Transcript of Webinar

Industry Day

Friday, July 18, 2014

Transcript by
Federal News Service
Washington, D.C.

MODERATOR: Good morning, and welcome. We are recording today's event and we'll post – and we'll be posting the recording, along with a transcript, to the ITSC site in the next couple days.

I'd like to turn things over to Joe Vitale, director of Information Technology Support Center. Joe, take it away.

OPERATOR: (Gives queuing instructions.)

MODERATOR: All right, welcome, everybody. So good morning, and welcome. We're recording today's event and we're posting the recording, along with a transcript, to the ITSC site in the next couple days.

I'd like to turn things over to Joe Vitale, director of Information Technology Support Center. Joe, take it away.

JOE VITALE: Thanks, Gary. And once again welcome, everyone, to the Industry Day for the ITSC U.S. Department of Labor Cloud Solutions Project. And we're excited about this project and we're glad for the participation. As you can hear, and you know, most of you, we're simultaneously broadcasting this and streaming the presentation to those individuals who cannot participate. Besides vendors, there are a number of state agency employees who have signed up for the webcast and will be listening live to this presentation also. So we're – like I said, we're excited and we're going to get started to move on for this project.

So before we do, just a couple of housekeeping rules, pieces of information I wanted to go over with you. So we ask that you – those of you here, turn your cellphones off so that the – we don't get any interruption from the ringing phones. The restrooms are down the hall on the right, and you'll see a sign to get you to that direction, to the restrooms. We're not taking any breaks. We're going to go straight through, so feel free to take a break on your own but we're not taking official breaks. As we indicated, this recording is being made of this presentation, as you can see with the videographers right here.

And one other note – and you'll see a slide on the screen right now and you should have received a little business card handout when you came in. You can get WiFi access by going to your Web browser and entering the guest password – user ID and password. And it's on the screen right now and you should have that handout with the – with the user ID and password for the Internet WiFi access.

One note, we are recording – next slide – one note, we are, as we indicated, recording this presentation and we are putting it on our website along with the RFI, the questions and answers that we posted and the recording from the previous webinar. This recording and the question – all the questions and answers from this webinar will also be posted on that website within about a couple of days from the end of this presentation.

So we'll be recording that only – and we'll be posting not only the live questions but the questions that we get streaming in from chat. So you'll be able to download – by the way, on that

site you'll also be able to download the PowerPoint presentation. We think that will be all the resources you need. We'll be in one place and you'll be able to get everything you need for this project.

On that note, I'd like to turn it over to Gay Gilbert, the administrator of Unemployment Insurance in the U.S. Department of Labor, and she'll give a welcome and of course some comments.

GAY GILBERT: Thanks, Joe. And good morning, everybody, both here in the room and those of you who are joining us virtually. Joe is absolutely correct; we are very excited to be hosting this event collaboratively today. And let me just say a quick thank you to our colleagues at GSA for the use of their wonderful facility here today and also for a lot of the help that they've given us to think about how to orchestrate this industry day and the counsel they've been giving us on their – around how they have approached solutions with other government agencies, so that's been very, very, very helpful.

So let me add very quickly – go over the agenda. We're going to do this in sort of four trunks. We have, sort of, our opening panel that you're going to hear from very briefly here to begin with. We then are going to be joined by Lou Ansaldi in a minute, who is going to walk through the technical components of the request for information.

We then have two special guests from the state – (inaudible) – UI, who are going to be sharing their experiences with regard to UI modernization projects in their state and in combination with other states, because as we shared with you on the webinar, one of our big strategies in the unemployment insurance world is to actually move forward with a consortia of states collaboratively building systems together. And then we'll be talking some more about that as well.

And then finally, the most important part of this is for you all to ask all of your questions, and we'll be giving you more instructions about how that's going to work here shortly.

Let me just say that we – information technology is an incredibly – fundamental to the operations of the unemployment insurance system, and we shared again on the webinar with those of you who participated that we have many states in varying degrees of modernizing their systems and many who still need to just start. So we – and so we are in a position, I think, at the Department of Labor and through our information technology support center, working to support states to understand the technologies that they need to take advantage of. And in the context of this project we are exploring – (inaudible) – multistate or even national inclusions in the cloud arena that would be beneficial for our UI system to consider.

And I will say that this – we are approaching this request for information as a – as a call to innovate, if you will, to ask the vendor community to come together with us as a system to think about what those opportunities are. We do envision, after this project is through, moving to a proof of concept. And ultimately, as we – those prove fruitful, obviously looking to broader solutions with our state partners.

So I wanted to – the RFI goals are pretty much what I just said, actually. We want – we want to engage you all in this process. We are looking, as most organizations are, at probably more private for cost efficiencies. We are – in the government arena are looking at restrained resources, as many of you know. So finding solutions that are cost effective that – also, we really want to take advantage of the new technologies that help us also be effective in the delivery of this program.

We are – I mentioned – and again, we will talk more about this – we have this consortia approach, so we are not only looking to – we're looking for pretty complex solutions, I will say, because we have these applications that are being developed by our consortia; we want to be able to deliver those ultimately to other states. We think the cloud solutions may offer us some opportunity to do that as well.

So that's our goal for the RFI. And obviously our next slide here are the goals for the Industry Day are to obviously continue to give you as much context as we possibly can to allow you to have – to provide us with really strong responses to the request for information, be sure you kind of understand the technology and infrastructure in the UI system at this point and how it's evolving, clarify the RFI requirements and, again, respond to your questions. Next slide, Gary.

Just a reminder about the UI program structure, for those of you who, if you didn't get those, participate in our webinar, this is a federal-state partnership. The states actually operate their own UI programs, in concert with federal law. The Department of Labor fund states to administer the program, but the important thing to remember is all states are different in their laws and have some unique needs as a result, which further complicates some of our challenges in coming up with some of these solutions. The good news is we think that roughly 80 to 85 percent of the UI system is similar. So there are opportunities to build core – (inaudible) – then can be customized appropriately for our states to meet their individual needs.

And I think that's pretty much the things I wanted to open with is just a summary to provide some context. So let me move forward to introduce our opening panel. You've already met Joe Vitale, who is the director for the Information Technology Support Center. And let me just say for a minute about that, the U.S. Department of Labor funds the Information Technology Support Center. We refer to it as ITSC, so if we slip and do acronyms. And their role in life is four-square focus on supporting and providing technical assistance to states and our consortia of states to help them modernize their systems. And so they're the really important part, and they are the key architects of this project for us and helping us do the RFI and to understand what you all tell us when you respond.

Let me introduce Tom Kireilis, the acting director of the Cloud Management Project here at the General Services Administration. Let me again thank Tom and all of the GSA team for all of the support they have given us. And following Tom I would like to introduce Dawn Leaf. (Inaudible) – we're close – Dawn Leaf, who is our deputy chief information officer at the U.S. Department of Labor. And let me also thank Dawn. She and her team have been very generous with their time and expertise as we have launched this effort. And Dawn has a really strong grounding in cloud, this technology, and experience in cloud technology as well.

So if I could ask Tom to join us and provide his welcome and opening remarks.

MR. VITALE: (Inaudible.)

MS. GILBERT: Oh, sorry. Joe. (Laughter.) Never mind. I was going to skip right over you, Joe.

MR. VITALE: You skipped right over me.

MS. GILBERT: Sorry, Joe Vitale first and then Tom.

(Cross talk.)

MR. VITALE: Good morning again. And I just wanted to spend a few minutes going over how this RFI fits in a project that we received to work on from the U.S. Department of Labor, together with the state workforce agencies.

So this RFI, as you can see from the slide at the bottom – (inaudible) – is one component of the much more comprehensive study that we're doing on cloud technology. So as part of our partnership with DOL, we're doing a whole feasibility study on the benefits, challenges, risk and other issues around the potential use of cloud computing and the various implementations of cloud computing models and delivery mechanisms that are available today to support the consortia, and also individual states who – because not every state will join a consortia.

Some states will – as Gay indicated, this is a federal-state program and states can do their own information technology the way they see fit, and the consortia model may not be satisfactory for all. So the cloud approach that – the study on cloud technology that we're using really needs to consider those single states also. We're going to look at the potential for identifying various cloud solutions to support states. And we're exploring how we can fit in that model to help the states. Next slide, please.

So I'm not going to cover all these bullets on here, but I just wanted you to get an idea of the breadth of the study that we're working on. These are the areas of this – of this study that we'll be exploring as we move forward with the cloud proposal.

So we're looking at security. Security, obviously you see it's the number-one bullet up there and it's one of our key concerns – personal identifying information, making sure that's key and secure, data privacy and data ownership, vendor independence. We want to make sure that – you know, we want the participation of the vendor community but we don't want any state to be locked in and have to be held hostage to any one of the vendor community organizations.

And there are a number of other things there. How do the different types of applications fit into the cloud model? Keep in mind obviously the – what you see on here is a bullet talking about ownership of materials, so anything developed with federal funds, the application is owned by the U.S. Department of Labor in the end, and the U.S. Department of Labor can give that application to any other state that they feel – that wants that application, because it's public information in some sense of the word.

We're looking at cost and funding models. Government is key. Obviously, as the cloud moves forward – (inaudible) – forward, we've implemented some sort of cloud solution. There will be maybe one or two consortiums, a single state that could be on one cloud. Governance on how that – how that whole – how all those organizations work together in keeping everything synchronized and organized and secure and structured properly is key. And accessibility, that's another one of the key bullets that we're looking at. So the study is going to look at all of that. Go to the next slide.

So what's the process that we're doing? Obviously this RFI is a key – not too far. That's it. (Chuckles.) Obviously this RFI is a key component in this study. We're also reaching out – we reached out to – (inaudible) – GSA to get some help and guidance from them. We're looking at a whole new different service model and deployment model: IAAS, PAAS, SAAS – that's S-A-A-S – looking at the different – those are the service models and the deployment models, you know, hybrids, community models, et cetera.

And we're outreaching to states. The train is moving. Some states have already started on that road. We're a little behind so we're trying to catch up. So we're reaching out to the states that have done some leading work in cloud to help to get some guidance and advice from them, and actually reaching out to industry in this RFI is one way we're doing that. Next slide.

What are the outcomes? So on this project that we're working on, on cloud feasibility, what do we hope to accomplish by that? Well, we're going to come up with some recommendations, a final report, or white paper if you will, that's going to talk about areas of opportunity to leverage cloud computing in the UI world and the UI information technology world. Hopefully we'll come up with some good options for proof of concepts that we can implement. This RFI is the key place for that. And we're going to update one of the main resources that we provide to the states on our – on our website. That is the best practices and guide for states in the cloud solutions. We'll have the component on that website for that.

That's all I have at this point. And now I'll turn it over to Tom, who is going to talk to you from the GSA perspective.

TOM KIREILIS: Thank you. Can I move these slides forward myself or just – OK.

Thank you all again for coming on this gorgeous Friday morning here in D.C. We haven't had quite a nice day in quite a while. It's unusual, especially you from out of state and everything else, so enjoy the weather while you're up here. You can go to the next slide, please.

We in GSA, at least our organization within the Federal Acquisition Service, Integrated Technology Services, with over $21 billion in IT sales just last year, we are the largest federal IT procurement organization, well, in the federal government I should say. And we've been doing lots of things, if you will, to move the needle on cloud. And one of the things is our initiatives on cybersecurity. You've heard of the FedRAMP program. And part of my time in the federal government prior to 9/11 I was an IT auditor and I did a lot of security, you know, certification and authorities to operate.

And that process was a long process, often – you know, six months or so. It's expensive. And we thought, why not just do it once for the federal government and leverage GSA's ability to do that and avoid having to pay those costs over and over and over again for the same thing? So that's another part of GSA that is doing that. So it's ESIT (ph). It seemed initially somewhat laborious and everything else, but once you buy in, once companies buy into that process, I mean, you have a way to sell those services through that portal over and over and over again. Let's go ahead and go to the next slide, please.

The last couple of years, I think early in 2012, we began looking at not so much selling our vehicles that we have but how do we push the needle on cloud across the federal government. So we ended up into a brainstorming group. It's what we called ourselves informally, a brainstorming group. And we met on a monthly basis with a number of agencies, I think 21, 22 at all, Department of Labor being one of them but also DHS, Health and Human Services, NASA, DISA.

And the monthly meetings started to involve not just moving the needle on cloud but how do we acquire – (inaudible) – how do we leverage the buying power of the federal government, if you will.

And we came upon a concept that's pretty hot right now, but back then it was still in its nascent stages, if you will, but it's cloud brokerage. And we thought, OK, if TSA were to become a cloud broker, what would be the impacts? Can we be one? You know, so we decided about putting together an RFI. That RFI was a long process. It was laborious and everything else. We had a lot of lessons learned out of it.

Go ahead and go to the next slide. I can just right into that discussion.

We ended up -– so we published it in July, and I think we (pushed ?) it off in late September, early October because of the government shutdown or whatever going on at that time, I think we pushed off October. But we got about 81 responses. Seventy-nine we written. Two were verbal. Of the 79 written responses, we had over 2,000 pages of text to analyze. That analysis took us about six months. And the way I organized that whole effort was, let's break the responses down by market sector, if you will. You know, some – (inaudible) – assistants integrators have responded, manufacturers, telecom companies, consulting companies, CSBs, cloud brokers as well. So we – (inaudible) – off that way.

And first, we wanted to gauge – you know, we wanted to gauge, was it – response positive or negative about GSA going into this business and – (inaudible) – overwhelmingly positive except for one market sector. The telecom industry did not – (inaudible) – in this direction. And we got a lot of pushback also from Congress as well. You could tell – (inaudible) – attempt to, you know, kind of stifle what we're trying to – what we're trying to do.

Nonetheless, out of this effort we decided – (inaudible) – here are some compelling responses. And we wanted to see the negative responses as well. We wanted – (inaudible) – in their thinking

and, you know, what their opposition was about. And so we invited 17 firms back and did a – (inaudible). And we had about a one-hour session or whatever.

And then out of that 17, we found a number of those respondees to be – there is really something there, so let's invite them back for a deeper dive, if you will, and invite some of our agencies that we've been collaborating with – most notably in this case it was Health and Human Services and Homeland Security – and let them participate in the back-and-forth process.

We found out of this effort – one thing we definitely wanted to do is examine a cloud broker management platform. What we wanted to do is be able – have the ability to put electronic catalog online and have program – (inaudible) – be able to, you know – (inaudible) – stuff like that. And one model we were particularly intrigued was actually the state of Texas. And I was talking to a representative from the state of Mississippi – (inaudible) – I guess a little bit later. But we found that many of the states have progressed quite far in this arena much harder than the federal government had in some cases. So we were intrigued. We contacted the state of Texas. We contacted the integrator that was managing that platform. We also talked to the platform provider as well and got their perspective, and we found – you know, this is probably a model. If we're going to go into this business, this is something that we probably want to emulate and do that. And again, the state of Texas is very open to sharing their documentation – (inaudible) – else, so it's quite positive.

Can we go to the next slide, please?

This last April we concluded our proof of – cloud service broker proof of concept phase. You know, I take it back – (inaudible) – October 2012, we spent almost a year, six months analyzing the results, maybe two more months doing the deeper dive and figure out, OK, we're going to do a procurement on a proof of concept, this is what we're going to procure, and devising the procurement strategy and everything else, that puts another six months to get from – (inaudible) – it takes about six months, it's a six-month process.

And then we got that in and we started testing the platforms in March –- I'm sorry, in September of 2013, and we concluded the testing in 2014. And we tested a number of -– there were -– at the time from the – (inaudible) – responses that we got, there were about five viable platforms, software platforms that were out there. And we wanted to test as many of them as we can for the bunch of use-cases that we put together.

And if you could go to the next slide.

In concert with DHS and Health and Human Services, we developed a number of use-cases for creating an electronic catalog. And basically those – that electronic catalogue will have some of our procurement vehicles on there as well as the – (inaudible) – DHS or HHS contracts that they have available for cloud services and create this (expansable ?) electronic catalog for cloud.

And what we want to accomplish through these use-cases is to do the revisioning, deep revisioning, the actual acquisition as well. So we have to do a number of –- just a number of (roles ?) in, you know, program – (inaudible) – you know, say, a hundred BMs (ph), for

example, and then that action had to go – the acquisition officer go through, make sure there is funding available (and so on ?). And then you had to have some capability of audit ability as well – let's see who's doing what and being honest. And then we examined from the platforms what can you do right out of the box, what do you – what did you have to do to, you know, configure the platform to do X and what you're going to have to do still in a manual fashion.

And we found that – (inaudible) – there was still an awful lot of manual function that we ought to go through. You know, the software vendors will have me believe that – do all this out of the box. Well, you can configure it, but each agency procures services a little bit differently, so it's not the same, you know, doing it out of the box. And that's been one of the great challenges for us. Nonetheless, we got hands-on experience with these platforms, and there's a great deal that can be gained out of that. You got to understand the difference between a technical broker and a business broker. It's, like, different.

And then if I could go to the next slide, please.

Aaah. Missed one.

Anyways, what the slide was supposed to say is actually a segue into where we are today. You know, we have this experience in this doing these RFIs for cloud services and what it took to kind of analyze the results and all that. As this project included – (inaudible) – service broker, we were approached by the Department the Labor to assist them in this RFI. And again, consistent with our philosophy, not so much selling cloud services we really working with other agencies in collaboration to move the needle on cloud, you know, we feel that collectively, this is good for government, and we're more than happy to help them continuing stay in the process.

So again, thank you for coming to us, and, you know, we hope to continue to work for you – (inaudible).

MS.   : Our pleasure. (Chuckles.)

MR. KIREILIS: And that basically concludes what I had to say, so thank you again.

MS.   : Thank you. (Applause.)

DAWN LEAF: So good morning. My name is Dawn Leaf. I'm the deputy chief information officer for the Department of Labor.

Before I came to Labor, a little over a year and a half ago I worked for several years as the senior executive for cloud computing at the National Institute of Standards and Technology, NIST. And what I wanted to comment on today, I just briefly wanted to share with you some practical considerations based on the work at NIST, based on our experiences at Labor that might be useful to you regardless of your position with respect to the process going forward, whether you're going to be a user, whether you're going to be potentially a provider and/or some of the folks working on the concept.

So I wanted to ask -– and I know there are a lot more people watching it through the webcast than are in the room, but how many people are familiar with the NIST cloud computing program in the room?

Not so many but some.

NIST was charged with developing a cloud computing technology road map several years ago, and we worked as colleagues with GSA and with government agencies.

But the idea was to identify the top 10 requirements that needed to be satisfied to expand the federal government's use of cloud computing but also in the state and local governments, the commercial private sector and in the academic. And for those of you who are really just getting exposed in detail for the first time with cloud, I would encourage you to go to the NIT (ph) site, where they very clearly define the delivery model, the service model, the functions of a broker and just that whole model. I think it might be useful.

But with that said, there are a couple of those requirements that we identified strategically when we developed the cloud computing technology road map, and that was done with a lot of industry partners. There were over 2,500 participants in the various working groups to produce those products and define that and (then vet ?) it. There was, as you might expect, a need to have security requirements defined, interoperability and portability; that when you went to a cloud solution, you could get out and so that you can ensure different cloud services would work together. There was 508 compliance roles and responsibilities and performance.

So then when I shifted to the Department of Labor, one of our major initiatives that we completed successfully last year was moving our staff, over 17,000 staff, from nine different legacy email system to a single cloud computing – federal cloud computing model in the Microsoft 365 community cloud.

And because we have basically a federated model still in many of the government agencies, I think this may be very applicable to what we're trying to achieve here, what you're trying to achieve in terms of the state control (shop ?).

So with that said, just three lessons learned that I'm going to share with you.

The first one is that whole approach in federated services. And the biggest – one of the biggest challenges that we've found was the upfront preparation. I think there is a somewhat naive perception that if you're going to cloud services, that it's like buying a chair. Well, it's not. You have to get to the cloud services. So that means that you have to have network and security infrastructure that's reliable and well-performing, that you have the bandwidth. It means that you will have to modify your infrastructures.

So we found, when we did the upfront technical analysis, that we had over a hundred different inconsistencies between our nine federal infrastructures that had to be resolved before we could even get to the cloud services.

And the analogy I would use – if you live in a house or a boat, there are some things that you can live with as an owner, but when you go to sell, and you have an inspection, you've to correct those, you've got to make those best practice. So that's a tremendous amount of work.

And we also found that there was some challenges in working – and this really gets into the next lessons learned about roles and responsibilities – with the service provider-broker-consumer role. And it doesn't matter who the broker is, whether it's a fed broker, whether it's a commercial integrator – doesn't really matter, for that matter, whether it's federal outsourced or shared services.

To give you one example, we spent 30 days looking at a network connectivity issue, and there was a basic assumption in the model – and this is true for outsourcing in general – that it must be somebody else's fault, right? So we spent 30 days proving that it wasn't Verizon, that it wasn't the DOL network, that it wasn't the integrator, and finally it got down to the fact that it was a federal community cloud configuration route, which chewed up not only a lot of time but a lot of resources. You got to think about it. You got 20 people working on a problem for 30 days, multiple shifts. It's a fair amount of money.

So where I'm going with this, in terms of this context, is I would hope that these are things that would be considered in this process. At the RFI, in the response and specifically from the providers, how would you in your strategy seek to minimize those kinds of risks and issues? Roles and responsibilities clearly goes right to the heart of security. When you do have an event, who's the party that's going to respond? Obviously in our case federal – responsibility for Federal Information Security Management Act compliance cannot be delegated. OK, we are responsible, even if we delegate the provision of a service outside. Well, you can debate whether the states and/or private entities all need to be FISMA-compliant, but certainly, in the context of the FedRAMP discussion, if you can get services that are, then that's – you know, you're a step ahead.

But you still have to think who's going to respond and how long do they have to respond. OK. You have 24-hour requirement for those kinds of things.

And I would just finish by talking about the last and, I think, most important lesson learned, and that has to do with the partnership aspect. We talk about state and federal partnerships. We talk about private and public partnership. Well, I think there is also a misconception again that going to cloud services is somehow easier. It's actually harder than when you had to integrate your environment and you and you've had your hands around all it. Sometimes people refer to server hugging. It's not just that. It's that when part of the service is outside of your direction, then if you are the provider – and I know I can probably look at every CIO in every state, and they will know exactly what I mean – when there's something wrong, it doesn't matter who the provider is. You are the one who's on the hook in that organization for providing that service. You are the one that's going to be in the position and really held accountable.

So that's where that partnership really comes to play, and I would say – share one other brief example with you. We also had a situation with message queuing products between handheld devices and the cloud environment. And again, we started down this path of, well, it works for

this agency; it works for that; it must not, you know – (inaudible) – the device provider, the service provider – well, again, it was actually in the cloud environment. But I'm happy to say that we've moved past them all, where we no longer have one organization be at our integrator – and I would give a plug for our integrator because in cloud we had a 2 percent failure rate. That means for everybody that we moved to cloud, we were moving 309 – only 2 percent of those people had a problem, which is much lower than the average 10 percent. So what we – some real diligence in our integrator.

But the real point is that your integrator, your service provider and the organization – you really have to work as a team and not sit, wait, resolve the issues. Everybody has to be out of the gate to do that. And I think when you achieve that, it can be tremendously successful.

So I'm excited about the initiative. I'm sure you are. And I wish everybody the best of luck.

Thank you. (Applause.)

MS. GILBERT: Well, thanks again to Joe and Tom and Dawn for kicking us off here. I can't tell you enough about how helpful both Dawn and her team and the GSA folks have been to us in helping us to get this point and understanding sort of how – what will get us where we need to go to understand how this technology helps our system. So thanks to all of you.

We're going to allow our opening panel to kind of shift us here and we're going to be bringing up Lou Ansaldi, who is the technology director at the Information Technology Support Center. And Lou is going to be taking – walking us through the technical aspects of the request for information and set the stage so that we will again be sure you all have the solid context on our UI – the technology pieces of our UI system and so that you can tailor your responses accordingly. So thanks again to our opening panel. (Applause.)

LOU ANSALDI: Good morning. So I'm going to be – after this quick 20 minutes here, I think my back is going to be hurting from sitting down. So I don't think there's much flexibility in this microphone, so – but we are going to go swift. We have a number of slides, and I do want to connect – I'm going to some – connect some points that really do appreciate the input and the collaboration that has been provided by Dawn and her team, as Gay has said, but as well as by GSA, Tom and their entire team. If – as you'll see there, there's certainly connectivity in what they've talked about through some specifics here that we're going to walk through.

So the key areas of interest in this RFI, technically what we're trying to obtain and acquire – that's fine, that's fine – the use of cloud services to address the challenges that UIIG modernization has experienced over more than a decade at this point in terms of developing systems, but also sustaining systems. So it's from a dual perspective that we're trying to leverage cloud services to help improve that process. And I will go into further details subsequently.

Secondly is the systematic delivery of this cloud service that addresses these issues in an organized way. And you see the term broker. We are certainly open, just to be clear, in terms of what that looks like. Now we have a vision, and I'm going to talk about that, as I did in the Web

X, with some examples and scenarios and some specifics. But we are certainly open and we are eager to hear from industry.

As Tom mentioned, there was a lot of education that they've received and they shared with us. And we would like to obtain that as well and we'll be sharing with GSA too. And then finally, we'll go into some detailed specifics of what we're looking for to better understand cloud services and capabilities. I think we have a fairly broad and somewhat deep understanding, but this will make it – attempt to be more comprehensive in that regard.

So before I launch into this, for those that are outside the UI domain and that have expressed interest just by attending here physically or virtually, I just want to give some context to what a UI IG system looks like technically, in terms of scope. They range in terms of lines of code as a metric – a fairly crude metric – but from a million to maybe 2, 3 million lines of code. A consortium, multistate system as a point of reference, they're still under development so we don't have any metrics regarding that, but imagine they're going to be upwards towards the 2 to 3 million lines of code range.

But also, there's a significant amount of business rules that are incorporated into these systems. And as it turns out, based on the analysis that's been achieved thus far and requirements definition processes with the consortiums, and Gay has mentioned this, there is a significant amount of commonality among the states, ergo, among the inspirations for the consortiums. But we want that to be leveraged in terms of common code, OK? So a vast amount of the code we're hoping is common so we gain economies of scale in development as well as support.

We had talked about this in the Web X. If you parse out – and I think Ellen and Dale are going to mention this too, upcoming – if you look at the functionality within the UI system, you could look at it as about 15 – no, you count, 15, 20, 25 components, OK? Those components individually are complex, but they also need to be integrated. So I want to emphasize here, this is a complex system.

And while there's more complex systems coming from different spaces before this, including Department of Defense and avionics systems where you have 15, 20 million lines of code and even more, this is quite complex, because of the interdependencies and the number of business rules. Also, there's a lot of third-party products that typically are included in delivery of a UI system. So integrating that efficiently and effectively is very important.

In terms of other kind of rough metrics, web pages, the number is 500,000, even more. In terms of database tables, a significant amount of database tables. Not necessarily a significant amount of data to the volume measurement, but certainly in terms of number of tables, and then a large number of external interfaces. And some of those interfaces, for example, are with Social Security and the IRS. And there are special rules around those. That's very important too to understand. So that's level setting for those kind of outside the UI domain that we want to hopefully bring in to help us here.

Next slide.

So what are some of the challenges? This is kind of an overview and a little bit more detail than was provided in the Web X. Just as a general point, relative to other software engineering projects globally, if you look at studies, UI is a bit behind in terms of success rates. So we want to bolster that. The good news, the trend is positive in our success rate, but now we want to take advantage of cloud services the best we can to help improve that.

The second point is typically in the past, until the early 2000s to about 2008, 2009, the UI have been individual state efforts. And as mentioned by Tom, this idea of leveraging and each state kind of doing pretty much the same thing over and over and having trouble with it has also been an inspiration for consortiums that Gay has mentioned. And as it turns out, that has been a significant emphasis here. What we want to do, of course, as has been mentioned, want to make sure that consortium initiatives are complimented by these cloud services.

So further, in terms of – in terms of maintenance and support, just to go back real quickly, maintenance and support – so once we develop a system, when that does happen, it's been very difficult for the states to actually support a system. There's a number of reasons as to that. And so the consortiums themselves, recognizing that, have been looking at outsource models. And I'll talk about that a little bit more shortly.

Next slide.

So specifically, to address those key challenges, we would like to leverage as best we can and we're looking for industry to provide inspiration, input, innovation regarding this on how to best address the challenges in terms of development, in terms of sustainment. So as an example, some states have actually gone through successful modernizations and, four, five, six years later, based on technology obsolescence have had to redo their systems. We want to avoid that. We want to evolve these systems efficiently and effectively.

And of course, an overlay against all that, or on top of that, is security and maintaining security. And there's different aspects to that, from PII to other types of security requirements. And this was mentioned by both Tom and Dawn regarding NIST requirements and Fed Ramp and so forth. And we'll talk a little bit more about that shortly.

So the inspiration for this cloud broker concept is in fact in collaboration with Dawn, initially, and kind of corroborated by discussions with GSA. So the intent here is to get a pool of cloud industry service providers across the spectrum of whether it be infrastructure service, platform as a service, software as a service, whereby they connect to the states through this thin layer, we'll call it and you'll see it pictorially on the next slide, a broker, OK, who delivers these services efficiently, effectively based on need and best fit to the states and – (inaudible). So that is the emphasis of the – of the cloud broker.

The broker needs to be independent. The broker needs to be unbiased and truly work on behalf of the states and the consortium. So those are kind of some criteria. This is not to eliminate or limit the entity that it could actually fulfill the broker role. We are interested in the hearing ideas regarding that.

Next slide.

So this is that pictorial I talked about. I mean, it's very simplistic. Or you could break it down to the bottom layer is the service providers. And that is a combination of IAS, as I mentioned, or any type of cloud service provider. And then in between, there's a liaison. And essentially providing a catalog of capabilities and services to the single state or consortia states that would be included in this are those services.

So the consortia would, if they're interested in, for example, a new consortia that is about to acquire a development vendor or infrastructure as a service vendor could actually go to this broker service and, based on its needs in terms of SLAs, pricing models, exit strategies, things of that nature, they could go through the broker and acquire that quickly and with agility. And in fact, as it turns out in the future, if there is a desire – and as Dawn mentioned this – there's a desire to change the infrastructures of service supplier, they could do that through the broker quickly and rapidly as well.

So that's the type of concept that we're trying to achieve here. The next slide is a scenario, and there's a few others that are provided in the RFI. This one is where there is a state that needs to modernize. So that technical scope that I provided, they need to get to that. They need a system – take their legacy system and get to this – that type of 1 million, 2 million lines of code that provides all the functionality that's – that's I described. So what they would do is in fact interact with the broker, OK, who is acting on their behalf.

And that's an important point. It's not - it's not necessarily acting on behalf of industry. It's acting on the behalf of states. Although, the point is that everybody wins in this process, OK, in terms of delivery or getting business. So for industry, there are different offering in terms of a SaaS provider - SaaS provider 1, 2, so forth, or even a consortium. So I think you're going to here shortly, too, from the leadership of two consortiums about this onboarding process. So this could, in fact, be the model of which that occurs, is through the broker. So there's the (best bit ?) with whether it's consortia A, B, or service provider X to be decided.

Next slide. So in terms of the role of industry in this cloud community, this - what we're looking for explicitly - and this is spelled out in the R-5 - again, to kind of illuminate and highlight some of the key areas - the interest among those in the audience in terms of what you think you could provide - what role you would fulfill - is it infrastructures of service? Is it platforms of service? Softwares of service? And then, regarding that, what are your experiences, as related to that, in terms of delivering something on the order of what we're looking at here?

So those are two key areas. We're also looking at a description of your services that you provide. So whether it be a roadmap as related to your software's (of ?) service new features capabilities that you see delivering in the future, and how that would be relevant given the description of UI for those outside your domain that we've provided, to tools, libraries, things of that nature that are relevant that are relevant (to the ?) platform as a service - those are the specifics that we're also looking for, OK? Next.

We're also interested, as I mentioned - governance. And governance is directly related to, of course, the broker role. So we certainly want to understand, from industry, based on your experiences, and as you've been - as I've mentioned - and has been mentioned by Gay and Joe - you know, we're coordinating with Tom and Dawn in terms of, you know, their experiences and so forth; we're also doing likewise - we will do likewise - reciprocate, but we want to reach out here and get some input and even guidance as to what's worked from the vendor industry experiences.

And then, finally - and regarding that is, what type of timelines or even proof of concept that you would suggest that would be useful to demonstrate this type of - this type of model and delivery of services that will address the key issues that we have regarding the UI IT modernization? Next slide, please.

So the next slides really illuminate some of the hot spots of the RFI request I'm going to go through quickly, but you will have these available up on the site. In terms of standard (SLAs ?), we'd like to know what the offerings are in terms of methods of calculation, response times. As Gay - excuse me - Dawn gave an example - a couple of examples in terms of some of the issues. You know, what are the RACI matrix? So who has roles - who has the responsibility, accountability for the boundaries of services and so forth? We're looking for that. We're also looking for terms of service. So what are the - what's the onboarding process? What's the migration process? What's the reverse of that - the exit strategies?

And then, of course, scheduled uptime - downtime to - for maintenance and so forth, if that's applicable. So those are kind of a highlight of the service-level agreement area in the RFI. The next slide.

So as has been emphasized here, security is obviously the keen issue within any credible agency and state government. So protection of PII - avoidance or elimination of breaches - things of those nature; that is a key aspect here. Also, we're looking for, explicitly, the certifications as related to FISMA - FedRAMP, is something in process, et cetera.

And then, specifics regarding encryption, PKI - is that used - what type, what class? So those are just kind of the highlights that we are eagerly interested. And then, there are other aspects, as you see in the RFI, that we will be looking at, but these are, again, points of emphasis - disaster recovery and COOP - so this is also a (G ?) aspect in particular, and Dale Smith from Mississippi has experienced this with Katrina a few years back regarding the need for disaster recovery. He is from Mississippi, as I mentioned, and that was a key area. So we're looking for that, and that, of course, would have applicability cost - the nation based on whatever disaster type.

The next slide - and then, of course, pricing models that - (inaudible) - go along with this. As I said, to be a broker, between the need, the states and the - and industry, they need to know how much it is to buy these services. So there's specifics there that are laid out that we would like to see responses from, and I'm not going to read through all these, but if you pay attention to them in the RFI, we'd appreciate that. The next slide?

OK. So finally, potential proofs of concept. So what we see - and Joe has mentioned this, and Gay has mentioned this - what we see is not just a white paper encapsulation of the responses and so forth, and further dialogue with industry. But the potential, based on the outcome of a proof of concept or more to (prove out ?) well, in fact, can we help bolster success rates in modernization projects? Can we do - we can be more efficient and effective cost-effectively in terms of sustainment of a new system? And further, does the broker model as envisioned here make sense, or maybe input from a vendor or two from industry - you know, exercising that? So those would be examples - (however ?) not to be exclusive, we are also seeking input from industry regarding those, and so this is a specific request regarding that. So that is the end of this brief, and I will turn it over to Joe.

MR. VITALE (?): (Inaudible.) So the next panel, we have our state representatives - as Gay and I indicated earlier, this is a true partnership where not only is it ITFT and UDCOL, but the states. And here with us today, we have two of the leading visionaries from two of our consortiums that are actually functioning right now. We have Ellen Golombek from the State of Colorado. She is the executive director of the Colorado Department of Labor and employment. And by the way, she's also the president-elect of the National Association of State Workforce Agencies. NASWA, as we call it, is our parent organization, and all 50 states and the District of Columbia, et cetera, and Puerto Rico are members of NASWA, and Ellen will be leading that organization next year. We also have Dale Smith with us. Dale is the deputy executive director from the Mississippi Department of Employment Security, and Dale has served as the information technology director on NASWA in the past. Both Dale and Ellen are also on our governing board, so information technology support center is governed by a board of state IT directors, state UI directors and state administrators, and so they set our direction and our goals and our strategic plan, and Ellen and Dale are both active participants in that - on that board also.

Ellen is the - I think Dale's going to go first - Dale is the lead state in the Mississippi, Rhode Island, Maine Consortium - MRM, as we call it, and Ellen is the lead state in the WYCAN Consortium, composed of Wyoming, Colorado, Arizona and North Dakota, and both of them are actively involved in those consortiums.

So Dale, I'll turn it over to you.

DALE SMITH: Thank you, Joe. Mississippi began developing and re-engineering our unemployment system back in 2005. And we've possibly heard from our - we've constantly heard from our (key ?) organization that - (inaudible) - held together by bubble gum and Band-Aids and was going to explode at any minute. So we decide to move forward in trying to kind of (hear ?) that little issue. We were living in a - (inaudible) - environment - primarily COBOL. We had some wonderful COBOL programmers - excellent skills. We had nobody that had web-based skills. And we thought we had a plan to deal with that: As we began to develop in the web environment, were going to have our staff work beside the developer's staff, and they're going to learn everything from start to finish, and it was a noble plan, but what happened was as they achieved these highly desirable skills, they left before we wanted them to. And soon we realized that that was not a viable plan, and we had to do something else. So we began to look to the consortium as the – a solution. And initially with Mississippi, we understood that we could buy the services for maintenance and support that we needed to carry the system forward, but it was

expensive. And although we could buy them, we couldn't afford them. And so initially, Mississippi got in the consortium business, which led us to the concept of cloud technology because of the financial means.

MS. : Thank you. Good morning, everyone. (Inaudible.) So WyCAN – Wyoming, Colorado, Arizona and North Dakota – was originally AWIN, which was Arizona, Wyoming, Idaho and North Dakota. And Idaho bowed out right about the time my governor said, can't you find some other people to help you modernize your system with? So as luck would have it, there was an opening. And so we turned the WyCAN team and in fact, as Joe (sp) stated, became the lead state. In retrospect – (inaudible) – (laughter) – given the amount of time it takes, much like the old system in Mississippi and much like the systems in the other states. We had the 25, 30-year-old mainframe systems, COBOL green screen. We can't even find COBOL programmers anymore. We are bringing retirees back to help us with our system. I literally wake up every morning, and the first thing I check for on my email is whether or not our system, which is called – (inaudible) – is actually up and running, and whether or not it will stay up and running before we get WyCAN up and running is really anyone's guess. Reliability is essential. Acceptable is essential to this project.

And so I think we'll just go – I'm happy to be here today. We've got – (inaudible) – some questions to ask us. We're going to answer them, and then I think we're going to open it for questions either from people here or folks –

MR. : Thanks – (inaudible) – so what we did was we put together some (premade ?) questions to get the conversation flowing and key on some points that I think will be important to review as the vendor community as you respond to this RFI.

So the first one I'll throw out to both Ellen (sp) and Bill (sp). Can you provide us a high-level at least a high-level example of the types of processes that are supported by IT within the state UI agency? So basically, what is it that your agency does on a daily basis, and how are those activities supported by IT infrastructure and services? Who wants to go first.

MS. : So I'll take that one first. And I should say that in Colorado, we have a centralized IT department. And so everything goes through that centralized agency. And on a daily basis, we use our IT systems – and this is where you'll hear – and many of you may be familiar with it – all of the things they deal with. This is by no means a comprehensive or exhaustive list: overall case management; determining claimants' eligibility; making payments; adjudicating issues that affect claimants' eligibility; interacting with the employer community regarding their tax status, regarding claimants' eligibility, wages and charges based on the claimant's filing; workflow automation; document management; event scheduling like appeals. The list just goes on and on. As I said earlier, the systems are old. They are inflexible. It takes weeks, sometimes months to reprogram when there's changes to the system. And they have a really difficult time handling the heavy loads, as we experienced firsthand during the recent recession. These systems also have the – (inaudible) – infrastructure to support collaboration between state employees, interconnecting divisions and departments, and of course our customers.

MR.   : And Mississippi has a little bit different perspective on this. Well, maybe I should say an additional perspective on this. We certainly serve the same constituency for – in our unemployment insurance program, as Ellen (sp) discussed, the employers who are filing and paying taxes, registering to pay taxes, the benefits processes, the benefits adjudication, the benefit overpayment recovery. So all of those – all of those pieces live within the Mississippi program. But in addition to that, we have to be cognizant of the fact that in our organization, we support other programs of USDOL, such as Labor Exchange, Workforce Investment Act programs, and the unemployment insurance program has to interact with those programs. We share data.

Actually, Mississippi partnered with USDOL and ITSC on the Reemployment Connections project that we actually launched in pilot back in March, I believe it was, in March of this year, and which has been very successful for us, but it's a bringing together of the unemployment insurance program and the job placement programs, job – skills gap analysis programs into a symbol (sic) point of entry for the customers.

In addition to that, we also have to be prepared to communicate with other agencies, the Department of Human Service agency, which – in fact, Mississippi is looking at creating a consortium of a sort with our state and Department of Human Service organization because we serve common customers. And so there are a lot of interfaces that have to be created, a lot of interfaces that have to be respected, a lot of rules that surround the unemployment insurance program, external to the program that we have to take into account as we move forward with this process.

MR.   : Thanks, Bill (sp). Thanks, (Ellen (sp) ?).

Ellen (sp), let me ask you a question. So what information do you think that is important for the vendor community here to know about related to your experiences in UI information technology and how the UI system evolves through the – how do you think – (inaudible) – can actually – (inaudible) – cloud technology?

MS.   : I think a lot of this was covered by Lu (ph), and also you, Joe, and your presentations. But let me personalize it to WyCAN, if I could. Early on, we realized that our four states themselves couldn't support a modernized system. And when I say that, it's the capacity issue and the expertise issue. As – (inaudible) – stated earlier, we can't keep staff to maintain these systems. They view state service a little bit like OJT (ph). They come and work for us for a couple of years, get experience, and then they go work for all of you at twice the salary. (Laughter.) You know, we were really concerned about being able to update and evolve a new system over time and keep it updated.

So the realization that these new technologies also change quite a bit was also top of mind. And I have seen firsthand the years it takes to develop some of these new systems, and once they're online, they're actually outdated. So how do we resolve that issue?

So given all that, at WyCAN, we unanimously decided we were going to outsource the maintenance and the support of our new system using the FAST (ph) model and the cloud

services. And our vendor, HCL (ph), will support the multistate system, including our software and our infrastructure, and our vendor will also assure that all of our security requirements are being met, you know, things like coding systems for multitenant use, just – it's not just another IT niche. Experienced resources are critical for efficient development in the – (inaudible) – system, in-depth knowledge of Web security standards. Legislation, for those of you who don't know this, dictates specifics about where data can be stored, data at rest and in transit in the cloud, as subject to the same high standards of security that are required with localized data centers. It's essential to have a well-defined service level commitment to manage agency expectations, continuity of service from cloud providers, in conjunction with local UI IT support. So those are just a few of the additional things.

MR.   : Thank you. What you hear from the two states here is not uncommon across the country.

Having worked in one of the unemployment agencies in this system (and the ?) lack of resources to support, operate and maintain these systems going forward in the new technology is – for us, again, is a problem out there across the country. (Inaudible) – programs moves people to the new technology. The new technology requires new skills, and getting those skills and paying for those skills is very difficult for state governments, so that's a problem that most states have.

Dale (ph), so you've had experience in tackling in UI modernization both as a single state and now in a consortium. What should the vendor community understand about the difference between working in a project on the single state versus the needs of a consortium? How can vendors distinguish between the two and the needs of the two groups?

MR.   : Joe (ph), there are three major factors that have to be handled, and handled well, and those are communication, security – as Ellen (ph) talked about a minute ago and Lou (ph) just talked about – and prioritization, governance. Those are the important issues that we have to deal with. I think communication is probably maybe the number-one issue. We all talk. We all write, send emails, text. You would think we communicate. They really don't. If you – if you consider the definition of communication that you learn in college oral communications class, we don't do that. The things that I say probably many times – not probably, many times aren't received in the context of what I'm saying. And communications is extremely important and becomes even more important – it's extremely important in – (inaudible) – states production. But when you start multiplying and compounding that in a consortium environment, it becomes very, very difficult to truly communicate. Remember, I'm not talking about just talking. I'm not talking about just sending an email or writing. I'm talking about truly communicating.

Along the lines of the communications piece, we have to consider two I call them arts: the art of negotiation and the art of compromise. That is critical in dealing with a partnership, which is what a consortium is. It's a partnership of states. And so that goes for the vendor community as well as for the state agencies. It's important that everybody understands that there is negotiation, and it's important that everybody understands they can't always have their way. And that's one important issue, and I think, as I said, the number one issue.

Security is certainly critical. We deal with a tremendous amount of personally identifiable information. I don't think any one of us in this room can stress to you enough the importance of

securing and protecting personally identifiable information. Not only is that a federal requirement. There are state requirements also. Some of the state requirements may even be more strict than federal requirements. Federal requirements are strict, whether you look at the Safeguard Procedures Act that those of us that have IRS data, those are some relatively restrictive directives that we receive from the IRS. But in a few cases – in most cases that – the states do not go any deeper than that, but in a few cases states do. Working with state's legislatures, if you have done that, you understand that – I'm sure that if one legislator has something bad that happens to them, they get a law passed, and that law may be way beyond what you would normally expect the law to say. So that's the reason that states sometimes have more restrictive laws. So security is very important, and you've got to take that into consideration.

And the final thing that I will mention in these three is prioritization. How do you prioritize the system changes? In the MRM consortium, there are three states. In WyCAN, there are four states.

Well, let's consider the legislatures again. Legislatures decide that they're going to pass a bill, and it happens in two states in a three-state consortium. The bill is passed, the changes are required on the same date. The effective date of a lot of legislation is July 1, in states. How do you deal with that? How do you make those changes? And the only solution that I have for a developer is, you better have the staff to do it, because it will be a requirement from the states that it be done. The governor expects it, the legislature expects it and certainly the executives of the agencies expect it, because the governor and the legislatures are looking to them. So we want to make sure that that happens.

One other – one other point that I want to mention here in this particular segment is I think looking at a single state development state development in relation to a multi-state or consortium development, Mississippi took nine years to develop our reengineered unemployment system and our technology surrounding that. We have a very successful system that is stabilized and operating some components that have been operating since 2007. The latest component has been operating for over a year now successfully.

As we move into the consortium model, we began to realize that probably for us the hardest part of the work had been done: the reengineering of the system. It doesn't mean that there aren't a lot of hard – there isn't a lot of hard work that still has to be done, but the hardest part has been done: reengineering the system.
Now we have to figure out how to put that into – how to refactor that into an environment that serves multiple states. (Inaudible) – once said something about that (earlier today ?). Mississippi and Rhode Island and Maine are interested in on-boarding it. And to define that, that is bringing on other states.
We don't want to take on the world. I was accused at one point of wanting to take on the world by one of our partners. (Laughter.) I might have before I got into this, but we are interested in limiting that to probably a total of six to eight states. We think for our model that is what is adequate. And we – so as – we have to work around those issues of how we put all of this together and how we consider everybody's needs. The MRM for the Mississippi system is the base system, and as we add the other states in there, we began to have to consider the fact that

there are unique pieces with the other states that have to be dealt with, and that is bound to our rule changing. But still, I want you to understand that a lot of work has to be done. Communication, security and prioritization are the three important things you need to take away from this conversation, though, I think.

MR. : Great. Thanks, (Nathan ?). One thing I wanted to hone in on for the vendor community, as Dale (ph) mentioned in his presentation, is the fact of flexibility and the uniqueness of all the three states or all four states in the consortium. So the vendors need to understand that from both a self-aware application perspective and an operations perspective, state legislatures are going to pass laws, governors are going to sign laws, and it may not be in all three states. So you and the vendor community have to respond to an individual state law. You can't say, well, I'm not changing my core system or I can't affect my core system because your state components have to be isolated and be able to be flexible enough to be changed to deal with those legislative changes quickly and nimbly. So that's a very key point. Thanks for bringing that up, Dale (ph).

I'll throw the next one out to either one of you who are brave enough to take it. Given that you're already looking to use cloud technology to support your consortia, what are your thoughts about how the cloud will help you migrate your final development application to additional states? Ellen (ph), I see you – (inaudible).

MS. : Well, I think the most obvious benefit is the nonlocalized nature of cloud solutions that allow for this onboarding. And WyCAN is the only four-state consortium that is out there. We are developing tax benefits and appeals. It's a complete, total modernization system.

And we're very interested in expanding, once we've completed and have gone online – in expanding to other states and allowing them to onboard. That doesn't mean that states have to wait until it's finished. They can start looking at their requirements and getting prepared to onboard onto our system. We don't really have a limit as to how many states would onboard to our system. Again, the configurability of this system will be what is key to how many states onboard, when they onboard and how they onboard.

And we hope that it will happen in a much more rapid and more cost-effective manner because that really is what this is all about. It's – you know, if I – sorry, Joe, I'm going to kind of lead into the next question. But if I had to talk about the two or three critical issues that we're looking at with these systems, I would say security, reliability and cost. You don't have nine years to build this. I'm not going to be around for nine years. So it needs to happen much quicker. It absolutely has to be reliable. I would say reliable and flexible. It can't take as long as it has to reprogram these systems because not just state laws, obviously we have federal changes as well.

Those federal changes will go across all states, but again, to Dale's point, then individual states will take those and perhaps go even deeper. And Dale talked a lot about security, but another key point in these consortiums and cloud systems is that the state's data cannot be comingled. So that's a security issue that has to be dealt with. And we don't even comingle our data with the other agencies within our state, and so making sure that in addition to all of the other security issues that we're not comingling the state data that's out there. And these systems – it's not just

about the current, obviously, laws that we have in place, but now adaptable and flexible are they going to be for future changes at either the state or the federal level.

MR. VITALE: Dale, did you want to add anything to that?

MR. SMITH: Sure. The – I'll just briefly give you the – some – (inaudible) – points on the – (inaudible) – cloud technology, that it has to reduce the net infrastructure and continuing support cost. It has to create a stable and highly available system, provide a practical disaster recovery business continuity solution. As – (inaudible) – mentioned, I believe it was Mississippi's vast experience with disaster recovery. We have to mitigate the security risk.

And sorry to mention security so many times, but I don't think we can – we can – I can stress that too much because we live in an environment that demands security – it demands security of the data that we hold. We don't want anybody being able to see your private data, nor do I, nor do any of our customers. So security is very important.

The ability to maintain the current security patches and service upgrades – our staffs are overwhelmed with so much other work just keeping the systems running that sometimes they get behind on upgrading the security patches, the service upgrades – doing the service upgrades. So We – our vision was to able to do that and do that timely, and address the issue of staffing and stability. And for that, I mean be able to fully staff – to have a full staff ready and capable of doing whatever we need without the fear or somebody hiring the staff away from us. And we figure that in this kind of environment – (inaudible) – responsible to keep the – to keep the staff – staffing levels up. These factors, properly addressed, will create the long-term vision that MRM has for the cloud infrastructure in mind.

MR. VITALE: Great. Thanks, Dale. We have one more question for the panel and then we're going to move into questions from the audience and from online. So let me let people know online, please type your questions into chat – into your chat window as they come up and we'll try to intersperse live questions with chat questions.

But for the last question for our panel, from a broader state perspective, what is your take on how cloud technology can help support UI infrastructure for the UI system in new ways to help save money and improve quality?

MS. GOLOMBEK: So, we believe that the development cycles will be shorter, systems will go online faster, they'll be much more cost-effective because we're sharing costs of maintaining and operating joint systems, whether it's a four-state or a three-state or even a two-state partnership. It will allow other states, obviously, as we spoke, to onboard and basically get that new system faster and less expensively. We'll get extra processing capacity quickly without having to buy it ourselves to pay for the processing capacity only when we need it. And I think most importantly is that states won't have to spend their time and their resources maintaining systems, but instead we can spend our time serving our citizens. And that's what we're there to do.

MR. SMITH: And, Joe, to that, I have a couple things that I would like to add. Just picking up on the extra capacity that Ellen talked about, we do need the ability to have elasticity in our systems.

A good point in that is – or a good case study in that was EUC. EUC was the emergency unemployment compensation. I'm sorry for using the acronym. We – in the UI world, we talk in letters instead of – instead of definitions.

But anyway, the extended unemployment benefits, some of you know it as the 72 or the 99 weeks of benefits that were paid by states starting in the middle of 2008 and running until earlier – or late last year. That caused quite a stress on systems around the country. And part of that was the ability to scale up to handle the volume. So elasticity is very important all around.

I think too that the cloud operation offers disaster recovery. If you want it out the box, it's there. And we struggle with disaster recovery. In Mississippi, we do have a disaster recovery system, but we didn't until about three years ago. Our IP (ph) organization told us we did, but what that – what that amounted to was we had boxes sitting over at our state IP (ph) organization that we could – that we could get space on. And we had to start our systems again over there.

And that's not what we're talking about. We're talking about a highly available system that rolls over into the – into the – to the DR mode if something happens to the main system that we're operating out of. So that's critical.

And the other thing that I will mention is that I have come to understand that there may be states that have technology organizations that are maintaining their systems. And the systems do not have any external support. They are well-beyond end of life. They're dead. They're in the stage of rigor mortis. And they – but the state staff can keep those things running.

But what happens when we have another emergency unemployment compensation program that has a little different twist. And then go back to the comment that I made to start with – these things that are held together with Band-Aids and bubble gum, they come unraveled. And so with this cloud and this cloud concept, we think that we will be more prepared to offer some of those states an opportunity to begin to migrate over and, if nothing else, use components out of – out of the cloud environment that may somewhat ease their pain.

MR. VITALE: Great. Thanks, Dale. Thank you for your inputs, Dale and Ellen. What we'd like to do now is open the – Industry Day up to questions and answers. So – yeah, so first we sort of divided the question and answer period into two segments. So while Dale and Ellen are up there, we'd like you to address any questions that you have first to them and then we'll bring back Gay and move for business and technical questions (often ?) were not state-specific. So again, people online, please feel free to (answer ?) your questions to Dale and Ellen through the chat window, and as the questions come in, we'll direct them to the panel. And you have a question in the audience, please wait until the microphone gets to you. And we have - I see a question right there. And please state your name and organization.

Q: Good morning, everyone. I'm Brian Yuss (sp) with Salesforce. Thank you very much for being here today; I appreciate it. I was hoping to get, kind of, your perspective and thoughts on the importance of reporting, and if you guys had looked at things like metering, chargebacks - had you given any thought to that, either as the long-term strategy or if you guys are currently doing that today? Could you kind of talk about some of your experiences?

MR. SMITH (?): Well, I want to say this - in terms of fully-addressing your question, I probably can't fully address your question. But I will say this, that it is certainly critical that we are able to understand our (easing ?) to the system and how much traffic we're causing on the system, how much it costs each individual site, because there will be sharing of costs and there will be charging to the individual states for their burden, if you will, on the system. I don't see this as something that would be paid for and the systems can use it to the extent they want to use it. And so I do think that that process will be important; in terms of telling you how much of that we do today, I can't answer that question sitting here.

Q: Thank you. (Inaudible.)

MS. GOLOMBEK: I'm not sure if this will actually get to the answer of your question, but when we were in - when we were in the process of defining how we wanted to do this and what we wanted to do, one of the big issues was, we go through these peaks and valleys of usage of our system, and obviously, we just went through a tremendous peak, and now we're going into a valley. So how do you - how do you work that into your system?

And one of the ways that we thought about doing that is through our service-level agreements, and actually, through our base budget, what we - what we get as a base budget from the USDOL as opposed to a metering concept or a usage concept, because the truth is, the vendor also has to have a steady, reliable stream of income in addition to our - to making our systems cost-effective. So I'm not sure if that's the answer to your question; I know that there's others in the room who might be able to answer it better.

MR. VITALE (?): Lou, Did you want to add anything to that question?

MR. ANSALDI: Just what Ellen mentioned regarding metering and these different models. In fact, we're looking, as part of the pricing models action - (inaudible) - you know - (Euro ?) prices and so forth, and based on the context that you've heard here. But certainly, this idea - become a transaction-based - that would be somewhat new, so it'd have to be well-explained, or this metering type of approach. And in general, I would say that the model that WYCAN has followed with Ellen is what the other states in the consortium are typically following, but would be eager to hear some input.

MR. VITALE (?): Thanks, Lou. Any other questions coming from the audience at this point in time on - for Ellen or Dale? Do we have any from chat? I don't see any. (Laughs.)

OK, we have a question from the chat window. How can shared services be leveraged to meet the needs of an integrated UI system? Who would like to tackle that?

MR. SMITH (?): I understand the question. It deals with components of a system; maybe for example, a state wants to adopt a benefit module from - that has been created by another state. So that could be shared through a cloud environment that somebody could pick up the WYCAN's benefit module, and they no longer pick up the MRM's tax module. And I think that with these services being in the cloud, that makes it a whole lot easier - states are a little bit reluctant sometimes for other states to come into their system, and that causes a lot of concern around

security and having this in the cloud and having a security environment already structured, I think, will certainly ease those pains.

MR. VITALE (?): Lou, you wanted to add something?

MR. ANSALDI: So just to add on to what Dale says, regarding the shared services - I mean, that's certainly - and leveraging shared services in terms of how it's implemented, in terms of software infrastructure - I mean, that is vital - that is a vital aspect to the consortiums, and by virtue of common requirements, to a large degree - not completely - (whether it's ?) uniqueness - we want that addressed efficiently as well, but gaining economies of scale of those sharing services in an integrated fashion - so whether it be a single instance of a solution - I'm going to get somewhat technical here - or a single instance of a license of a product regarding, maybe, a business ruling that gets shared among the states, and then, therefore, the costs (of these ?) shared. So that is - that's a key aspect of what we're (trying ?) to achieve, but not just now with the consortiums. With this initiative, we're trying to understand how it could be achieved and leveraged nationally.

Further, just quickly, is - there is somewhat of a semi-initiative within ITSC and some of the states to build out a common component or a couple of common components. So what we would like to do, as Dale mentioned, is do that in an efficient way, using, maybe, platforms of service or softwares of service.

MR. VITALE (?): Thanks, Lou.

Any more questions from the audience? We'll take a question from the audience now. And since Lou is sitting at the panel, please feel free to address a question to Lou at this point in time. (Off mic.) And Gay.

Q: My name is Kuwat (ph) from Science Tech (sp). for you - Ellen and Dale, working in a consortium - I know it's a challenge to do projects just with one state - how - you know, with multiple states working, how did you guys come up with the governance and managing the project efficiently? And you're learning through your experience as well, and so it's hard to - (inaudible) - experienced - (inaudible) -

MS. GOLOMBEK: If I heard your question - sorry - the - (off mic) - how did we form our governance agreement and how are we managing the project?

For the WYCAN states, we have an executive team, which is where the highest level of issues go to, and it's made up of two representatives from each state, with one vote. So we required that we have both the business side and the IT side at the table so the IT work isn't being done in isolation from the business side and the business side isn't being done in isolation from the technology side and that they're actually dealing with these issues in a parallel way as opposed to having one be developed and then the other.

We also have - at the next level down, we have our (steering ?) committee, and then we have our subject matter experts. This is - this is an issue because you are not - you don't come together based on size or state law or requirements. However, we have found that about 85 percent of requirements and our laws are similar, and then it's the other 15 percent, but it probably took us

almost as long to hammer out our governance agreement and how we were going to operate as it did to finalize our contract with our vendor. It gets very tricky; prioritization comes into play. Lead state comes into play, who, if one state gets onboard at first, which state will that be? And so there are some very, very tricky issues that we have had to deal with, and frankly, are still dealing with.

MR. VITALE (?): Dale, you wanted to add something?

MR. SMITH: Yes. If you would, look at the governance - the MOUs that we established initially, which - WYCAN did and MRM has done at least one of the consortiums - (inaudible) - has an MOU. And the MRM consortium - we look at that, if you would, as, you know, our Constitution. And the consortium executive committee that we have is very similar to the organization that Ellen was talking about, is essentially the legislative body. If issues arise that aren't addressed by the memorandum of understanding, it is escalated then through the project director to our executive committee, and we make a decision and we move forward.

So the governance is not done and probably never will be done. It's a – it's a living, breathing organism that changes from time to time depending on the circumstances and what has to be done. I don't think there's any way that even today that anybody can sit down and lay out every rule – a rule to address every issue that's going to occur within the consortium.

MS. GOLOMBEK: And if I could just add one thing to that – because it's multiple states – all of the states sign the contracts and the agreements but one state is essentially the liable state and the lead state for those agreements. So in the governance agreements that were hammered out at least for WyCAN, is as you – as things rise to the executive level and perhaps votes need to be taken as to which direction to go to, it's very specifically laid out that if it has to be a three-person vote out of the four states, that the lead state must be one of those three because ultimately we're the ones responsible for that contract.

MR. KIREILIS: It's definitely a balancing act with the states and the governance. It's an important factor to consider.

Any more questions for our panelists Ellen and Dale before we move on to more general questions? None on the chat?

MODERATOR: We have another question for – (inaudible).

MR. KIREILIS: OK, so if I could ask Gay to come back up. And, Ellen and Dale, thank you. (Applause.)

So at this time we'll be entertaining questions to Lou Ansaldi on the technology and Gay on the Department of Labor and the – (inaudible) – the project in general. So any questions from the audience? Let me start off with a question from the chat. And do we have who this is from, because we did not identify who these questions are coming from. The question at this point in time says: What is the definition of the technical broker and the business broker?

MR. ANSALDI: So I'm going to take a shot at this, but this is specific, I think, frankly, to GSA and their kind of exercise that they went through and some of the outcomes. But my interpretation would be that there's certainly the technical dimension to this broker service in terms of connecting the need, as expressed in the requirements, but not just the requirements – functionally, nonfunctionally, technology bases, evolution of a system – as well as on the other side, the business side. So there's pricing models, there's SOAs (ph), there's termination of services, technical clauses.

And so I could see that there's certainly multiple aspects to this. And in fact, maybe there are two layers or side-by-side brokers that communicate. So that is a potential here. I'd be interested if industry – is there any more that would suggest that in their response – (inaudible) – RFI?

MS. GILBERT: So just to – I want to ask you a question on that one. It is my sense that we have put forward this kind of broker concept as a way for thinking about how it could work. We think there are probably multiple models. There may be other models. So we want – this is the part where we want industry to come to us and help us innovate around that.

MR. ANSALDI: Absolutely.

MR. KIREILIS: Thanks. That question came from Ed Hernandez from Jamcracker, Inc. Thanks, Ed.

Any questions here from the live audience? Yes. Microphone?

Q: Good afternoon – (inaudible) – with Salesforce. Thank you for your time, again. Given your experience with Office 365 and kind of understating the importance of clearly defining a service catalogue, have you guys thought through maybe where to start from – you know, what types of services you would offer initially? And then, have you given thought to more of a longer-term strategy and to what services you'd like to offer in the future?

MR. ANSALDI: Well, that is, once again, an excellent question, as they all are. Regarding that, in fact I think we're seeking from you folks – I mean, we have – we have ideas and they've been expressed in the RFI in terms of a proof of concept, because I do think the proof of concept will inform kind of what to build out – you know, a process for what that catalogue of capabilities and services would be. I'd be very interested in the experiences and the insights from industry regarding that.

Certain ideas would be infrastructure as a service, different aspects as related to that. But in terms of component build-out, I think that would probably make more sense than a full UI system. As I've described these systems, they're quite complex and made component by component. So that could be, you know, maybe a stone in the process.

So to summarize, I think we're really interested – we have thoughts. We're really interested. They're kind of in their nascent stages, so we're interested in what industry thinks, you know, to get us there, and timelines associated with that.

MS. GILBERT: And I would also say we – and this is a non-techie person talking here – as we were – as these guys have attempted to teach me the possibilities of cloud technology, it appeared to us, I think, as we were trying to apply it to all the complexities we share with you about the UI system, that there are probably multiple models. And in fact, it's not going to be a one size fits all because of states being in such different places. We obviously have the folks you've talked to who are sort of leading the charge here and kind of our leading edge out there, championing that direction.

But I – so I think – the other thing I think we've learned was that the traditional three categories of cloud types of services in and of themselves are not the only solutions. We think there are probably blended models and hybrids of those that would serve our community better, and that's what we've tried to educate you about and how the communities – where our challenges are so that you can help us think through what those would look like.

MR. ANSALDI: So that is an excellent – that's an excellent point that Gay makes. I mean, and that's part of the openness of this RFI – (inaudible). What we understand generally, you know, PaaS – in some detail too, obviously. I'm going to be working with the consortiums and other projects that – (inaudible) – has in terms of PaaS, SaaS and IaaS and so forth. However, we do think that there are other approaches.

And as Gay has mentioned, I think by sharing kind of the overall functionality of these systems and the complexity of these systems and the fact that there's a significant amount of business rules – and I can't emphasize enough – I know it was mentioned and I just went through it quickly, but configurability. So configurability of any capability is really vital because the more configurable a system is, I think it's more amenable for use by any other state that's interested in a quick, fast way that Ellen and Dale mentioned.

MR. KIREILIS: So related to that, I just want to make sure everybody – we do, in our RFI, say we reserve the right to bring collected vendors back in for more in-depth discussion. So please put your creative ideas that – you know, like as Lou and Gay indicated, in the RFI. And we may bring you in for the sort of deep-dives discussion. So just as GSA did, I think that's what – this is an educational process with this RFI, so that's what we're looking for. Thanks for that question.

So we have a question from the chat. It's from Salesforce, Steve Thompson: Specific to the requirement around integration to third-party products, please give the vendor community an idea, for example, of the types of third-party products and/or use cases that this cloud-based UI model solution needs to integrate with.

MR. ANSALDI: So again an excellent question. It's regarding the use cases. What I foresee – and this is still open and we'll see how things evolve – is in fact as part of a proof of concept or multiple proofs of concept, it would be a use-case kind of basis to understand what in fact the requirements are. But let me – let me speak in general terms, in terms of UI.

We're very careful to ensure that, based on use cases of the functional need and nonfunctional need, that the third-party products solved those problems and that we shy away from an

experienced-based kind of learning process from just picking a technology because we like it but it doesn't necessarily fit the need.

And that is the case within the UI space, and that's important to understand. But as far as typically - so there's content management and imaging systems - correspondence - third-party products - obviously - yeah, schedulers; there's address validations - in fact - (inaudible) - (visual ?) engines - things of that nature, and it is the smart integration of those, but based on need that we are looking for, and that would probably be, at least from my perspective, one of the areas I would like to explore in terms of the proof of concept.

MR. KIREILIS (?): Thanks, Lou.

Any questions from the participants here? Yes.

Q: Hi. My name is Nehu Anarka (ph) I am from (HPL ?). Question is about the learning GSA - (inaudible) - CSB services - (any key specific ?) learning - (inaudible) - of how that has helped GSA learn from that proof of concept and what's the (moving forward ?) strategy - (inaudible) - CSB itself or any news on that? Thank you.

MR. ANSALDI (?): So, given my role at ITSC, I really can't speak on behalf of GSA. Maybe what we could do - I know GSA is present here, obviously, and maybe what we could do is work with them to provide some summary - I think - (inaudible) - to protect some of the information just based on collaboration with them, but they did have, certainly, some lessons that they shared with us. And one of them - and, in fact, as we have expressed here, I think, multiple times now is that, you know, we are open to ideas. There is no, you know, right way that we - you know, that we see at this point.

I'm not going to pigeonhole or dictate, you know, any - say, for example, there's a difference between the technical and the business and a (birther ?) type of concept, so it's not to be - not to be restrictive, and I do think that it's really more a next step that will probably be more revealing within this exercise in terms of proofs of concept, so that would be something, I think, that we probably - well, certainly, we'll be reaching out. You know, as Joe mentioned, some could be - some of the industry participants could be invited in for follow-up, and then, from that, could be a proof-of-concept or multiple proofs of concept, and as far as the outcomes of those, I believe that there would probably be some sharing of that as well.

And just, you know, those questions that we don't fully answer here, we will answer and get in contact with other people to answer and post on the - on our website along with questions and answers from this session. But there will be a more in-depth answer - (inaudible) -

So Steve from Salesforce - I'm going to go to a chat question now - Steve from Salesforce has two related questions to his earlier one. Who is providing the initial source of funding for the project? The federal government or the states? And two, what is the time frame when the funds have to be spent? (Inaudible) - Gay and - (inaudible) -

MS. GILBERT (?): Yeah, the U.S. Department of Labor is the -is the fund source, and honestly, we have to think about - (inaudible) - concepts. We already do have money set aside through the information technology support centers to enable that. We'll probably have to get the - it's several years out, still - maybe 17 - so we'll double check and put that on the website.

MR. KIREILIS (?): Great. Thank you. Any questions here from the audience?
Quiet group. All right, I have a question from the chat, from Grant Peterson (sp) from SavvyTech Solutions. It was mentioned earlier - opening remarks that there are approximately 80 to 85 percent of common requirements in the UI system. Employee - the employee must be - the employer must be able to - they changed the font size in the middle of reading - (laughter) - the employer must be able to register their account online. It's a common requirement across all states, but each state differs drastically in that registration.

So how do you envision the consortium will resolve those issues with common requirements? Will a decision be made across the states? Will each state have a separate functionality, or will it be decided on a case-by-case basis?

MR. ANSALDI: Good question. It's an excellent question, again. So at that level, sure, it's a common requirement. When we think of common requirements, we're at a level - (inaudible) - that's essentially what I've been saying - (inaudible) - or even maybe a level above that. So when we're talking about common requirements, we're talking about steps within a (use ?) case because you're familiar with that, and interaction between the system and an (accurate user ?), OK? So we have achieved that, and part of the reason we have achieved such a high degree of commonality is, in fact, that was the objective, all right? So there's a process - there's an interaction between the system and between the user and the development process and the re-engineering process. And the states work together to come to consensus on that. Now, the question also is in cycle in terms of, they need that in terms of a response by the system to a user request or submission and so forth. There's rules that are exercised.

Now, at that level, they're even as high degree of commonality. And what we found in the ranges - 40, 50, 60 percent among the states - a lot of it is law-driven, so it's state-specific law that drives that, but there's also federal law, and then there's also the policies that drive these - that drive these rules.
So it is important that that be understood. So at the rule level, having, again - emphasizing this configurability capability - that is really vital, and so, to be able to achieve that, and, within the same common framework - that's what we're trying to achieve. And in fact, I think that would be a really good, to me, proof-of-concept opportunity as well, in addition to what we're doing with the consortiums.

MR. VITALE (?): Thanks, Lou. Ellen wants to add something,

MS. GOLOMBEK: Yeah, if I could just add to that. I think that - this is a great question because this - by joining these consortiums and taking a look at what all the other states do, it actually allows for us to really start looking at best practices. So while we differ drastically in our registration, if it's not dictated by state law, and it's only dictated by state policy - and I don't mean to say that lightly - that perhaps we really should be looking at best practices and what's

the best way to get this (done ?) for employers, because the other piece of it is, most of the employers that are in Colorado are also in Wyoming and Arizona and North Dakota. And so maybe it's time for us to actually start making it easier for them instead of having 50 different state registration portals.

MR.   : Yeah, one of the side benefits of the consortium model is having the states work together and see the - as Ellen pointed out, what's common, what's different, and then, you know, maybe some of it is just different because it's been that way for 30 years. We can change that process and make it more common, so that's a great question.

MR. ANSALDI (?): And I do want to - so a little bit more on this in terms of configurability - in terms of the question from - (inaudible) - Tech, who is actually an industry - or the company was in the UI to mainly play within the UI - (inaudible) - so they obviously have some insight here. In terms of configurability - I mean, there's different ways to achieve it as well, right? So - I mean, there's business - (inaudible) - engines. There's different technical mechanisms. And so what - the - (inaudible) - responses, hopefully, from the (businesses ?) here when we get to see some of these other ideas on how to achieve configurability, but in a way that we maximize common code, OK? Even within code, you can do that in terms of some techniques, but maybe using code tables, things of that nature. So that's the type of specific detail, you know, that we'd be looking for, too.

MR. KIREILIS (?): Good. Thanks, Lou. I think we have a question - Kevin (sp), you said you had a question here?

Q: Hi - Brian Murphy (sp), Capgemini. A bit of a follow-on question to the funding - and given the models you guys have laid out and described, where you have the Department of Labor, you have some vendors in the middle performing various roles and you have consumers in the - in the states - how do you envision the contractual relationships? What type of vehicles do you anticipate using? Do you anticipate the contractual relationships between the vendors and DOL, the vendors and the states or some combination thereof?

MS.   : So I don't think we have a clear answer to that question at this point. I think it will depend on the models that make the most sense, that involve some of this process, and that we are able to test out in a proof-of-concept about whether or not we move forward in the model that's totally driven by states coming together with their own money, or whether there is something that comes out, such as brilliant ideas at the federal government - I'm going to want to go up to the Hill to Congress to say, this is a really - and to the president to say, we need this in our budget this year, because this is going to be such a huge new direction for the UI system and be revolutionary. So I think we are trying to do a stretch here and figure out what's feasible, and I don't think we know where all the money will come from, but the - the options are, we find the money at the Department of Labor, or we do that collaboratively with states, or states do it collaboratively together. So those are, kind, of the options.

MR. ANSALDI: So to kind of focus on the procurement part of that in terms of the funding and things – and I certainly appreciate what Gay said – in terms of the procurement, the acquisition

side of it, we are looking for ideas regarding that. And so I think that would fall under that kind of business broker type of dimension that was mentioned previously.

And to me – and maybe this is some guidance; it's not exclusive in the RFI – we would be looking for a vehicle or mechanisms that are agile, rapid, quick. And I guess what I'm saying there is, well, working with the states, in particular these modernizations projects, and the consortiums, I mean – (inaudible) – is a lengthy, difficult, tedious process. So part of the agility here isn't just agility between lead and providers, you know, as states want it, but actually to acquire and update services as needed, to include somebody else who's interested in participating in this community pool of cloud services. So those are just some thoughts to stimulate, you know, you folks, but we are eager, again, to hear your ideas.

MR. KIREILIS: Thanks, Lou.

There's a question from Steve again, from Salesforce. He said: If any follow-on questions arise after today's meeting, will the vendor community have the ability to submit them in writing? And when might we see your response?

Well, what we're doing is we're closing the question period today at 5:00. So any questions you have, please send them to us today before 5:00 and they will be responded to and posted on the website. But we had to put a cutoff. Otherwise we would be answering questions every day. So today is our deadline for that at this point in time.

Any questions from the group here? Please feel free to ask. Here is your opportunity.

Q: Brian (sp) – (inaudible) – with Salesforce again. How long after kind of you guys start the review process do you envision proof of concept-type engagement? And are you open to kind of opportunities that, you know, maybe we've had in the past to kind of give you guys some guidance on defining POC?

MR. ANSALDI: So I'm going to take a quick answer at this, but – and then I'm going to pass it over to Gay for the answer – the real answer. (Laughter.)

So my perspective of it is: As fast as we can. I mean, I see this as a real need and real potential to at least address if not alleviate completely, you know, the challenges within, you know, the UI domain in terms of modernization. So there would be a rapid kind of a review process, and based on that I think there would be some dialogue, you know, as Joe has mentioned, with some specific vendors.

And then from there, one, we would probably formulate kind of what these proofs of concept would look like. And again, you know, as you mentioned – and I think the message would be – it could be something that's offered by one of the vendors or a couple of the vendors. So it could be that. And then the execution of it certainly involves some requirements, preliminary steps. So that's kind of what I envision. And from there maybe it takes six months after, nine months and so forth on that – you know, that we'll have to see.

MS. GILBERT: My experience in the world of technology is it always takes longer. (Laughter.) But I think the answer "as soon as we're able to" is the right answer. We obviously need to process the input. Depending on the complexity and what models you'll come to us with will also determine how complicated it is to bring the states to the table because they obviously have to be part of that process. And so I do think this is going to be a many-month if not probably a year kind of activity.

MR. KIREILIS: Great. Thanks, Gay.

We do have a question from chat from Ed Hernandez again: Is mobility a significant requirement? I believe he's probably – I don't want to speak for him but I think he's referencing mobile apps and mobile devices. If that's not correct, Ed, please correct us.

MR. ANSALDI: So that's not really central to this exercise. I mean, if there's any input that's, you know, provided in that regard it would be welcomed, but that's not really the – you know, the central piece of this RFI and any follow up.

MR. KIREILIS: Good. Any more questions from the audience? Are there any more questions in the chat? Last opportunity.

OK, on that note I think I have to thank you. And I want to turn it over to Gay Gilbert, who is going to close out the session today.

MS. GILBERT: Well, first of all let me just say thanks again to all of you for joining us today. This is an adventure for us. I think we see cloud technology in our future and want to take advantage of it for our system in the best possible way. You've heard some of the struggles we have in the technology world for our UI system, and I think the cloud clearly – from my perspective, there are obvious opportunities, but figuring out sort of where are those sweet spots and how to best leverage it, that's what we need your help with.

And so again, we just thank all of you for coming. We're really looking forward to your responses on the RFI and engaging with those of that come up with those cool models, and looking forward to a proof of concept. So thanks again, everybody, for coming. And thank you very much.

MR. KIREILIS: Thank you. (Applause.)

(END)