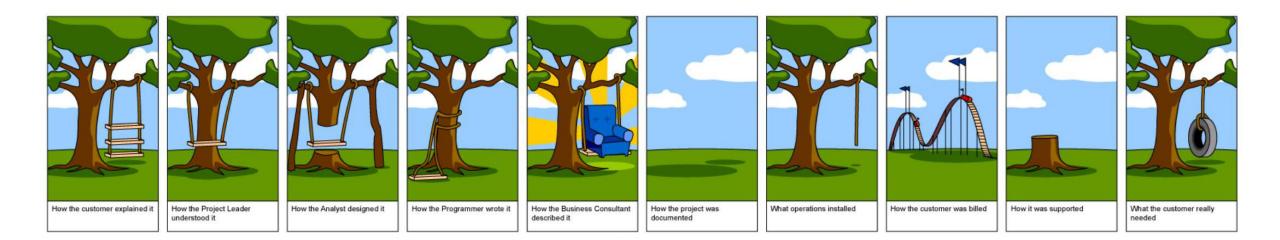
Sources: http://www.andersramsay.com/wp-content/uploads/2012/04/lean-agile-traditional.013-sm.png, http://welovelean.com/

Case Study: Nordstrom Innovation Lab



Sources: http://www.youtube.com/watch?v=sO2GKC29CsY

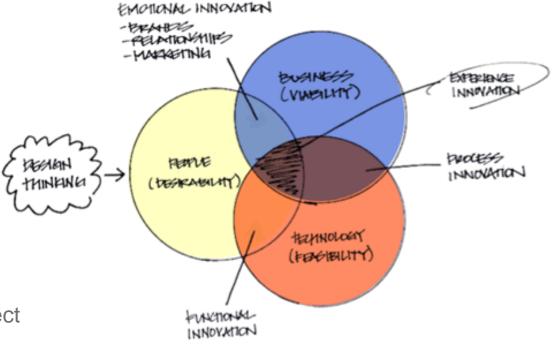
How It's Often Done Today...



Sources: http://corporateminion.wordpress.com/tag/tree-swing/

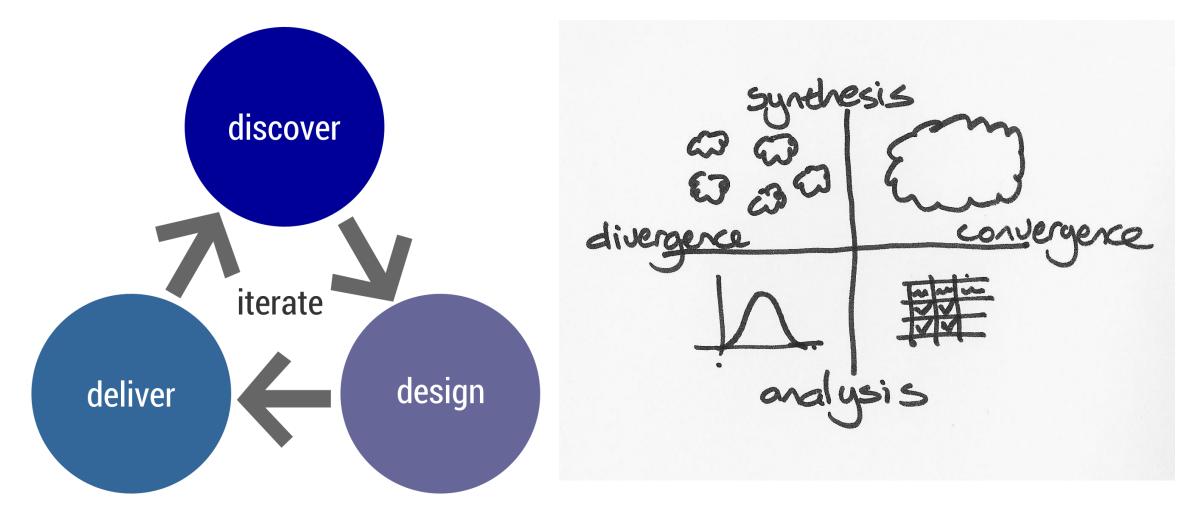
Requirements Visualization: A New Way

- Adaptation of Lean UX → Built on Agile, UCD, and Design Thinking principles
- Cross-discipline teams eliminate silos
- Customer focused → Using stories that are centered around the customer
- Visual means to reach shared understanding of solution
- Solve the problem together everyone invested
- Rapid design iteration \rightarrow Done early and often in the project
- Leads to innovation
- Speeds up product development time by providing insight early in design process
 -> Where to focus = Minimize waste.



Sources: https://sites.google.com/site/designthinkingmooc/

In a Nutshell: The RV Process



Sources: http://designthinking.ideo.com/?p=51/

Discover

- Know your users → 2 research methods
- Develop personas
- Define the problem (vs. solution) → Get to Gemba
- Keep context

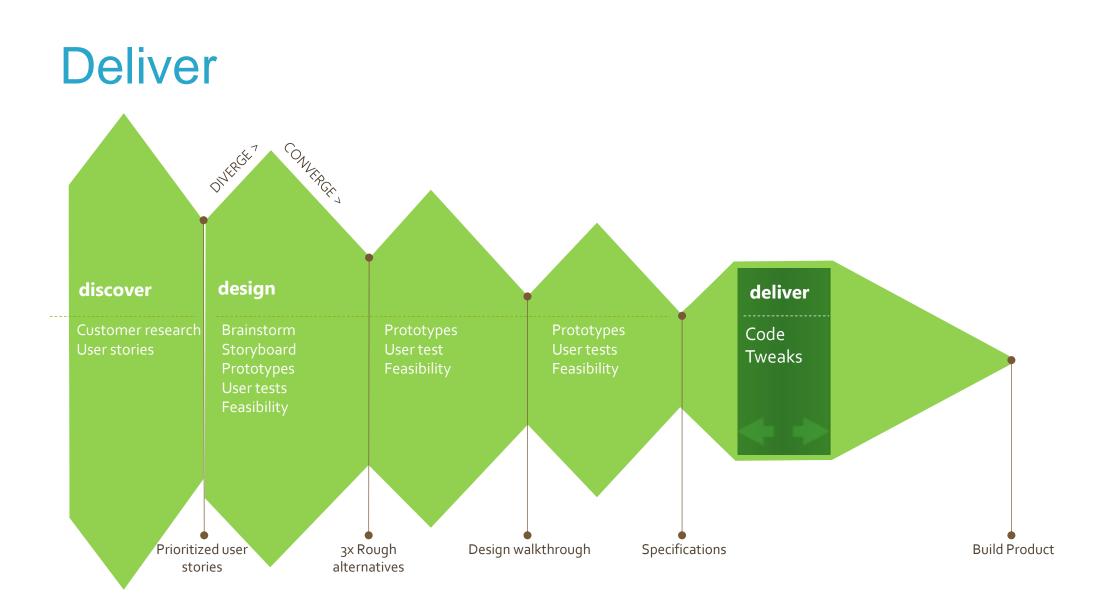


Design

- Solve the problem together
- Storyboard & sketch
- Prototypes → Paper, Axure Wireframes
- Organize & prioritize
- Define success metrics



Sources: http://www.inspireux.com/2010/05/25/exercise-ux-design-facebooks-privacy-settings-part-2/; http://uxdesign.smashingmagazine.com/2011/12/13/messy-art-ux-sketching/



Top 5 RV Mistakes

- 1. Writing specs too early
- 2. Not clearly identifying the target customer
- 3. Forgetting about your user story
- 4. Designing in your office with the door closed
- 5. Trying to do too much...Better to get 1 thing right than 5 things done poorly



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R Cake

How Exactly Does This Relate to SharePoint?

UX/UXD for SharePoint is not actually different than for any other application (...well, almost...)

SharePoint UX Can Be Hard...

"Implementing SharePoint is a lot like building a house. It's like a friend of yours says, "I know exactly what to do." And he drives you to a Home Depot, drops you off at the front door and says, "Everything you need is here." Then, he drives off."

Jared Spool, Founding Principal, User Interface Engineering - Paraphrased from his closing keynote at Web Directions North, 2008



Sources: http://joanna.briggs.ca/blog/2007/02/08/jared-spool-on-sharepoint/; http://www.happywebbies.com/store/detail/jared-spool/

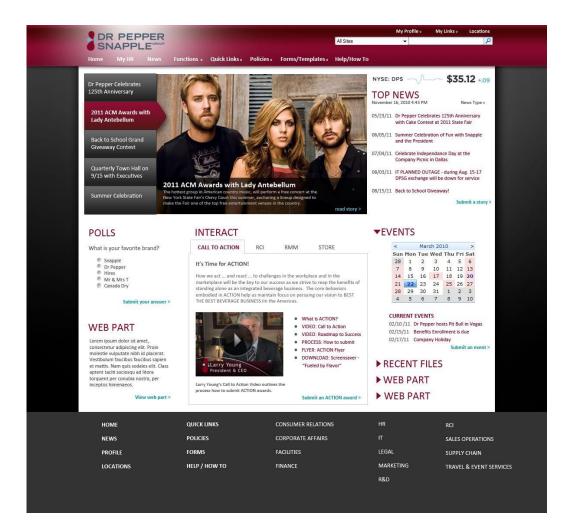
Boils Down to Several Areas of Focus

- Who uses it \rightarrow Internal vs. external
- Taxonomy
- Get user perspectives \rightarrow Processes, features used, challenges
- Identify usage context, patterns & use cases
- Aesthetics & branding
- Assess feasibility vs. ask \rightarrow Effort, overriding UI features (vs. replacing)
- Responsive layouts

Application of RV Process to SharePoint UX/UXD

- Ensures application is focused around user tasks, goals & needs (vs. only stakeholders)
- Allows shared visualization of end solutions
- Everyone invested in solution → Stakeholders + users + project team
- Rapid design iterations = Multiple opportunities for refinement & adjustment
- Identification of right problems to solve
- Early testing = Less development changes late in process → Faster time to market + cost reduction.

= AWESOME!!!



Now...GO BE AWESOME!!!

When I get sad, I stop being sad and be awesome instead.

Sources: http://trickd123.deviantart.com/art/Awesomeness-195705686/



What are UX & UXD?

User-Centered Design & The Lean UX Revolution Requirements Visualization: A New Way

SharePoint + UX = Awesom Q&A/ Resources







UX/UXD

"What Is User Experience Design? Overview, Tools And Resources" - Jacob Gube (Smashing Magazine): <u>http://uxdesign.smashingmagazine.com/2010/10/05/what-is-user-experience-design-overview-tools-and-resources/</u>

"Don't Make Me Think: A Common Sense Approach to Web Usability, 2nd Edition" [Paperback] - Steve Krug: <u>http://www.amazon.com/Dont-Make-Me-Think-</u> Usability/dp/0321344758/ref=sr_1_1?s=books&ie=UTF8&qid=1362417289&sr=1-1&keywords=dont+make+me+think

"The Design of Everyday Things" [Paperback] - Donald A. Norman: http://www.amazon.com/Design-Everyday-Things-Donald-Norman/dp/0465067107/ref=sr_1_1?s=books&ie=UTF8&qid=1362417328&sr=1-1&keywords=donald+norman+the+design+of+everyday+things

"The Elements of User Experience: User-Centered Design for the Web" [Paperback] - Jesse James Garrett: http://www.amazon.com/o/ASIN/0735712026/ref=nosim/jjgnet-20/

UCD

"When to Use Which User Experience Research Methods" - Christian Rohrer (Nielsen Norman Group - Jakob Nielsen's Alertbox: October 6, 2008):

http://www.nngroup.com/articles/which-ux-research-methods/

"The Messy Art Of UX Sketching" - Peter Buick (Smashing Magazine): http://uxdesign.smashingmagazine.com/2011/12/13/messy-art-ux-sketching/

"User-Centered Design" (Wikipedia): http://en.wikipedia.org/wiki/User-centered_design

"Notes on User Centered Design Process (UCD)" - W3C: http://www.w3.org/WAI/redesign/ucd

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Thanks!!!;)

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