Welcome to The Future of government user experience: Improving faster with design systems. Thank you for that intro. I work at 18F. Here we go. Did that work? Maybe?

There we go. Okay. You could do it if you want to do it.[inaudible]

I'm Aviva Oskow, a Visual & service designer at 18F, working to improve user experience in digital tools of the federal government as other people have spoken about earlier today.

Thank you. So, 18F, if you don't know, although I think some people do, is a user centered design and technology agency, within the General Services Administration. We are within the Technology Transformation Service and we work iteratively. We design for real people and build it open whenever possible. We share what we know. Which is what we're trying to do today. So, I just want to get a read on who is actually in the room. Is anyone that isn't federal? Are there any state? City? Oh - from New York? Cool. I'm also from - I live in Brooklyn. And, how about, ok, do we have visual or user experience designers? Cool. How about content designers or strategists? Any developers in the room? Cool. And, any product people? One? We got one. Good to know who's in the room. Um, So, today, we're going to be talking about the U.S. Web Design System, and other reusable systems for doing our work better and faster, examples - in practice and use cases, and then what should come next. So, we'll leave some time for discussion.

## 2:00

To start out, I just want to talk about volume. Just over the past 90 days, there were 3.7 billion visits to U.S. federal government websites. So, from immigration to severe weather, healthcare, Veterans benefits, civil rights complaints, student loans, Postal Service, the list goes on, as you all know. People need to interact with our government through digital experiences more and more all the time.

And yet, in 2017, which was not that long ago in government time, there was a report that found that 92% of the most popular federal government websites failed to meet basic standards for security, speed, mobile friendliness, and accessibility. Some highlights from that report include that 41% of the reviewed websites were not mobile friendly, and 42 of the reviewed websites failed to, failed the accessibility test for users with disabilities. Most of us working in this field, and definitely the public, don't need a report to tell us that the websites are not doing that great.

We also know that people are attempting to change this - all of us are here right now. Things do feel like they're finally moving at a better digital direction. We are spending more and federal I.T. than ever before. In fact, digital services contracts increased by 17% in 2018. But these statistics do beg the question: how much time and millions of taxpayer dollars are we spending on potentially reinventing the digital wheel? Are we taking coordinated approaches? Or cluttering the already busy landscape? Most of that probably isn't news to you all, but this might be: In November 2018, the 21st Century Integrated Digital Experience Act (IDEA) was signed into law. This is a huge step in giving our work as user experience innovators real teeth. Now instead of us just trying to prove

that better digital experiences are key to a high functioning government, there's a law that actually backs it up. Representative Ro Khanna who sponsored the bill said, "Government exists to serve citizens, this bill ensures government leverages available technology to provide the cohesive, user-friendly online service that people around this country expect and deserve."

## 4:00

I think everyone here can probably agree to that. Under the 21st Century IDEA, federal websites and digital services must: meet web accessibility standards and be mobile friendly, have a consistent appearance, create digital versions of every in-person or paper-based government process, which promotes digital forms and e-signatures, have industry standard secure connections, reduce duplicity and legacy websites, be designed and developed around data-driven user needs and continually test it for usability, and any new websites or redesigns starting now must comply with these and any existing must report within a year for how they will improve.

So, those are pretty tall orders but they're very exciting. Good user experience for everybody. The fact that there is now a law that says we have to do user centered research for every federal website, and we have to work towards more visual and experience consistency, not to mention even more legal backup for making the web accessible for people with varying abilities, in case the Americans with Disabilities Act Section 508 and the Plain Writing Act were not enough, these are really big steps forward. This is like Oprah putting a better web for all under the chair of every person in the United States. It actually calls out in the law that any website for the public must comply with the web standards set by the Technology Transformation Service - who is us - which means we better do a good job of sharing what those standards actually are.

## 5:30

So, while I love the ambitious stance, this is a lot to accomplish. So big steps lead to big questions. What should be consistent? And what can be unique? What does a consistent appearance actually mean? How do we go about achieving these requirements across such a complex ecosystem filled with so many legacy services, processes, and providers. And how do we keep track of how we are approaching it? And how does it live on past us? At 18F we're lucky enough to have coworkers on the same page as us, but as many of you know from experience - I'm sure - there are many more lone UX champions in agencies who are trying to do the right thing without a lot of time or support and we all need tools to improve the design and development in a way, to improve design and development and ways to advocate for best practices.

So the way to start answering some of those questions is through design systems, documentation, and guidance. So first of all, we need to be speaking the same language. Ways that we are attempting to do this include creating a common system for designing code, shared methodologies for user centered design, shared design principles, and documentation of how we've done it and guides for doing it again.

Basically, we all get a big head start for when we're attempting to turn complicated processes into plain and simple digital experiences. The first of these that I will dive into is the U.S. Web Design System. Can I get a show of hands of how many people are actually familiar with the design system? Hey - that's like almost everybody. How about people actually using it on their sites right now? OK, less.

So, for those of you who don't know or aren't using it, the U.S. Web Design System is an open-source library of interaction components, coding guidance to help government teams - or anybody who wants to use it - design and build accessible, responsive, and more consistent digital experiences all backed by usability research and modern web best practices. Despite a lot of good efforts, there's a lot of confusion about what a design system actually is. So, some common misconceptions that I have heard of that the web design system is just a style guide, just some reusable components, or only for developers. When in reality, a style guide is part of the design system that speaks directly to the look and feel, often static stylings for a site like color and type. Reasonable digital components are another feature of the full system, which also includes larger page templates, research documentation, and guidance. And it's not only for developers, it's for developers, designers and stakeholders who want to speak that same common language.

## 7:53

As of right now, there was just the launch of the Web Design System 2.0 a few weeks ago. These are all the tools you can get from the updated system. It's a lot, and I don't think I even know how to use all of these yet. But, I'm going to dive into some at least, at least some of them in this presentation. And I encourage you to keep exploring them on your own. Dan Williams, who is the current product design lead of the U.S. Web Design System said to me recently that he describes the system as a pallet of choices. So instead of starting Greenfield on every project with every option for color, and spacing, and layouts, and interaction patterns, we have fewer but better options to pick up and start running with.

For me, designing without the system feels like when I got a huge grocery store or pharmacy and there are about 1 million different options for hair products. I get very overwhelmed and end up spending way too much time trying to decide and usually leave feeling fatigued and probably not with the best product for my needs. It's not that I don't have specific hair needs - because clearly I do - but it's rather that I wish I just had a smart person who understood my exact hair needs and could cut through all the rest of the noise, narrow down the options for me and back it up with research. Is that so much to ask, do you think?

# 9:00 Let me go back.

Government digital experiences are kin to consumer option overwhelm. Not just for the end-users, but for those of us designing and building these experiences as well. So, the Web Design System has helped us go from an array of visual brands, confusing navigation systems, inconsistent interaction patterns and - sorry if anybody, if these are anyone's sites up here - including every combination of button style and content-

possible. So "join us", "subscribe", "open account", "get started" - like those are all blue, but mean different things. "Apply now" can also be red. If you were just in the color one [The Importance of Color in UX by Scott Lenger] before, you'll recognize some of these.

So, the U.S. Web Design System brings us to attempting a certain level of consistency over conformity. We're trying to make things feel similar enough, but not so rigid that there is no room for personality or creativity. As a colleague has said, booking a campsite shouldn't feel the same as applying for Social Security. I'll add that the design should help you know how to navigate either.

## 10:00

Currently there are over 200 federal government websites using the System in some capacity. So, consistency over conformity.

To dive into this a bit more, here are the templates for a landing page and inner documentation page. This will probably be updated soon with the new release that just happen, but you'll start to see how these act as the base for a lot of sites you might already be familiar with. We find consistency through similar interaction patterns and components like general layouts, but also, similar headers and footers, buttons, form fields and others. Here's a sampling of some of these base level UI components the designers can download and start working with in Illustrator or Sketch. Now these are little outdated, like I said, but there will be new ones released really soon.

On the topic of consistency, these are mockups that myself and a colleague at 18F, Austin Hernandez, made, but you can see how simply through shifts and colors, images and typography the whole tone and personality of site can change even with the same layout. That is the power of the system like this. You will see in some of the examples that I'll show next, but the cool thing about this is that by starting from a similar place, even if some of the stylings, like colors or additional features are added, we are creating more simple consistency between government websites. So, when a user comes to fill out a form on one website, it isn't so wildly different than the last one they had to do.

#### 11:15

A closer look at these, choosing the serif versus sans serif option, font weights, and colors creates very different voices. These are all actually options within the system. To see this in practice, I'll be showing some example that highlight these use cases, for how it improves our work. So, the first is speaking the same language, accelerating rapid prototyping, teams that have dedicated visual and UX designers, teams that don't and have limited design support, time or budget, and opportunities to pave the way forward. So, a quick aside usually in presentations I would go into how we do our user centered research or user centered design more, but since this is on design system specifically, I would to say that everything I'm about to show is done with this process because the first we learn pain points and opportunities from users. We align with the business needs and constraints that we have with our partners, then prototype by designing and testing potential solutions to learn the best

path for - the best path forward - for building. Then repeat this process as we build the best proven things.

#### 12:21

So the first example is speaking the same language. One of the new features I will point out is guidance for spacing units and margins. So previously on projects here at 18F working from design to mockups to development, there's always the struggle of having to decide how to match the design spacing to how the developer should spacing things in code. There's usually a back-and-forth at the build, But a lot of that time can be cut down if we are working from the same place - the same pallet of options in the first place. These are actually some screenshots of real annotations that I have handed off to developers in the past. You can see that I am annotating every little spacing detail and I'm sure it was really annoying to them. Now imagine with the new system instead of trying to decide if we should set spacing units of 6 or 10, we just have to refer to the system and can start from the same pallet, which is units of 8 by the way. 8 pixels.

Another common pain point of design to code is grand and responsive type sizes. That is a conversation between designers and devs from a team of mine a couple years ago. We had already been designing in one grid system, like a 16 column grid, which we had gone over with the developers along the way, but when it was being coded, it was clear that something was off. We ended up needing to shift the design around because it was not able to be built the way that we had designed it. Some snippet include, quote: is it worth going to a 12 column grid -- so we can speak the same language? It will only take couple hours at this point or does that mean a lot of work for you, the developers also? And quote, Are you going to kill me if there are some type sizes that seem to big? Is it hard to adjust? I don't want anyone spending tons of time tweaking stuff in code honestly, we're trying to figure out why everything feels so huge.

## 13:54

With the most recent launch of the design system, though, we can actually avoid this by starting with the same responsive grid and regularized type sizes from the start. This help designers be better partners with developers by working with the same guardrails in the first place and saves the developers a lot of designer frustration for not making something look or interact how we had planned.

In regards to collaborations between designers and developers, one of our developers, Heather Batagglia, said there are a lot of conversations I haven't had to have because of the system.

#### 14:20

As designers it's our responsibility and the law to choose accessible color pallets. Making a good color decision means making an accessible color decision. If you ask any visual designer, like in a talk that was before this, we all have our favorite tools for doing this. Web AIM color contrast checker was my go to, or this neat tool that some 18Fers made a while ago for building accessible color pallets. These are great tools, but still require a lot of back-and-forth checking.

In the newest version of the design system, though, a new, much larger smart color library has been created which has color contrast requirements build in. It sounds more complicated than it is, but every color in the system has a numeric grade. And the difference between the grades is what we call a magic number. So for example, magic numbers of 50+ achieve AA contrast, and magic numbers of 70+ achieve AAA contrast. So, for example, here I picked red 60 and red 5, 60-5 is 55 which means it has a 50+ grade and achieves AA contrast requirements. As you can see, you can't tell in this - speaking of light -- we've done it before, but you can't tell here, but if you look at this online, you can check it out. As you can see on the right, these colors should still be readable for someone with low vision, if it wasn't being projected on this.

## 15:38

The second use case is accelerating rapid prototyping. A great example of how we use the system to accelerate our prototyping capabilities was on the Crime Data Explorer (CDE) which opened up the FBI's national crime database and was their first open-source tech project. The CDE was the first attempt to build a web platform for the public to interact with the FBI's crime data in a user focused way. The hope was that by broadening access to this data, it can help people better understand crime in their communities, promote citizen engagement, improve resource allocation and lead to more transparency and accountability within law enforcement agencies. We embarked on this project in 2016 and through research with FBI, and lots of users, we learned that we needed to build something that would meet their varying needs. So, exploration of the data through visualizations for more novice users and easy access to the raw data through downloads for experienced users. After our initial research into the existing pain points and hopes for what a new tool could do, we started testing our ideas with users. We went through many iterations of content and ways to present the data and information starting out with sketches, then using the U.S. Web Design System styles, for prototyping, and eventually using our own visual brand once the content was closer.

## 16:49

Because we have the design system to pull styles from, we were able to go from pretty rapid, simple hand sketches to designing something that a user could interact with really fast. Rapid prototyping is much easier when you have a starting place. That's my horrible sketch on the left. And then, the design that I was able to make pretty quickly after it.

Here's another example of that - another designer sketched and I was able to mock up pretty fast.

## 17:15

This project required a lot of data visualization exploration. There are tons of cool looking graphics out there, but we wanted ones that would actually read and allow us to be responsible with how we are presenting the data. Because we were using the system, we were able to spend more time iterating on the types of charts and how well users could read them before needing to spend tons of time choosing specific visual styles — although that did come later. Through our usability testing, we came up with a chart that actually worked for people and you'll notice that they're much simpler than some of the others we tested out. It turns out

that pie charts aren't really easy for humans to understand and some information is actually better as just a table instead of a visualization at all. The design system doesn't currently have any data visualization components, but this is an example of something we learned that we could offer to the team to be included as guidance for the future.

#### 18:04

When designing coding for projects with rapid prototyping, the system keeps us from getting bogged down in the weeds, leaving more room to focus on solving the most challenging problems. We have more time to do the pieces you can't always replicate. Understanding the complex problems and systems and coming up with user centered solutions. A positive I've heard from developers and designers alike is that the system works really hard to not be too prescriptive and allows for customization when necessary, like on this project. So instead of the developer spending lots of time making sure all the buttons have the same padding, they can figure out how to link up the database to the new design charts. While we customize on top of what the system offered for this one a lot, you can see where it acts as a base for the general layouts, header, buttons, and drop downs. We accomplished a lot with this project and we are able to get much further faster by using the system is a base.

#### 18:51

Number 3 is for design teams with dedicated visual and UX designers. So, the last project uses the system as a base, but we did a lot of that customization and this example shows a project where we are able to stick to the system actually more closely, but still add our own flavor and meet our unique requirements. And I'll mention that both of these projects did have design capacity throughout. This one is for the new FOIA.gov improving the process for making freedom of information act requests. So, FOIA is the most important law we have for government transparency, as I'm sure you're all familiar with from working here. It allows the public to gain access to government records, but it's a notoriously slow, cumbersome and mysterious process for uses. In 2016 it was mandated that we create one intake place for all requests to the federal government. And, yeah, collection all agencies. Through research with agency FOIA officers, the most common requesters and transparency advocates, we learned that while we couldn't actually fix all the issues with the FOIA process in this project alone, we could help set expectations and create a clear, upfront process for requestors. Through synthesizing what we heard in research, we determined that the new FOIA experience should feel trustworthy, clear, official, open and transparent. If you are in the last presentation in that room, he was showing that list of words that you can kind of pull from that should be like the feeling that your visual design is giving. So, those were some of the words and principles that came out for us.

## 20:16

Here I'm showing part of an audit of justice.gov and the old FOIA.gov, with the U.S. Web Design System home page template in the middle at the top and then how, at first, we started exploring options for what a combination could feel like.

I started with the existing FOIA.gov colors and updated to the U.S. Web Design System for basic layouts, form field and font. Then I took the

basic styles further by utilizing brighter blues, more sans serif type and approachable imagery to create a visual voice that matched the design principles. Here's a version of the basic U.S. Web Design system on the left, or the styles of the time - it's a little different now - and then closer to where we ended up - a brighter, more open feeling.

## 20:52

For reference, this is the old landing page again, complete with flash charts that no one can actually see anymore. And the new. While we stuck to the U.S. Web Design System layout pretty closely, by choosing an image that represents DOJ as more open, bright, and accessible instead of representing lots of paperwork, we were able to shift how users perceive the FOIA process right out of the gate. I also added some custom icons to familiarize users with certain pieces of content.

#### 21:19

Similar as on the CDE (Crime Data Explorer), we could quickly start testing the form with users because we have the fields to draw from right way. And more time to focus on the content instead of having to start from scratch. We tested each version with users, keeping what worked and adding what they needed. Through that process, we ended with the government form that will be more familiar to users as more agencies adopt similar styles. The layout for this form is currently being used as a base for new projects as well. And we built confidence in the partners dedication to transparency by guiding users through the steps with tips and relevant content for making a good request along the way. Another reusable component that is now part of the system is the official website of the United States government banner. This is a thin banner at the top of webpage that can expand to give more details on how someone knows it is an official, secure site.

## 22:06

Another cool, reusable piece of code that I will point out is the dynamic glossary tool. This is not currently part of the design system itself, but is another open-source tool that anyone can implement on their own site. This helps users define words they might not know without taking them out of the experience flow. As much as we write plain language, there will still be words and concepts that need extra definition. Many sites 18F has built use this currently and I encourage anyone to bring this tool over to their own site. It's pretty cool.

Number 4 is the design system in practice is teams with limited design support, time, or budget. The relaunch of USKPA.org is an example of a project that had no designers on it for the majority of the engagement, and only about 10 hours at the very end out of 11 weeks. The UN's [inaudible] scheme is meant to prevent conflict diamonds from entering the mainstream rough diamond the market. 18F was brought on by the Department of State to develop a strategy and product vision for a website and database to manage U.S. certificates, but with limited time and design budget. After research, the team recommended that there be better security and features for login, expanded data entry, and search, and print and notification capabilities as key functionality for the full architecture and interaction redesign.

## 23:22

This was the old database site which was unusable on mobile and didn't fully capture all the details necessary for the process. And the new product. Because the project didn't have a designer for the majority of the project, the developer pulled the styles straight from the U.S. Web Design System. Toward the end of the process, they brought on of our visual designers, Austin Hernandez again, to give the site a bit more branding and voice by creating a new logo, finding an appropriate hero image, and do some quick fixes for spacing and other small tweaks that do make a big difference when you are launching a product. Even without Austin's expert final touches, the USKPA site would have been leagues ahead of where it was just from the straight out-of-the-box design system.

Number 5, the design system as a use case for creating opportunities to pave the path forward. So, the forest service, which is part of the Department of Agriculture, not the Park Service/National Parks, engaged 18F to help with the new public experience for online permitting meant to increase and encourage the public's responsible access to public lands. They were, we were actually brought on to help find and then work with vendors for the technical support so we were not the developers or the designers on this. A deliverable that came out of this engagement, although not the initial ask, was a new web design system for the forest service, based directly off at U.S. Design system. So, while there is a lot more interesting work on the permitting site development itself, and I encourage you to check out the 18F blog for more information about that, for this, I just want to focus on this artifact specifically. So, 18F was only in an advising and strategy capacity, like I said, and the contract team didn't actually have a dedicated, visual designer. Although they did have a content and UI designer along with several developers.

Early on in the engagement, 18F directed the Forest Service to the U.S Web Design System and they were able to clone the system and adjust it to match their branding. In the last talk somebody was asking how do you take color - if the agency already has agency branding colors - what do you do with those if you're using a system? This is an example of, you can't see here, that's like not blue - it's tan. I think tan or orange don't really show up on this. They took the forest service already using bright colors but then put them into the web design system to make it feel like their own.

## 25:39

While this is not yet currently serving all of the Forest Service online presence, they are using it as they build out more modules, and they also continue to maintain and add to this design system as they create new components that are tested for usability and accessibility. So, for example, the U.S. Web Design System doesn't have a progress bar, and, something that they created for their system was a progress bar for going through the permitting process. So things like that could also be wrapped back into the system. This gives them a big leg up and adhering to the 21st century IDEA. Not all 200 sites actually using the U.S. Web Design System create things like this, like an artifact like this, but, what's nice about this approach is that the Forest Service now has a place to point people for learning their system in an interactive way. If you're familiar with reading - if you are not familiar with reading code or

navigating github, online system guides like these are a great resource. Other federal sites that have done the same thing include USAjobs, Centers for Medicare and Medicaid, and NASA. And in case it's not clear here, this is actually a webpage that you can go to and interact with and click through and see how things actually work. You can see the code that is making it, and for designers, you can see what it's supposed to look like and how it is supposed interact.

## 26:54

Melissa Braxton, an 18F UX Designer who worked on this project, said our partners are now ahead of the game. They already have a project and product that complies with the 21st Century IDEA and can be built upon.

Okay. Now you're an expert in the design system and all of its capabilities and how to use it, right? If not, or you need help convincing others in your agency about the benefits, here is a U.S. Web Design System cheat sheet that I made for you. The system gives us a big head start for prototyping projects with or without design help. It leaves more room for solving complex problems and complying with the 21st Century IDEA. The system is based on user centered research itself and has documentation to back up decisions. The system opts for consistency over conformity. Sites can retain personality while making things easier to use. It gives us a common language that promotes better working relationships on design and development teams. And it is open source, which means it's free, and wants your feedback on how to keep improving. So, it's actually a collaborative effort. You can tell the U.S. Web Design System team how you're using it and what else you want to make it better. This is an open source community of government engineers, content specialists and designers, and people within and outside the government can contribute - which is how a lot of 18F projects actually work. Some of our developers are people who have been just kind of people that worked on the outside and commented on open source repos in github and at some point, 18F was like, hey, maybe you should do this for real. You can connect with the team on GitHub, Slack, or email.

# 28:31

In case you still don't know where to start - because honestly, this can all feel pretty overwhelming - here are some are guides and resources that I will wrap up before leaving some time for questions and discussion. So, plain language.gov is a resource that explains plain language in plain language, with guidelines and examples and has trainings and resources. This is actually part of a joint project that 18F launched to help not only our own content team improve their plain writing skills, but for anyone inside or outside the government to learn and use. This is an example on plain language.gov where you can see a before and after. Before big blocks of text with important details buried and confusing phrasing. And after, more straightforward, action-oriented, bulleted list that is easier to understand. The 18F guides are basically a landing page for all these other ones that I'm showing here. But these are our technical guides by topic and discipline that 18F uses on projects with other agencies. They help us do our day-to-day work and are public domain for anyone to use or replicate themselves.

The 18F method cards are collection of activities and practices for doing human centered or user centered design. I personally refer back to these often when I'm crafting workshops in person or virtually with partners and users. We are actively updating and improving these. And Julia Lindpaintner who was on the remote panel earlier today is leading that charge if you want to speak with her. I just called her out and did not ask if that was okay, but I know that they are seeking feedback. And the 18F content guide, which is a detailed guide on how 18F content designers plan, write, and manage their content, including our shed content principles.

Finally, although this is not even all the resources that we have available, accessibility for teams is a quick start guide for getting accessibility and inclusive design practices into a team's workflow. It provides an overview of how different disciplines can be building for accessibility and inclusive design.

## 30:24

So, I'm going to leave time for some conversation, but in conclusion, here's the cheat sheet again. You can, I think they are setting out these stacks, or I can share. All of this is open for anybody to use, and reuse, and share. These again are the resources and these are clickable links, if you get the PDF of this, you can just go that way.

Special thanks to these colleagues of mine who helped give their opinions and thoughts to this presentation. And the disco ball actually worked! Very exciting. I'd love to open it up for questions and discussion, and just conversation about what people need. I know I throw, I threw so much at you. So, I understand. Thank you. (comment from audience) Repeat the ..., yes - ok. Hello

### 31:13

Question from audience: I was probably a former evangelist of USWDS and so IDEA Act came out and [inaudible] six months, we have not gotten anything from TTS aside from these standards and there's a lot of frustration within the federal community that, is the web design system THE standards? And if so, like for example - NOAA.gov - webby award winning website, has nothing to do with, but based on user research, beautiful site, very user friendly. Is that now going to have to be completely redesigned to look just like the Web Design Standards? [inaudible] So there's a lot of frustration and I know that's not directly at you and there are many bigger players - but what's your advice to us in the federal community who used to be so excited about this, used it, loved it, and now feel like it's [inaudible]

Presenter: I would love to answer that. So The question was about, with the 21st century IDEA [Audio cut out from 32:00 - 32:57]

... not saying, you have to exactly be designed this way. What [inaudible] ... the thing to be more visually consistent. It does beg the question, what does visually consistent actually mean? I would suggest that if you already have, if you haven't already recently done a redesign, or if you have good usability practices on your site already, I don't think it means, first of all, we know that nothing is going to happen within a

year. That's just, I mean, encouraging, yes. That's just impossible. Whoever like, I think that was an ambitious thing to push people. But, if you already have a site, and don't, I guess, don't necessarily quote me on this, because I'm not a complete end all be all on this, if you already have a site that really has a lot of good usability practices and design and everything what you have to do in a year is just do a report on how you are going to improve. The report, if you say, look at all this usability testing. We already following all these things. We do all this testing. We're accessible to people of varying abilities. You are making a case for why your site is actually already doing really great. Especially in comparison to all the sites that have not done any of this. And then, for new things, or for new sites or whatever, things that have not done that, I would say a good place to start, instead of going and starting your own thing, even if it could look really great, would be to start for this. You can still do customization. Just, not a specifically. Ironically, GSA's website does not really follow this. As you can see.

## 34:32

From the audience: We have an online question. The question is, how do you find end users for testing your design? With the general public, how do you filter when the general knowledge of the subject would be beneficial?

Presenter: Do people hear that? Or should I repeat that? So, the question was about, how do we find people to test with for usability? If we are asking the general public, what if you need someone specific that has a specific knowledge set. So, we get this question a lot when we are presenting stuff and I think we should do like an entire talk just about, specifically, usability testing. The way that we have done it in the pastis we start with our stakeholders. Interviewing with them and see what their experience on their understanding is. And then where we go from there is, we, usually with them, help try to find groups of people that they think, that they know are their users or think they are their users, and try to either first, see if they have contacts, or if there are other organizations outside of government that they know are working on similar things. We reach out to them and ask if they have people that would potentially be interested. Sometimes we do things in person, like I know that teams have gone to public libraries, where people are accessing Internet. If they don't have it at home. They kind of do testing in a more in-person way. I'm trying to think of other ways that we - I have done a lot of, yeah, doing research around groups of people or communities that are already doing similar things and then for sometimes it ends up just being, if you need just kind of general public, since for the government we're not allowed to incentivize with money or anything like that, we've done a lot of kind of starting out with friends and family that we know, and then starting to broaden it from there. So, kind of using our own personal networks as way.

From the audience: A follow-up question is, what are the limitations for reaching out, people can be contacted or

The question was about what are the rules around reaching out for asking for usability testing? So, first of all, you cannot offer money or any compensation. And people, we have everyone sign an agreement that says,

this is completely voluntary and if anyone wants to stop the test at any point, or not continue giving information, that they can stop it, and we say, we let them know if we are recording or taking notes. If we want to quote them in anything we will come back and ask permission, so those are some of the things up front to make sure that they understand. And, there is some things around the paperwork reduction act that have to do with like, you can't ... it's quite complicated. I don't even fully understand it. But basically, you can't survey like a ton of people, and sometimes a usability test can be considered as a survey. So, there are rules around like, in other cases where you can be like, everyone take this thing. I'm not an expert on that, so I will let people talk about PRA, but I know there are certain things to do around making sure that it is ... [to audience member] are you on one here? Do you want to say anything else about that?

#### 37:42

From the audience: For that project we immediately because we were talking to other federal, government employees, with the public it's 10 or more folks, or if it's the majority of a sector, for example, if there are only 4 companies that do this one thing, and you're talking to three of them ... [inaudible] majority even though it's not [inaudible] and is the exact same set of questions [inaudible].

Presenter: Just to repeat that for online people: If it's within the federal government testing, it's actually not, it doesn't require the same. And, there was a lot more things that you said. We will try to maybe add that in -- after or something. Yes?

# 38:30

From the audience: There's a 2016 flexibility memo around PRA [inaudible] everybody look for that, but again, like you said - it's the instrument. Surveys are not really [inaudible], but as long as it's like direct observation and non-standard, there's no limitations. So really look at the flexibility memo around PRA and use it to your advantage.

Presenter: That's great.

From the audience: PRA should not impact any usability testing at all.

Presenter: PRA should not impact any usability testing! There's a new memo that's come out - from 2016, so it's not even that new. -See, these are the things. This is why we Come together so we learn these things. That's really good to know. In the back, yes?

## 39:23

From the audience: [inaudible] UI designer ... it's been a challenge ... [inaudible] ... bring up a dirty word and that's boostrap. And we have developers that come in and know bootstrap [inaudible] copying and pasting and then it's not putting it into the grid [inaudible] also for 18F [inaudible]

## 40:00

Presenter: The question was about for bootstrap developers, and people that have more capabilities in systems that the USWDS does not currently,

basically have direct components for. How we go about that. So, a good example of - of something similar, is that we don't really have Drupal developers that 18F, we have one person at two people that do Drupal. But somebody created a Drupal version of the U.S. Web Design System that the people can start pulling from. I believe it was somebody that was not part of U.S. Web Design System team. So, because it is a kind of open source thing, I don't know of right now, to be honest, the design capacity of the U.S. Web Design System was very small. Which hopefully will increase, because of the whole 21st Century IDEA and everyone needing to work with us now. But, I think that things like that where if it's people we're working with need it, this certain thing or we need a certain thing to build off of, that's what we want to know and they could work toward figuring out how to provide more resources for that, or if the somebody else that can work on building that up. Interestingly, I was talking to one of 18F developers and they were saying that they had the opposite experience where they used to have to do prototyping and bootstrap, and then they weren't able to do all the things. I know everyone has their different things that they like and the different things that they worked with. Let me say one other thing about that.

From the audience: [ Inaudible Comment ]

#### 41:41

Presenter: Yeah. Another example of that is, we might start using the tool, Figma, as designers. And, the libraries are in Sketch and Illustrator and not compliant with Figma. This is the information that the team wants to know more about. And we can talk about ways to be accommodating.

From the audience: CMS - their design system is more developer centric inaudible]

Presenter: Centers for Medicare and Medicaid - their design system is more developer focused.

## 42:18

From the audience: ... the folks online and they want to know are there any case studies that show positive reflections in analytics after using the design?

[Inaudible Comment]

Presenter: That's a great question. I didn't include any of that in there, which, thank you for pointing that out. If you go to the 18F blog, there is definitely a blog post about kind of coming back around to agencies after they have launched. We try to do with our partners, plans for when we're handing - it's less of just like a handoff and more of a we're working with our product owners after we're gone and Part of the thing that we try to do, I can speak to every single project, but is to incorporate analytics and things so that people are continuing to test their own sites and understand. There definitely are case studies...

[No Audio]
[Event Concluded]

Related links: <a href="https://18f.gsa.gov/blog/">https://18f.gsa.gov/blog/</a>

Related info posted to the UX-COP listserv after the UX Summit

- PRA Overview including information about the Fast-track clearance: https://www.usability.gov/how-to-and-tools/guidance/pra-overview.html
- I noticed some links are broken, but I think the content is still good, for the current page on ICRs: <a href="https://www.whitehouse.gov/omb/information-regulatory-affairs/federal-collection-information/#IIPR">https://www.whitehouse.gov/omb/information-regulatory-affairs/federal-collection-information/#IIPR</a>
- Flexibilities memo from 2016: <a href="https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/inforeg/pra\_flexibilitie">https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/inforeg/pra\_flexibilitie</a>
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