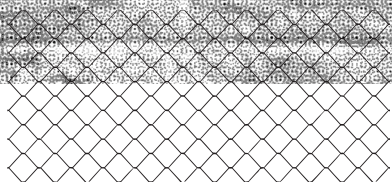




PARTICIPATORY

DESIGN
PROCESS
BOOK



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PROJECT OVERVIEW

PROJECT OVERVIEW

This guide is the result of a yearlong collaborative project that re-imagines the FOIA request process.

Our process explored the following two key questions:

HOW ~~★~~ CAN ~~★~~ FREEDOM OF INFORMATION ACT (FOIA) ~~★~~ REQUESTS IMPROVE ~~—————~~ THE RELATIONSHIP BETWEEN LOCAL ~~★~~ JOURNALISTS AND ~~★~~ COMMUNITIES THEY ~~★~~ REPORT ~~★~~ ON?

HOW CAN A MEDIA LITERACY INTERVENTION FOCUSED ON FOIA AND CIVIC ~~—————~~ ENGAGEMENT IMPACT ~~—————~~ LEARNING EXPERIENCES ~~—————~~ FOR ASPIRING JOURNALISTS AND ~~—————~~ CIVIC ~~★~~ MEDIA PRACTITIONERS?

The Participatory design process prioritizes collaboration among people working together to better define problems and iterate through potential solutions. The participatory design process, in contrast to traditional design processes, includes all stakeholders. This orientation increases transparency, helps to ensure that the proposed solutions can, in fact, solve the defined problems, and creates a sense of shared ownership and success. For the Putting FOIA to Work project, the participatory design process was used to help design meaningful engagement between journalists, journalism students, and the communities that were the focus of our project.

Our goal is to experiment the design process applied to local reporting and engagement. In this project, traditional methods of journalism such as research, lead generation, interviews and reporting, story writing, and publishing are augmented and enhanced by involvement from diverse stakeholders, such as non-profit investigative journalist organizations, FOIA filling service providers and civic design practitioners and journalists. Each of these stakeholders brings to the table different forms of expertise, collectively contributing to a process that uses FOIA to generate collaborative reporting projects and meaningful community engagement.

The student teams and partners chose to focus on the issue of gun sales and procurements in Massachusetts. This topic was decided collaboratively by BINJ, Muckrock and the participating students at Emerson College, through deliberation and research.

This guide is written for journalists, journalism and media educators, community organizations and stakeholders who wish to understand how participatory design can leverage the FOIA process to increase community-driven reporting, ensure greater engagement in the storytelling process, and foster a sense of local involvement in news.

This guide is part of the “Make FOIA Work: Using Freedom of Information Act Requests to Engage Communities in Locally Relevant Reporting” project, supported by a Challenge Fund grant from the Online New Association (ONA) and spearheaded by Professor of Journalism Paul Mihailidis at Emerson College.

Guide written by Adam Gamwell.

Layout by Courtney Lord.

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STAKEHOLDERS PROFILES AND STAKEHOLDERS

Partners:

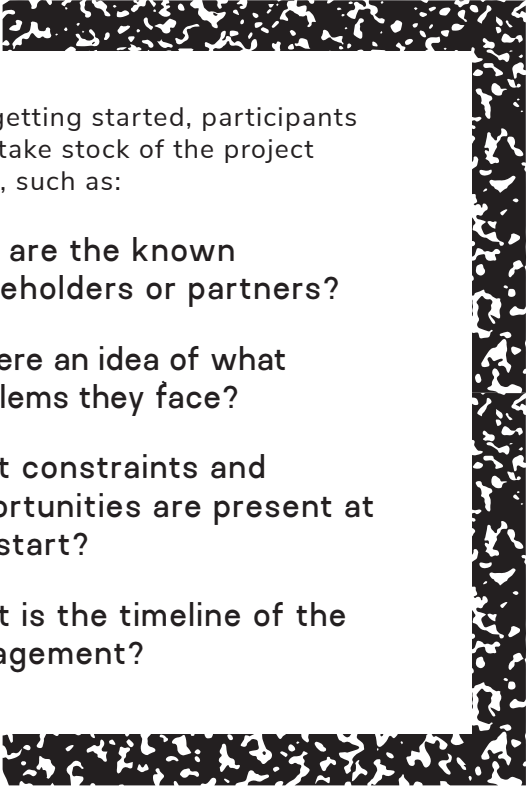
- ♣ Emerson College, Department of Journalism
- ♣ The Engagement Lab
- ♣ Boston Institute of Nonprofit Journalism
- ♣ MuckRock

The Project Team:

Paul Mihailidis	Associate Professor, Journalism	Emerson College Engagement Lab
Adam Gamwell	Design Anthropologist & Affiliated Faculty, Media Design, Journalism	Emerson College Engagement Lab
Michael Morisy	Co-Founder & Chief Executive	MuckRock
Chris Farone	Editorial Director	Boston Institute of Nonprofit Journalism (BINJ)
Catherine D'Ignazio	Assistant Professor, Journalism	Emerson College Engagement Lab
Catherine Buckler	Project coordinator	
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DESIGN METHODS PARTICIPATORY DESIGN METHODS

How to Scope a Project for Participation



When getting started, participants should take stock of the project context, such as:

- who are the known stakeholders or partners?
- is there an idea of what problems they face?
- what constraints and opportunities are present at the start?
- what is the timeline of the engagement?

Amongst the Media Design teams working with BINJ and MuckRock, the context was defined as “understanding the work of BINJ and MuckRock in relation to the FOIA process, local journalism, news production and consumption, and information access over the course of a college semester.” In first assessing the idea of building a design process around FOIA practices and local journalism, our team used the **Stanford dSchool’s Design Project Scoping Guide** to outline the elements needed to frame a design challenge:

WHAT

what is the human experience we are trying to affect?

FOR WHOM

what group of people are we designing for?

CONTEXT

what are the important facts, insights, instincts, background knowledge we bring to the table that clarify our challenge and why it matters?

GOALS

what do we want to accomplish?

ASSUMPTIONS

generally when approaching a project people have some intuition or hunches about the opportunity in mind. What are they?

The first step is for the team to answer these questions together, out loud. Writing ideas down on whiteboards or sticky notes is encouraged. At the initial phases of a project, teams can't always answer all of these questions, or may not feel satisfied with the initial answers. That's OK and encouraged. As teams move through the discovery and ideation phases, they can (and should) revisit the design challenge questions to better scope and define the project.

The dSchool guide notes further that questions 3-5 are Team Considerations, while 1 and 2 are Challenge Space questions. What this means is that questions 3-5 are means for the team to develop their understanding of the problem space - important facts, goals, assumptions - together to create a baseline of actionable knowledge. Questions 1 and 2 help shape the way teams

understand the problem they and their stakeholders face.

Minimally when getting started, teams will have some idea about their own considerations—**such as they are working with a certain group of people, or what the context of their work is.** The key here is to not jump to solutions or conclusions, even though this may be tempting. If team members find themselves coming up with ideas to solve problems, write them down on sticky notes, and place them to the side. It is helpful and important honor team members' instincts and experience, but the goal of this phase is to frame problem in the best way. Solutions at this phase represent individual or team dynamics, not necessarily a good or effective response to the problem.

- ♣ Early project **goals** in the Making FOIA Work case could be, for example, *“Aiming to understand how local journalists present and use FOIA to others.”*
- ♣ **Assumptions** could look like “We need to test the assumption that students don’t know or care about FOIA.”
- ♣ Service
- ♣ Digital App or Software
- ♣ Physical Product
- ♣ Curriculum
- ♣ Workshop or Training
- ♣ Exhibition
- ♣ Website

The art of scoping is premised on bounding the project in specific ways that allow the team to move forward but that leave room for discovery and multiple kinds, types or categories of solutions. Framing a problem should NOT embed a solution nor presume stakeholder needs. It gears the team towards discovery.

A **tactic to keep focus on problem definition**, rather than solution finding, at this phase consists of listing categories of potential solutions:

♣ Literature

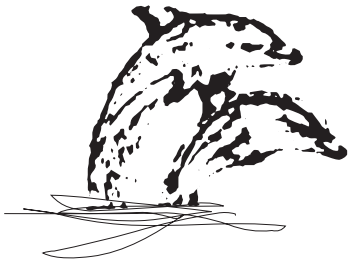
An open list like this can help team members from jumping to one idea like “making a workshop,” or “designing an app”

DESIGN

3 PHASES OF PARTICIPATORY DESIGN

**Participatory Design is
flexible enough to be
split
into
many
phases.**

The following three phases encompass a framework which we find to be helpful, and the methods draw from a mix of design thinking, participatory research, and human-centered design methods. Participatory Design is an iterative process. This means, it often is not linear. This can be a challenge for process-oriented people, as it involves a high level of ambiguity, particularly as the project begins. Iteration also means participants can (and should) cycle back across each of the phases as they feel it is necessary.



Ideally in this process, team members and stakeholders are in frequent communication so questions, ideas, and solutions can be shared and iterated by everyone who can fruitfully give input. The three main phases in our design process are:

- | | | |
|----|-------------|--|
| 01 | DISCOVERY | The goal of this phase is to listen closely to the users for whom you are designing. This includes gathering background data and information, conducting observational research, interviews and surveys with stakeholders, organizing and evaluating data and analyzing patterns. |
| 02 | IDEATION | The goal of this phase is to frame points of conflict discovered in the first phase and generate possible solutions. During this phase, teams evaluate, envision, propose, and iterate on novel, bold future possibilities to solve the problem. |
| 03 | PROTOTYPING | The goal of this phase is to conceive, design and test the artifacts created to solve the problem. Prototyping also allows designers to evaluate their process and design decisions by making their solutions more real and to generate feedback from stakeholders for further refinement. |

DISCOVERY

**Participatory Design is
built on a Human-Centered
mindset, meaning the**

**perspectives,
experiences
and
wellbeing
of people,
sometimes
called
users or
stakeholders**

Because participatory design involves working with, and designing alongside, others, this kind of work often challenges unconscious assumptions and biases. To be successful, facilitators must create psychologically safe and accountable space where participants can explore differences with patience, respect, and open minds.

This is where the real work begins.

**is paramount to problem
definition and solution
finding.**

Generating Tactical Empathy

EM . PA . THY
NOUN

**THE ABILITY TO
UNDERSTAND AND
SHARE THE FEELINGS
OF ANOTHER.***

* Oxford New American Dictionary

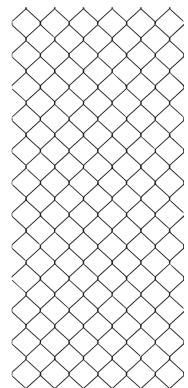
In order to understand what challenges, issues or problems communities face, participatory design begins

with empathy - gaining a felt understanding of how stakeholders perceive and feel.

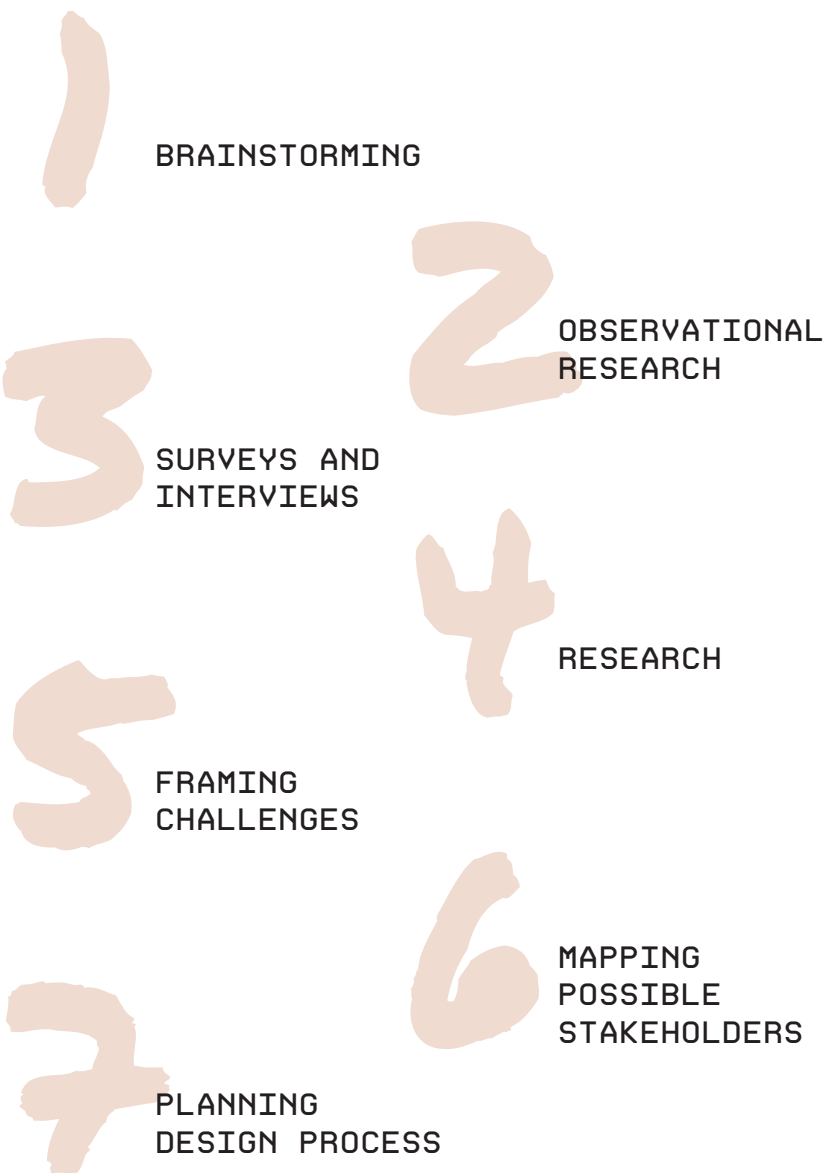
Team members can ask themselves and stakeholders:

- What challenges do they face in a given area, and how do these challenges manifest?
- What are their motivations and thoughts in trying to accomplish a task?
- What behaviors and actions are common in a given scenario?
- What do they say, to themselves or others, when discussing a particular topic?

The goal of empathizing with others, or putting oneself in another's position, is to get to know a group of people previously unfamiliar to you in terms of how they experience a problem or challenge. What do they say, think, feel and do around a particular issue?



Discovery Phase Methods



Initial Stakeholder Meetings

Early in the process, the Media Design teams were introduced to partner organization leaders, Chris Faraone from the Boston Institute of Nonprofit Journalism, BINJ, and Michael Morisy from Muckrock. Chris presented BINJ's investigation into the militarization of local Massachusetts police departments. Michael took the class through Muckrock's website and the process of filing a FOIA request.

The initial meeting with BINJ and Muckrock clued the design teams into the ways these organizations approach news gathering and reporting, information and news dissemination, and their perspectives on local journalism.

The Media Design cohort consisted of 10 students, which would be large for a design team. The cohort was split into thirds to facilitate manageable working teams.



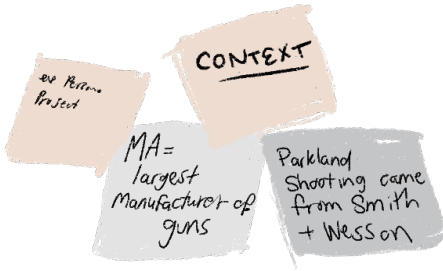
Initial stakeholder meetings are crucial. They are an opportunity for the design team to get to know the people they will be designing with and to ask initial questions about problems or challenges they face.

Take note of names, organizations, and roles. Get a sense of who the organizations or community partners are. What are their mission and goals, how do they operate, what do they produce? What is the size of the organization, is it hierarchical or flat, etc.?

Generally, teams will have a reason for meeting and this guides the initial framing around problems. How are stakeholders addressing the challenge space? Do they simply talk about it, do they have programs or projects in place to address challenge? What do they see as the most crucial aspects of their work? What are the biggest challenges and what are the biggest opportunity spaces they see?

Questions teams ask should be tailored towards getting to know their partners and allow for their partners to get to know them.

Problem Framing



Following initial meetings with stakeholders, teams begin to frame directions for further investigating the problems that were articulated.

To demonstrate this process, the following examples highlight how FOIA design teams began to frame problems around gun sales and procurements in Massachusetts.

Example: Design Team #1 framing around the problem of 'care'

Given the recent and unfortunately ongoing phenomena of shootings in the United States, Design Team #1 chose to explore how college students experienced realities and news about shootings. They narrowed their stakeholder scope

to journalism students. The team saw journalism students as the next generation of news providers and producers, who could provide insight into issues through the lens of storytelling and reporting. Seeking a balanced spread of perspectives, team members interviewed journalists at BINJ, professors at Emerson College and undergraduate journalism students.

When working through participatory design, or any design process in teams, sticky notes and sharpies are a must. Use them to capture down single



Theme capture from meeting from Design Team 1

ideas—problems, context, people—and seek input from all team members. Use the 5 problem framing questions above to guide the organization of sticky notes. If there is an abundance of context or what stickies but few who, then this is an indication of where further research may be necessary.

Example: Design Team #2 explored questions of access and user interface design of the FOIA request platform, Muckrock.

The more accessible a platform is to a community, the more it can perhaps be utilized. The second design team explored the usability of project partner Muckrock's FOIA request platform. They conducted initial user testing of MuckRock's website. Initial insights included confusion around the seeming lack of organization of content elements on the home page and lack of clarity in terms of the services offered by MuckRock.

Design Team #2 used contextual research tasks to define their problem space. Specifically, they asked project participants to do

the following:

- Try to contact a member of the Muckrock staff
- Try to find out about the FOIA process in Massachusetts
- Try to find information about gun sales in Massachusetts

This open-ended set of actions were undertaken by interviewees who used the MuckRock website for the first time. Users attempted to complete each of the three tasks and narrated their actions while doing so. Design Team #2 took notes of user actions, their comments and feelings, when they felt stuck and what worked well. To complement contextual research with first time users, Team 2 set up interviews with MuckRock staff to gain further perspective on how the internal team articulated and thought about the organization's mission, their current design and feature choices, and goals for future growth.

Example: Design Team #3 began on questions of news fatigue for consumers

Design Team #3 framed their exploration into gun sales in Massachusetts by asking how consumers of news may engage with, or disengage with, news about these subjects. Their design process began with conversations with Chris Faraone (co-founder of BINJ) and Jason Pramas (Network Director for BINJ) in order to get a better sense of how they understand their relationship with their audiences and the ways in which their publishing choices affect local community moods.

Design Team #3's problem framing process also incorporated a general survey to local participating communities around their news habits and moods towards local news. They found, unsurprisingly, low levels of trust in news in general, but an openness to the local news organizations that they feel more connected to.

Problem Framing Conclusion

All three Media Design teams turned their attention to discovering stakeholder problem areas and to understanding where pain points emerged between journalists and local communities. Focus areas included:

- How journalists foster community collaborated stories
- What structures need to be in place to encourage readers to take action beyond reading the news
- What confuses first-time users in the MuckRock website
- What are the true impediments for community members to be genuinely engaged in local news reporting

During this discovery phase, particular emphasis was given to the following methods: interviews and surveys, stakeholder mapping, and persona generation, after thorough research and careful observation.

Discovery Method 1

Interviews and Surveys

**Interviews
and surveys
are methods
of data
gathering
that let
designers**

**into the minds of
stakeholders.**

Interview questions can be either open-ended, meaning answers aren't prescribed, or closed. Surveys can also have both kinds of questions, though researchers tend to get more in-depth answers from interviews given the opportunity to ask follow up or clarifying questions in-person. Surveys are good, on the other hand, for gathering a larger amount of data quicker.

Design Team #2, working on MuckRock's FOIA request platform, offered the following rationale for using a survey in their initial exploration:

"We conducted an initial online poll asking folks if they'd ever filed a FOIA request, and if they'd be interested in sharing

feedback on a website that facilitates the request process. We did a series of in-person interviews testing the current MuckRock website with potential users to get their feedback on the look, feel, and usability of the website. We also did one on one, in-person interviews with several MuckRock staff members."

Some responses from interviews:

"[The website] would benefit from more granular organization. Given the multiple, and somewhat disparate purposes of the website, it makes sense to have a top level of organization before you break down into sublevels to try to track the various things that people want to use the website for. It would make sense to have a very simple front page that says 'Do you want to...?' and then lets people drill down from there."

"I don't have a sense of how MuckRock got started, I didn't see any affiliations, and they don't have any links to partner organizations. I feel like typically a big organization (although I don't know how big they are) has more up front info about who the organization is, and although I think I know what they do, I don't actually know who they are."

In an interview with MuckRock founder, Michael Morisy, the team discovered some important insights: In this critical interview, we learned that MuckRock does not have a single function, but defines itself as a "platisher;" a blend of 'platform' and 'publisher.'" MuckRock sees their core mission as being a conduit for transparency.

This discovery was a defining moment in our process as it encouraged us to embrace the multifunctional aspects of the the MuckRock website as we worked towards our ultimate redesign.



Discovery Method 2

Stakeholder Mapping and Persona Generation

In participatory design, stakeholder mapping is a method for organizing information and data gathered from background research, interviewees, surveys, and observations.

For Design Team #1, stakeholder mapping took the form of creating attribute spectrums around care, knowledge of FOIA, feelings of empowerment for change, and whether they felt gun violence was becoming normalized in the news or whether it was consistently unnerving.

Mapping attributes allows the design team to note patterns and trends across interviewee perceptions and attitudes.

These attributes can be used to create **personas**, which are data derived sketches of people based

on patterns, trends and commonalities. The purpose of personas is to keep individual data anonymous and to ensure design focus for the widest possible group of people while still addressing the specific and contextual problems identified by stakeholders.

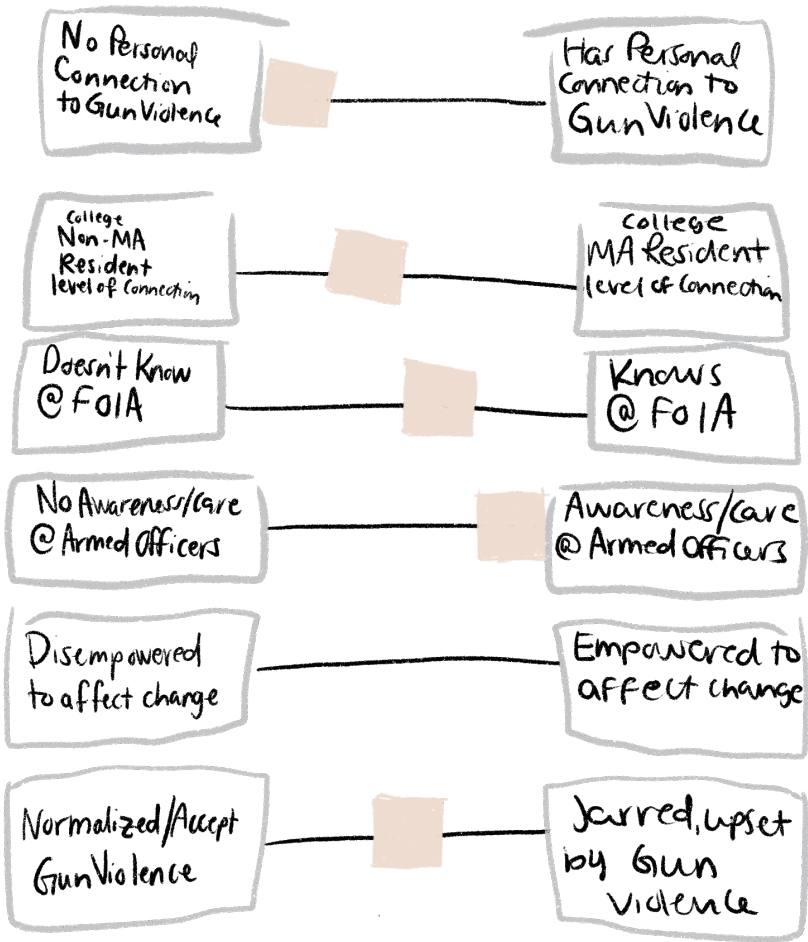


Fig. 1: Team 1 Attribute Map

Design Team #1 found that asking questions around gun control and violence, as well as school shootings, tend to be polarizing and depressing. They also found that

interpersonal connections with interviewees, such as whether they knew or had a connection with someone before interviewing them, changed how open respondents were.

Design Team #2 created an attribute map to navigate MuckRock's website. They developed the following taxonomy:

- The site is (easy / not easy) to navigate
- The site is (well- / not well-) organized
- (Would / would not) use

site in the future

- The site's purpose is (very / not very) clear
- (Ease / difficulty) completing all tasks
- Thinks website is for (general / specific) audience

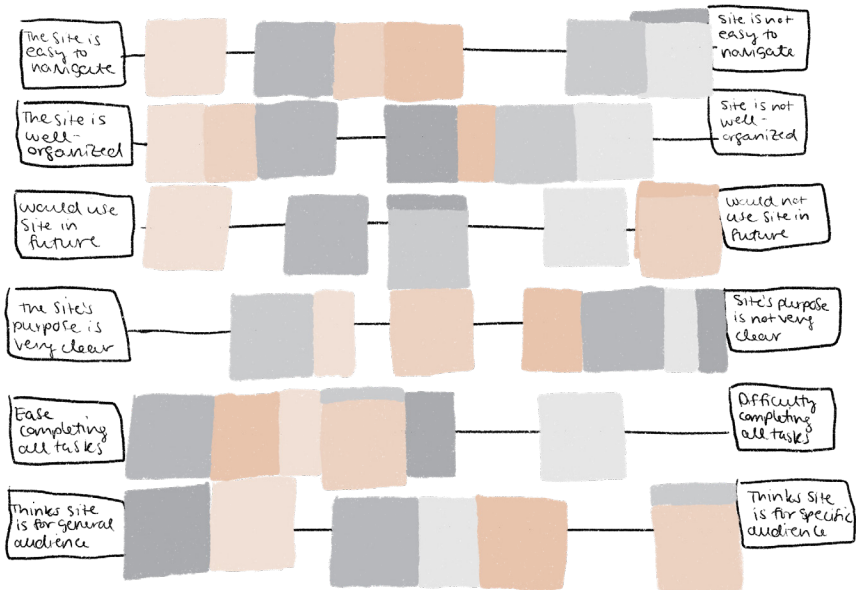


Fig. 2: Team 2 Attribute Map

Drawing on the patterns noted in surveys and interviews, Design Team #2 came up with a persona named Reed, who:

- Is a millennial (age 22 to 37) [age/generation]
- Consumes news two or more times per day [habits]
- Usually feels disappointed and helpless after reading the

news [emotional states, problem area]

- Believes they are a trusted member of the community [social standing perspective]
- Trusts the news sources they curate [perception]
- Does not see themselves as civically engaged, but wants to be [perception, problem area]

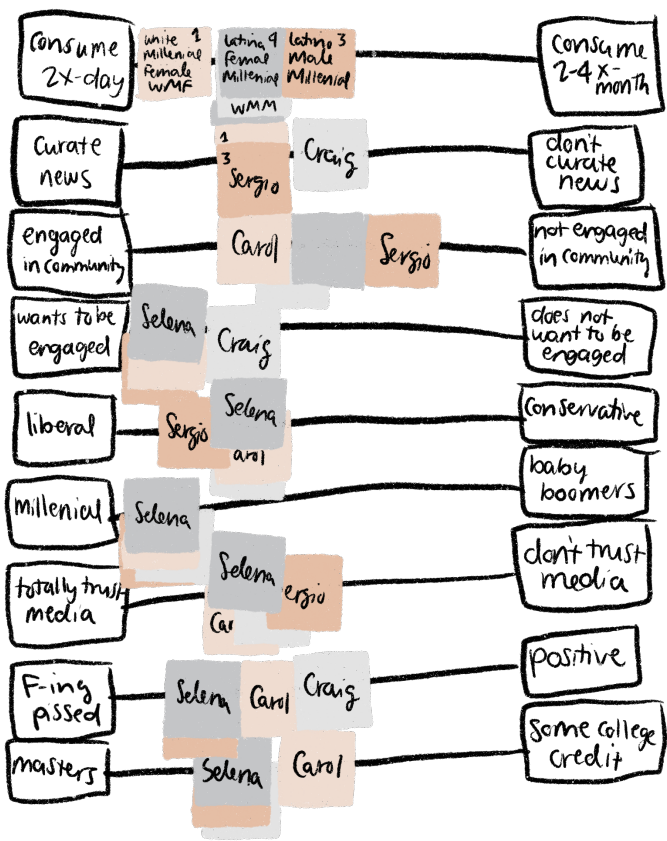


Fig. 3: Team 3 Attribute Map

One strategy for better understanding and making personas actionable is to note attributes that categorize the persona's specific features. For example, labeling a persona as a millennial is a feature. The attribute of millennial can be age and generation. We added attributes in brackets to the Reed persona example to demonstrate how attributes and features work together.

Specific attributes help clarify what a feature might indicate to a designer. By noting how persona traits can be mapped on to larger categories like emotional states, social perception, and behavioral disconnect, we can identify problem spaces more clearly. Reed helped Design Team #2 identify two problem areas news consumers like Reed face:

- feeling disappointed or helpless when reading the news
- disconnect between wanting to be civically engaged and not taking action to remedy that

These two issues can be connected to each other, but it is important to consider them separately.

Phase 1 Reflection

Mapping the Discovery Process



Fig. 4: Mapping the Research process in Discovery Phase from Design Team #1

As noted in Figure 4, Design Team #1 organized their process across background research, observation and interviews. They spelled out key observations and findings and helped bring them to life through quotes.

They also took note of

what resources they employed such as online cloud services, transcription services for interviews (Trint), and organizations they drew from like BINJ, as well as teamwork highlights, including project management, division of labor, communication and allocation of skills.

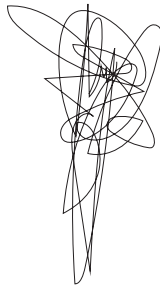
Reflecting on the Discovery Phase, Design Team #2 noted:

“When we began this process, we were told it would be “messy,” but it wasn’t until we were underway that I understood what that actually meant. Messy is being on the journey before you even know where you are going, messy is making assumptions and then having to backpedal and begin again, messy is grappling to develop the best set of questions to get to the heart of people’s needs without showing them the way, messy is reframing a challenge four times before you get it right.”

Design Team #3 reflects at the end of the Discovery Phase:

“What we know: At this point in our process, we have taken the original problem as an entrypoint to start asking questions. We have discovered that “headline fatigue” is a common theme experienced by news readers. We think that this can be solved by presenting the news in a new format or creating a new way for someone to feel involved.

What we don’t know: We are curious to know more about the levers that a user can identify that help them transform from feeling “passive” to “involved.” We don’t know if there are areas of Boston we should focus on or if we should build from our persona.”



IDEATION

What if journalists
could (better)
cultivate a sense
of care in each
story-gathering
interaction?

Auto-trans-
cribed-
interactive
Screen

How do we
make the
interviewing
process better for
the interviewee?

News
Confessional

Podcast

Ideation is the process of strategically coming up with various ideas and possible solutions to the problems identified in the discovery and empathy phase. There is a massive amount of potential methods for idea generation, organization and selection. This section of the guide documents a selection of the methods the design teams employed in the ideation phase of their process. One method borrowed from design firm IDEO is the creation of "What if" Statements. This exercise is a way of framing possible directions for personas or stakeholders without dictating specific solutions. They allow the team to see what directions align with stakeholder needs.

What if
interviewing
interactions felt
empowering
for the
interviewees?

Oral
Histories

Fig. 5: Selected questions and solutions from Team 1

Ideation Method 1

What If Statements

Following the persona Reed (discussed above) as well as insights gathered from interviews with BINJ staff, Design Team #2 came up with the following What If Statements:

- ♣ How journalists foster community collaborated stories?
- ♣ What if Reed didn't have to read the whole news story in order to feel informed?
- ♣ What if BINJ could grab readers' attention without having to read whole article?
- ♣ What if BINJ didn't have to hold events to engage communities?
- ♣ What if Reed could feel like an authority without holding a traditional community role?
- ♣ What if Reed didn't have to do extensive research in order to understand a news story?
- ♣ What if journalists received follow through without call-to-action?
- ♣ What if Reed could feel empowered after reading news without feeling fatigued?
- ♣ What if Reed could contribute to developing new without being a trained journalist?
- ♣ What if journalists didn't have to do more than report the news in order to be a catalyst for citizen action?

These "What If" statements provide a means to externalize and organize potential directions teams can take for pursuing solutions. They help contextualize and focus the iteration phase of the process through a set of structural boundaries.

Ideation Method 2

Future Scenarios

In the Future Scenarios ideation method, teams brainstorm scenarios that do not yet exist in order to see if they can identify any deeper or other unmet needs that affect the current problem. Questions here include, “what would a future look like where our problem was met?

had a lot of questions, but were fuzzy on the problem. By categorizing our questions, we saw that the focus on the topic (gun sales) was distracting us from our interest in how the interviewees felt a sense of care in talking about heavy topics (like gun sales).”

DESIGN IS AN ITERATIVE, AND OFTEN MESSY PROCESS. IT TAKES PATIENCE AND A WILLINGNESS TO WORK WITH AMBIGUITY.

What would we need to accomplish to bring that future to fruition?”

Design Team #1 employed future scenarios with the following intentions in mind:

“We created future scenarios to generate questions around what a future could look like that addressed our problem. What proved most useful in this process is that we

One key insight Design Team #1 came across in this phase is that despite moving through the discovery phase, the problem of what to try and solve for was still unclear. This is common in the participatory design process. As they categorized questions through the Future Scenarios exercise, Design Team #1 realized that gun sales as a topic was

distracting from a root problem around care when students engaged with heavy topics. In other words, gun sales themselves weren't the problem to try to solve for at this point, especially as the team began to emphasize their work with news providers like BINJ and information aggregators and FOIA services like MuckRock. For these organizations, freedom of information and story reporting are of paramount importance, and hence how readers experience care around the news creation and consumption process became more pertinent.

Design Team #2, focused on redesigning MuckRock's online platform, initially felt stunted trying to think about what future scenarios would look like, given their seemingly limited solution space. They noted:

"I was feeling limited in the activity until our professor suggested that we think beyond the website to some of the broader issues that were addressed in the interviews that we conducted. Through this broader approach, a whole world of possibilities emerged. In considering the data we collected from interviewees, I discovered that a core part of the work we are doing in this redesign really speaks to issues of access. When we look to potential users of the MuckRock website, there are a number of things that could impede people's access to its functionality. The issue that we settled on was the financial barrier of filing a FOIA request."

"Our future scenario was this: "if in the future there were no financial barriers to file a FOIA request, what would that look like?" The phrasing of this question was important to us as it doesn't actually focus on cost, it focuses on access."

"Future Scenarios" allowed our group to step beyond the website we are trying to re-design and to consider the broader issues of our problem space. This particular process allowed me to imagine possibilities that have the potential to illuminate a way forward, but also clarified some of our structural and societal limitations in a way that was eye-opening for me. Many of the limitations that we developed in our reflections were overlapping, indicating that there are several big challenges that hold us back from doing many things that could create a better future for our world."



Ideation Method 3

Yellow Brick Road, or Idea Mapping

Idea mapping is a process where teams can focus on where they are heading and what the most important priorities are in their work.



Fig. 6: Design Team 1 Mapping Groupthink

Design Team #1 utilized idea mapping to reorient themselves to the bigger issues they were engaging in beyond gun sales alone. After conducting the mapping process (see Figure 6), they wrote:

"We were pleasantly surprised at how easily ideas flowed and built off of each other when we were synced as a Team: we had clarity on our focus, on our user group, and on our problem, and with all of this, found a momentum in conversation and possibility that we previously had not experienced as a Team in this project."

With a sense of direction following the "yellow brick road" flow diagram, Design Team #1 began to select possible solutions to the problems surrounding the lack of care people may feel around heavy news topics like gun sales and police militarization. The Team pulled together key questions from Future Scenarios and solutions they felt matched those questions. Grouping questions and possible solutions together clarified an unmet need for creating spaces that prioritized the experience of the interviewee (and could benefit the interview itself).

Ideation Method 4

Values-based Design and Human Design Goals

Complementing the selection of problem questions and potential solutions, all three teams engaged in a values-based exercise premised around defining and aligning stakeholder and design team values.¹ A values based assessment helps stakeholders better define their design goal, reframe the problem they are trying solve, and organize how to think about a solution. Design Team #3, focusing on local news consumption and engagement, developed the following value map (Figure 7).



Fig. 7: Design Team 1 Mapping Groupthink

¹ This exercise was adapted by Dr. Gamwell from “How to Practice Ethical Design” by Maheen Sohail of Muzili. Google Slide Deck of the Method.

DESIGN GOAL

OUR GOAL IS TO MAKE THE INTERVIEW
PROCESS MORE APPEALING/BENEFICIAL
FOR THE INTERVIEWEE BY ENCOURAGING
A SENSE OF EASE/VALUE IN ORDER TO
INCREASE LOCAL CONNECTIONS BETWEEN
JOURNALISTS AND COMMUNITIES
AND IMPROVE CONFIDENCE IN LOCAL
JOURNALISM.

IDENTITY

OWNERSHIP

LONGEVITY

RESPECT

TRANSPARENCY

SAFETY

RESPONSIBILITY

EQUALITY

TRUST

Fig. 8: Design Goal for Team 1

Design Team #1 used the value mapping exercise to align the values that emerged from interviews with local journalists with their own values. After the mapping process, this ideation exercise asks teams to express a clear design goal, consisting of a single sentence that conveys what the team wants to accomplish, for whom and why. Two questions guide this outcome: What is the problem we are trying to solve? Who are we solving for and why? Figure 8 shows the design goal for team 1.

Design Team #2 convened around the values of transparency, access, and trust. This led them to articulate the design goal: “We want to enable MuckRock to be a vehicle of access for potential users by making their platform more transparent, trustworthy, and user-friendly.”

Ideation Method 5

Community Engagement Events

With clearer design goals, the teams had the opportunity to take their ideas to the community and get some feedback. In the latter half of the fall semester, community stakeholder BINJ was holding a fundraiser at a local venue in Boston. Many local and independent journalists came out to support BINJ and to visit with colleagues. Teams put together games as a way to gather data and feedback about their ideas.

MADLIBS

My **worst** interview was PERSON OR PLACE
about TOPIC. It was bad
because REASON.

My **best** interview was PERSON OR PLACE
about TOPIC. It was great
because REASON.

My **ideal** interview would be
PERSON OR PLACE about TOPIC
. It would be awesome because
REASON.

Fig. 9: Interview Mad Libs for BINJ Fundraiser

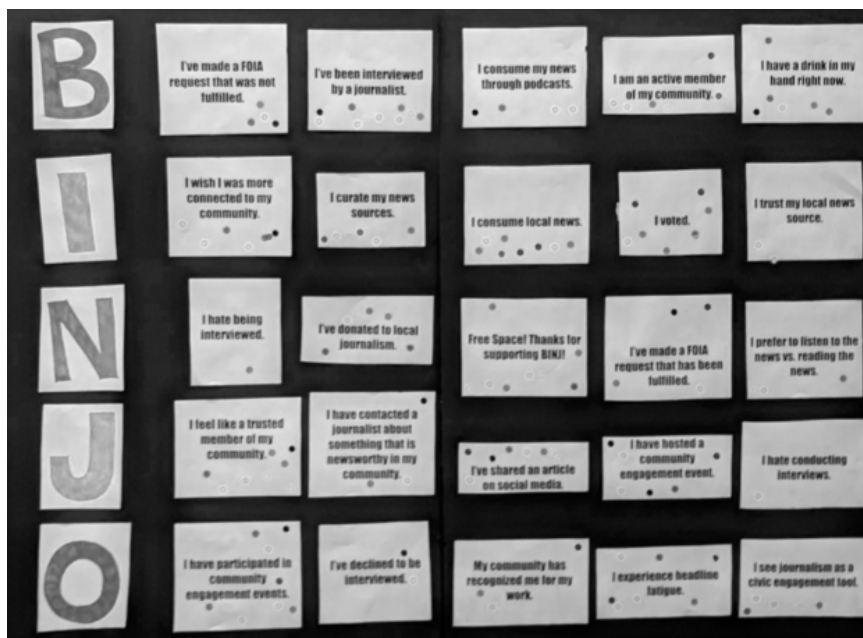


Fig. 10: Design Team 3 "BINJO" Activity for BINJ Fundraiser

This playful approach to engagement allowed the group “to question whether interviewers could connect to the interview experience as something they cared about. The event atmosphere was not research focused, but the ‘Mad Libs’ activity we created resonated with the many journalists there, and the challenge of creating the activity offered another place where we had to create clarity in our focus as a group.”

Design Team #3 created “BINJO” a playful spin on bingo, that they played with all participants at the event. Through this play, Design Team #3 was able to gather data on how these two groups of stakeholders approached themes they identified around news fatigue, civic engagement, trust and journalistic participation.

DESIGN: PROTOTYPES

Prototyping involves physical renderings, storyboards, and sketches of a proposed solution. Through prototyping teams hone their ideas and gather internal and external feedback on what's working and what isn't in order to improve a design's impact for stakeholders.

Think about prototyping like this: walk through the experience, make things and ask for feedback, create the thing and run it.

The following prototyping methods can be used by teams to realize their ideas:

STORYBOARDING

involves visualizing how a proposed solution would help a persona

MOODBOARDS

a form of visual collage that clarifies aspects like form, color, or feel that a solution may take

SPACE CREATION

involves setting up a physical area in which a solution can be acted out

WIREFRAMES AND MOCKUPS

a tool for outlining the elements of a digital layout

PAPER PROTOTYPES

sketches of a digital application that demonstrate the steps a user would go through when accessing it

Prototyping Method 1

Storyboarding

Storyboarding is a method similar to what screenwriters and graphic artists use to depict a scene.

Teams can use post-it notes, index cards, sketch on paper or digitally to map out the course of action as a stakeholder experiences a proposed solution. Like all prototypes, these can be quick sketches and do not require artistic proficiency. The idea is to

on paper or digitally to map out the course of action as a stakeholder experiences a proposed solution. Like all prototypes, these can be quick sketches and do not require artistic proficiency. The idea is to



Fig. 16: Storyboard sketches from Team 1

convey a scenario problem and articulate how the proposed solution changes the experience for a user or stakeholder. Storyboards provide a roadmap for designing an experience, and clarify what elements could or should be included.

The figures show examples of team storyboards for a co-creation interview space (Figure 16) and a community reporting booth prototype (Figure 17).



Fig. 17: Storyboard sketch from Team 3

Prototyping Method 2

Moodboard

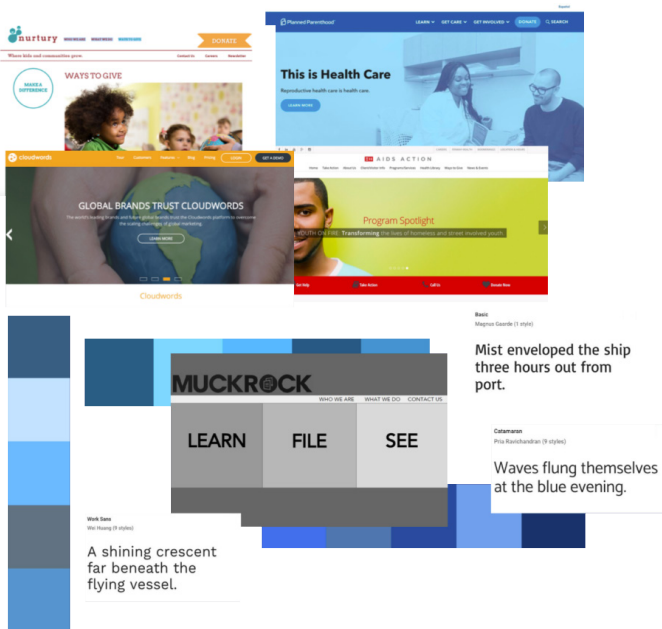


Fig. 18:
Design Team
2 Moodboard

Moodboards are a form of visual collage that clarifies aspects like form, color, feel that a solution may take.

They involve collecting similar visuals to a proposed idea. Figure 18 is an example of moodboards from Design Team #2 depicting various layouts, color palettes, and feel they drew inspiration from to incorporate into their proposed redesign of the MuckRock homepage. Design Team #2 focused on

a visual and informational redesign of MuckRock's site, so they used moodboards to select color palettes and typography. They used Adobe Color CC for the palettes and Adobe Typekit as a base for discovering typefaces. The colors were selected based on user feedback and the type faces combined sans serif to emphasize experience of contemporary clarity.

Prototyping Method 3

Space Creation and Physical Modeling

When prototyping a physical space, teams can rearrange or repurpose existing areas to work out how a solution may function or feel.

For example, Design Team #1 prototyped a “pop-up Green Room” in which interviewees could co-create the interview experience alongside the journalists who would interview them. In Figure 19 below, Design Team #1 prototyped an interview space with chairs, a table with snacks, low indoor

lighting. Large sheets of white paper were affixed to the wall so that interviewees and journalists could collaboratively write ideas, questions, and facts.

Creating spaces using existing furniture and materials provides a realistic and rapid means for teams to physically conceptualize a idea, to get a better understanding of how a solution may work, which elements need more development, and to get feedback.

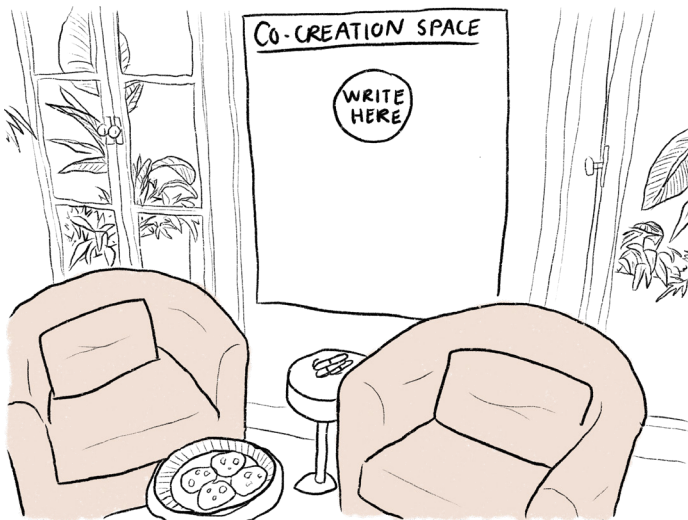


Fig. 19: A Co-Creation Interview Space

INTERVIEW

when was the last time you ...?	do you care about who is buying guns in your community?	what is your reaction to gun violence?
what did you have for break-fast?	what is your favorite color?	what is your favorite food?
what do you know about gun sales?	do you know how many guns your police department is buying?	what do you know about gun sales in the NRA?
how are you?	what kind of firearms do you think are appropriate for police department to have?	

Fig. 20: Physical model of a topic selection board for interviewees and journalists

In another example of physical modeling, Design Team #1 employed participatory methods into their solution. They created a “choose your own interview” board in which interviewees could choose what topics they

CONSTRUCT YOUR PERSONA

I'm confused by ...	I don't like ...	I want to know more about ...
I feel like ...	I value ...	I'm intrigued by ...
Something you should know about me is ...	I want to say ...	I'm angry that ...
I can't ...	I can ...	I wonder whether ...

Fig. 21: Physical modeling of a ‘Persona’ board for interviewees

wanted to be interviewed about (Figure 20, as well as a “persona” wall in which interviewees could choose select cards to direct questions as well as make known how they approach questions and topics) (Figure 21).

Prototyping Method 4

Wireframing and Digital Mockups

Wireframing is a prototyping tool for outlining the structure of a website, an app or other digital space that provides a clear rendering of how a site is layed out.

Wireframes clarify where elements on a webpage are placed such as menus, images and text as well as the hierarchy of information. Wireframes can be physical sketches

with ink and paper or created digitally using illustration or web design programs. Figure 22 shows an example of wireframe sketches for a redesigned MuckRock homepage.

Note: Wireframes work well in conjunction with Moodboards, especially when moving between sketches and digital renderings.

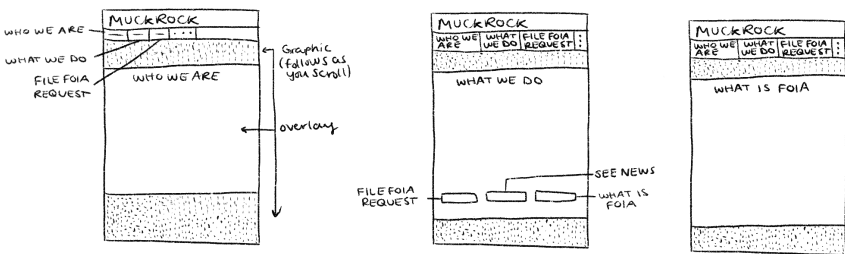


Fig. 22: MuckRock Site Sketches by Design Team #2.

Digital Renderings or Mockups are more detailed realizations based off of wireframes.

Figures 23-25 detail the website mockup for MuckRock’s proposed homepage. Note how the mockup clearly displays key user information in the MuckRock menu such as “Who We Are” and “What We Do” and “Why FOIA.”

The latter portions of the mockup contain Calls to Action, or CTAs, which are action oriented buttons that ask a user to do something, like File a FOIA request. Many modern websites have CTAs as a way to guide users. Figure 25 displays a quote from MuckRock founder to increase user trust by showing the human side behind MuckRock and the FOIA process.

3 section website mockup:

Fig. 23



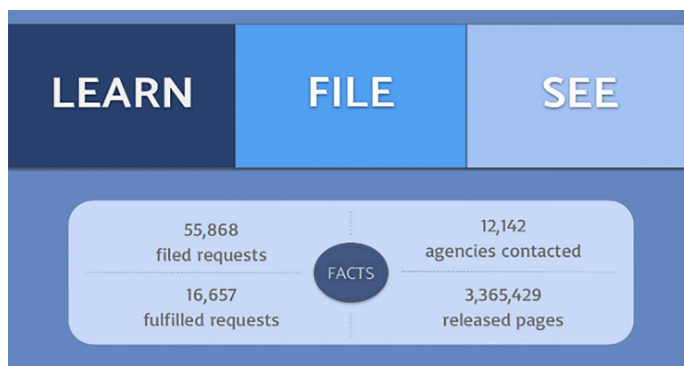


Fig. 24

All three CTAs center on actions around FOIA requests:

- **LEARN** takes users to information about the FOIA request process, and to news articles by MuckRock
- **FILE** takes users through the process of filing a FOIA request
- **SEE** takes users to a searchable archive of all filed requests, and allows them to see FOIA requests they can support

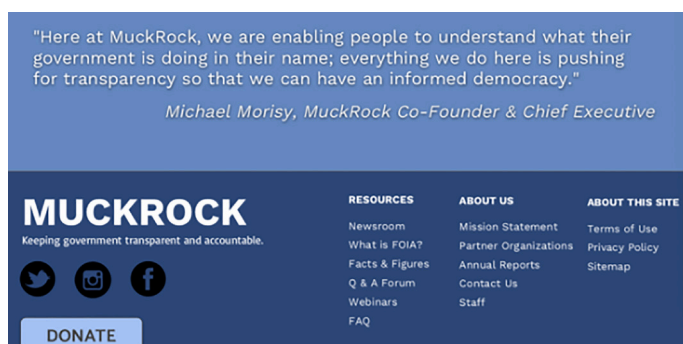


Fig. 25

Prototyping Method 5

Paper Prototypes

Paper prototyping is a rapid and cheap method for defining and designing a user flow, or how someone will use a digital application.

For example, Design Team #3 came up with a combined physical and digital prototype that provides news reporting

access to community members. Part of this solution involved the creation of a digital app through which users could report stories to local news outlets. Such an app could also be used to help community members access and file FOIA requests as part of the news making process.

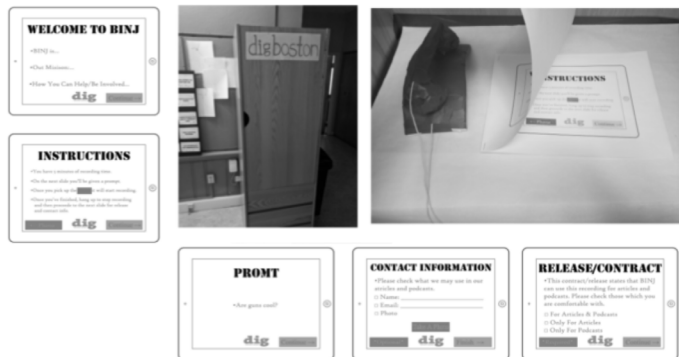


Fig. 26: Physical prototype of booth and iPad app on paper

Walkthrough of iPad paper screens:

- **SCREEN 1** provides introduction, background on BINJ, and how the reader can help

- **SCREEN 2** shows the instructions on how to record and what is expected of a recording session

- **SCREEN 3** is a release contract (which is tied to the audio record) allowing BINJ to use the provided content. However, the subject gets to choose how the audio gets used i.e. in the article or podcast.
- **SCREEN 4** is an example of a prompt screen.
- **SCREEN 5** is the wrap up page that allows the user to provide optional contact information and also takes them back to the start.

In addition to the booth, Design Team #3 also conceptualized a story collection app for smartphones as a paper prototype:

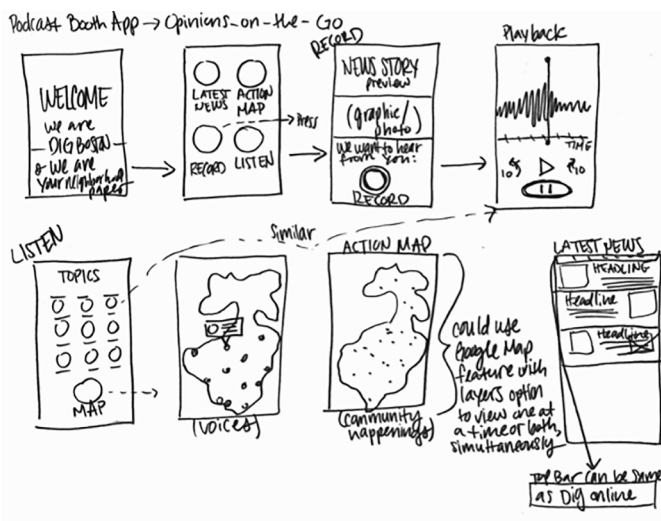
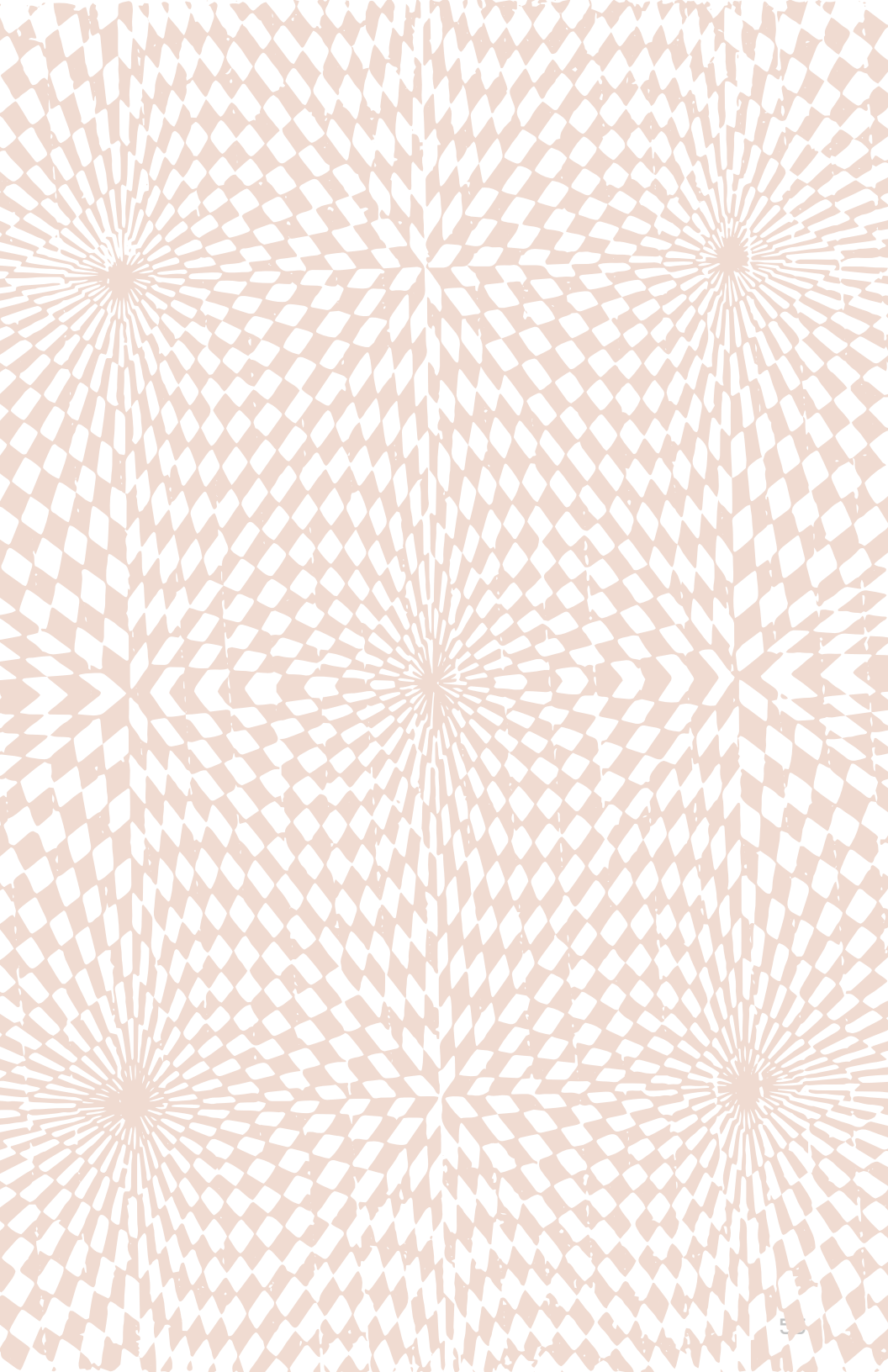


Fig. 27
Sketches
from Team
#3, BINJ
Booth App.

Note how paper prototypes are similar to wireframe sketches. The major difference is that paper prototypes document a user

flow, or how a user will interact with a digital app, in addition to displaying the visual layout.



CONCLUSION

Participatory Design is an ongoing and iterative process.

While based on in-depth research, interviews, surveys, intensive ideation and idea testing, and storyboards and light field testing, prototypes are most often the first iterations of solutions. One course or workshop likely cannot solve entrenched problems, but working iteratively across **Discovery**, **Ideation**, and **Prototyping** can provide inspirational and concrete steps for how to notice problems, get to know people, generate and organize ideas, and propose effective solutions.



STRATEGIES AND TOOLS

Discovery Phase

- Use of free online tools and platforms for conducting surveys (Survey Monkey and Google Forms)
- Use of social media (Facebook, Twitter)
- Data collections and analytics
- Data visualizations
- Attending useful local workshops (General Assembly)
- Lynda.com online tutorials
- Journalist class visits and direct interaction with undergraduate and graduate students

Ideation Phase

- Brainstorming sessions for the purpose of framing design challenges, mapping stakeholders and planning the design process
- Writing ideas down on whiteboards or sticky notes
- Constant individual and group reflection
- Persona mapping exercise using a series of “What If” statements

- ♣ Conducting small or large scale surveys and interviews to gauge problem areas such as “how journalists foster community collaborated stories” or “what structures need to be in place to encourage readers to take action beyond reading the news” or “what confuses first-time users in the MuckRock website” or “what are the true impediments for community members to be genuinely engaged in local news reporting” etc.
- ♣ Implementation of games like @stakegame, designed to be interactive and spark conversation and simultaneously collect more persona data
- ♣ Conduct values-based design workshop to frame ethics of prototypes
- ♣ Sketching
- ♣ Role-playing
- ♣ Storyboard and moodboards
- ♣ Color palette exploration

Prototyping Phase

- ♣ Paper and digital prototyping and their validation
- ♣ Storytelling podcasts

