7/2/2018

Attendees

* Saleim Abushanab - USAjobs core team, FE views, backend re login and SIF (their API for posting jobs/applicant info)
* Matt Dingee - lead designer, user interface, strategy on integration
* Danny Descomes - dev, scrum master for Team Titan, not involved in the coding
* John Still - BA, program office, helped with testing during integration
* Jodie Young - BA, joined login.gov integration team towards the end of the process

[00:00] And just jump right in. Perfect. So I'll go ahead and turn my camera off just to preserve some bandwidth. But, um, I'm still here. Don't worry. Um, so as I mentioned, we're working with the VA and we're really interested in hearing more about your recent process of integrating with login.gov. and before we really just, uh, dive right into the questions, I was hoping we could do a quick roll call just so we know who is on the phone and what parts of the system you folks work on and, and you know how best to tailor those questions to you.

[00:36] Alright, I'll go first. My name is Saleim Abushanab. I work on the core team or is called Titan internally. Um, basically I handle a lot of the, uh, front end views as well as like a, I guess kind of back into like login and other kinds of tools that we allow the other agencies to use. That's my job.

Matt Dingee. I'm the lead designer. I worked on the lab in the sub basement. Um, and uh, I guess some responsible for sort of plotting the course of a where we're headed and I'm integrating these things that come up like this and to the user interface.

[01:36] Great. Thanks for joining us on the call.

[01:42] Yeah, so this is Danny Descomes, so I'm also a full stack developer and scrum master for jobs, Team Titan. So, uh, didn't have as much info as involvement with the actual coding of the integration as a celine did. So I'm, I'm here more for ears then, then mouth, but glad to be here. Yeah.

[02:01] Great. Well I'm sure you still have lots of thoughts on everything, so thanks for joining us.

[02:09] This is John Still. I'm a business analyst. I work in the program office and I'm here basically just to listen in to.

[02:22] Great. Well thanks for joining us John.

This is Jodie and I'm also a fairly new BA on the project, so I am here just to listen in and just absorb.

Perfect. And then just one clarifying question for Jodie and John. Were you folks involved at all in the integration process with Login.Gov?

[02:48] from a user perspective, I helped with the testing.

[02:58] Perfect. Jodie, how about yourself?

[03:00] I came in the latter part, Um, so this is all new to me, but I am familiar with um, us changing over to login.

Great. Well this sounds like a really awesome group with a wide, a wide experience with this integration process. So we're really excited to hear from you and really appreciate you taking time out today to speak with us. I'm going to mention we have about an hour so we'll try to be really cognizant of everyone's time. And on that note I wanted to just kind of dive right in and we can do this round robin or whoever has a more experienced with these processes as I ask these questions, feel free to jump in and I just really would want to hear from everyone on the call as much as possible. Uh, so go ahead and get started then.

**Before you folks had integrated with login.gov, were you managing your own database of users? Could you tell me what that was? What that setup was like?**

[04:02] We had our own, our own user database, uh, we manage all that and we had a help from security to kind of make sure we were following the NIST guidelines. Um, so we have, uh, we have people here by name of Todd and Victor and they will kind of tell us what rules we have to follow security wise and we would just make sure to employ those rules and any code changes we made. I think the goal of integration was that we didn't want to have to manage the NIST guidelines. Um, so it was more of a, uh, we don't want to be in the business of logging people anymore from a performance perspective. We do gain some availability there because they are in aws, the cloud. Um, so, and, and we are not. So, you know, our scalability is going to be a much slower than logins would. So again, that too. Um, but yeah, I guess before we had log in and go, we manage everything internally.

[05:16] Motivation to move to login.gov was not having to manage and make sure that you're following all those NIST guidelines yourself. And then the performance because of it being powered by aws, is that a good summary?

[05:31] Yeah. I guess one more thing I would add is that they have a two factor authentication with authenticators and phones and it had been something that we wanted to add for awhile, but I think Michelle made the decision that instead of doing it internally, she wanted to pay for a service, so log in and fills that need as well, where we, we now have two factor authentication.

[05:56] That makes a lot of sense.

[05:58] I was just going to add a, another contributing factor is that the number one thing that our users were writing to us about is not being able to get in. Right. So forgetting their password, not remembering their security answers. Um, I think we were getting. Hmm, I'm trying to remember the exact numbers. I want to say like roughly like 24,000 a month that we don't, we don't do phones, just email, just folks writing to us about authentication. So it was by far and away by more than two to one. The number one thing that folks were right, we're writing to us about.

[06:48] Gotcha. So also kind of got admin work reduction was a major factor in choosing to integrate?

[06:56] well and just solving users pain point of not having it be easy to, you know, just not having, just having there be a fair amount of friction getting in. It's not to say that that friction is completely gone away, but I'm at least now the friction is a little bit more. The two factor makes it a bit more secure and um, and the other parts of it or maybe have bit more a well implemented than what we had.

[07:27] Gotcha. That makes sense.

[07:31] I expand on that. Um, we had a lot of friction here. Like, you know, basically your account would become inactive after, I think it was three or six months, I forgot now a of not using the account. So if you, if you [don’t] log into the account for a certain period of time, your account would be essentially locked out. And that caused a lot of friction for users because if you found a job and you're happy with your job, you might not come back for a year, which means that you would come back to your account being disabled or um, you know, essentially blocked off from logging in until you contact the help desk. Um, but we had those rules in place because we didn't have two factor authentication and those rules were required by NIST if you don't have two factor authentication. So login.gov gave us two factor authentication, which allows us to reduce the friction.

[08:19] Okay. Yep. That makes sense. Just to dovetail off of that question, you folks had mentioned a two factor authentication and all those other friction points with the previous model. **So did you, in your previous user database, did you folks do any identity proofing and if so, to what level and how did that work?**

[08:52] Yeah, so the only thing we use to identify user to basically prove that they are who they are is through email. Um, I don't know of any other methods that we used to ask the user or to try to identify them other than email.

Yeah. And we all had security questions too. They went away. Matt, do you remember when this occurred? Questions went away. I forgot we got rid of those, but you know, I guess recently before we made the move to login.gov we did get rid of a security questions and that wasn't our way to identify users. Uh, I guess the user to the account. But other than that, I don't, I can't think of anything else.

[09:34] We did discuss, whether to go…. Login.gov. they are working on LOA3 which is essentially proving that someone is who they say they are, but they didn't have it ready when we decided to that we would transition with them and it's not clear that we'd really want to use that unless a user got further along in the process. I mean we have tons of users who come in and kind of browse but never apply to, we’ve got folks who, you know, apply once in a blue moon. And then we've got folks who apply all the time, um. So, you know, there was some discussion I think amongst the top brass about whether we should try to push for LOA3 and have that. There was some interest in that I think mainly because, you know, agencies also have a desire to streamline folks through their onboarding process once they do make a hire. Right. So it would save potentially save them some work if, if you knew exactly who was somebody was, you could tie that to their SF50 or D214 or whatever it might be. Um, so I, I mean, I think that's so now login.gov is working towards that and that's something that maybe will consider in the future that, you know, if somebody has that level already and we can know that from them that we might be able to tie it to records on our back end, that, that would help speed their application process along or potentially speed them along once they come back to onboard as a new employee. Um, but it's not the kind of thing we really want to put in front of every user because it's, it's definitely way more involved, right. There's, there's a number of additional questions you have to answer, you have to ask to go out to Equifax or to another third party to verify a lot of what you've provided. So it's a lot more involvement.

[11:32] **And, and after you folks had integrated with Login.gov, what are some of the benefits that you're seeing of not having to maintain your own user database besides those that** **we had already mentioned in terms of performance and reducing the friction for users as they're logging in.**

[11:50] Yeah. Um, I think a lot of the benefits are more that we don't have to worry about any kind of NIST guideline changes that happened. Before, you know, if this came out with a new guideline, like you have to do this or that we would have to make adjustments. Now if they’re adjustments made to NIST, it's more on login.gov to make that change. I guess another benefit would be we don't store passwords anymore, right? So I don't have to know a user's password, which means no one can kind of hack us through our own database anymore. They would have to have hacked the, um, I guess I won't say they can't get from any, any point, but from a password point of view, they can't hack us from passwords anymore because of how they exists in our system. They exist in login.gov. So that's kind of like a, a benefit. Um, and there is some costs to having to store passwords through a hashing algorithm so that we don't do anymore. Um, they also have a lot more environment so that we can use, you know, so they have a multitude of environments we can, we can test on in login.gov. So environments can point to different environments whenever we want to. Um, we had, I think there's a plethora of, uh, of benefits to that. Danny, do you have any more you want to add?

[13:16] No, I think that about sums it up. I mean, it, it, it does, it takes that burden of authentication off of us. Everything from NIST guidelines to security issues, to even a reduction in, um, security issues, and even, you know, help desk traffic tickets that are our help desk is having a work, um, as a result of, you know, users having login issues and so on and so forth. A lot of that stuff now goes to the Login.gov. So, uh, I'd say that that puts an umbrella over most of the advantages that we've gained from it.

[13:53] Yeah. That was going to be the one I was going to mention as well, right. As our help desk tickets are now at an all time low, which you know, is not to just say, okay, we deflected all the email traffic off to GSA. Right. They are also seeing much less, uh, you know, there was an initial spike and now it's kind of chilled out. Um, but the, I think the sort of side benefit that right at our help desk can now focus on the things that are really core to what the site does, right. Authentication, it's just something that has to happen to be there, but it's not like the main function of our site. The main functions of our site is to help folks find and apply to jobs, um, and that's a much bigger authentication was just kind of the in their way. And so, uh, now hopefully we can focus on the things that are more core to our quote unquote business.

[14:53] Right. That makes sense. That's really awesome to hear that you folks feel like you can now just focus on the things that you need to do for USA jobs and not worry about any authentication on your end.

[15:09] It's not to say though that it has been, you know, not fraught for some users. Right. There's having the extra requirement of having to have a second factor, so having to have a phone or an app on your phone, uh, you know, being able to receive texts or we're having an app so having to carry a phone. It was a challenge for some users and will continue to be. But the good news is that login.gov can, that team can focus on those solutions. So you know, they're working on various solutions for folks who are on were on military bases or other places where it might be difficult to bring in a phone into a certain environment or have it with you all the time. So that doesn't distract from us doing that work. Right. So again, like authentications, they remain focused. They can provide the best possible user experience for authentication and we can focus on everything that happens after that. Whereas if we were doing it all, we would now be working on that problem. Nothing else, probably because we're, by comparison, I mean they're not a gigantic team either, but by comparison we're a smaller team than they are. We have less resources so it's nice that we can move onto something else and they can continue to iterate and make that part better.

[16:25] **Yeah. I'd love to hear more about what you folks are hearing in terms of the user experience you mentioned, you know, some of those risks that they have in terms of not having a phone or perhaps being somewhere where they can access their phone over there. Anything else that you folks are hearing about folks as they get used to this new process?**

[16:47] Yeah, so we, we had a bit of a triage Trello board that I still have around, so I can actually email you a list of things that came up. I mean, I can just try to summarize here. Most of the, there were, let's see. Um, there were a couple of problems. One was we had previously accepted a username as well as a primary or secondary email. So some folks who were using their username didn't remember what email they had their account attached to there were certainly in the minority but a healthy number nonetheless. And uh, so when we transitioned in and we asked folks to use their primary, secondary email, because that would be the way that we would automatically connect their logging duck out of account to their USA jobs profile. If they were using that username and couldn't remember the email, they were kind of a little bit out of luck. They'd have to contact the help desk and provide their username and their security

[17:50] answers, which, you know, they can't remember their email. They're very unlikely to remember the answers to their security questions either. And so then they will be out of luck. So that was a problem. We could, we probably could have avoided that ahead of time by reaching out to those folks. We did discuss emails out ahead of time to users to kind of warn them with the changes that were coming, but login,gov, they’d just gone through this with global entry and they had kind of fouled that up for lack of a better term. They had actually told people about the change way in advance but didn't really provide clear guidance. And so that actually generated more confusion. They had folks going out and creating login.gov accounts, but with no way to tie them to their global entry accounts. And, and so, so the login.gov was very nervous about sending out communications in advance of this transition.

[18:44] Uh, and then some, some folks on the team also raised that, you know, that was, that was done to when USA jobs was brought back in house from Monster. Um, there had also been some communications that were sent out in advance that it created more confusion than they solved and they didn't, we didn't really feel like we could reach out to everybody because we would just swamp our help desk. Like there's, we don't help desk is not scaled up to deal with the millions of users that we have. So, um, so that caused a bit of problem, uh, in terms of that kind of backed away from doing any communication upfront. And so, you know, even if we had said like, well, we're only going to communicate to the folks who have usernames. It didn't, we didn't, we maybe missed a trick there. Yeah, that makes sense.

[19:39] Um, but the, the questions we got back were mostly around, you know, if I can summarize and, and not try to be too smarmy about it, but like, you know, seriously, I have to carry a phone. That's basically the end result. Whereas a lot of folks saying I don't have a phone on a regular basis on it when I'm at the place that I want to apply. So like I'm in a workplace where I can't have my cell phone or what have you, um, or I just don't want to do it, you know, I don't, I don't feel like doing this. I don't have a data plan that allows me to get all these text messages.

[20:17] I don't have access to my... So those were like the phone related issues. Some folks legitimately, you know, I don't have a plan that covers me or, or I can't risk, you know, I have a phone but it's only for emergencies. So say like, you know, we actually heard from folks in the park service who were very remote, right? And don't turn on their phone unless they absolutely have to. And they're like, I don't know, I have a phone but I don't really want to use it for this purpose. Um, we did have some problems around the interface, was a little trickier. Ran International numbers. We have a number of folks, you know, military business. But also just a broad and general who might be looking for jobs and so, you know, we had made sure that the list of countries that log into up supported was, was gonna cover those areas, um, but there was still some confusion in the interface, but how to enter your international number to get your sms message for two factor so that initially required and they've since changed the interface that was addressed. And then, um, we had some transient areas, error errors early on that we solved.

[21:27] Let's see what others, something to contribute here. Some complaints about not having regular access to their personal email, um, which is which you really only needed to sign up with 'em. But some folks saying like, well I don't, you know, I don't have that right now. So mostly just the complaints about inconvenience of two factor essentially, which was not really going to be any different if we had done it versus login.gov doing it.

[21:57] I want to add that employee a remember this computer feature where if you log in on your, on, on a computer, it will actually remember you next time. So you won't have to do the phone message again and that actually helped out a lot, uh, from, from a user standpoint because they don't always have to have their phone if they're using the same computer to log in so that they know that feature did alleviate a lot of the pressure, I think.

A perfect example of like they're continuing to iterate on this, on their product and making it better. Um, which you know is, it's honestly a fulltime job. Like there's, there's, there's still more to be done and, and there's just, you know, there's a lot of, we have users overseas, we have users on faces, we have users in, in interesting scenarios. I mean I think one of the reasons they chose us as an initial partners because we do have a really wide swath of different types of users in different contexts and environments. So it's a great test case for them. Um, and, and we're a little bit the front door, right? Like if folks are interested in working for the government, they come to us first. So we cover, you know, if they created it, login.gov account with us, they're gonna be able to use that account with every other agency and client that login.gov works with. So, so there will be a tipping point at some point where, you know, most folks will have a interacting with governments at least who are interested in employment, let's say will have when they get to irs, right. You'll say like most US citizens will end up having a login.gov account. So there's, you know, there's definitely some benefit to that as well that we hope to gain in the future and I think other agencies will gain from our work as well.

[23:45] Uh, before I switch gears a little bit, John and Jodie, did you have anything that you wanted to add in terms of the user experience after implementing login.gov? I'm okay, thank you.

[24:03] [they] hit on just about everything.

[24:06] Great. Great. So I got a great sense now of what the end user experience was like after the implementation side. **I wanted to kind of switch gears and get a sense of what your folks experience was as you were going through that process of implementing login.gov.**

[24:28] so are you referring to like a developer point of view? Like how, how was the development experience?

[24:33] **Yeah. And also even more open ended, you know, from the BA perspective, from, from everyone on this call, I'd like to get a sense of, you know, what was that process like what was involved, where did you run into trouble, where you able to get the tools that you needed in order to make the implementation successful?**

[24:54] Yeah. So, um, I think the team was very helpful, you know, the, the login.gov team was helpful when we needed them. We actually were able to, you know, I guess they have very good documentation because we didn't have to reach out to them too much. Um, we did make some assumptions with users and I'm not sure if Matt and John and maybe Jodie, you remember this, but um, one glaring issue that we coded at the start was we use cookies for all of the authentication between Login.gov. I guess the communication with governance and using cookies has an a problem where if I've changed device halfway through my login, login fails. So I started on my computer, I finished the login on my phone, it would not work, so we had to pivot there and uh, we actually store what step you are in the log in process and the database now that was just kind of like a development pitfall

[25:51] we had to get out of. The documentation by and large was enough for USAjobs to kind of go and implement. If we did have any questions, it was more on the configuration side, you know, they actually have configuration about who can call them. So we had to configure our site as a valid caller to login.gov. And I go and that requires a lot of, uh, at the time it required a lot of intervention with login.gov. Um, you know, emails back and forth saying this is where I need to go into the configuration and then if it didn't work we would have to go back and um, you know, ask them why's, you know, why isn't this configuration working properly, they would have to look at it, they have since done a, a whole new dashboard where you can kind of go in and see what configurations you have out there and you can actually add the configurations yourself instead of going through them. So that helped out a lot. Um, they were actually surprised that we were able to implement it without any help. I think other agencies did need help during the implementation process. But for us it was, it wasn't too bad implementing, it was more of like internal, like internal struggles just getting everything coded in time because we did have a, a, a deadline on this to get done. So it was more internal stuff and not really login.gov related issues.

[27:17] Gotcha. You mentioned that they created something like a self service dashboard where you could kind of create those configurations yourself. Can you tell me a little bit more about that and how you folks used it?

[27:37] Yeah. So, um, before they had a dashboard just for the integration environment, which is the environment that you would start at if you were going to integrate with login.gov. That dashboard works fine and um, you know, the configuration really all it is is it says, uh, what site is going to be calling this environment, this integration environment. And so for example, I would put usajobs.gov will be calling it. We're actually, in this case it would be like development.usajobs.gov is calling, you know, login.gov. So I put that in the configuration, also put back any kind of redirect urls we're going to use. So once the log in is completed, where does the user get redirected to? I have to put that in the configuration as well. Uh, that dashboard and the integration environment work perfectly. Um, I was able to go into the dashboard myself, add or change a configuration is I need to test it.

[28:31] Uh, the issue came into play when we wanted to move up to different environments in login.gov. they have a staging environment, they have a performance testing environment and obviously they have like a production environment. Those environments, I couldn't really see the configuration. I had just a hope it was out there and you know, obviously it's not ideal. So I would send an email to them saying, hey, can you make sure this configuration has been moved to test or move to staging or move to prod? Um, and, you know, there was no visibility there. They eventually added a dashboard for all the environments so you can see all of your configurations. So that. But that was after we had already implemented all of the login.gov uh, you know, things. So it was nice to have that at the start, but since we didn't, we had to communicate a lot more to get those out there. Does that answer the question?

[29:23] Definitely gives me a good sense of that. **So aside from the dashboard, would there have been anything that would've been really useful for you folks to have earlier on in that process?**

[29:39] I'm trying to think back. We did have some, you know, things that we had to iron out between log and I gave a lot of it in and Matt, I know you can agree with this. A lot of the problems we had was linking the accounts up between our accounts and login.gov accounts. Um, in some cases we could actually have duplicate email addresses because we didn't really use, I guess, you know, we weren't using email addresses like a primary key, but now you know, with, with login.gov we kind of use email address, like our primary identifier because that's how you link the accounts up between us. So we had some pitfalls there, but that's not really anything. I think it's more of a USAjobs specific problem. I don't know if any other agency would have that problem. Another issue is that people use username and username doesn't have any bearing on login.gov. So we had to get rid of that, um, but as for like what they could provide us a, I don't really know what else I would need from login.gov, but I think I think they've provided a, you know, enough and we had to kind of figure out our side how to kind of go through the integration process.

[30:51] I'll add a little bit on, on that topic of the issues with linking the accounts. One of the big hurdles we had after, after we did the integration, users have authenticated with USA jobs through login.gov. they've established this linking between the two sets of accounts and after that Login.gov released the capability for users to delete their login.gov accounts. Um, it was kind of an unanticipated thing. We didn't know it was coming and when it released we discovered that users now have the ability to orphan their usajobs account, delete the login account. So from a technical perspective, now we're receiving tickets. I can't get into jobs anymore. Well, um, so it was just one of those things, again, I don't know how other agencies would have, would have been able to handle it either, but the way we were set up basically we had, we had users with stranded accounts because they were linked to a nonexistent account in login.gov. Um, so we did have some issues early on with getting them linked and keeping them linked with the email addresses that they wanted to use.

[32:01] Yeah. And I think, I think because of that change we asked for more advanced notice of what changes they're making because we were sort of getting them like the morning of. I mean, correct me if I'm wrong, John, but I feel like for awhile there they were telling us like we're making a change and they had already made it or it was hours away and now they're supposedly doing, supposed to be doing a better job of warning us, advance to those changes.

[32:34] No, we were discussing implementation at the start we had said, do we need to allow for linking, uh, you know, once the account is linked to login.gov and USAjobs, do we have to, we need to have the options really that we, we actually said no because they don't have a delete account feature. Well, when they added it that that kind of threw a wrench in the whole thing. Well now we have to have an unlinking feature or a fixture because now it's possible to open an account. So yeah, that was kind of unexpected change that they kind of threw on us and we had thought their stance was no one can delete accounts, but the stance changed and I think we were told about that. So I guess there is some communication was that kind of occur, but I think that would occur with any implementation you're doing. Uh, and of course we had to adapt. So, uh, you know, I think, I think we got out of the problem well, we now have the ability to only get accounts so the account is still orphaned what someone leaves their account. But they're actually able to get it back now in the help desk and help out with that to.

**In a perfect world, how would that communication between an API provider and new folks when there's changes that they could push out or any sort of communication that needs to happen? What is an ideal scenario or way of getting that kind of information?**

[34:07] Um, I would say for me it'd be more like a roadmap or um, you know, maybe a list of deprecated things or things that are coming up in the future. Like if we had known a delete account feature was coming up a relatively soon, you know, maybe a couple months out, then we could have had a lot, we could have had a lot of discussions on that and see what changes we want to make on our side to meet that new feature that being implemented. Um, but I think having a roadmap would be nice. Like these are things we’ll be working on the next couple of months. And based on those, based on those things, we can go ahead and address anything that we need to fix on our side. In total fairness Saleim and I, we're coming at it from a developer perspective and those conversations may be being had, you know, above us.

[35:01] So just to be totally fair. But yeah, in a perfect world we even had the developer level, we would know a release ahead, right? That the changes are coming that we're going to need to accommodate a good reference to this would be like using a library and coding, right? So if I'm coding something and I'm using a library library might have changed notes or a upcoming features for the library that I might need a code for in the future, uh, or if things aren't going away, quote unquote deprecated. So that means, you know, I would know what's going away. I would know it's changing something like that and kind of publishing that somewhere so I can go read it. I don't have to go ask them directly. I can go out there and just look at it and see what's coming, what's coming up next.

[35:46] We've been thinking about this for our own API, versioning them so that we can put a future version out there. Folks can hit it, they can move to it when they're ready, and then we can slowly deprecate the previous minus one version, right? So we've always got kind of like three versions out there, the current, the one we're aiming for and the previous one, and we can kind of roll through them that way. Um, that would be ideal because we actually suffer from this ourselves because we give our, our agency partners currently get up to six months to adopt changes we make to our SIFT [sp?], which is our api for applicant data and for posting jobs mostly around posting jobs. This is where I think the friction really comes up.

[36:41] And it really is a good example, Matt, because today we're actually turning on the feature toggle to require new fields in SIFT. And so today's a good example of where we've communicated with the user that we're going to be making fields required. But I, I know as soon as we require those fields, we're going to get a bunch of emails from agencies saying that the can’t post jobs anymore, even though we've sent out communication. So I think if, you know, if we can, if we can have a version list on, on our side too, it says like this is what's going away, this is what's changing actually printed somewhere, it'd be a lot easier.

[37:18] Yup. And it would be easier too, if we didn't support it so that the agencies could move when they wanted to within this within a frame of time. Right. So that, you know, they can, because right now they would say, well we never want to move because it's work and we don't want, we don't get paid for it, we want to do it. Um, because you know, they have to kind of go to their, the talent acquisition systems. They have to go to their agency clients and say, Hey, pay us to make these changes that you made, which is sometimes a tough sell. Um, which is why we give them a lot of time. But for us it creates a huge headache for not being able to really move things forward. If we've got, you know, six months in internet time is forever, you know, having to manage changes across that long of a timeframe means you know, we have to do these kind of monolithic, monolithic in terms of time and somewhat complexity of like, you know, tracking what we're going to make required in the next six months.

[38:13] Then we're gonna come back to that thing and, and try to push the next set of changes other six months down the road. So we're actively trying to move them to a more aggressive schedule that, that closely or more closely aligns to how we deploy things. Um, but you know, authentication's a little bit more complicated. So I don't know if it really be feasible diversion authentication maybe, but I'd see why maybe you haven't done that. But in terms of other Apis, I think that that would be what I will be looking for is, is there a way, is there some leeway for us to stay on the version? We're on test with the new version that we want to move to move at our leisure so that you don't have to align our schedules.

[38:59] I'm just back to your earlier question about, you know, what did login.gov provide us and maybe what, what would have been better or what maybe what will did works. Um, they did provide the design team, a designer to work with who had worked for awhile on their, on their interface, they could answer questions about the decision, the design decisions they made there, um, as well as help vet our designs for possible problems. Uh, and just, you know, he was just a really great reference for my team and myself to, to hit and to bounce ideas off of and to ask questions. And so that was super helpful and we were able to invite him to our, to a slack channel. So he was a guest in our slack and vice versa. So we could, we had a way to communicate not just by email which can add a lag. So we were able to get fairly immediate answers when we are in the design phase. So that works well. I would say one thing that maybe hasn't worked so well as, you know, like any team, they've moved onto their next thing which is LOA3 for them, which isn't. So now when we have questions and maybe it takes a little bit longer to get an answer. So around those kind of like what do we do now that folks can delete their accounts was harder to get any information out of them uh, later on. So, I think the lesson there is, you know, as much as you can prepare to have resources available to support, so it's not only up front but ongoing as things will come up that need dealing with.

[40:40] Yeah, that makes sense.

[40:43] I guess depending on the complexity, right. Again, like authentication is fairly complex and as a fairly big part of the complexity of our overall site and say chunk of it is an authentication. So...

[41:00] **great. If folks had mentioned a little bit about some trouble with certain fields are like for example, the international phone numbers. Do you know what other sorts of data standards were involved when you folks were implementing login.gov?**

[41:23] can you rephrase? When you say like, uh, other force data standards, like, um, I'm not sure what the, what the question is here.

[41:30] **Yeah. I guess just what sort of guidelines did they provide you in terms of, you know, how to set up, say a design for an interface to accept international phone numbers or for, for instance, how to deprecate the usernames, how to connect all those email addresses in the new accounts.**

[41:53] A lot of those problems were more specifically the username and the email linking problem. They didn't really have a lot of, uh, you know, input in that realm. But that was, that was more on our side, you know, it was just kind of a think the sentiment from long, long ago was that it's more of a problem, you know, because this is marrying up data on our side, not really on their side. So in the international phone number, that's more of an issue on their side. And uh, I think, I'm not sure how they fixed that Matt, the international numbers, but um, for the linking of accounts and for the username deprecation, uh, that was something that we had to do internally. Um, because, you know, from, from a provider, you know, from a, from a login provider, they don't really have any leeway in kind of telling us how to, how to deprecate the username and how to link up the accounts. The only thing they can provide this, you know, this user has logged in and here's the, uh, here's the primary identifier for the user after that we kinda have to resolve the issues our own.

[43:01] Yeah, I mean I would say they were able to provide us guidance based on previous projects. So had, they had just gone through global entry, um, and working with them so they were able to tell us, you know, kind of use that as a use case and say, well, in that case we would advise because of our experience, they're not to do this and maybe try this other thing. Um, in terms of like specific UI, you know, most of it they control, right? So we hand off to them, they guide the user through setting up an account and then they hand the user back to us. So we didn't really comment on. I mean, they, they did share with me the research, they did what they learned, you know, the insights I gathered through that research and sort of what their methodology was for arriving at their design.

[43:44] So I felt pretty confident in what they had done that they had done their due diligence and that um, you know, that they have usability tested many, many times and they had changed the interface based on what they learned. So at that point I didn't really say like, well you should, you know, dot your i's, Cross your t. I mean I, I pretty much said that that part of the interface is up to you. That's fine. That's great. I'm not gonna not really going to comment on it. Um, but I did, and they kinda gave us the same sort of professional courtesy as well, if not really kind of stepping on our toes in terms of what we wanted to do. But we did ask for feedback on specific portions of it and also share with them, you know, when we were usability testing, they, Michelle came along and watched and you know, you got to see what we were testing and what, what different variations we were trying and we discussed, you know, what worked and what didn't work. So I think, you know, good, good relationship, good positive relationship, you know, what you hope to have on two teams are trying to collaborate to get to the best results.

[44:51] yeah. And to Saleim's point, uh, some of the problems they just, they had not run into before because they didn't, they didn't have another case where someone was using something other than an email as you know, as a part of the keys to authentication. So they didn't really have a lot of guidance, guidance to provide, um,

[45:13] uh, Joel who heads up sort of a project manager for the project. He's been on a number of different types of projects. I think he came into it so he was able to provide, you know, previous experience. I was able to do the same. So we can try to say, well, based on systems we've used in the past or you know, implemented in the past years where we would land, but that wasn't really any kind of formal way as mostly just kind of informally through meeting saying like, well this is based on my experience, this is what I think.

[45:41] **Okay. So it sounds like in the cases where there wasn't any, um, anything to drawn on in terms of past experiences, it was a pretty collaborative environment in terms of figuring out how best to resolve something.**

[45:58] Yeah. So then, you know, that's amongst the two teams. Then they're still convincing opm, leadership, opm, security, and that's where real friction, what's involved, right. Because this is all new to them that, well, it's all new to the leadership, not the security, but um, you know, so a lot of this stuff isn't just about educating them about two factor about you know, why we might want to do this, how much work it would have taken to do it on our own and maintain it on our own. Um, you know, more kind of selling them on the idea. Um, but that too is a partnership, I mean Joel and login.gov did a lot of the heavy lifting there. I'm mean to clearly they were trying to convince folks to sign on with them and move over. Um, so we've mostly tried to answer from our perspective this is the benefits and this is what it's costing us today and what have you. But they actually did help quite a bit with convincing folks this is the right way to go.

[46:54] And to kind of expand on what Matt just said, a lot of friction and moving over because we had login for like, you know, eight or nine years and login, we never really changed. I mean there's a project that was always the same. We never had to update it. And you know, by that, I think there's a problem in that, right. You know, if we're not updating it, we're not improving it. So as I said before, we don't have, we don't honestly have a time to, you know, make, you know, updates to login because we're working on other priorities. So, but because it worked for nine years, they all have this mindset that, you know, some people have a mindset like why change to login if you already have a working solution, but I think they aren't taking into account that us not updating log in is a problem in itself because it's not getting the attention it deserves.

[47:52] I just want to ask one more question about the documentation. We have about eight minutes left, so I want to leave a couple minutes at the end in case you folks had anything else that you wanted to talk about. So if that's okay with you, we'll just start to wrap up the conversation. **And you folks had mentioned that the login.gov team had good documentation and um, I'm curious what made the documentation good? What was useful about it?**

[48:22] There's two main protocols that we've used in the past and why I guess, you know, there's, there's one protocol we've used in the past which is called a ws federation and that is a communication layer that you can use to authenticate users. Uh, we have never used the open id connect authentication layer before. Basically that kind of communication layer, their documentation kind of explained that protocol really well. It also explained in detail what you need to pass too login.Gov to get a valid request back and it had multiple steps on, once you fulfill this step, this next step is going to occur where you'll have to pass this information. Essentially there's, there was about three calls we make, you know, to get a login, a successful, I guess to be more specific, there's three, three redirects we have to do to get a login, a completed from long ago.

[49:20] And they kind of detail in their documentation, kind of, you know, where those calls need to happen. Um, so I think it was very robust and you know, I was kinda surprised when they said that they needed the other agencies needed assistance in implementing it because, I mean, I guess at the time they might not have had the robust documentation, but with the documentation there, it was actually fairly straightforward to implement. Um, we did have some, I guess some changes we had to make our, our side because we were using a outdated version of our authentication library and it did not support open id connect so we had to upgrade to a new version that did support it, but that was um, you know, that's really on our side to get our infrastructure kind of updated to use their login authentication. But yeah, the documentation went over every single step you have to do. Um, I didn't have any questions on that front, so yeah, that's, that's pretty much my experience with it.

[50:31] **What makes for bad documentation?**

[50:35] So I'm actually gonna draw to some of our documentation. Uh, you know, I think a lot of agencies that use SIF[sp?], they have a complaints that, you know, we aren't, we don't document enough of the steps involved to call SIF. So yeah, this is our API essentially. We'd probably get better at it. I, I think bad documentation would be documentation that excludes steps. Like if, if, if I'm going to call it, like an example would be in this case, if I make a call to login.gov, I get a piece of the authentication back, I have to make a subsequent call to get back a token. The token would have the actual information I’m caring about what this authentication. It tells me that the users actually valid. Bad documentation would be, I make the first call, it gives me a peace to authentication, but they don't, they don't list.What I need to do next to get the next piece of authentication. So I guess if it's not fully flushed out, they don't have all the steps. Um, but as long as all the steps are there and defined and I know exactly what I need to call, what information I need to pass. I think um, dominations good. Uh, so I, I think it just needs to be fully flushed out. If it's not fully flushed out, we consider it to be bad documentation or if it's missing information, obviously that I need that’d be bad, bad documentation as well.

[51:56] So we has about four minutes left. I want to be really cognizant of everyone's time. **Is there anything that we haven't talked about today that you really want us to know in terms of this process of implementing login.gov, or creating good documentation, et cetera?**

[52:17] Uh, I guess I'll just end with, you know, there obviously were bumps in the road we had to go over, but I think the like, you know, I think when we were in the thick of it, it seemed like it was worse than what it was because after going through the integration now and looking color, you know, I guess we were thinking about how it went over. I think it actually was pretty smooth. Um, so I think the integration as a whole wasn't too bad, but we obviously have some pitfalls. Pitfalls that we discussed on the call. Um, overall I think was pretty good.

[52:53] Excellent. Great. We're always looking for additional folks to speak with you after this call. If you can think of anybody that you think would be a good resource for us that would help, um, help us understand how better to build, you know, API set. For example, you folks might consumer, other agencies, we would certainly appreciate you letting us know about those contacts. Um, and if you have any other thoughts or questions after today's call, feel free to reach out to any of us that were on the invite. We'd be happy to speak with you after today and we certainly appreciate you folks taking time out to talk to say this has been a really informative call for both of us.

[53:40] Great. And if there's no other questions or thoughts that just want to give you three minutes of your day back and thank you so much for your time. Take care.