Welcome everybody, to the third day of the 2020 government UX summit. We are going to be getting started shortly, as a reminder, this event is being recorded. While I am telling you the getting started stuff, please go into the chat and tell us what agency or organization you are from. There, you are also going to find a link to live captioning as well as other useful links, we had a great program so far this year and I'm really excited to hear from our colleagues across the country. A big shout out to everybody who has made this possible, including my fabulous co-chair, Jean Fox, the staff at GSA, who are doing all the logistics to make this possible. Everyone who submitted fabulous proposals and made it so hard for our volunteers who provided peer review and program planning and all of our presenters who are taking the time to share their experiences with us, our session chairs and all of you who are attending the sessions today.

We have a great program and there's still one more session after this, if you're not already signed up for it, it's not too late, go and sign up if you would like to attend, the Summit has been organized by the user experience community of practice and digital.gov, the mission of digital.gov is to transform how the government learns, builds and measures digital services in the 21st century. They do that with the tools, practices and policy guidance they need to deliver accessible services. The practice provides sources to all levels of the U.S. government, it is open to anyone who has an interest in UX and the government email address, you will find information on joining the community in the chat chat window.

A few more things before we get going. Videos of the presentations will be available online in about two weeks. At the end of this session, you will see a link to a survey and we would appreciate you filling out the survey, it'll help us make future summits even better. Direct all your questions to the chat, you won't be able to unmute yourself, so if you have a question for the presenter, put it in the chat and the session chair will relay it to her at the end when we have Q&A. As a final reminder, this is being recorded. Now, let me introduce Christy Hermansen, she has been working with GSA's integrated award environment since 2013, first as a contractor and since 2016 as a federal employee, although much of her background is technical, she first served as the integrative award environment analysis. She has engaged with and analyzed user input from thousands of IAE customers. Christy, take it away.

Thank you, Wendy, and also thank you, Jean. I know we were all hit with this pandemic as a surprise and pulling this off as a virtual event, I really appreciate the opportunity to share this presentation today, so thank you very much. Change is hard, and in the early 20th century, almost nobody in this country brushed their teeth. Think about that for a second. 7% of households in the country had a tube of toothpaste in their medicine cabinet. At the same time, Americans were consuming more and more processed, sugary foods, dental health was declining. And nobody brushed their teeth. So, an executive named Claude Hopkins who is an informative influence in the advertising industry, was approached about putting together a national ad campaig for a pepcident, he believed that selling toothpaste was financial suicide, he would never convince people to change their habits and start brushing their teeth. But, he agreed to design a national marketing campaign anyway. In doing his research, he discovered that teeth are covered with what he called a film. You can get rid of it by eating an apple, toothpaste doesn't necessarily get rid of it. But in spite of this, Hopkins used this to get people to change their habits and start brushing their teeth. Using a simple trigger. Just run your tongue across your teeth. About three weeks after the ad campaign first ran, demand exploded, and his campaign was considered wildly successful. Still, a decade later, 35% of Americans still did not have a tube of toothpaste in their medicine cabinet. That just gives you some sense, 10 years, you look back now and you think you can't imagine people not brushing their teeth. But, that type of change over the course of 10 years to get just 65% of the American population to brush their teeth as a habit. It really illustrates for me just how difficult change can be, how long change can take sometimes, and really how hard it is.

Because of this, I think it's never too early to consider how change is going to impact your customers. And when we talk about human centered design and customer experience, it's important to look at the change aspect of that as its own design, and how we need to be conventional about that and treat it like, I'm going to get into software development a little bit, and I'm going to talk about things like agile, where we have these well-established iterative processes that are going in and trying to reach the department. But throughout that entire process, considering the changes and really what kind of changes you are taking people through, talking to people about what those changes are and then making them active participants in the change that you are taking them through is such a critical part of particularly the kinds of sweeping changes that I'm going to talk about that we have been making.

So, this picture right here shows a little bit of the environment that I work in, I work for GSA's integrative award environment, we are responsible for what was 10 governmentwide award systems, that is contracting systems and federal systems like grants and support systems. So, we have things like contract opportunities, governmentwide again, agencies will put out contact opportunities on one of our old websites called FBO.gov, and vendors would go in and bid on those. We have past performance data on when those awards would have been made, we have those award actions, we have sub award data. On the assistance side, we have something called assistance listings which are program descriptions, we have entity registration where vendors and state governments and any one who gets any sort of award from the federal government goes in and registers themselves. So, the idea behind this is to go in and connect all of this data together, so the award data is connected to the vendor data, the opportunity is connected to the agency data and all of this is playing together and the end state, the vision is a really powerful tool where everything is seamless and connected.

So, if you look at the graph on the left, that shows, we are partly through this transition right now, the systems with the green background (CFDA, PEEPERS, WDOL, FBO), are systems that have been decommissioned already. Everything that you see in the blue background are systems that we have yet to decommission or transition. So, CFDA, PEEPERS, WDOL, FBO, these have been brought into a single environment and that graph that you see in the lower left-hand corner shows you a feedback that came in, we have a feedback tool on the integrated site and you can see the feedback coming in and this is the number of feedback items that we have received, and you see that huge spike in the middle, where it says 9919, almost 10,000 comments, that corresponds with the month that FBO retired, you can see this traffic ramping up to that, then you see this huge spike of people reacting to the change we made.

So, this is a little bit about different stakeholders and we’ve got a lot of government and regulatory bodies, but even within the user community, it spans everything from a really small nonprofit that might be a one or two person operation, to a large state government, to a large federal contractor. So, really different types of users with different needs. So that adds some complexity there. Something else to think about, if you look at the bell curve in the lower left-hand corner, this comes out of a book called crossing the chasm by Geoffrey Moore, and it’s really a marketing book but it talks about trying to get people and how you get people to adapt innovative technology. And I think one of the things that is really interesting in the federal government with systems like ours, and I think a lot of others as well, is that this bell curve that shows the natural progression from early adopters, through the early majorities is that blue in the center, and you have the late majority which is the next block and the laggards which are the last people to launch the technology or innovation. When we have an authoritative federal system, we have that entire body of uses, that we are essentially telling, okay, you know what, you need to adopt all of this right now.

So if you think about when we transitioned fed biz opps which is the contract opportunity system we have, over a weekend in November, which means that when all of these people, regardless of whether or not they are people who really embrace innovation, or people who really want things to be much more stable before they adopt a new technology, all of those people that use our systems, when they left work on Friday afternoon, they had one system that was the authoritative system, for contract opportunities. When they came into work on Monday morning, they had a completely different environment that was now that authoritative system. So we are taking all of those people across that entire bell curve because these are mandatory systems, if you want to do business with the federal government, you have to use our stuff, we are taking all those people and really making that huge leap together. And if you think about that, it's really sort of an astounding thing to get your mind around, that something that has this natural progression out in the marketplace, we are really doing that in a very much shortened time-frame and really just bringing everyone forward together. A huge challenge.

So, we've had a human centered design program in place for a long time. Probably dating back to, well, because we have so many people who use our system and so much governance, we have been talking to stakeholders since before we really had a formal program. But, probably around maybe 2016 timeframe is when we really started to formalize things more. We worked with the lab over at OPM and did 100% training for all of our program office staff at that time, based on the 4-5 day training that they were offering on human centered design. Really great program by the way, we made very few tweaks to it in bringing it into our environment, and we periodically would hold refreshers internally, we don't have a lot of turnover in our staff, which has been really nice. But we hold refreshers periodically in different types of workshops as well. So, we've had this program going for a long time, and we have also done scaled agile development, which really means we are meeting every eight weeks, in reviewing where we are at, taking and adjusting our priorities and doing all of that analysis, and you can see the agile and this is a straight, you can go out online and look at the portfolio Kanban and you can see the steps that we’ve implemented where first new ideas go into a funnel, we review them they go into analysis, at that point once they’re approved to move forward they go into a backlog where a development team can pick up that work, implement it and then push it to an alpha environment. You can see how forward this is with all the human centered design processes, in those first few stages. This is a process we have had going for a while, like I said, but a lot of the focus on this was really on the end state. So an example might be, how do we enable small businesses to identify contracts that they are well-suited to compete for? And really, what is the end state system that we want that is going to make it easy for them to do that? That was really the type of problem-solving we were focusing on. Instead of taking a look at that end state, and saying, OK now that we know where we want people to end up, what are the incremental things that we can do along the way to make that transition easy for them? Which really is a design problem in its own right, and there are places without, throughout this framework where you can really insert those types of questions. Particularly in the framing of your problems, as you are going through and talking to people and in focus groups and in interviews, and having a good sense of where they are coming from and what steps they think they need to take to get to the end state and then as you are going in and prototyping and going out and soliciting feedback on that, and we do have a fairly robust prototype process in place, and really being very explicit and intentional when you are going through those experiences and asking people, okay, if this is where we really want to be with this system, then how do you want us to get you there?

So, this is a little bit of what our end state vision was - what we were initially focused on. If you take a look at this picture right here, and then go back to this one here, these are really, really different pictures, this one we've got 10 different silo systems, each with a fairly focused positioning, a focused mission, and we are taking these 10 systems and turning them into something that is conceptually organized like this. Part of the point in bringing all these systems together is to really connect the data, so when you are searching through records, you can search through all the records on a company, so you can look for the award data, their entity data, the registration information, if you have the right privileges, you can look through the performance information. So the idea is that we really wanted to have a unified search, one, it is much more efficient to build a single search experience, it becomes very consistent for people. Then we can really start to connect the data. To be able to search across all these different systems. If you look at the databank on the far left, where we wanted to have a single area of reports, and that way, each of the legacy systems has their own reports and for the MVP, we have to get to the point where we have those reports in place, but then we can start to build on that and make connections between the data and build reports that span data sets. So in order to achieve and really get to the vision, this is what enables us to do that. It's also very different from what people were sed to.

So, we spent a lot of time, years working on getting all this infrastructure in place, getting single sign-on in place, and consolidated role management, looking at rolls across all the systems, trying to standardize terminology, a ton of focus on how do we really make these systems consistent, how do we make them work together? How do we standardize functionality behaviors across all of this? And we didn't spend a lot of time thinking about how really different this looked to users, and you find yourself in this position where you kind of feel like, okay, we can change nothing and then nothing ever gets better, or changes going to be hard, and you are caught between doing nothing or making the change and know that it's going to be hard. And that is really, I think, a little bit of our mindset and a lot of those early discussions where we know this is going to be hard, but hard is better than doing nothing. So, when we first transitioned CFDA, we did not ask those questions, like ok it is going to be hard...but how do we soften the landing? So when we put CFDA up there, it was vastly different, we put together training materials and all of that, but it really sort of just focused on what the features of the system are. It didn't look back at where the users were and really try to, we treated them, this is a very common thing, people tend to treat their users as if they are blank slates, instead of going in and really trying to understand what the gap was between where people started off and where we really needed them to be to understand what was going on with the system. So, after we transitioned CFDA, and it was a fairly small system, so all things considered, it went reasonably well. We did bring in some FBO users and we show them how we transitioned CFDA and said, will this work for you, too? They said, no, we need much more than that.

We did a little bit more than that, we went in and created a landing experience, and explained what was going on a lot better, we provided some links to different things that we thought would be most useful, but to a large extent, this effort was still somewhat external to the system itself. It's something we built on top of the system as an afterthought, it wasn't really anything that we built into the system itself. As we got closer and closer to the FBO launch, we really started to recognize that we needed to be a lot more intentional. So, as we started looking at some of our future transitions, we started looking at, okay, what does that actually mean to be more intentional? Some of this that I'm showing you here comes from a classic text on innovation by Everett Rogers, called *The Fusion of Innovation* where he is really looking at how quickly people adapt and accept innovations and what are some of the attributes that really affect whether or not people are going to accept something or project is ultimately going to fail. Because a lot of times, the technology might be great technology, but really getting people to buy into it and see it and accept and move forward is a lot of times where the failure comes.

The first attribute he talks about is, how do you increase the advantage of the new solution, and you see I have the word user in brackets there, and not to use the generic reference to the user, but as you are doing this, identify specific users, a specific problem you're trying to solve for them, and express how to increase the perceived advantage in those terms. But, this was the first one that was on the list. Really focusing on, how do you, not just the advantages, but how people perceive them, and asking people how they perceive the change.

Compatibility, I'm going to do a deep dive into in a little bit, but this is about, how do we provide an experience that is compatible with the values, past experiences, and needs of the user? This is going in and really drawing on that history, drawing on their habits, drawing on their understandings of in our case, our legacy systems, all the visual cues in those systems that they are so used to having and it doesn't matter that the new system might be much better than the old one, there are certain visual cues that they have been working with for years and all of a sudden, we are asking them to unlearn that. So how do we take those cues and really move them forward and leverage those as we are transitioning them?

Another important factor is the complexity of the change, and really understanding what the complexity of that change is. We have a reporting tool from fpds.gov that we have been in the process of bringing in, it is a third-party tool, loading all of our data and then making it available. And that is one area where we are really understanding how people perceive that complexity. And I've got a screenshot in a while, I'm going to talk about that more as well. But, people's perception of the complexity of the change and how you get them over the hump and really understanding and dealing with that complexity. A lot of times it is perceived complexity.

The fourth one is, is it possible to make things available for people to try out, to experiment with beforehand? Can they go in and kick the tires and get comfortable with it before they are required to use it?

The last one, observability, this is a lot about whether or not the effects of the change are something that other people will see. The examples that are used in the book are cell phone use for example. Cell phones are very visible, you have them out, they ring, they are disruptive, all of that, so if you are brand-new cell phone adopter, it's very visible to you and the people around you, that is about other people being able to tell that you have adopted this change.

I'm going to go into an example here, this is really focused on the compatibility. And whether or not what we are doing is compatible with the expectations and history that people bring. So, we did a lot of focus groups and interviews and things like that before we started transitioning our systems. Almost in almost every single one, one thing that we have heard over and over and over again was some form of the request, I just want a Google like search. So this is probably a little bit more like a shopping site because it does have the categories, you can see all the award data, kind of like when you are shopping, you've got different departments. If I want to shop for Harry Potter, I shop across an entire site or I can look for it in books or movies, in toys and clothing. But again, Google likes search, this meant that you can type location, you can type an ID, a keyword, any number of a variety of fields, you just type it in and the system figures out what you're looking for and gives you the most relevant results. And from there, you can further refine it by category, add additional filtering, but this is what people said over and over and over again, we want a Google like search.

This is a screenshot, this happens to come from the current Sam.gov but a lot of our legacy searches looked an awful lot like this. So you've got this box with the heavy black outline, that would be on one page where you have some sort of quick search that maybe went against one or two fields, and then you can see the DUNS number, a couple of IDs, and this takes you to a dedicated page with a lot of boxes you can filter by. People were really used to this idea that they have an advanced search and that is an entire page of stuff to choose from. When we brought them over and gave them this Google like search, people would start off, and they would search across all reward data, and the first thing they would run up against was, where is the rest of my filters? They were used to having this entire page where they had lots and lots of filters and we heard, bring back advanced search, my filters are gone.

So, the filters weren't really gone. We did what was similar to a large shopping website, when you search across the entire site, the number of filters that are available that are applicable across all the different departments, or in our case, the different modules. It changes, so if you are shopping for shoes versus toys, versus videos, the filters might vary. As you narrow in, it'll get more specific. So the filters were all still there, the users were not making the connection because we didn't have an advanced search page anymore. This site behaved, we looked at so many different websites, who looked at who is highly rated, and we looked at the behaviors and this idea that you go in and you start a search with keywords, and you progressively narrow your results more and more to get a more refined result as you go, that's what everybody was doing but people were not making that connection.

So, this is where we needed to ask, how do we take the search that looks like so many other searches that have best practices out in the world? How do we take and make that more compatible with the past experiences that these users had because there were certain visual cues they didn't see any more and it confused them. So, to help with this question, we held workshops and we used applicable prototypes, so we went and it was a skeleton of a prototype, and you can see the size, if you do the math on those numbers, 26 people in one group, and two groups, that is roughly 13 people per group. So a lot of our user engagement, we tend to go a little bit higher in the number of people than recommended. The number of people that we have but are interested that want to participate, we actually get really good response, a lot of people want to be there, so we tend to have to fill up the sessions a lot higher, to make sure we get everybody included. But the way this worked was we had this clickable prototype and we asked for multiple volunteers from each session to take turns working with the prototype and this was after everyone went virtual this spring, this was done all virtual.

So we asked different people to share their screen, we gave them a link to this prototype and we asked them to take turns of clicking through, we would give them a scenario like suppose you want to find a contract opportunity, we give them an industry code and product code and say okay, go see what you can find for us. So, the person who is volunteering would take the prototype, anybody else in the session could take and help them out. They could go in, they could type into the chat, they could give them suggestions if they got stuck. We watched people navigate this prototype to see what visual cues were missing for them.

So, if you look back to the original site that we launched, the search bar was a lot more prominent. People went directly to the search, there was a couple problems with that. One, they were getting stuck and not finding the advanced filters, and the other one was that the search was only across the award data, it is not a full site search, it doesn't search the help or the reporting areas. We were on Google analytics and we were monitoring what people were putting into the search criteria, and an awful lot of the search text that people were putting in was topics you would look for in a health section. So, where originally people were going through and trying to find stuff through the search, we deemphasized it and we put the contract opportunities, this title right here, and we found people then were going straight to that title and into the contract opportunities. So what this really is doing, where our initial thinking was that we had this integrated search, we want to emphasize this integrated search and this capability to search across everything, and get people really thinking in terms of these functions like search and reports, and these big consolidated areas. We were really taking a step backwards to when these systems were siloed, so each one of these titles really represents one of those silos that people are comfortable with and used to. When we first started working on this project, I heard this phrase, “Paving the Cow Path,” somebody said with whatever you do, we don't want you “paving the cow path,” we were bringing in processes, a lot of which were paper processing 30 years ago that somebody had automated without really re-factoring the process itself. It was just an automated version of the paper process. And our guidance had been all along, if we are going to go in and do this modernization, we really have to modernize it we cant pave the cow path. By going in and really sort of replicating a little bit of the experience of those sideload systems, we are kind of doing that, we are taking that old cow path and putting a little paving in place at least temporarily,y’know its a little counter intuitive, to get people past the initial change. We haven't backed down at all, we still have the global search, you can see there is a main menu item that gets you to it. There is a shortcut here, these are for power users to get to these capabilities, that long-term are the capabilities that we really want to feature. But as we are making them more powerful, as people are getting used to this, we are very much going in and saying, you know what, people are used to having these siloed systems, let's replicate a little bit of that experience for them, at least in the short term, to get them through this transition.

When we went in, prototyped that and put it in front of people, they gravitated to that, navigated through that, and provided us a lot of good feedback. We could see that comfort level people had with that little bit of familiarity we were giving them back. And this right here is an illustration, this is what we showed them during those groups, they gave us a lot of great feedback, told us places where they wanted us to tighten things up, rearrange a little bit. You can see based on that, this is the next iteration, again, a really iterative process and these groups just happened a few months ago, so we will do some additional usability testing on this as well. But you can see here, where, people who are used to that legacy, silo system contract opportunities, was FBO, you can click on that. And you can see they have a dedicated search that just takes them to the contract opportunities already pre-filtered. It's a part of the global search, but the drop-down has already been set to just restricted to contract opportunities, pre-filtered, you can see the advanced search button, again, that button takes them to the same place they can get to other ways, but just by using the visual cue, lets them know that that is going to take them to where the filters are and they can get directly to those filters that they associate with the advanced search experience. So it's not the same experience but it's the filters and that little Q gets them there.

So, this is the reporting tool that we currently have right now, it's on our beta site, it's fully live, people can use it today. We have really considered to be live back in March. Right now, what really is keeping it from being authoritative is this change management piece. One of the things, looking at our previous transitions that we looked at was, okay, how do we give people more time? All of the sites, we had functionality out there, we had in alpha testing, but really that full finished product, we didn't leave out for people to play with for a very long time. So we looked at, how do we get people more time to try to experiment with this, to help ease that transition?

So we did that. We put it out there, we said we are going to get people a few months to do this, then the pandemic hit and people were caught up in all of the contracting related to the pandemic, so we pushed that date to the fall. One of the things that we learned is we put this out there for people to play with, we put up notices on the legacy but all the reports were being transitioned on the Sam.gov site, we put up all kinds of notices, as much communication as possible and we noticed that people still really weren't playing with it that much. What it came down to really was the complexity that people perceived that it had. So we went in and we got some initial feedback that it was hard to use, so we again scheduled usability sessions and we sat down and looked at what users -- we had already been through all the alpha testing and we were told that functionally it was fine, but, the initial testers were fine with it, but, then when we put it out there for a large volume of people to use, we weren't getting any takers. So we sat down and we watched people go through and once people got started with it, we noticed that they were fine.

Once people got a report started, once they started adding some data to it, you could see them, we observed their attitude and their posture and their approach to it, where they were not confident in the beginning. Each button click, you could see that confidence grow really quickly, so it really became a question of how do we get them over that initial part, where this is a new tool. If you look at this data on the side, those are the different categories of data. About 500 columns in this as well. So again, this was a complexity. We went out and reached out to the vendor of the tool and we have been working to create a bunch of samples to put out there, because the real change management problem with this one is complexity. How do we get people some simple reports that build their confidence really quickly and a couple of videos that help them through that?

If you look at this, you can see as we are moving forward, we have been tracking how many reports people are running. And you can see right now, we have about the same number of people now that are using the new tool, that are using the old one in FPDS, so this is something we are tracking over time and as we are going forward, we are starting to do things like train the trainer events, we have a lot of force multipliers out there, small business counselors that are running through a program that DOD funds where we can go in and really have these force multipliers, to see how much we can get that trial, people using the new tool as much as possible before it gets shut off.

So, that is what I have for my examples and I think I'm staying on schedule. I just really want to summarize, again, it's never too early to consider how change impacts your customers. And really, this idea, looking back, it's a little bit like the toothpaste issue where, in hindsight, hindsight is 20/20, where you think, why would it be hard to make that leap in brushing your teeth? And in hindsight 20/20, there are so many things that you think, well, of course you should be doing them. But, for us, I think it was really a mindset change in understanding that this change management really is an intentional design process, and it really needs to be embedded in the framing of our problems, it needs to be embedded in all of the user analysis that we do. It needs to be embedded in the design and it needs to be embedded in all the feedback that we get once we have delivered something to make sure we are really intentional, not just about what the end state of our system should be, but really, what are the incremental steps that we need to take to bring people along with us, so they become partners in making these changes, as opposed to feeling like they are making something. With that, I think we have time for questions.

Wonderful. I've got some great questions from the chat box, including this question, how did you know that leading customers through change was the overall challenge you were working with?

So, it's certainly not the only challenge we have, if you can imagine, it was really the one that wasn't getting any attention. A lot of it was really just through hearing users say over and over again that this isn't like what I'm used to. And initially, our reaction to that, we knew it wasn't, we knew that we were asking people to accept something that was going to be vastly different, and we kind of felt like it's going to be worth it in the long run, just hang with us, and I think we heard enough times, people say that, but it's really not what we are used to. I think over time, this idea grew more and more. There's a lot more that we could be doing to iteratively soften the landing for them. As opposed to sort of accepting that change was going to be hard and we would have to get through it together, let's see if we can actually make that change easier.

Someone commented on the cow path, when you were talking about you mentioned several times that it was for now, or temporarily, is there a plan to de-pave that path eventually?

I think that really is a matter of listening and agile. This is a multi-year project nothing really happens, because we are governmentwide, right? So, when we change things, we've got 90 contract systems and millions of users and we've got users from around 24 CIO agencies, so when we say iterative, some of this is pretty big, so the short answer is, we don't know yet. I think a lot of that is really going to be driven by the feedback, and because we have so many users that use our system in ways that we don't anticipate, and because of that, I think a lot of that is going to be driven by how this evolves. So the short answer is, we don't know yet

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When you were talking about the workshop, like the prototype, it sounds like a focus group instead of individual usability types, and Jean wants to know, what did you gain from having the interlock interaction instead of the individual visibility tests?

A lot of it was having them feeding off each other and places where there was consensus and disagreement, and we got to hear them discuss with each other. We have a lot of really knowledgeable people that use our systems. So, you are kind of a mouse in the room, listening to a bunch of experts debate how things should be. So, a lot of it really is, I don't want to discount any individual usability testing, because I think you get a lot of great, fine-grained feedback from that, but listening to people feed off each other and debate things and all of that, it is a different kind of feedback, but it's really rich discussion a lot of the time.

Would you do it the same way again?

I would, yeah. Okay, and again, I'm not saying that replaces usability testing, just that there is a lot of complexity to our systems, we are not building shopping apps, there's policy implications, operational implications across a lot of different agencies, what works for one doesn't work for the other. A lot of times when we get people from those different backgrounds in a room together, when they can come to some sort of consensus, then we have to synthesize less and some of that process of synthesizing different user input, we've got a bunch of subject matter experts kind of synthesizing amongst themselves and we can take that and run with it. So, it saves us some analysis initially.

Wonderful, Kathy Ervil says that she likes how it asks if users are new to the system and asks how much the PDF step-by-step instructions includes a before/after, versus a clean/this is how it starts now.

That new section is an experience that we saw customs and immigration first, it was a few years ago that we first ran across what they had done, where you could go in and fill out, have a few different checkboxes indicating who you were, and you could tell it what to do on the site, based on who you were. But, you had to really dig to find it, we had the opportunity to reach out to the team that developed that and asked them if that was intentional, that it was so hard to find. And why didn't they make it more prominent? They said that, they were in the process of making it more prominent, and they got really good feedback on it. So, that is something that we also put into the workshops, and that experience actually got the highest reviews of anything we put in front of people. The most positive feedback. So what that experience is, broad categories of users we have, we have Federal and nonfederal users and people in the contracting community and people in the assistance or grants community, so that experience is going in and asking people, okay, are you a federal user or nonfederal user? Are you an assistance user or are you contracting? And based on those broad categories, we give them a list of options, things they can do on the website. So it's very task oriented. It's the opposite of paving the cow path, is giving people the perspective, you have to search the database, databank, that functional organization of the site. Then you've got that domain contract opportunities, assistance listings, that organization of the site, and the new to Sam is based on who the user is, and it's really orienting the site based on who you are.

We have more questions about the focus groups for usability, that you ran from Daniel and from Tirsa, I'm wondering, it sounds like they brought a lot of great information from the really knowledgeable and very processed and policy oriented users, how have you been bringing in the voice of the more general user base?

That continues to be a bit of a challenge for us. Those really small businesses have a lot less time, so this really is where we rely mostly on the multiplier, as we talked about, the procurement technical assistance centers is the DOD program, and DOD funds, there's about 300 different centers across the country where you can go in for free, if you're interested in doing business with the government, you can sign up for a counseling session and they will help you register in the system and get you started with contract opportunities. And a lot of the best input that we have on those small businesses really comes through those centers. There is a center at George Mason enterprise Center out in Fairfax, Virginia, and I have gone and signed up for the classes that they give and sat through, alongside business owners who are new to the government, and listened to what the counselors taught them, listened to the questions they had and that has been our primary resource for that type of activity. We hosted a few sessions as well as small businesses, but that has been the best resource.

Wonderful, would you have time for a couple more questions if the audience has any more to throw out, otherwise I will say there is still time to register for the final session, the link is in the chat. You can also sign up to be a part of this community of practice or any other community of practice. Christy, you have been a wonderful speaker and you have taken these questions with great aplomb. Thank you for being with us today. Is there anything else you would like to share with us before we part today?

Just a really big thank you to everyone who is participating, and also to Wendy and Jean for hosting these events, and under extreme circumstances, thank you so much.

Thank you very much and I hope to see all of you at our final session and just about one hour. See you then. Have a good rest of your afternoon.