Pen & paper techniques for getting from research to design

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Who we are

Leah B.
I’m an information architect and a designer. I have a nerdy obsession with processes and methods.

Kate R.
I’m a designer and strategist. Making things visible and visual makes my heart sing.

Adaptive Path

Adaptive Path is a User Experience strategy and design consultancy. Our mission is to help companies make products and services that deliver great experiences that improve people’s lives.
Why are we here?
But first, a story...
But first, a story...
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But first, a story...
But first, a story...
What made it work?

Visual ideas get through faster

**cube** /ˈkyub/ — noun
A solid bounded by six equal squares, the angle between any two adjacent faces being a right angle.

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What made it work?

Visual ideas get through faster

Pictures communicate a more complete idea

I’m a pretty little thing,
Always coming with the spring;
In the meadows green I’m found,
Peeping just above the ground,
And my stalk is cover’d flat
With a white and yellow hat.

— Ann Taylor
What made it work?

- Visual ideas get through faster
- Pictures communicate a more complete idea
- Images help groups move faster...together
What made it work?

Visual ideas get through faster

Pictures communicate a more complete idea

Images help groups move faster...together

So that the resulting designs reflect the people and their needs.
How could we do this again?

See  Sort  Sketch
By the end of the day...

1. See → Sort → Sketch

2. TOOL KIT
   - Surfaces
   - Layouts
   - Key Tools
   - Marks
   - Utensils

3. 

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Questions?
Activity #1

INSTRUCTIONS

Make a nameplate.

1. On a piece of paper (cardstock) write your name in a way that communicates something about who you are.
2. Then make a sketch of some kind that says something about you.
3. Do it in 5 minutes.
Your toolkit

* Surfaces
* Utensils
* Layouts
* Marks
Your toolkit

**Surfaces**
- sheets
- 1/2 sheets
- squares
- quarters
- Poster board
- Rolls of paper

**Utensils**
- stickies
- sharpies
- markers
- colored pencils
- colored chalks
Your toolkit

Words

Case
Case
CASE

Hello World
Hello World
HELLO WORLD

Icons

Lettering

Lines

Weight

Texture

Shading

PICTURES

$ symbols

Marks

drawings

Takes only seconds more than writing!
Your toolkit

centered

list

grid

radian
tree

linear

cluster

Layouts
Your toolkit

SIZE

SHAPE

COLOR
Questions?
Here is our process

See: What we heard...
Here is our process

**See**

**Sort**

**ask:**

What it meant...

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Here is our process

See → Sort → Sketch

Ask: Why it matters...
The business challenge:

You are a researcher on a project to develop innovative solutions for common household organization problems.

Working together, we will use pen and paper tools to analyze research and explore design implications for this project.
See

What's the goal?
See

- Transcripts
- Note taking
- Coding
- Spreadsheets
- Jotting

And more!
WE’RE CURIOUS ...

How do you capture your source material now?
Jotting

How to...

- As you review transcripts, pull out key words and phrases and jot them down.
- Jot the words that you heard, plus small sketches and accents to illustrate the ideas and make them visually recognizable.
- Big ideas deserve more ink on paper. Make the text bigger, underline it, give it a border, or try other ways to make the idea stand out.

The whole point

- Jotting is a visual way to track research data. It illustrates and accents the data, so it becomes memorable and rediscoverable.
- Important ideas risk being lost in the analysis process. Using visual cues to call out the important concepts keeps them highly visible.

Jotting breaks down observations into their most elemental parts and captures the weight of each idea.
Activity #2

I love to come home after a long day. When I get here, it just feels like this is the place I can hide from the world, or recover, or just be alone. It's all my stuff and everything is where I want it. It's like a nest. Well, sometimes it's a nest. But sometimes it's more like a project. There's always something that needs to be done.

INSTRUCTIONS

Jot what you observe.

1. Read this quote from a user interview.
2. As you read, jot any significant ideas or themes that you observe.
3. Jot one observation per piece of paper.
4. Do it in 2 minutes.
Activity #3

INSTRUCTIONS

Let’s jot an audio transcript.

1. Now, listen to this three-minute transcript.
2. As you listen, jot what you observe.
3. Use line weight, color, and imagery to distinguish the big themes from the smaller ideas.
4. Do it in 5 minutes.
Activity #4

INSTRUCTIONS

Let’s do it again.

1. Again, listen to this three-minute transcript.

2. As you listen, jot what you observe.

3. Try something you didn’t get to last time: color, size, layout...additional ways to distinguish the big themes from the smaller ideas.

4. Do it in 5 minutes.
Questions?
Break Time

Be sure to shake it out. All that jotting can make your hands stiff.
What do we do with all these pieces of paper?
Sort

What's the goal?
WE’RE CURIOUS ...

How do you synthesize findings now?
Theme boards display the results of synthesis. They show the patterns and themes that act as a bridge to the design process.

How to...

- Working with the project team, go through the jots and begin to pull related ideas together.
- Stick related ideas together on a board, a large piece of paper, or even a wall.
- Keep moving ideas around until clear themes emerge.
- Give each theme a memorable, concise, and visible label.

The whole point

- The goal of theme boards is to look across all research findings and start to pull together the big themes.
- Theme boards are a group activity. They encourage everyone on the team to express what they see as the big themes, and have directed conversations on what it all means.

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Activity #5

INSTRUCTIONS

Group sorting.

1. Share your jots and concepts with your group.

2. Combine the groups’ jots and concepts into clusters.

3. Once you have all the jots and concepts sorted, name each cluster in a way that communicates its high-level meaning.

4. Do it in 15 minutes.
Questions?
What's the goal?
WE’RE CURIOUS ...

What happens to your research & insights now?
Graphs show a relationship of data elements. They often tell a story that emphasizes comparison and time. Variations like pie charts and Venn diagrams show relationships of parts to a whole.
Grids show important categories or dimensions as columns and rows. They make us want to fill in the blanks. They often tell a story of the completeness or incompleteness of a total landscape.
Mind Maps show a free association of concepts and their implications. They tell the story of what we know and where we could go with it, and are often used as a starting point for extending ideas.
2 x 2s plot similar items along two axes to illuminate major differences. They often tell a story about which options are more desirable, forward-looking, appropriate, etc.
Mandalas communicate the implications of a strong, core idea through several radiating layers or dimensions. They tell a multi-level story of an interrelated ecosystem with a high-level themes and low-level details.
Concept Sketching

How to...

- Look at the big themes and figure out what story you want to tell. (If you’re not sure, just start writing a few notes to yourself on scrap paper. The story will emerge.)
- Pick a visualization that’s good for communicating what’s important about the story.
- Do a rough sketch. Iterate and evolve it. You will probably do a couple revisions.
- Enhance the final version using all the tools from jotting.

The whole point

- Concept sketches help you tell stories about what you learned, what’s important, and what opportunities and actions it points towards.
- Concept sketches should be rich but “get-able” visuals that others can remember and refer back to.
Activity #6

INSTRUCTIONS

Sketch the stories

1. Look at your theme boards and think about ideas that are important and have implications in design.

2. Create 1 concept sketch that communicates the depth and significance of these ideas.

3. Do it in 10 minutes.
Activity #7

INSTRUCTIONS

Sketch the possibilities

1. Working as a group, take a look at all the concept sketches.
2. Discuss ways to further the concepts to connect to possible designs.
3. Create 1-2 concept sketches that communicate implications for design.
4. Do it in 20 minutes.
Questions?
Where do we go from here?

Discovery → Research → Design → Build

The Waterfall
Hinge from research...

...to design
By the end of the day...

1. See, Sort, Sketch

2. Tool Kit
   - Surfaces
   - Key Tools
   - Layouts
   - Marks
   - Utensils

3.
WE’RE CURIOUS ...

What 3 things can you start using tomorrow?
GETTING THE GOODS

Download the deck from:
• www.intelleto.com/epic2008
• www.ugleah/epic2008

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