Making RIAs

Research, Personas, and Trends

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Todd Wilkens

wilkens@adaptivepath.com

Paula Wellings

wellings@adaptivepath.com

AGENDA

» Why Do This

» The Field Research

» A Brief History

» Personas

» Trends

WHY

Microsoft has always prided itself on delivering what software developers need to succeed.

But developers have been changing.

The Web has introduced new ways of working, new types of "software" such as rich internet applications (RIAs), and even new team members like interaction designers and graphic designers.

Our understanding of who builds software need to expand to include a deep understanding of who is building the "new Web."

- Brad Becker

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WHY

» Augments existing quantitative market research and market segmentation (i.e. "practical programmer").

» Studies a space that is difficult to get at with surveys -- we don't even know the right questions to ask yet.

» This is more descriptive -- provides detail that can influence product and feature decisions a bit more clearly than 80% of X do Y.

» This is the beginning of an effort at Microsoft to understand people doing this. Other work will follow to validate, extend, and add detail.

RESEARCH QUESTIONS

1 What are "designers?" What do they do? What do they make?

2 How are designers different than developers? How do they work? Approaches, drives, motivations, activities, work history, work preferences, learning methods, work culture, state of artifacts.

3 What are their workflows? What are the teams?
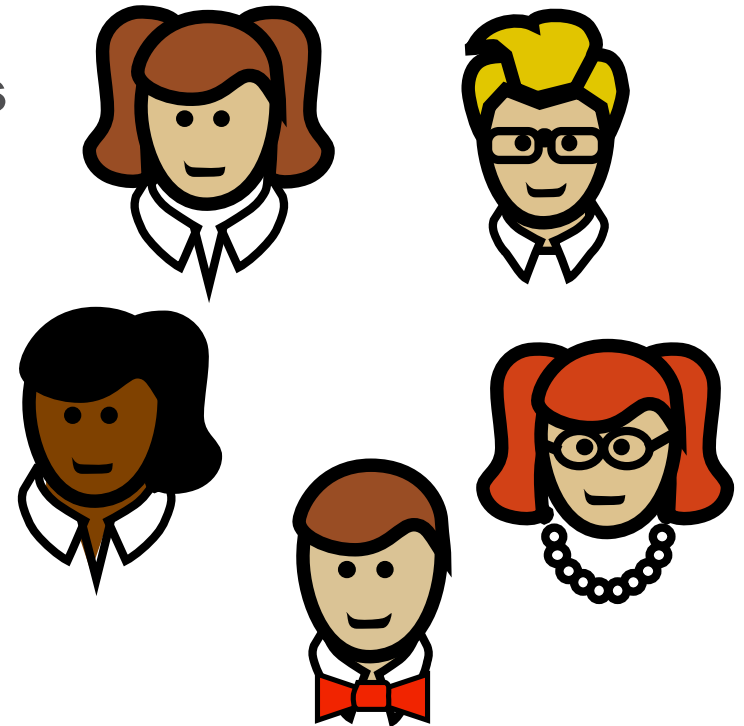How do teams work together?

THE FIELD RESEARCH

WHO

16 people (8 teams)
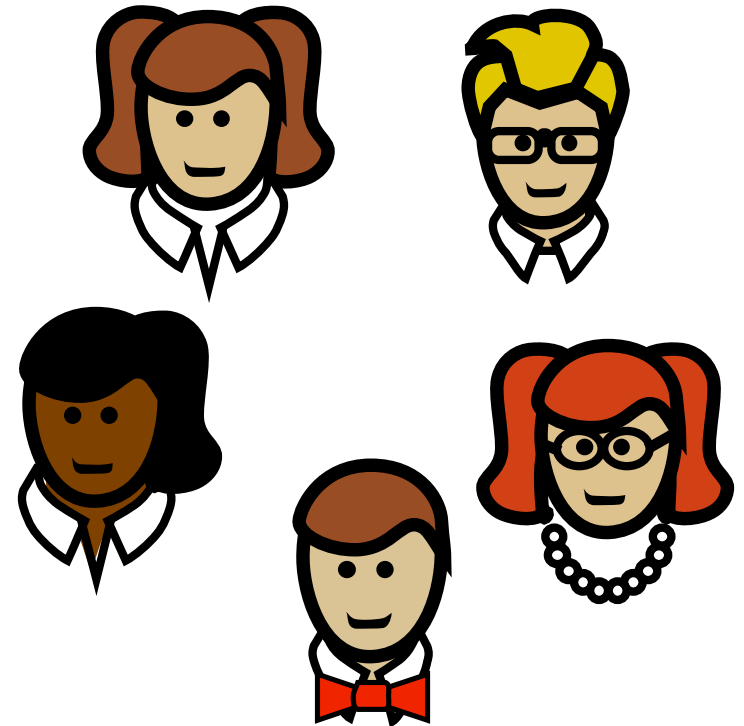
Focus on sites rather than roles

» 2 sole practitioners
» 2 boutique agencies
» 1 large interactive agency
» 1 large IT agency
» 1 Enterprise CMS
» 1 Enterprise RIA LOB

WHO

They filled many roles...

- » Back-end developer
- » Front-end developer
- » Interaction designer
- » Flash designer/developer
- » Assoc. creative director
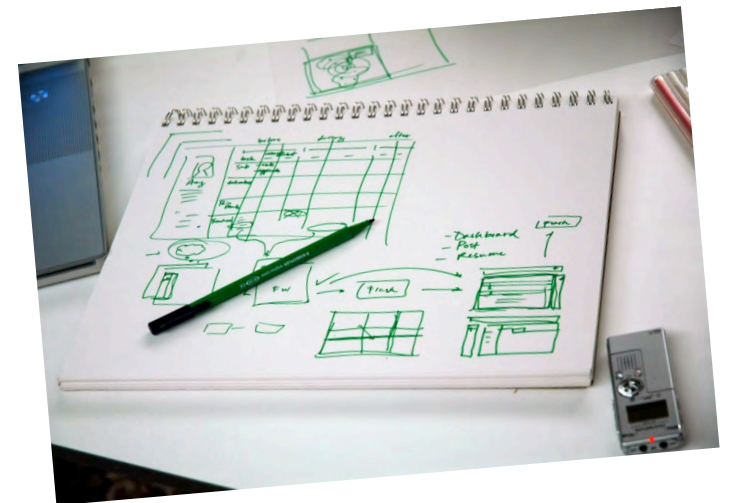- » Visual designer
- » Technical lead
- » UX lead

...and more

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WHERE

4 metro areas, 3 states
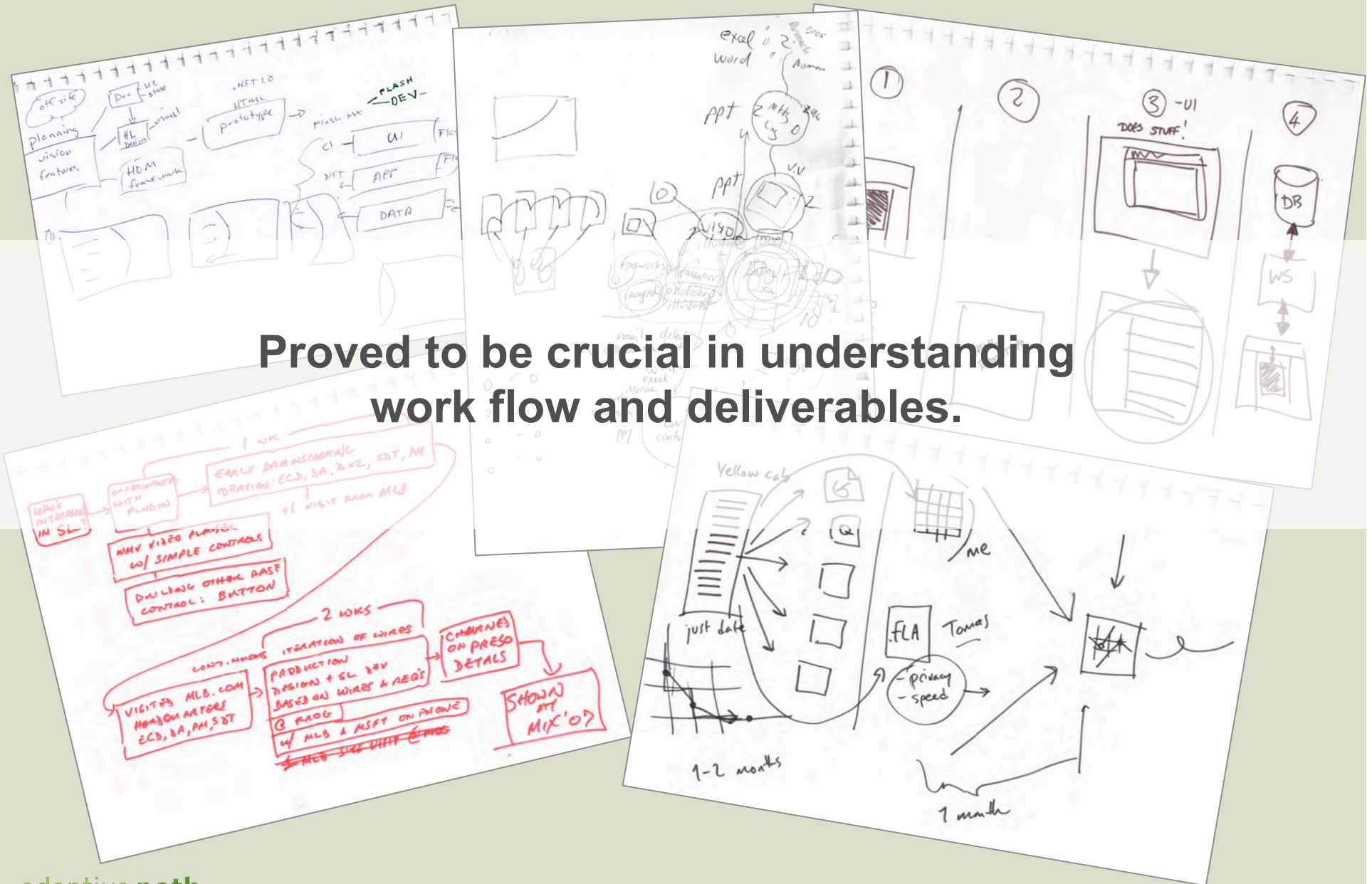
San Francisco

Phoenix

Austin

Houston

WHAT

Contextual Interviews

» 1.5 hours each

» Four activities

1. Work history

2. Sketch a recent project

3. Artifacts & deliverables

4. Tools

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SKETCHES

Proved to be crucial in understanding
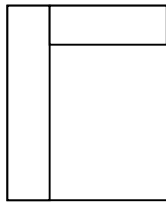work flow and deliverables.

A BRIEF HISTORY

...and a clarification

~~Designers vs. Developers~~

Designers, Front-end Developers, and Back-end Developers.

A BRIEF HISTORY

Before

| Graphic Design/UX | Front-end Dev | Back-end Dev |

CSS
HTML
Javascript

**Vision
Look & Feel
Interaction**

**Pass things
around and display**
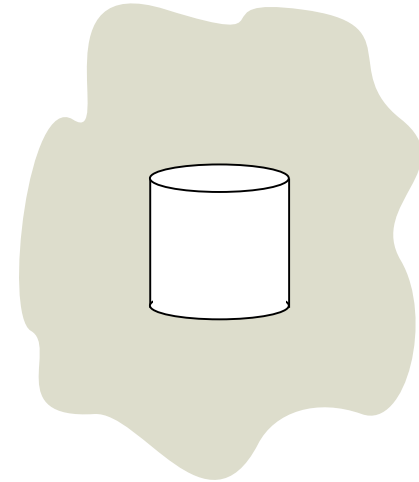
**All the
interesting
stuff**

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A BRIEF HISTORY

Now

Graphic Design/UX
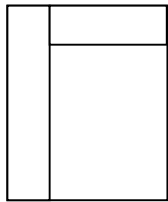
Front-end Dev/
"Design"/UX/IA

Back-end Dev

**Vision
Look and feel?**
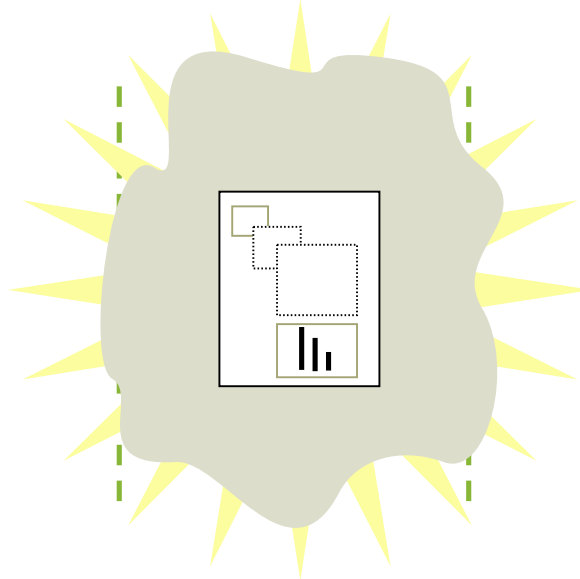
**All the
interesting
stuff**
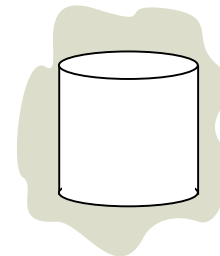
**Pass things
around**

A BRIEF HISTORY

"Designers" are starting to sound like developers.

"I'm pretty proficient in code.
I spend 80% of my day there."

"My hope is that some of the things that we're
doing -- total abstraction, frameworks -- is going
to influence the way the rest of the company
works. The make-it-pretty guys are gonna
determine how things are gonna get built."

- Designer/developer/manager, Enterprise LOB

A BRIEF HISTORY

Front end is misunderstood and underrated.

"I think the front end is still misunderstood.
They don't consider how much work it takes to get
all of that stuff to play nice in all the different platforms
that everybody wants."

- Back-end developer, Enterprise CMS

A BRIEF HISTORY

There is no rich internet without rich data -- and rich data has a lot of implications.

"This application, it's extremely data rich so they've got gigs of data about demographics and houses and things like that...also a hell of a lot of visual presentation, a lot of interactivity."

- Front-end developer, large IT agency

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A BRIEF HISTORY

Now is an interesting time. RIAs are in flux. Definitions and processes are **far from settled**. The world of RIAs are like **settling the Wild West** or **taking an expedition to the North Pole.**

http://flickr.com/photos/mexican/10015875/

http://flickr.com/photos/fear_and_loathing/364393840/

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PERSONAS

PERSONAS

Personas are fictitious people who represent the archetypal qualities of your audience. They provide targets for design and are generally very effective for communicating design and research activities throughout an organization.

Personas are:

» Drawn from field research

» Named as individuals

» Developed for specific contexts

» Typical and believable

Personas are not:

» Based on demographics or market segments

» Drawn from gut feelings about your audience

» User profiles or stereotypes e.g. "Soccer mom"

» A magic bullet

DIMENSIONS

As part of transcript analysis we pull out hundreds of quotes that seem to be important in describing and explaining the participants' behaviors.

These are anything from activities (e.g. making wireframes) to motivations (e.g. wants to make cool stuff). We go through these methodically looking for clusters.

The goal is to find the characteristics that best explain the differences and similarities between the participants.

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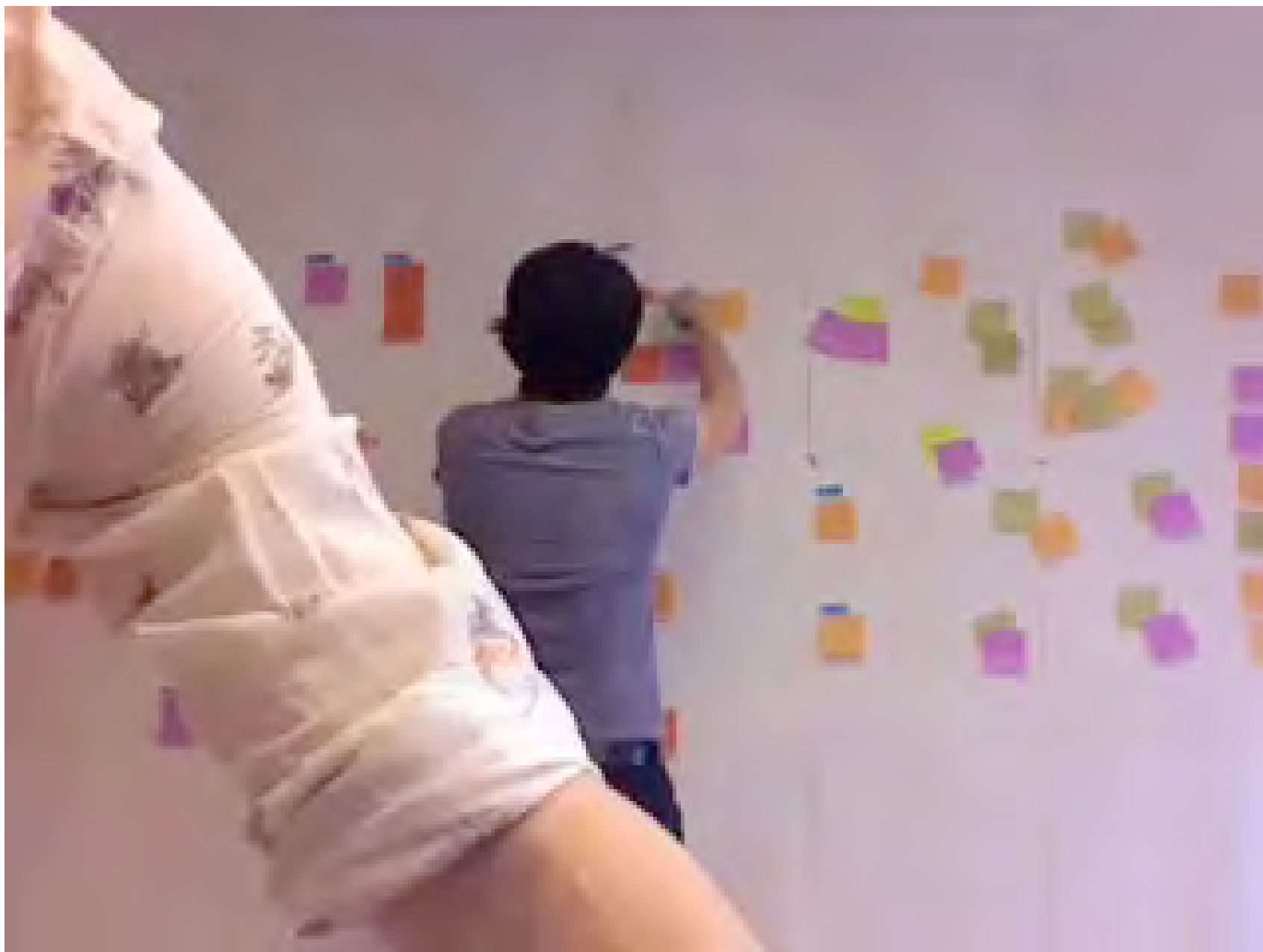
DIMENSIONS

DIMENSIONS

DIMENSIONS

» PROFESSIONAL FOCUS

» PROJECT VISION: CREATE OR BUILD

» APPROACH/PROCESS

» IDEATION: CODE OR CANVAS

» WHOLE TEAM TOGETHER

» ATTITUDE TO NEW TECHNOLOGY

» MOVEMENTS + TRANSITIONS: DECIDE OR BUILD

» APPROACH TO DATA IN THE RIA

» UNDERSTANDING OF DEVELOPMENT EFFORT

» TOOL/PLATFORM CHOICES

» PHOTOSHOP COMPS + WIREFRAMES

» PROTOTYPES, DEMOS, CLICK-THROUGHS

RIA WORKFLOW

Initial
BIG IDEA
[back of a napkin]

iterate

demo

prototype

Permutations & combinations

present

comp

wireframe

scrum

Product definition (emergent or planned)

whiteboard

storyboard   *code*

sketch

Product making

spec

Live RIA

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PERSONAS

SEAN

"The hardest part of the project is coming up with the idea, a vision for creating something useful."

Information Architect

MOTIVATIONS

Business value of design. While Sean is responsible for the vision and design implementation of projects, his true passion is in promoting design's business value in companies.

Thought leader. Sean sees design becoming more and more granular with regards to role and specialization. He aspires to be an expert and an evangelist.

Usefulness. Sean sees design as a powerful force in the world when it supports users in accomplishing their tasks and goals.

User Experience Designer
Houston, TX

Background
In college, Sean dabbled in computer science and art. He never felt quite talented enough at either to be an artist or a programmer. However, when the WWW came in to popular existence, he realized he had found his perfect niche.

Starting out at an advertising agency, Sean designed and built cd-roms and web sites. As the internet evolved, he saw the opportunity to become more specialized with a focus on information architecture and user research. In the late 1990s, Sean joined a large enterprise software company and began connecting his expert knowledge in design with the business objectives of the organization. He aspires to teach every fortune 500 the business value of user research and experience design.

CRUCIAL DIMENSIONS

Sean **solves business and user problems.**

He **creates the project vision.**

He has a **low understanding of the RIA development effort.**

Sean worries that the **whole team together isn't the best soluti**

His approach is **processes driven and slow to change.**

He wants to know the **business value of new technologies.**

SEAN

Information Architect

BEHAVIORS

Conducting | using user research. Sean does generative research to support his proposals to the Marketing and Development teams. He uses this research to pitch products that will have greater acceptance in user communities and the market place.

Exploring possible design solutions on paper. Sean can get his ideas out fastest with a pen and pencil or on a whiteboard. He uses sketching to create variations on an idea. He will use software tools once he is creating documentation and making things look pretty.

Creating design documentation. Sean creates documentation as a meditation on the many details of a project. His documentation is also created to support the implementation of his product vision. He is exploring different notation systems to account for movement and transition in his wireframes.

Leading design effort. Sean leads a team of design specialists including visual designers, information architects, user researchers, design media technologists, and technical architects. He orchestrates their participation to fully realize his product vision.

Evangelizing. Sean speaks about the business value of user experience design within his organization, in sales meetings with clients, and at annual conferences. He is an active participant in new business development activities.

SEAN

Information Architect

UP AT NIGHT

Documenting RIAs. Sean does not want to learning new software applications or programming languages to support the documentation needs of RIAs. However, he sees unspecified movements and transitions are being built by developers making their best guesses. He sees them often guess wrong.

Scrum/Agile. Sean's company is pushing designers and developers uses Agile/Scrum processes together. Sean is not convinced. He asks " Is scrum a design process or is it a manufacturing process?" He worries about the quality of design work this new process will yield.

ROI of RIA. Sean is critical using RIA techniques as eye candy. He does see the opportunity for transitions to support the user's perception of performance and aid in product usability. Still, he remains skeptical in his embrace of this new technology paradigm.

"Is scrum a design process or is it a manufacturing process?"

CARSON

Graphic Designer

MOTIVATIONS

Visual communication. Carson is driven to bring clarity to complex ideas through the design of clear and useful graphics and illustrations.

Emotional impact. Carson seeks to touch the feelings of the people that see and use his designs. He is generates graphics that communicate the emotional aspects of brands and he seeks to delight, charm and engage the end user.

Craft and history. To Carson, graphic design is a practice with a two thousand year long history. While he enjoys experimenting with new ideas and approaches, he is strongly attached to foundational practices in typography, color, and form making. He sees his work as continuing the history of graphic design.

Visual designer
New York, NY

Background
Carson graduated from art and design school in Communication Design, with an emphasis on typography and brand design. His strong print portfolio attracted an interactive design agency to hire him and he immediately began working on web sites without any web experience.

Two years later, he is an integral part of determining the look and feel on many leading companies websites, but he still feels constrained by the web design process and the technology knowledge necessary to create designs on his own. In his spare time, Carson has started a small publishing company with some friends, creating limited run chap books and hand printed cards.

CRUCIAL DIMENSIONS

Carson **wishes he could decide moment and transitions.**

Carson sees new technology as an tool to create **more dimensional and engaging visual designs.**

Carson creates **additional visuals** to support the design once real data is integrated in to a site.

Carson works solely in Photoshop and **sees no other tool that can adequately support his work.**

CARSON

Graphic Designer

BEHAVIORS

Creating Photoshop comps. Carson spends most of his time creating Photoshop comps from wireframes and design sketches. He finds that the wireframes are often more limiting than inspirational to his work. He breaks the grid of the wireframes to create visual engagement.

Interpreting wireframes. Carson often must guess all the button states and animations he needs to create from wireframes that don't provide a comprehensive account of onscreen interaction.

Working with brand guidelines. Carson receives brand guidelines and client style guides. He works to ensure that his visuals are "on message".

Creating last minute visuals. Working with CSS-centric RIAs, Carson creates fewer production-ready graphics than in the past, but he is often called upon later in the production process to create look and feel for interactions that were not accounted for in the original designs.

Interpreting and coordinating changes to look and feel. Carson works with his team and client, interpreting their intentions in graphical form. He thinks that while everyone has an opinion on how things should look, what they ask for often isn't sensible or well articulated. He translates their feedback into designs that capture their intentions if not their exact advice.

CARSON

Graphic Designer

UP AT NIGHT

Movement and transitions. Carson believes he should be making movement and transition decisions as this contributes significantly to the emotional and engagement aspects of the design. He is frustrated because he feels he has neither the tools nor language to adequately convey his ideas.

Life in the factory. Carson finds that his role in the design process is often marginalized and undervalued. People bring him work to "pretty up" after all major design decisions have been made. He believes that emotion and visual form are crucial to the successful designs and he finds his downstream role in the production process to be a waste of his talents.

"In my projects Information Architects give me wireframes and they expect them to be skinned. All IAs think they start the design, but I think visual designers start it "

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Microsoft RIA Research

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NATALIE

MOTIVATIONS

Invent the future. Natalie sees design as a process of inventing and prioritizing possible futures.

Collaborate. Natalie believes everyone needs to pitch in, if they are going to solve the big harry problems.

Play. Natalie knows the best ideas emerge when people are empowered to explore, imagine, iterate, fail, and succeed.

Inventor

Design lead
Seattle, WA

Background
With a scholarship for electrical engineering, Natalie headed to college, only to discover that design was a better match for her interests and passions.

In the last year of college, she started a small multimedia studio with a couple friends. It was a time when if you could spell "HTML" you could write your own paycheck. She realized that she was doing more and more management and never enough design. In 2004, she joined a leading agency as a design lead.

She believes that she is designing a little piece of the future every day.

CRUCIAL DIMENSIONS

She directs the **creative vision**.

She explores **initial concepts on paper and whiteboard**.

She **prototypes to ideate, demonstrate, and communicate** with clients and team.

The whole team **working together is efficient, effective and fu**

She picks **tools that enable easy creation and communicatio**

NATALIE

Inventor

BEHAVIORS

Conducting | using user research. Natalie is curious about how people interact with her designs. She conducts informal research with co-workers, friends, and family. She does formal user interviews and persona creation when budget is available.

Experimenting possible design solutions in many mediums. Natalie pushes the boundaries of what is possible. She challenges client assumptions, iterates through design possibilities and encourages her team to playfully fail forward.

Creating disposable prototypes. Natalie hacks together prototypes to validate movement and transition ideas. She knows simple Flash get something that works.

Creating design documentation. Natalie creates many different products to move the design process forward and to foster collaboration and communication. These products may include prototypes, wireframes, comps, specs, flows, charts, diagrams and storyboards.

Facilitating solution envisioning | creation process. Natalie owns the project vision. She works with her team and clients to generate and create the best new ideas. She leads the team in brainstorming, collaboration, iteration. She ensures continuity of design through development.

NATALIE

Inventor

UP AT NIGHT

Heresy. For Natalie and many other designers, design is not only a profession but also an education, a culture, a community and a way of life. She is involved in many professional organizations and communities, especially IxDA. Lately, she finds herself breaking all sorts of "rules" and "guidelines" because they don't seem to be useful on RIA projects. She shares her experiences at conferences, with mixed results. She knows she's doing good work but she can't help but worry that she's committing "design heresy" with her approach.

Designing applications. Natalie is excited and a bit terrified to be designing complex applications. She has some concerns that the documentation she creates is insufficient to communicate the functionality of the design, Yet, she also knows that 1000 pages specs don't work either.

Scope. Natalie works on many data rich, fluid layout, and social network projects. More than ever before, she has a difficult time understanding the development impact of her designs.

"We all want to make a social network but we don't know if that's hard."

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GREG

I do everything server forward. Everything from Photoshop mockups to HTML, Flash, Flex, Javascript, CSS...anything forward of the server, I can do it.

MOTIVATIONS

Cool and beautiful. Greg initially learned how to code because it made his designs cooler. He saw beautiful web sites that were made with ActionScript code and decided to learn Flash.

Quality experiences. Greg wants his work to look and interact really well. In order to maintain the quality of his vision he is driven to learn all aspects of UI design and development.

Making it real. Greg likes to make progress right away. He finds it easier to build the real project than to waste time talking about how it might be built.

Designer-developer

Web Designer
Chicago, IL

Background
Disillusioned with the creative opportunities in architecture, Greg began working as a web designer in the late 90s. His high level design skills merged with an interest in Flash's ability to deliver the crazy design ideas he dreamed up.

As Flash evolved in complexity, Greg found that he liked the logic of object-oriented code and its ability to reduce the time-consuming drudge work associated with design changes and design iterations in canvas based tools.

Although Greg considers himself a designer that can code, he is usually hired as a bridge between front-end design and development.

CRUCIAL DIMENSIONS

He explores his **ideas in code.**

He starts with the **data as an input to ideation**.

He worries **web projects will never be done.**

He **dislikes wireframes and photoshop comps.**

GREG

Designer-developer

BEHAVIORS

Visual sketching with code. Greg makes quick little code sketches to explore his visual ideas. He can imagine what the code is drawing on the screen and finds WYSIWYG canvas views to be annoying and unnecessary.

Iterating solution as he makes it. Greg starts with one idea of a design, but in the process of making his design he usually stumbles across something new that evolves his design in to something better. The flexible manner in which he works allows him to create many ideas that spark conversations with his colleagues.

Exploring the data. Greg will connect directly to the database and play around with the data and different visual designs, thinking about new ways of putting everything together.

Dealing with Photoshop comps. Greg thinks it's really important early on to think about how a design operates in code. When he receives comps and wireframes from other designers, he usually must make significant design changes to support the richness of the data, movement, and transitions.

Thinking about movement. Greg thinks about motion from the inception of his designs. Sometimes he knows exactly how elements are going to move and other times it's an experiment.

Programming. Greg codes 80% of his day and spends a great deal of time talking about frameworks and design patterns with his team. Two years ago he would not have believed this could be his daily routine.

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GREG

Designer-developer

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Best practices. Because Greg's skill set is very wide and diverse, he lacks knowledge of best practices in areas he is least familiar with. He feels competent learning how to use tools and languages, but is unsure if he is as effective as he can be.

Responsible for the real thing. Greg has built entire sites for a number of fortune 50 companies. He is amazed and somewhat surprised that people have let him make these sites by himself.

Sustainability and maintenance. Greg is concerned with making sure everything he does is sustainable. He worries about relying on information he doesn't control and data he can't manipulate.

Wasted effort. Greg struggles with the need for comps for business development and client communication. He sees these comps as a waste of time.

I don't want to end up maintaining this thing
for the next 3 years.

adaptive **path**

JAMES

Creative coder

MOTIVATIONS

Making dreams come true. James thrives on giving designers free reign to dream up new features and functionality. He loves figuring out how to make the seemly impossible, possible.

Bleeding edge. James likes to work with emerging technologies and push them as hard as he can.

High performance team. When James is working with people that are really committed to putting forth their best effort, he is in his element and having fun.

User Interface Technologist
Redwood Shores, CA

Background
James began programming as a side job while attending medical school. When he realized he much preferred devouring the latest programming book to attending class, he began to take his side vocation seriously.

In the past 5 years he has become well versed in numerous web technologies including HTML, CSS, Python, Flash, Delphi, JavaScript, Java, ASP, and .NET.

He sees the advances in Web 2.0 as an opportunity for developers to take the front-end more seriously. He also has a great appreciation for the efficiency and excitement that design/development scrumming has brought to his project teams.

CRUCIAL DIMENSIONS

He makes **visions a reality**.

He **loves cutting edge** technologies.

The whole team **working together is efficient, useful and fun**.

He changes the design to **fit with the actual data**.

Front end development **includes attending to maintenance, platform compatibility and security.**

JAMES

Creative coder

BEHAVIORS

Exploring and learning new development approaches early on. When James starts a project, he creates play folders where he creates a library of small experiments.

Making simple functional abstractions of final product. James creates simple HTML prototypes to validate his approach and catch things like browser issues up front. These are not throw-away prototypes as he then integrates them in to the existing platform.

Inferring functionality from comps. James is constantly making assumptions about interactions and data in designs. He receives Photoshop comps that show how a screen should look, but not how it's supposed to function. Often he looks to other web sites as models for the designs he is developing.

Scoping development effort. James analyzes comps and prototypes to let the team know how difficult a design is to build and how much maintenance it is going to entail.

Scrumming. James works in the same room as his design and development team. He finds they are all able to work really fast and get problems solved almost instantly. The agile process gives his team the flexibility to manage reality.

Programming. With the release of .NET, ASP Plus, and Actionscript 3, James is starting to see front-end development as real programming. When working in Visual Studio he was surprised and excited with how much Microsoft knows its stuff in terms of helping a programmer get around. He believes that the last couple .Net projects he worked on have made him a better Flash developer because he learned new constructs and best practices more prevalent in C# than in Actionscript.

JAMES

Creative coder

UP AT NIGHT

Changing technology. James finds it difficult to keep up with the pace of change. With so many different approaches to creating RIAs, including Flex, Flash, Silverlight, Dojo and other Javascript-type frameworks, he has a difficult time figuring out what he wants to spend his time learning.

Infinite platforms. James worries that designers and clients don't really understand how much work it takes to get RIAs to function consistently on all the different platforms that everybody wants.

DIMENSION MAP

	Sean **Information Architect**	**Natalie** **Inventor**	**Carson** **Graphic Designer**	**Greg** **Designer-developer**	**James** **Creative Coder**
Professional Focus	Solving business and user problems	Leading creative effort	Communicate visually and engage emotionally	Making cool product	Building the designs of the future
Project Vision	Creates it	Creates it	Owns look and feel, builds look and feel	Sometimes creates, always builds	Makes visions a reality
Approach - Process	Process driven, slow to change	Somewhat flexible	Process driven	Very flexible	Flexible
Ideation: Code or Canvas	Canvas: sketchbook, whiteboard	Canvas: software, sketchbook, whiteboard	Canvas	Code	Code
Whole Team Together	Doesn't inherently deliver the best product	Efficient and fun	Part of team by necessity	Whatever works	Efficient, inspiring. useful.
New Technology	Wants to know business value	Enables useful cool stuff	Enables new visual forms	Enables cool stuff	Loves it!

DIMENSION MAP

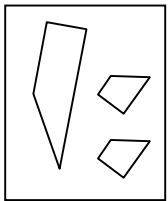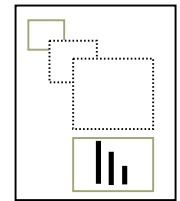|	**Sean** Information Architect	**Natalie** Inventor	**Carson** Graphic Designer	**Greg** Designer-developer	**James** Creative Code
Movement and Transitions	Developers decide (by default)	Decides	Would like to decide.	Decides and builds	Builds, decides sometimes
Data in the RIA	Only considers in abstraction (lorup ipsum)	Will mock up data	Comes up in design iterations. Team needs more graphic designs.	Uses real data in initial ideation	Changes design to f with the actual data
Understanding of Development Effort	Low	Medium-low	Low	Medium, fears the web is never done	High, includes maintenance, compatibility, securit
Tool | Platform Choices	Use without a struggle	Enable easy creation and communication of ideas	Photoshop, no real alternative.	Make the coolest things	Best ones for the jol
Photoshop Comps + Wireframes	Wireframes only, to think with	Uses to think and communicate with	Creates comps from wireframes.	Receives and makes, does not like to get them	Receives, measures a cuts up, finds them incomplete
Prototypes + Clickthroughs	Communicate to clients	Communicate to clients, demonstrate and ideate with team	No.	Ideation and constraint exploration	Ideation and constra exploration

RIA WORKFLOW

Initial
BIG IDEA
[back of a napkin]

iterate

demo

prototype

Permutations & combinations

present

wireframe

comp

scrum

whiteboard

**Product definition
(emergent or planned)**

storyboard   *code*

sketch

Product making

spec

Live RIA

adaptive **path**

Microsoft RIA Research

44
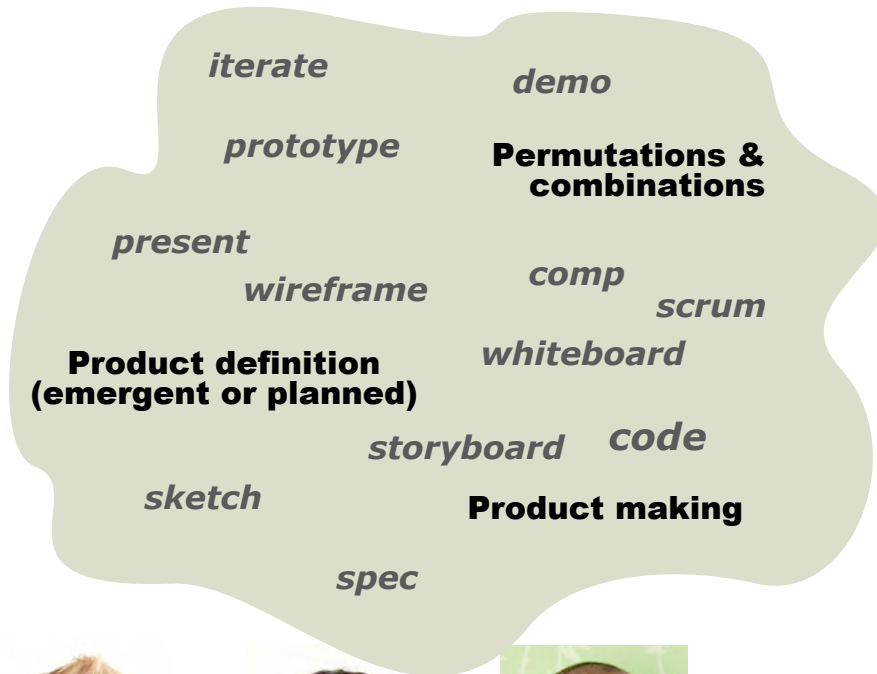
TRENDS

Conversation with Materials
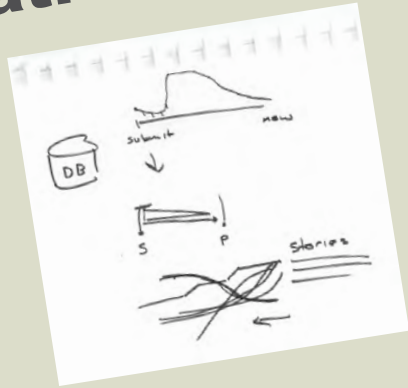
Project Vision

The Big Idea

Deliverables and Artifacts

RIA Workflow

Design

Development
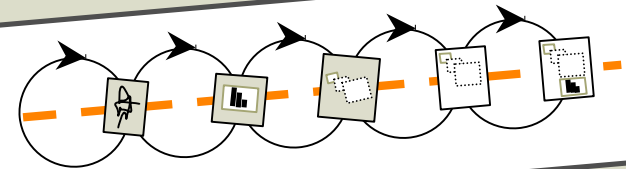
TRENDS

Conversation with materials
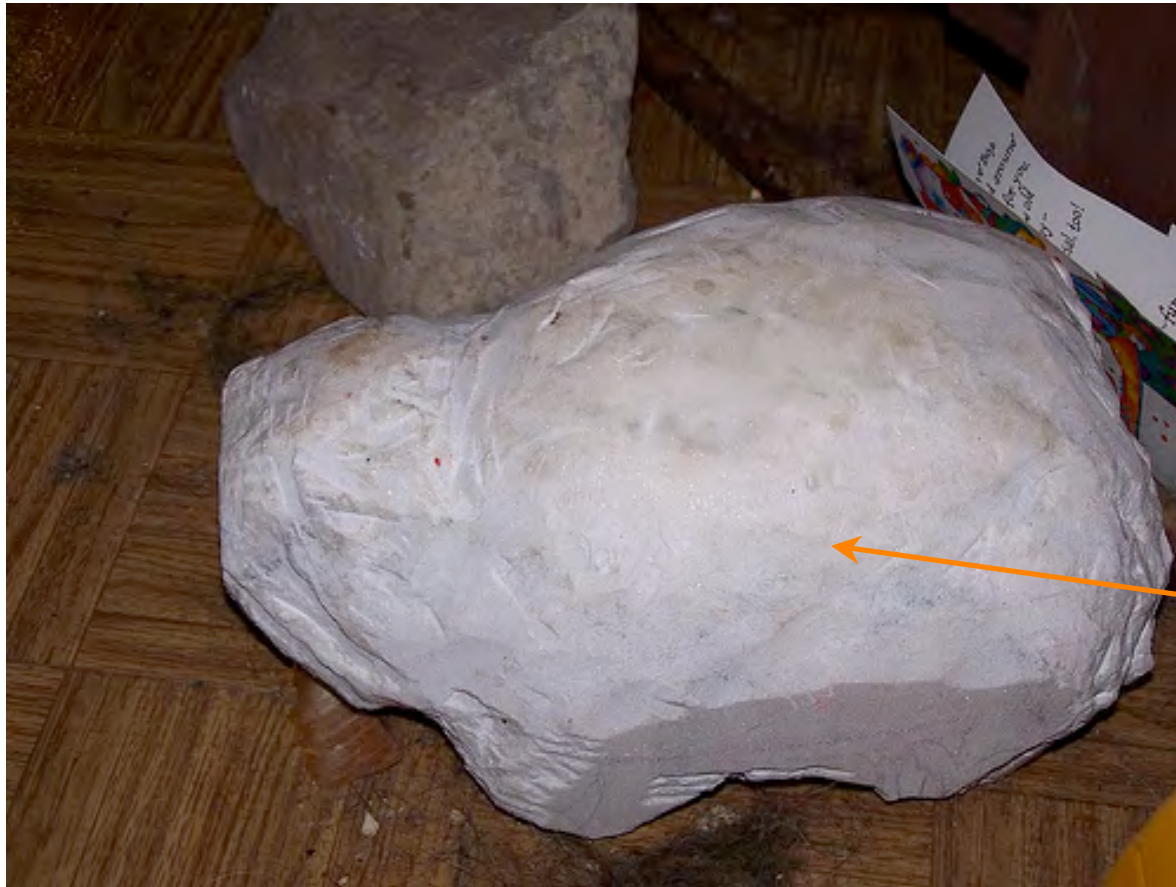
What is this going to be?

TRENDS

Conversation with materials

TRENDS

Conversation with materials

"I can't think of one time where the picture I had in my mind is what we ended up with on screen -- a lot of times it's because you stumble across or evolve into something that's better.

- Designer/developer, Enterprise LOB

TRENDS

Conversation with materials

Great for projects that are making use of lots of new technologies or putting them together in new ways.
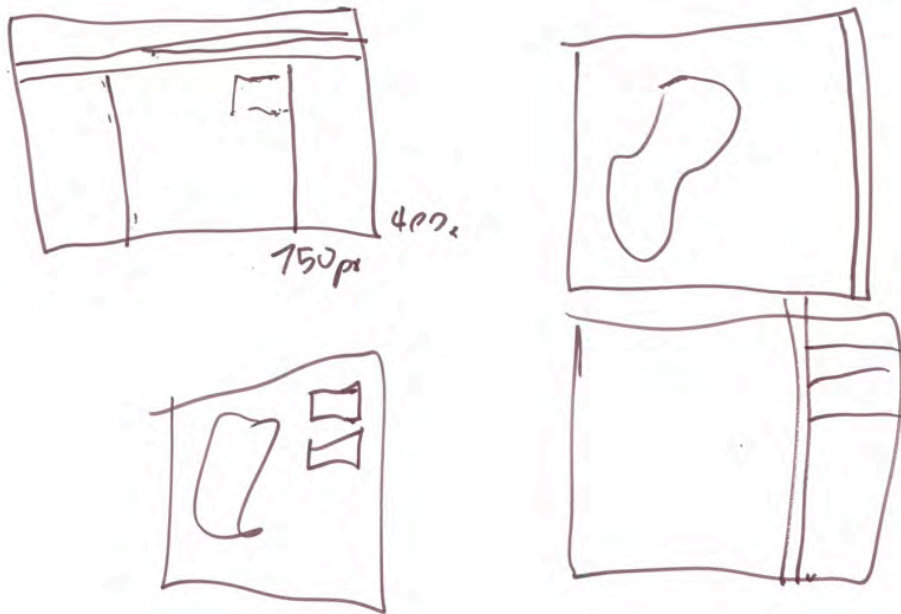
"Before we started building anything, I had been doing work from an exploratory standpoint, making sure... how do you get maps on there, what do I do with zooming and panning..."

- Designer/developer, independent

TRENDS

Conversation with materials

Also appropriate for situations where the user experience is rich with media and has complex interactions.

"The transitions aren't just eye candy. They actually aid in the perception of performance and aid in usability in terms of making connections between things."

- UX manager, Enterprise CMS org

TRENDS

Conversation with materials

adaptive **path**
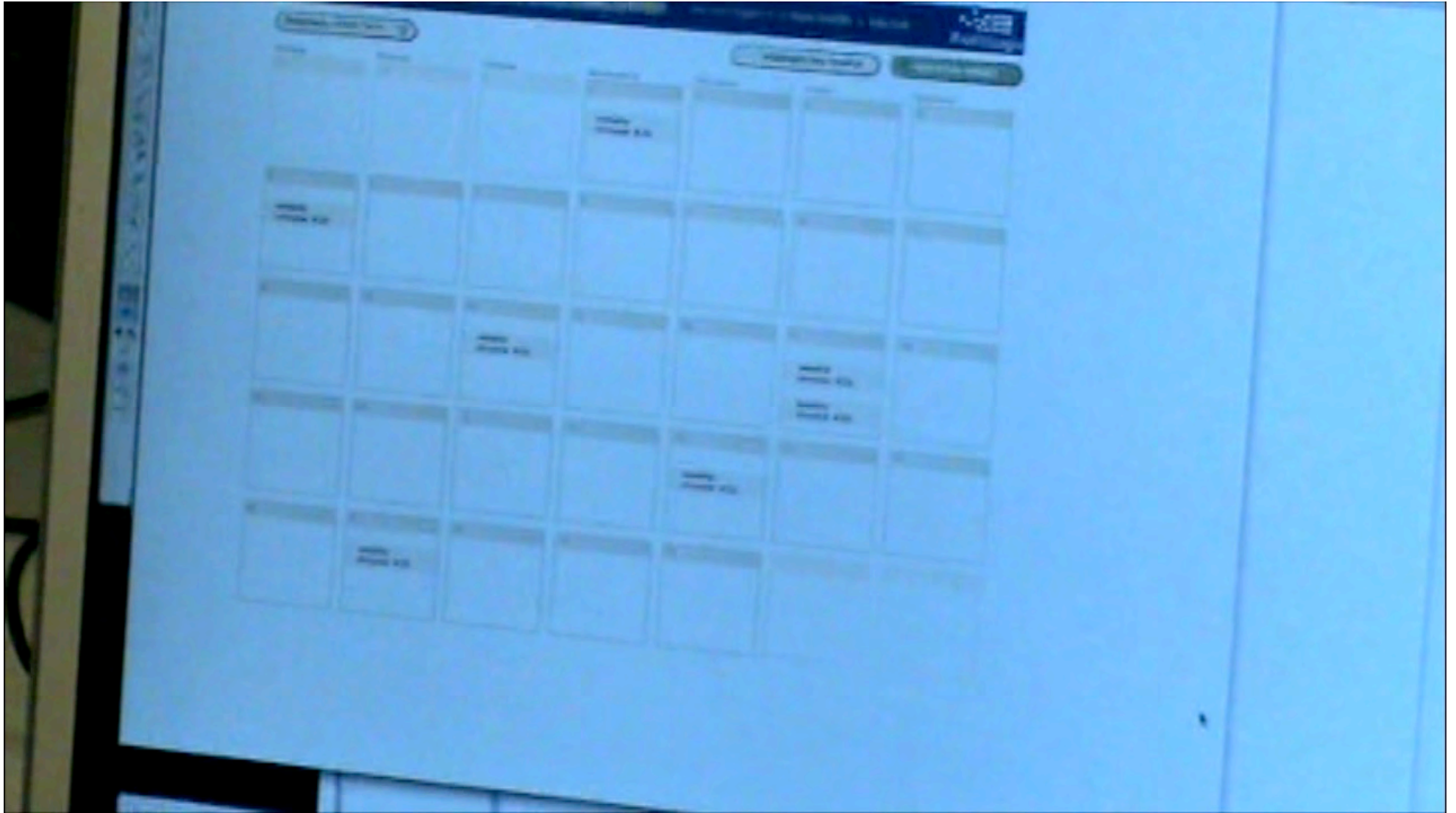
TRENDS

Who holds the vision?

In software development lots of different people hold the vision for the project. Sometimes a product manager, a tech lead, or a program manager.

In the world of RIAs, the person to lead the group and hold that vision is most often a "designy" person.

TRENDS

Who holds the vision?

RIAs are rich -- that means they involve lots of motion, animation, interaction, and sound. That richness seems to favor people with an art or design background. They are the ones with the dream and an understanding of how to best make use of these mediums.

"If you rollover something, does it blip or explode?
I see that as like emotion and expression
so I would put it in the design side."
- Visual designer, interactive agency

TRENDS

Who holds the vision?

TRENDS

Who holds the vision?

The engineering and tech people are the folks who are able to make these dreams become reality.

"We really weren't trying to slow down our designers whatsoever. We weren't trying to shut 'em down. We were, like, design this thing, include all the functionality you want."
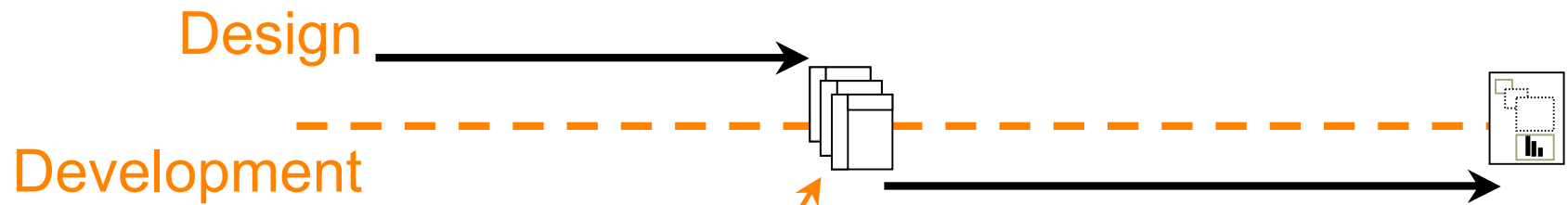
- Design technologist, interactive agency

TRENDS
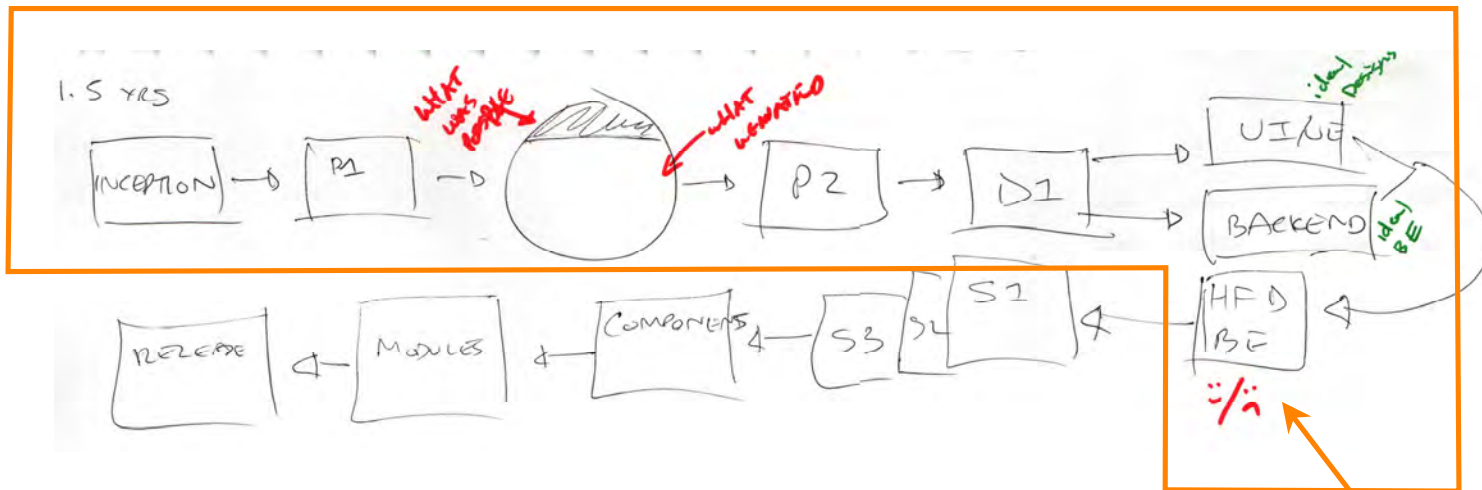
But what does this process look like?

TRENDS

Workflow

Design ⟶

Development

The hand-off point between design and dev was at the wireframes and spec.

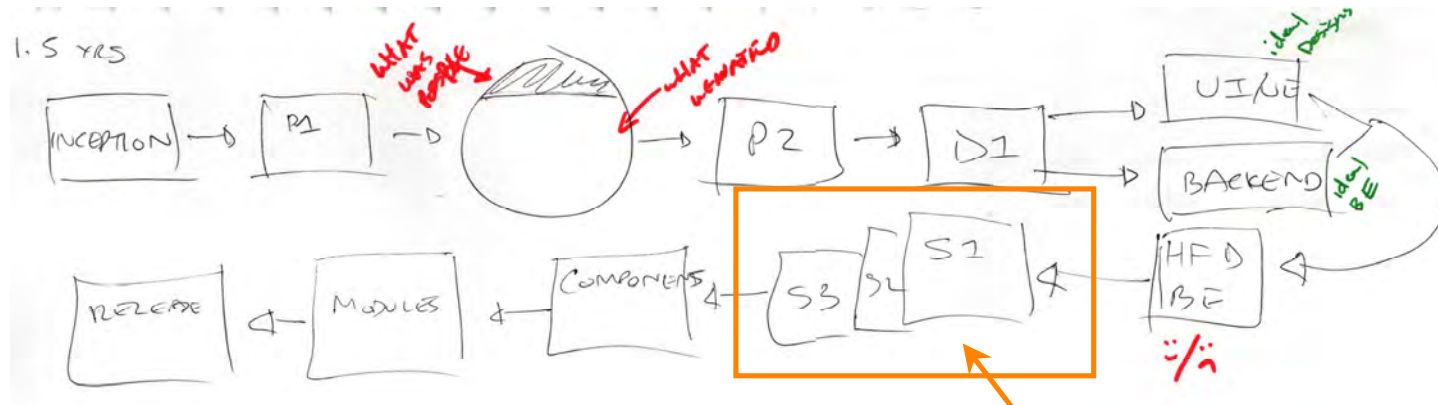adaptive **path**

TRENDS

Workflow

Had a "happy meeting that was really very frustrating. Decided to change approach.

TRENDS

Workflow

Started "scrumming" and everything started going smoothly.
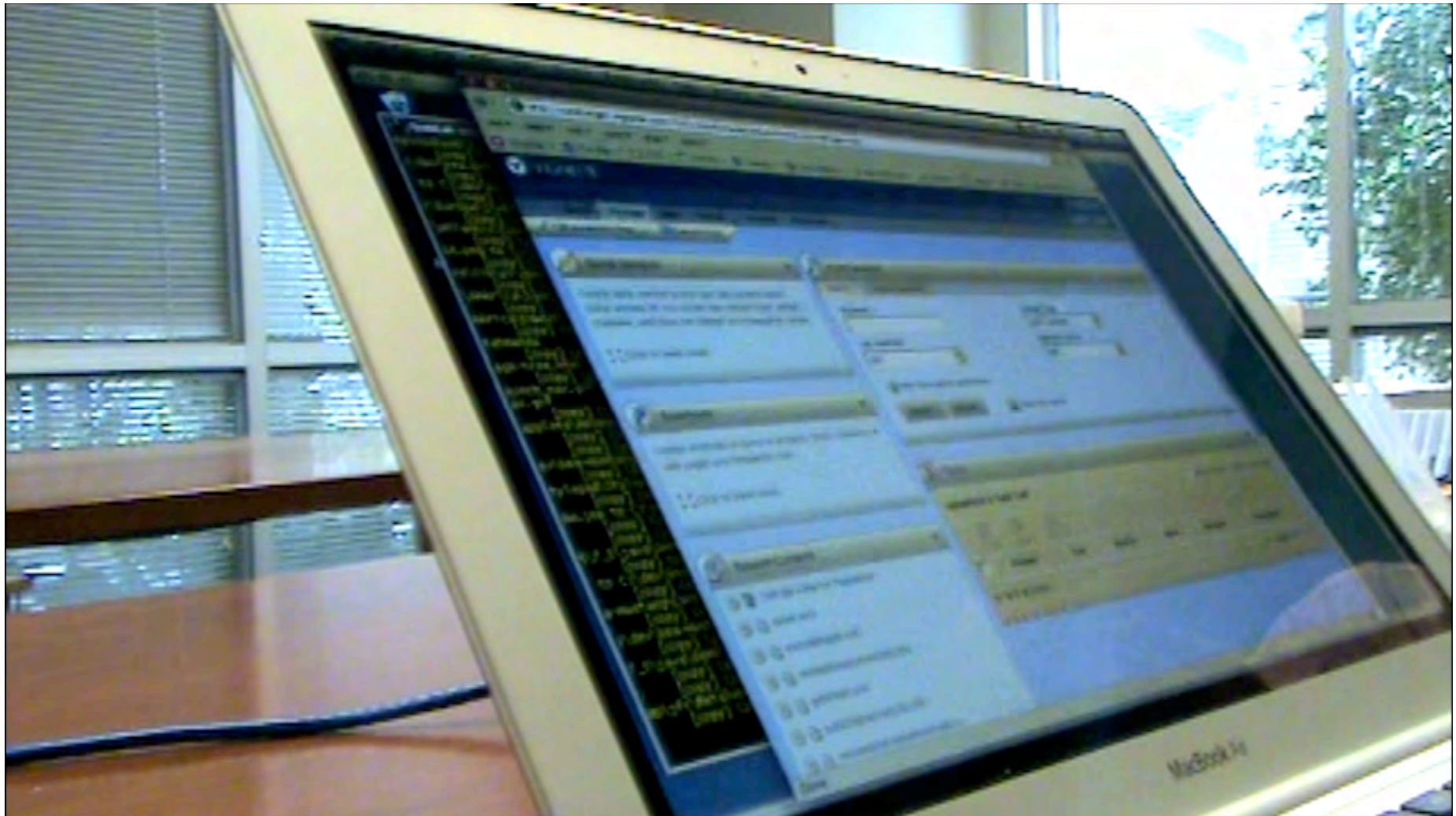
TRENDS

Workflow

Design

Development
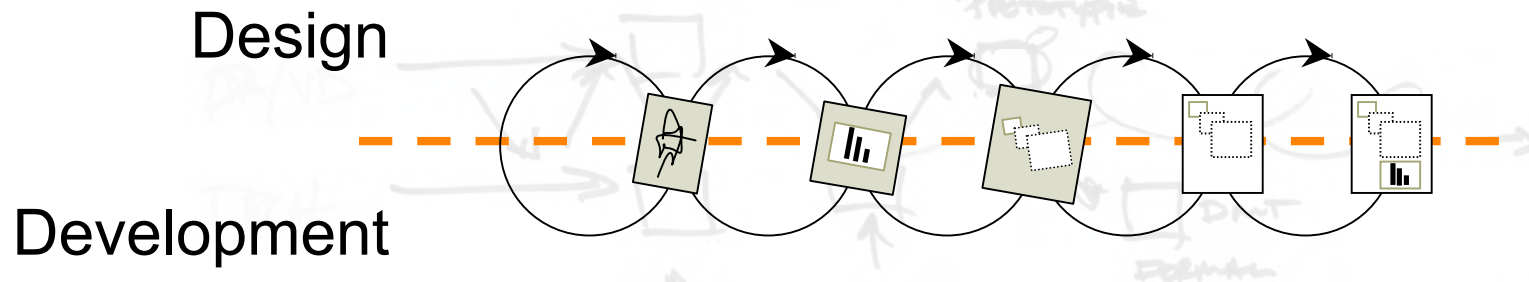
"There's no difference between back end and UE/UI persons. We're all saying, okay, this is how I would work with this information.

- Back-end developer, large Enterprise CMS org

TRENDS

Working together

TRENDS

What about Agile?

The Agile Manifesto

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

http://agilemanifesto.org

TRENDS

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http://agilemanifesto.org

TRENDS

Teams are approximating Agile

"Agile seems to be the closest to what we are doing anyway."

- Designer/developer, boutique data viz shop

TRENDS

Deliverables and artifacts:

- » Comps live on!

- » Wireframes: mediocre at everything

- » Prototyping and demonstrating for communication

- » Build, don't comp.

adaptive **path**

TRENDS

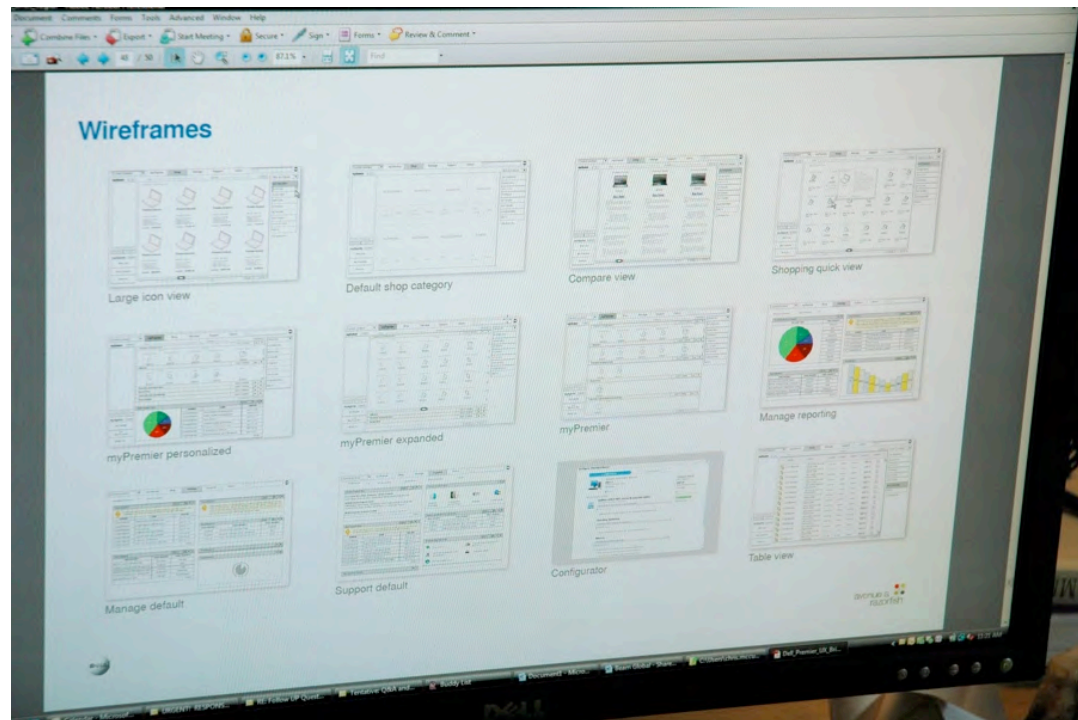## Comps live on!

TRENDS

But there are problems

"You couldn't build a windows application like this. People would just laugh at you. 'What is this button supposed to do?' You can't work that out from comps."

\- Front-end developer, IT services agency

TRENDS

Wireframes

Wireframes don't seem to be helping anyone very much.

TRENDS

Wireframes

"The 'UI expert' makes wireframes and hands them off.
But he does not bring a lot of value to me. Visio
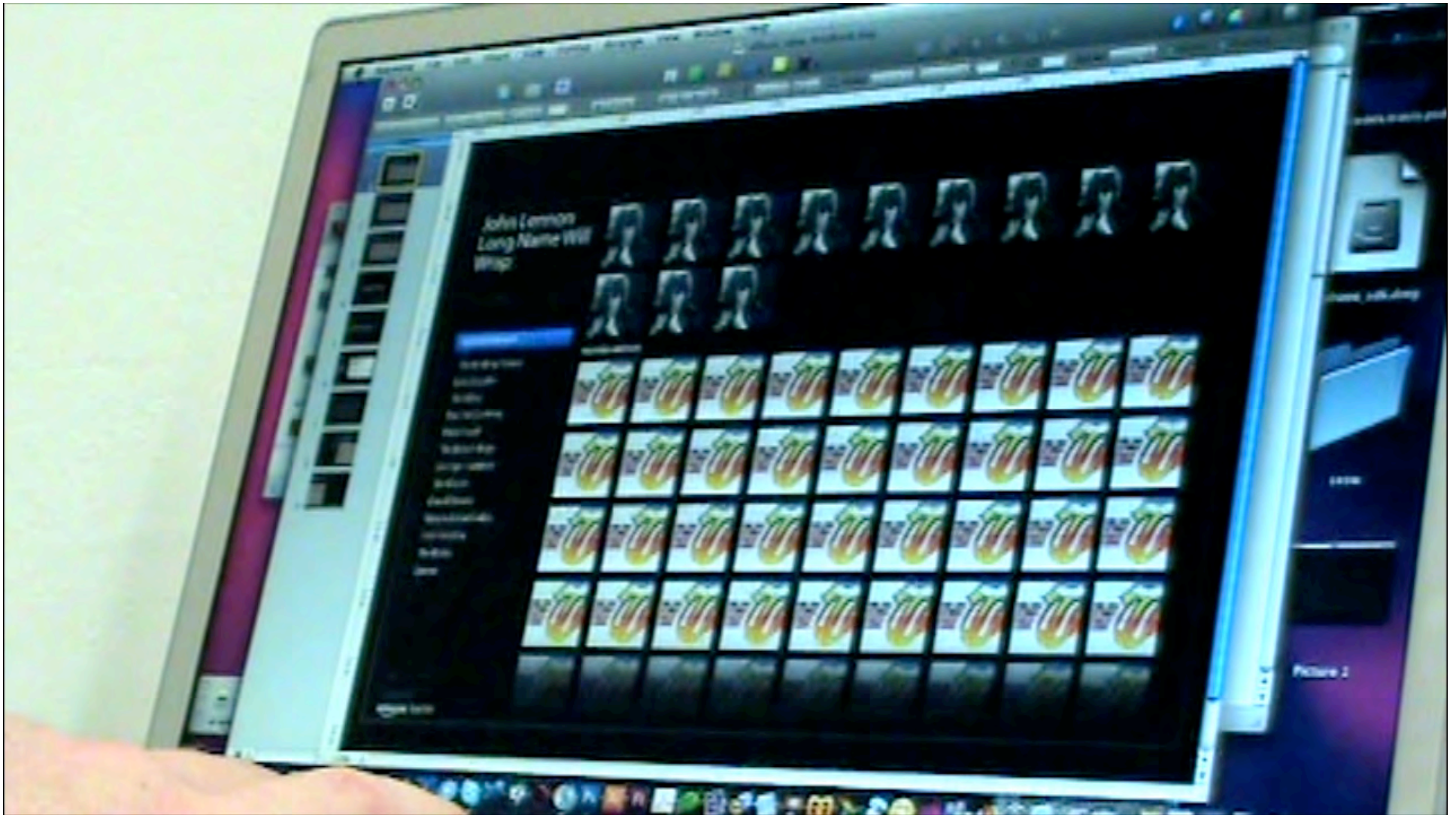concepts aren't that useful."

- Designer/developer, independent

adaptive **path**

TRENDS

Prototypes & interactive storyboards

They are often effective than wireframes, specs, or comps alone.

adaptive **path**

TRENDS

Prototypes & interactive storyboards

TRENDS

Build, don't comp.

Supports a conversation with materials and the fact that many of these people are thinking in code.

"As far as I know there isn't really a good way to comp out [RIA] sites without actually just doing it."
- Designer/developer, independent

"When you make the comp and then the stuff, the comp can't learn from the stuff."
- Front-end dev, boutique data viz shop

SUPPLEMENTAL

TRENDS

"A lot of the reason why we have a lot of things that we don't know is we're doing things nobody is doing -- putting them together this way."

- Design/developer, Enterprise LOB

TRENDS

Why does this look different from the "standard" software workflow?

Two possible reasons:

RIAs are new. They are at the cutting edge and creating them is a craft industry. Over time they will become better understood and the craft processes will be incorporated into more of a factory approach.

RIAs are fundamentally different. They require more focus on user experience, more "art," and are hard to compartmentalize. They will always require a different workflow.

TRENDS

Conversation with data

Finding constraints and opportunities through exploring combinations and permutations.
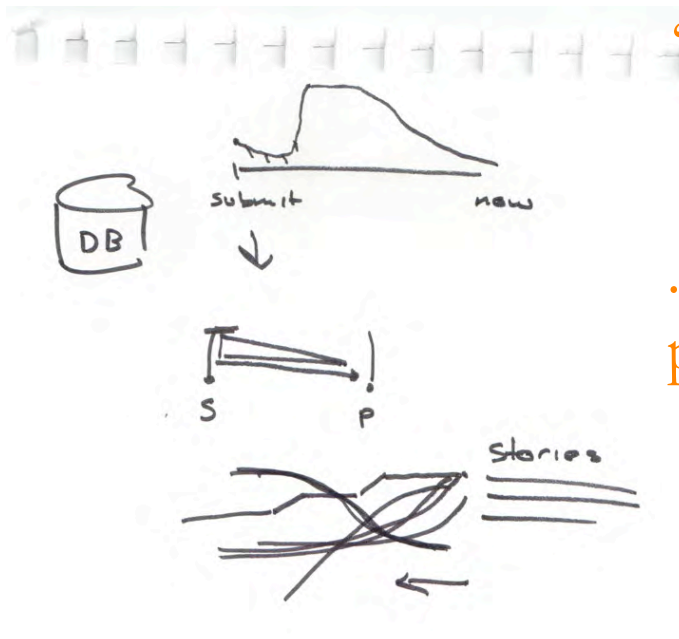
"A lot of what we do is just data discovery -- the visual representations explore the data.

...connect to the database right away and poke around the tables."

- Designer/developer, boutique data viz shop
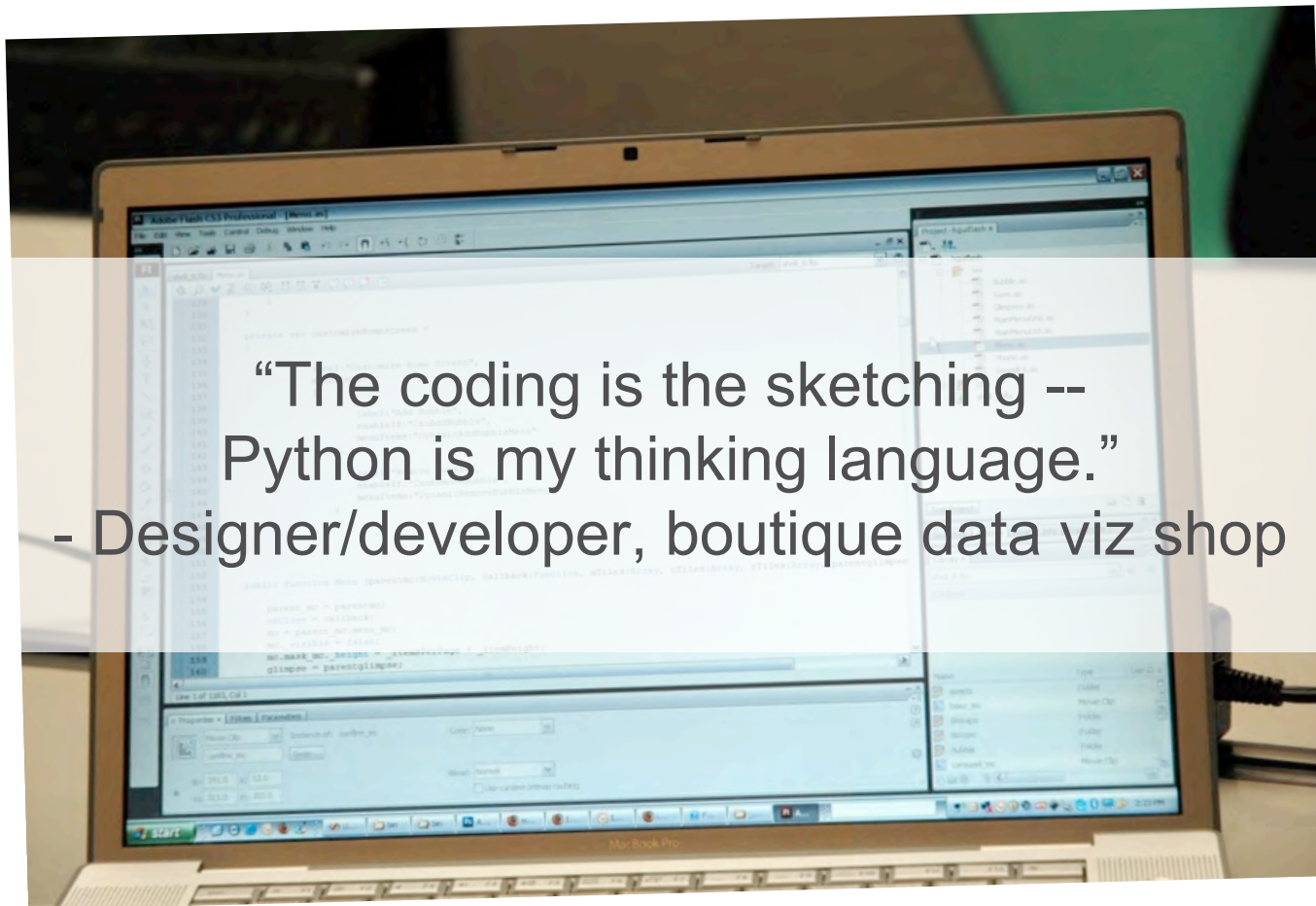
TRENDS

Prototypes and experimentation

So often times I'll prototype...

[I could be] going and doing a hell of a lot of work in the existing platform for drawing widgets and doing things...

But I didn't want to go and spend all the time building it and trying things and making sure the visual presentation worked and all of the interaction worked in the platform itself because I may make a mistake. It may take me longer to be effective in it. So I'll go and build an HTML first out. So literally this thing is an HTML prototype.

-Front-end developer, IT services agency

adaptive **path**

"The coding is the sketching --
Python is my thinking language."
- Designer/developer, boutique data viz shop

adaptive **path**

TRENDS

The web never ends.

While traditional software projects generally have clear beginnings and ends, web projects don't. Project goals are always moving.

"We do a lot of re-educating to show, look, this is a beta. It's okay that this part doesn't work. Google is in perpetual beta..."

- Designer/developer, Enterprise LOB