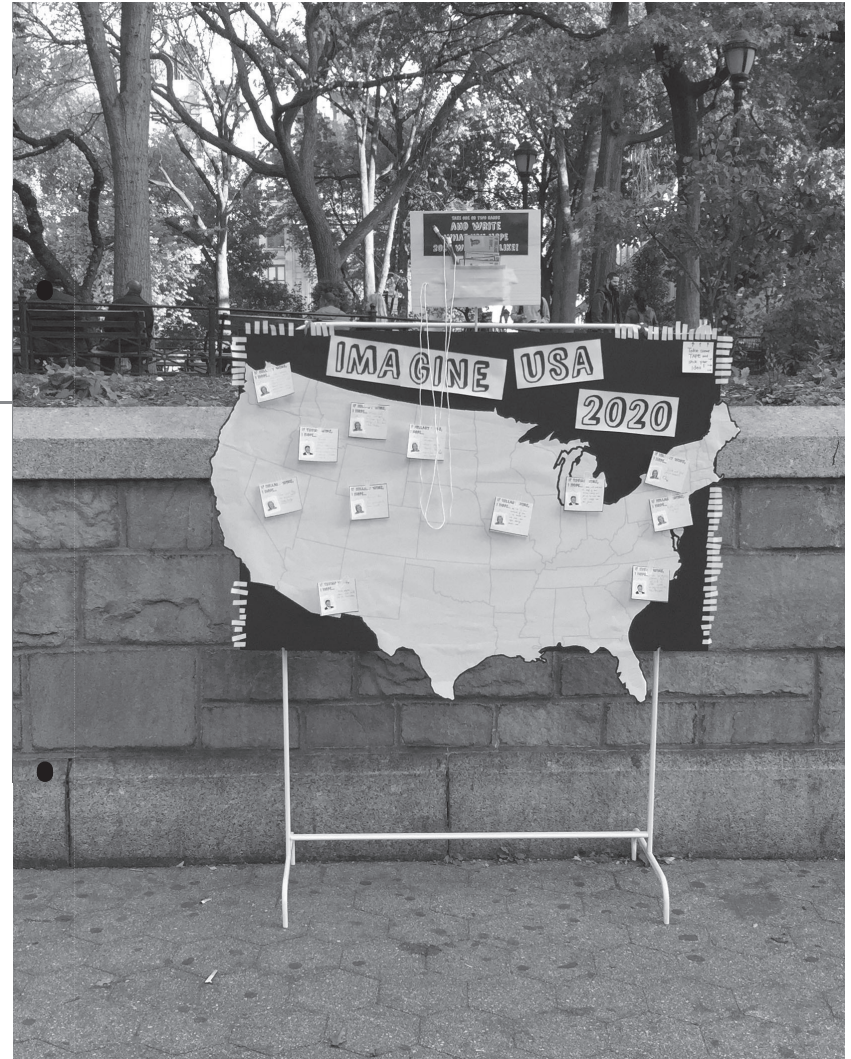


DESIGN LED RESEARCH

Tips and Tricks : the Emma Way
December 2016

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Rapid Prototyping

Rapid Prototyping is an incredibly effective way to make ideas tangible, to learn through making, and to quickly get key feedback from the people you're designing for.

- Prototypes are meant only to convey an idea—not to be perfect—you can quickly move through a variety of iterations, building on what you've learned from the people you're designing for.
- Rapid Prototyping means that you're building only enough to test your idea, and that you're right back in there making it better once you've gotten feedback.



**GETTING
STARTED**



Defining the Research Objective

What is the design brief? What information are we trying to understand from the field research?

Design Brief:

Design an intervention to increase and diversify voter participation in the US.

Research Objectives:

- Why is voter turnout in the US less than 50%?
- What experiences with the political system have affected people's voting habits and decisions?
- What experiences with the voting process have affected people's voting habits and decisions?



Prototype Example 2

Passive and applied prototype
Testing the desire of the public to contribute their hopes for future governance, engaging people passing through Union Square

Concept

- A community platform where individuals can express their personal needs and wishes related to local and national level governance.

Prototype

- Placement of concept board "Imagine USA 2020" in Union Square with leading question: "Take one or two cards and write what you hope 2020 will look like!"
- Since the board had an invitation with a specific instruction, and we left the materials necessary to participate (cards, pens, tape), we stepped out and observed how people interacted with it.



Prototype Example

Active and applied prototype
Testing a new debate format requiring self reflection in a pseudo public setting, engaging the public passing through Union Square

Concept

- Public media format where the presidential candidates are given the opportunity to exercise human frailties.
- Questions asked relate to current and former challenges of political work: What mistakes have they made? What have they learned? What are their strategies for handling uncertain and complex situations?

Prototype

- Self reflection and chocolate. Asked passers by to reflect on the same questions we would use in the debate format. Then asked their opinions of this format being used in national debates.

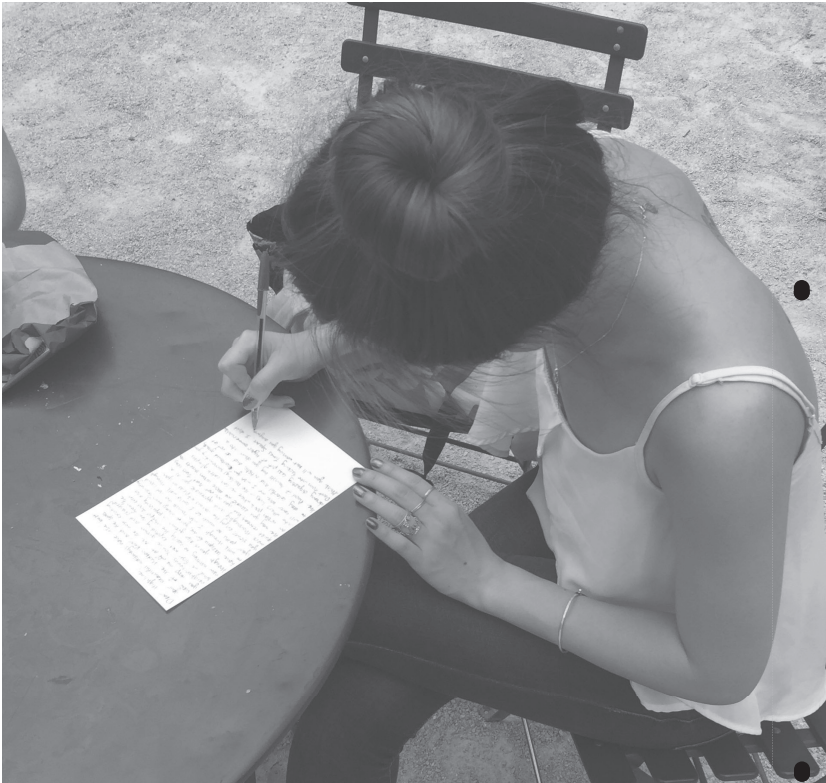


Getting Organized

Reflect on the timeline, the space we will work in, the team, the budget (if there is one), the skills we'll need, trips we'll take, and what we'll need to produce.

Tips and Tricks:

- Meet as a group and divide up the secondary research. Everyone needs to be on the same page as soon as possible.
- Set up a clear timeline for when things are going to be done. Maybe this is a google doc that everyone can manipulate.
- Remember team meetings are going to take way longer than you expect!



FIELD RESEARCH

PROTOTYPING



Generating Concepts

Move from a handful of ideas and insights into a fully fledged concept, one that you'll refine and push forward.

- Move from 20 or more ideas to 10 or so design concepts.
- Set up a format for how you will do lay out each concept page.
- The concepts should link needs with opportunities.
- Keep each of the concepts in a clearly defined space, for example one sheet of paper. If you set up the parameters it will force you to refine how you unpack the concept.



Conducting Interviews

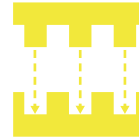
IDEO Quote: "There's no better way to understand the hopes, desires, and aspirations of those you're designing for than by talking with them directly."

Tips and Tricks: - Getting Started

- Come prepared with an interview guide. Make sure it has a good introduction - this always tripped us up!
 - This can also set the tone for the whole interview - do it well and they will be comfortable, bungle it and it will create distrust
- Start by asking broad questions about the person's life, values, and habits, before asking more specific questions that relate directly to your challenge

Tips and Tricks - The Interview:

- Ask about the persons experiences, rather than feelings. It is hard to formulate questions and feels super unnatural at first but it got better.
 - If you have experiences rather than feelings it is much easier to get meaningful analyses and takeaways!
 - Keep asking why, then why, then why again..
- Make sure to write down exactly what the person says, not what you think they might mean. Do not use a recorder or any sort of tech if it makes them uncomfortable - this means you should almost never use them.
- Observe body language and surroundings and learn from the context in which you're talking.
- Take pictures, but make sure you get permission first.



Creating Design Principles

Design Principles are the guardrails of your solution - quick, memorable recipes that will help keep further iterations consistent. They describe the most important elements of your solution.

- Look at your most important Post-its and what you came to in the ideation sprint, as well as your clusters from synthesis.
- Consider the core principles underpinning those themes.
- Examples from living and dying studio:
 - Foster holistic care
 - Ensure consistency across departments
 - Establish sticky, simple and clear communication
 - Facilitate contextual understanding of patient situation over time



Ideation Sprint

Get all of your ideas out there. The goal isn't a perfect idea, it's lots of ideas, collaboration, and openness to wild solutions.

- The last thing you want in a Brainstorm is someone who, instead of coming up with ideas, only talks about why the ones already mentioned won't work. Not only does that kill creativity, but it shifts the group's mindset from a generative one to a critical one. The only way to get to good ideas is to have lots to choose from.
- Tip: Give everyone 7 minutes to get as many ideas down onto post its. Do a round robin, sharing all of those ideas
- Then given everyone another 7 minutes building off or developing new ideas on post its
- Put all the ideas on a wall and begin to cluster. Maybe new ideas emerge out of the combinations.



Interview Guide Example

Key lines of inquiry: Voting habits and behaviors, Relationship to political systems, Relationship to voting process

Introduction:

- Hi, my name is ---- and this is ----. We are students at the New School/Parsons (which is part of the New School). We are doing a project about the voting habits of the American public with the presidential election coming up. We are speaking to eligible voters. Would you be willing to speak to us for 5-10 minutes?

Follow-up:

- We are less interested in your political leaning, we are more interested in why you and people in your family or community vote or don't vote.

Warm up questions:

- What is your name?
- Where do you live and what brought you here?
- Main questions:
- What is your experience of voting in America?

Based on what they say, follow up questions may include:

- Why have you chosen to vote in the past?/ Why have you chosen not to vote in the past?

Ask for examples of experiences or observations that have driven your voting behavior?

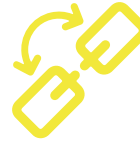
- Ask how those experiences and observations have made the respondent feel
- Keep asking why they have felt that way (5 why's)
- Optional: Ask how they feel their experience is similar or different to others in the country/their community/their family etc.
- In what ways do you feel like the political system represents or does not represent you?
- What experiences or observations have led you to that conclusion?
- How do you feel about the voting process?
- What experiences or observations have led you to that conclusion?
- Probe: voter registration, election day

Closing out:

- Do you have anything else you would like to share?
- Do you have any questions for us?

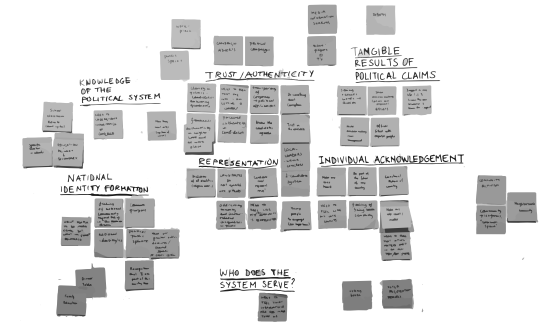
Housekeeping:

- The information you have shared with us will be used in a school project. We would love to get a picture of you to go with your opinions, is that OK?



Finding Needs and Opportunity Space

Based on the synthesis, clusters of needs are identified. Opportunity spaces are the existing structures that can facilitate an intervention.



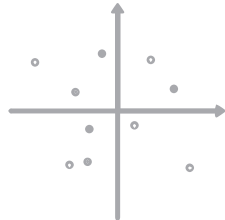
Relational Map

- A relational map is used to see how different ideas relate to one another. You might start by putting one idea at the center and then mapping how your other ideas and insights play off of it.



2x2

- A 2x2 gives you a way to plot your ideas along two separate axes and then home in on insights and themes. By sorting information in this way, you'll uncover patterns that allow you to draw broader inferences.



AEIOU

AEIOU can be used in-field as worksheets or be applied later to code data collected from other ethnographic or observational methods, including notes, photos, and interviews.

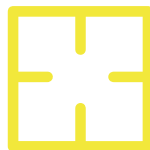
- **Activities** includes actions with specific goals in mind, and the processes performed to achieve them.
- **Environments** details the context and characteristics of the space where activities are being observed.
- **Interactions** includes both interpersonal and person-artifact interactions. Proximity and space may also play an important role within these relationships.
- **Objects** catalogues the items within the environment and how they are used.
- **Users** includes the people within the environment that are being observed. Key information includes their values and biases, behaviors, needs and relationships.



Personas

The personas method uses fictional characters to construct archetypes which represent actual user types.

- To make personas, analyze the research data, and find out common details.
- These common details underlie the personas. Persona's behaviors and goals give a key insight into interface and function in product design. They also help communication among team members, because every member could easily understand user and their design concepts.
- **Advantages:** clearly conveys goals to clients; simplifying a large amount of information; developing direction of the project.
- **Disadvantages:** fallacy of generalization, overlooking minority opinions, difficult to make.



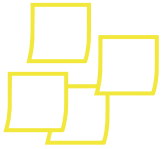
Synthesis Frameworks

A framework is a visual representation of a system and a great way to make sense of data. Use them to highlight key relationships and develop your strategy.

Journey Map

- A journey map, allows you to visualize a process beginning to end. This simple framework will help you to more easily imagine the entire flow of an experience, whether it's how a service may work or all the touch points of a customer's journey with a product. This doesn't need to be an in-depth, detailed representation, but rather a quick-and-dirty way of thinking out how a process unfolds.





Sharing Insights

One by one, you'll go around the room, capture your ideas and stories on Post-its, and put them on the wall. It's critical to pay close attention to your team-mates' stories, learnings, and hunches.

- When it's your turn, put all key information you want to share on Post-its and use them as you describe who you met, what you saw, the facts you gathered, and your impressions of the experience.
- Cluster the Post-its together as you put them on the wall so that you have a record of your discussion.
- Listen to what other people are saying - if you have something similar, build on them. Feel free to ask questions if something isn't clear.
- This process is best done soon after the field research. Download while your experiences and perceptions are fresh.



Fly on the Wall

This traditional behavior observation method allows you to secretly collect information by looking and listening.

- Low cost and effort, this method is an easy way to begin behavior research.
- Unlike other observation methods, Fly On The Wall separates the researcher from any direct involvement, which minimizes bias and researcher influence.
- When finished, it is recommended that you analyze your data by clustering, categorizing, or using sense-making frameworks.
- To validate your insights, repeat your Fly On The Wall observation again and/or use other research methods to confirm your data.
- Frameworks for note taking and methods such as AEIOU can help analyze observational data.



Love and Hate Letter

At its simplest, you ask a person to consider the relationship they have with an object or service on the same level as a romantic relationship with a significant other.

- **Advantages:** one simple prompt can yield more answers than a lengthy questionnaire; by humanizing the object/experience people reveal things they otherwise would not; it is more engaging than asking people to write their likes and dislikes.
- **Disadvantages:** can be somewhat rigid unless the people are particularly imaginative; can be skewed by the emotional state of the participant at the time of participation; can be affected by gender biases.



SYNTHESIS AND IDEATION

Exploring outcomes

- Process: Creating a representation of their new system based on themes
- Materials provided included: Lego, Paper, Tape, Sharpies, Play Doh, Balloons
- Students encourage to create either tangible or intangible representations

Process insights, what we did well

- Meditation introduction was a good start for engagement with the activity.
- Opportunity to be with students in relevant setting; a class called "Participation in Government"
- Planning time was crucial to making the activity.
- Multiple options of creative activities helped in case students lacked inspiration.
- Planning the roles of each teammate in advance was crucial.
- The activity encouraged group participation.
- The activity left space for people to express themselves openly.
- Diversity of materials can inspire different kind of outcomes.

Process insights, what we did less well

- More than 50 min would have been ideal.
- Some students came late so they missed the introduction and context (and it was more difficult for them to engage).
- Some students may need different level of detailed instructions for the assignment.
- Manage how to set (low) expectations on creativity processes (to reduce pressure and inhibition to creative thinking).
- Be aware and solve for different personality types.



Customer Journey Map

The Customer Journey Map (CJM) or User Journey Map is a tool to visualize complex flows and sequences

- It usually gives an overview of all the steps a user goes through, including various actors, touchpoints and interactions.
- The qualitative and quantitative data feeding the CJM can be sourced from preliminary design research methods, such as observations, surveys, photo studies, and AEIOU.
- Alongside the creation of personas and scenarios, the data-synthesis of the CJM will help to discover gaps in the research.



CO-DESIGN WORKSHOP



Workshop Example

Key lines of inquiry: How to create political engagement? Why is this important? How do we establish trust in the political system? How do we make people feel like their vote matters?

Workshop Structure:

Context & narrative

- Introducing the United States of Nowhere
- Meditation and narrative leading into first part of the assignment.
- Establishing a scene: a fallen city and a fallen society with no corporations, no government, no media, no money, no police, no law and no order...

Letter Writing

- Writing a letter addressing the entire surviving community
- How do we rebuild a human community? How do we establish leadership and create trust in each other?
- Include three keywords/guiding principles

Theme clustering

- Sharing of letters and identification of broader themes
- Team members read their letter or keywords. Shared themes were identified and priority themes selected.