Modernizing Government IT: CIO & CEO Perspectives, Lessons Learned & the Future of ERP

Jonathan Moak: Good afternoon everyone. And thank you for joining us today. I'm Jonathan Moak, Vice President at Salesforce. I'm really excited about our panel here today to talk about modernizing government IT. Specifically we'll talk about enterprise resource planning systems or ERPs and how this type of technology can be utilized to improve outcomes in the public sector. ERPs are a complete integrated systems that manage all aspects of business, aligning financial management, human resources, supply chain management, and manufacturing or distribution with the core function of accounting.

What I think we will learn here today through speaking with our panel is that ERPs are not a panacea and that we must find new and innovative ways to continue delivering for our constituents. We all faced tremendous challenges in the last 18 months and had to accept that the digital transformation was upon us and that we needed to evolve to continue to deliver the mission capabilities our government agencies are charged with. During our panel, we will discuss change management, initiatives such as the Technology Modernization Fund, lessons learned. And we'll wrap up with an eye towards the future of technology at each of these leaders organizations.

Joining me today for this panel discussion, we have Greg Little, Deputy Comptroller for Enterprise Data and Business Performance at the Department of Defense. We have Mia Jordan, Chief Information Officer at Federal Student Aid, US Department of Education, and Tina Vidal, CEO of CDR Maguire. I would like to start off by thanking our panelists for the hard work they do each day. And I would ask that you all give us a little more background on your current role and what you do. Let's start with you, Greg.

Greg Little: Thanks Jonathan. Hey, I want to just assure the audience, I know what the lighting, it looks like I'm in a hostage situation right now, but I want people to know that I'm safe within the Pentagon. Really excited to be here today, we have a brand new organization here in OSD comptroller for the DOD called the Deputy Comptroller for Enterprise Data and Business Performance. It's really an exciting

organization because we're marrying data analytics, which is an important part in decision-making with performance, with resources, with risk. And we believe this combination of functions within the controller will allow us to better align our resources to better performance, to reach our strategic objectives.

Part of my portfolio is actually working with the many ERPS and in the past like Jonathan and I worked together. So really excited to be talking about this topic today and honored to be part of this panel. Thanks Jonathan.

Jonathan Moak: Mia. Let's go to you next.

Mia Jordan: Hi, thank you so much for having me today. As you stated, I'm Mia Jordan, I'm the Chief Information Officer for Federal Student Aid. And just a little tidbit just for everyone to kind of a level set on the importance of federal student aid and the work that we do, student loans are the second largest US consumer debt surpassed only by mortgages, and more than 42 million Americans currently owe money on their student loans. At present, there are approximately 10 million students enrolled in post-secondary education, receiving aid. And so what's critical is that we are able to leverage a very agile and comprehensive technology stack that allows us to be responsive, not only to the public, but to be able to execute the mission efficiently and effectively.

I think we've all heard as of recent, there are a lot of things that are going on in the student loan world. And I certainly hope that we're all kind of strapped in to see what happens next as I know it impacts many of our lives on a day-to-day basis.

Jonathan Moak: Thank you Mia. Over to you, Tina.

Tina Vidal: Thanks Jonathan. And thank you for having me here today. I'm truly honored to be part of this panel. I am the CEO of CDR health and Executive Vice President of CDR Maguire. And I know firsthand how important the implementation of ERP systems is since we are on the forefront of responding to the COVID-19 pandemic. And our use of digital services has really changed the way that our state has responded to COVID-19 and the way that the public sector has been able to interact with our system, giving them power over their

information in a way that manual processes don't allow. So really excited to talk more about that today.

Jonathan Moak: Perfect. Thank you all for that. Let's dive right in. A successful transformation must be built on trust between leadership, employees and our customers that we serve. So let's start with the most important part in any transformation or modernization effort, people. We're aware of the digital transformation is more of a people problem in terms of change management. So I'd like to ask each of you, how are you managing that people aspect in your transformation efforts. Let's go over and reverse here. We'll start with Tina and we'll go Mia and then finish up with Greg.

Tina Vidal: Thanks. I think in our situation, we were unique in the fact that the lack of a digital automated solution or any sort of ERP technological solution required our people to work unsustainable hours to get the job done. In situations where not getting the job done meant life or death for a patient and a rapid response became really key. So our people really welcomed the digital transformation, they embraced it. I mean, it created the bandwidth for them to do their job better, faster, and respond to an exponential number of people. And in a time where nothing like this existed before, so pretty much every entity was using some sort of manual paper process.

On the other side, for the end user of our systems, it really put power in the hands of the people and in the age of instant gratification, it gave them immediate access to their information and results, allowing them to make real-time decisions without any sort of customer service delays.

Jonathan Moak: Thank you for that. Mia.

Mia Jordan: So much of our foray into helping customers really comes around making information available at literally the speed of light. And so during obviously the COVID situation and pandemic we still had to be able to deliver on student loans. So much of our focus on our customers was really about our engagement from what we call the digital customer care platform. On that platform, we focused a lot on a notification center where customers really began to expect the government to be able to produce and deliver information and resources very much the same way they experienced it in their daily

lives, either through an app or through some website where they could have very quick feedback.

And so what we've delivered over the course of the last nine months are the ability for our customers to be able to make a payment online, provide customers a personalized home page that summarizes their information, highlights their upcoming loan payments, and provides checklists. Another kind of example is a loan simulator, which I think is a very unique tool. You find it over in the mortgage industry. So it's not necessarily a new advancement, but the loan simulator that we've recently released essentially guides our users through questions about their life and goals, which helps them to inform their decision making as it relates to their student loans and their loan repayment.

And so that's really, really critical because the demographic that we're dealing with is everyone from a 17 year old that is getting ready to graduate from high school all the way to our 60 and 70 year old generation and citizens who have decided to go back to school and want to leverage student loans. So I think it's very important that, one, you understand your customer, but two, most importantly, you're delivering continuously tools that you can put in the palms of their hands that allow them to make the decisions that are best for them.

Jonathan Moak: Thank you. Very terrific answer. Greg, over to you.

Greg Little: Yeah. Thanks Jonathan. I thought this question was really interesting. As part of this administration, we're really focused on people. We're focused on investing in people and having the right skills, we're focused on recruiting the best talent. And I think we know that no matter what project we're on, people as a differentiator. I've worked on many ERPs with the same technology, some have been wildly successful some have not, and the differentiator to me has always been people. What makes, I think, this question really interesting is I think we're starting to use the word digital transformation so much that it's starting to lose its effect and actually make change management work difficult because there's resistance, to using that word because we're not setting the right expectations and delivering the value that I think people expect of transformation.

And so the analogy I always give my team is oftentimes, we'll take a car and we'll paint that car with some really fancy paint, and then we'll paint it again, and we'll paint it again. And then while we're doing all of this, we call it agile and we call it digital transformation. And ultimately to the user, it's the same car, just with different paint. We haven't improved anything. And so I think we've created a little bit of digital fatigue.

The other thing that I think is a challenge as we use this word transformation and change almost interchangeably and in an analogy I would give and both are good changes, making something better transformation is making something better, but just to use kind of a nature analogy. And what's inspiring me here is I'm living through my first cicada experience here in Virginia, and so I've got nature on my mind. But if I have to think about change, it's really about incremental improvement. So maybe an analogy would be, if I have a [inaudible] of a snake as it sheds its skin, it takes some effort, it's overall improvement, but it's not fully transformed.

And I would say we do a lot of change in the department, which is good. An example of that might be our use of robotic process automation, where we're automating something or making a user's life better by not doing that menial task and allowing them to focus on things like analysis. But it's still the same fundamental thing. Transformation to me is when you make something completely different. So if I had to take my cicada example, it's that cicadas in that shell and then it turns into this ugly flying bug or maybe a more pleasing analogy is when I have a caterpillar and it turns into a beautiful butterfly, that's really when we start seeing transformation.

And example for us in DOD is oftentimes in our old world, we would take an old process like financial management, we live in our silo and then we would attempt to automate it. So it'd be really that car just with new paint. When I got to be the Project Manager of Defense Agencies Initiative, which is one of our ERPs for all of our defense agencies. So think DoDEA, I think DARPA and so on, we actually created a fully integrated business environment where finance was connected to HR, which is connected to property, which was connected to acquisition. And it fundamentally changed the capability of that organization, the data and the way they organize themselves to better manage it.

So I think that is really transformation. Both are really good, but we need to think about change management. So how do we think about change management? There's four things that we often do in the DODEA and with different degrees of success. One is create a sense of urgency, the other is to build a coalition of the willing, the third is to show a win. And the fourth is how do you sustain and accelerate that focus? And so probably the best example is that COVID-19 created that sense of urgency. We had a problem with, how are we going to telework and have the collaboration necessary for us to be an effective workforce?

So within a couple of weeks, we were actually able to do Microsoft Teams, which was probably slated from a year from there. And then we were able to have a coalition of the willing, we were able to show some wins with some incremental capabilities, and then that evolved very closely with that focus of continuing to improve that telework capability to have a productive workforce. And we're starting to move to things like Office 365. And so it's that constant evolution of delivery and focus by the team. But showing enough quick wins to be able to show that it's valuable, has really proven successful for us.

Jonathan Moak: Thank you. I really like the range of conversation there, from the pandemic to a financial aid tool to cicadas. So we'll shift gears a little bit here as we move into the next one. There's been a lot of talk around the Technology Modernization Fund and to your point, Greg, this administration is really hitting all the right notes, talking about software and technology and people. And so in your expert opinions, how would you take something like the Technology Modernization Fund and align it towards those strategic priorities on this new administration and how would you have government leaders and the federal, and civilian, and defense industries take advantage of those resources. Or if you're not using that, how are you resourcing your transformation efforts? And this time, we'll start with Greg and we'll go backwards, to Mia and then Tina. Thanks.

Greg Little: Yeah, Jonathan, again, I think this is a really timely conversation. This administration is extremely focused on innovation and as part of that working group on innovation, we're always looking for new acquisition ideas to be able to go faster, new funding methods to be able to go faster. And what's interesting about this conversation is

we're wanting to make sure that while we're thinking of these things and what's best to use and the tools that we have available to us from an acquisition and financial perspective is making sure we don't fall into too many traps.

And so, one of the things that we're very conscious of is recognizing that technology is not actually a business strategy. And so what I mean by that is, technology is not a substitute for just good management practices. So we always want to make sure we understand why we're doing something, how does it lead to a strategic objective? How is it going to move the needle, and we're not just doing technology for technology sake. So that's one thing that we're always thinking about.

The second is, that when you're thinking of transformation innovation, you're going to fail, right? And so, what we have to think about in DOD and in any organization is there has to be a tolerance for failure. And I think that tolerance for failure is okay if there's a willingness to learn and you can capture that learning, so you're making it better. And that there's guard rails in place that we're not just doing innovation that leads to more money, leads to more innovation, but we're not seeing the end result. And so there needs to be guard rails on how we think about investment and we continue investing and we can always stop investing then.

And then third, and this is going to sound kind of counterintuitive, but actually when you're using some innovative funding or acquisition techniques, one of the things we need to think about is, "Well, what if the project is actually successful?" And what I mean by that is oftentimes when we're using some of these acquisition or funding innovative techniques, they do a really good job of getting the project from startup to an actual thing you could use, but sometimes they're not as good at getting from startup to actually a production scalable platform.

And so, one of the things that we need to really be thinking about is how do we go from startup to sustainment in a way that's really seamless and easy because we want these projects that's successful to actually go into production and be used by the masses here in DOD. And so, one of the successes we've seen in a funding model is, I'm the program manager of this project called Advana, which stands

for advancing analytics. It's the department's enterprise data management analytics platform.

It might sound familiar, there's a memo sent out from Secretary Hicks called decision advantage, which in essence telling the department, we need to use data as a strategic asset and use it to improve performance. And what's great about Secretary Hicks is she's not only writing policy, but she's walking the walk too. We actually had a business performance review a couple of weeks ago where we didn't use any PowerPoint at all, we used right live dashboards and analytics and not using PowerPoint at DOD is like a small miracle. And so we're very excited about that.

But one of the things we did and that is we centrally funded Advana with the idea of eliminating that barrier to entry, that funding barrier. In the value proposition, we tried to make clear to our components. It was, "You can come in and use free tooling in exchange we get access to your data." And so it's a, win-win the organizations get the tooling and analytics that they need and the department gets the data it needs to be able to benchmark itself, look for improvements, look for pockets of excellence. And so that model has really worked. And so we're always thinking of ways of how do we use this technology not only to innovate, but also once we get that innovation, how do we bring it to the masses?

Jonathan Moak: Thank you. I was having a flashback there when you were talking about PowerPoint and seeing something with version 84 on it. So let's move over to Mia. We can talk to her about technology matters, they should fund.

Mia Jordan: Sure. So certainly timely the billion dollars in the TMF, I think, the administration understands first and foremost that, or acknowledges that the standard budget cycle doesn't necessarily meet their urgency of needing to change. Now while the funds are focused on technology. I think we have a good understanding that again digital transformation doesn't mean the technology is driving forward, but I will tell you, I think it's dragging us closer to where we need to be. The advancements in technology and the expectations of our customers kind of demand that we move at a much more agile and iterative pace.

The other thing that I'll highlight is just for those that are listening is, so the TMF is focused on your high priority systems, modernization of those systems. It's focused on cyber, it's focused on your public facing digital services and it's also focused on cross government services and infrastructure. Cyber is hand in hand and all of those things, and so I'm really excited from an organizational perspective to see such a priority on cyber security, not to mention the executive order, the cybersecurity executive order that was just released on May 12th.

So as it relates to Federal Student Aid in our mission, I have to focus a lot of what I see is the TMF as being a real game changer and an accelerator for us in terms of loan repayment that will kick in eventually. And then certainly there's been a lot of talk about loan cancellation. So I'll take you back to what I talked about in terms of the digital customer care platform. It is a single platform that's intended to provide a 360 degree customer view with a single 800 number with IVR, integrated customer workforce analytics, which is really critical to our customer calls, our call centers, a centralized knowledge database, but ultimately providing an omnichannel customer experience.

All of that underpinned in a secure environment with the ability for all of that data to flow freely. The TMF, I think will certainly help us push the pace, accelerate the pace and deliver, I think world-class customer service to, as I mentioned, our 42 million loan customers. So that's where I think the TMF and its funding cycle is critical, I will just pull the thread briefly on what our previous panelists said. The budget cycle he said is great for getting us started, but to his point, I just like to kind of beat the drum on, it doesn't secure for us the ability to continue though, that iterative improvement, right?

These platforms, these ERP platforms that we are building and leveraging though, will change over time. New capabilities will come online and we need the funds and the expertise to be able to leverage those things and not kind of be in a standstill position. Thank you.

Jonathan Moak: Such an excellent point there Mia about the funding and potentially having funding that aligns to agile development versus the waterfall that we've always been so used to. Over to you Tina.

Tina Vidal: Thanks, Jonathan. As my other panelists said, I think that this couldn't come at a more timely situation than it is now. And as Mia said, the TMF focuses on four different main categories. And the one that I think applies for what we're doing most is public facing digital services. And we created back in May and June of 2020 at the beginning of the pandemic or the first few months in, an ERP system that allowed... that was both cloud-based and software as a service that allowed our clients and COVID-19 patients or potential COVID-19 patients to access the information and get their test results or schedule their vaccine appointment in real-time and manage their information all within one system while integrating with a number of different labs and integrating with various state reporting systems.

And that allowed our clients to get accurate real-time information so that they could make a powerful decisions in real-time as opposed to the delay in waiting for paper-based process to flow up the network and get aggregated. And so, while lab systems existed and you could get your results from some of the bigger labs, a system that integrated multiple different labs in order to provide real-time patient results on a mass scale, we were one of the first to be able to do that and then providing the integration so that that information flowed directly into our call center.

So if there was something that a patient couldn't do or didn't have the technological capability to do, they could utilize our call center and our call center had access to that information to give them what they were looking for. And that fed into real-time dashboards so our clients could see real-time what was going on at their mass vaccination or testing sites which then also fed into our financial and accounting systems.

And so we were able to create in a matter of weeks assist them that is now being used all over the country to replace a lot of paper-based systems to give people real-time and accurate information and put the information back in the hands of the patient, so they don't have to jump through all these hoops. And I think it's really critical when we talk about sort of not only the future of technology within government, but the future of how government may respond to a healthcare disaster like this in the future, because we really saw

where government and a lot of respect is light years behind on technology, or is always just sort of catching up to technology.

As Greg said earlier, implementing Microsoft Teams was something that was supposed to happen a year from now, in the private sector we've been using Microsoft Teams for a little while and it got pushed to the forefront even more so as a result of COVID. And so you saw that there was no centralized system for federal reporting for test results or vaccination results, making real-time accurate reporting of data very difficult. And therefore the ability to make decisions off that data incredibly difficult.

There was also no collaborative effort to communicate the government's plan in a way that was accessible and comprehensible to the average person. And so while a lot of people thought a plan didn't exist, no, the government had a plan and a very good one to respond to COVID. But I think we failed as a country in communicating that in a way that was accessible and comprehensible. And so the use of ERP technologies like CDR Health Pro really creates a centralized system where everybody can access that information in a way that's incredibly powerful. And then we have the ability to automate that information and communicate that in a mass scale in a way that's accessible easy, and that people can comprehend. And I think that those solutions are going to become incredibly more prevalent in our public facing digital solutions at the government level in the future.

Jonathan Moak: Yeah, couldn't agree more. So we've talked about people, we've kind of talked about a strategic look at ERPs and modernization of our technology, and we'll get a little more specific now. And I'd like for each of you to share an instance where you made a critical judgment call that sped up digital delivery of your services to your constituents. So if you could share a brief story that illustrates the challenge that you faced, how you approached it on the road to a successful digital transformation, and let's actually start with Mia time. Thanks.

Mia Jordan: Great. I think I have a pretty good example. So the prior administration had a very significant interest in expanding broadband services to rural America. And so I think as you know, Jonathan, I came from a rural development, which is a mission area within the US Department of Agriculture, primarily focused on

lending, right? Both housing, water, utilities, telecom and the like as well as a cooperative business lending. So with that though, the administration's focused on broadband was really about a truly fast paced program to quickly get about a billion dollars into the hands of different entities across the country to begin the expansion of broadband.

And with that, I had a unique challenge that was put before me. There was a system, a pretty new system that was in place, but had unfortunately been built on some technologies that had kind of been there, done that and needed to be put out to pasture. And yet I was faced with having to deliver a pretty comprehensive system in about four months time. And so I was able to leverage our ERP system in order to build that capability, basically kind of pushing the organization forward into agile when there certainly was a lot of resistance, having to stand up a DevSecOps team, governance and the like all kind of at the same time and keeping to the commitments that the administration had made to the public.

So that's always a very interesting place to be and when dates are set for you, where you don't have the opportunity to adjust at all. And with that, I think I'm pleased to say that we delivered a truly comprehensive solution integrated with geospatial technology that I think is truly a model for the federal government and it took into account all of the complexities associated with the different types of lending that's associated with a telecom program. I think that's one of the best examples that I have. And I'll just say in nine months time we were able to not only make a loan app... excuse me, in four months time, we were able to make a loan application available to over 300 applicants, but also the fact that a billion dollars in federal funds were distributed and that that broadband is well on its way to being a dream come true for many across rural America.

Jonathan Moak: What an inspiring example. Really appreciate that. Tina, let's go to you and hear about it. I think you've got some good examples with regard to the pandemic and how you helped there.

Tina Vidal: Yeah, I mean, and the example comes really personally to me and our admin team here at CDR Maguire. So when COVID first hit, it was a really all hands on deck response where it didn't matter what your title was or what your job description was. You had to be available to

really do anything and everything that was required to help save lives. And so in the beginning of the pandemic, I saw time and time again, where state and local governments were using paper processes to intake patients. And then having to follow up with all of those patients via paper processes for everything from delivery of test results, and it flowed all the way into vaccine scheduling and registration of vaccine sites.

And so, early on in the pandemic, we were responding for 12 hours a day out of the emergency operations center here in the state of Florida. And then at night, we were responding to thousands of patients looking for their test results with no faster easy way to provide them to them, with no centralized way to provide them to them. And so we'd work till three in the morning doing that. And so after several weeks and an exhausted team, we really said, "We've got to make a change fast," because it went from a couple of thousand people who were getting tested and responding to, at the height 200,000 people a day that needed a response back to.

And so, we looked at our available options and ended up selecting the Salesforce platform and rolled out a patient portal within a matter of weeks that integrated with seven different labs and integrated with the state's reporting system for test results and vaccination, immunization information. And so as a result of that, it freed up our team, not only one, to be able to sleep, but also to be able to respond to patients faster and to get them their results faster, which became incredibly critical. Because the faster you found out you were positive, the faster you were able to isolate and ensure that you notified other people that needed to isolate and that you didn't spread the virus and potentially put other people at risk.

And so, it became an incredible resource that's been used now as a example of how it should be done in other states, and then we parlayed that into creating our vaccine data management system, CDR Health Pro on that same platform and using the same model that we are from testing. And so we're one of the only companies, in fact, I think we are the only company that has a full turnkey system that allows you not only to create an account and register your information and schedule appointment, but that sees you all the way through the process of checking out at a physical site, whether that's for testing or vaccination, and then integrate you in with the call

center in any state or federal reporting. And so it's pretty incredible and without it, I probably still be working 20 to 21 hours a day, so a very personal example.

Jonathan Moak: Yeah. Thank you for that. Greg.

Greg Little: So for the Department of Defense speed matters tremendously to us, and especially in getting our digital services up and running, I think there's obvious things that we've done, like going to the cloud, software service, agile development, DevSecOps, what kind of I think about is how do you do that at scale? And we had 1,900 business systems in the department of defense. And so over the years I've been working in this space, I think there's two things. One is, the little decisions really matter in terms of being able to start seeing speed at scale, and what you say no to.

And so let me give an example of a little decisions. When I was on, again, the ERP that I ran a different life of DEI, which runs about 22 defense agencies ranging from DoDEA, which is running on department school district to DeCA, which is we have our own grocery store. It was really knowing how diverse that was, how do you really stay a standard as you can, to the software, knowing that the more you customize, the more difficult will be to upgrade, to give security patches, to ultimately move to the cloud, to have software as a service.

And keeping up with that promise of little to no customization, it was actually really difficult when people believe that they were non-standard because they had very unique missions. And so those little decisions of making sure that we stuck to the platform and re-engineered business processes actually allowed us to move much faster with upgrades and security patches and so on. And if you do those little decisions smartly and well, moving to different technologies, upgrading, saves a tremendous amount of time and a tremendous amount of resources when you think you have to do that over 1900 times.

The other is what we say no to. I don't think we talk about this enough. We need to be saying no and looking at a process to make sure we don't have redundant capabilities, to make sure we don't have technical debt, to make sure we're prioritizing our resources

around those innovations and objectives, and modernization goals of this administration. And by saying no to things, you actually free up a lot of those things, less technical debt, more funding. And some of the, in my role as the portfolio management of a lot of these systems, the proudest moments I have is actually what we said no to, not what we've actually said yes to.

Now, with that, I think we need to be very careful in making sure what we're trying to achieve, so we can have that speed of delivery. And one of the things that kind of keeps me up at night a little bit is, as we move more to the cloud and to software as a service, to make sure that we see the speed there, but we also don't have vendor lock-in. And so that's an area of us promoting our open data architecture to make sure that we don't see the benefit of speed, but the consequence of vendor lock-in, so we can't be fast or cheaper later. But those are probably my two examples, Jonathan

Jonathan Moak: Perfect. Really appreciate that. So I think in our final question here, I think we have time for one more question. I want to kind of shift gears and think about future requirements and what's on the horizon. What is the future of government modernization of our infrastructure look like when it comes to our ERP systems, and all the theater systems, and all of that? Or what does a unified ERP look like for your organization? Let's go now to Tina first.

Tina Vidal: I think we can expect a lot more interaction and engagement from the public sector in any user in the future. I think what we learned with this particular disaster is that just throwing people at the problem isn't good enough, and isn't going to work in the future and that the government needs to be more nimble and responsive in a way that can only be achieved through these mass scale implemented ERP systems. But they need to be priced in a way that the government's going to purchase. I mean, I think selling software to the government and, or the government adopting new softwares is often very difficult.

And so it needs to be done in a way that the government is receptive to, and that the people are going to use. And with the end user in mind, focusing on mass communication, automation, the ability to access information rapidly. And I think those three things are going to be really critical with how we're modernizing our infrastructure in the

future. Because even if you look at the IRS right now, if you've got to call the IRS, you call and you wait on hold for three hours and almost any agency within the government, there's not an easy way to communicate in and attract.

Everything's, "Call this 1-800 number," and you wait on hold for three hours. And maybe when somebody picks up, half the time, they're not able to answer your question and then you get hung up on. And I think, especially in today's age with the cancel culture that we live in and just the ability to access everything anywhere, we're going to have to really switch to being able to offer the ability for people to interact with us in that way. If we're going to be on the forefront of the future and what the expectations are with respect to that.

Jonathan Moak: Thank you. Let's go over to Greg.

Greg Little: Yeah, I think Tina is summed up one of the points I was going to make, which is we need to make sure we're pricing these tools correctly and we're seeing kind of a win-win for both the consumer in this case, DOD and the supplier, some of our vendor partners. As we look to the future, we have some consolidation efforts that we're doing around our ERPs, we're looking at cloud, we're looking at software as a service. One of the things that I'm really excited about is some of the opportunities around automation that we're seeing in the ERP pipeline, also around more active and prescriptive intelligence things, like already being built in maybe where we're looking for fraud.

Where we're very much looking at financial management [inaudible], or as we're looking at forecasting and courses of action, as we try to align our budget to priorities, some of these tools are starting to get smart enough where they're able to start providing recommendations to us, or identifying areas of risk automatically, and sort of augmenting some of the users decision-making in the tool, helping them do that. And so that's really cool and we're really looking forward to that. And so I think you'll see a lot of changes within our ERP space.

Again, the thing that I'll kind of highlight, and this is something I think as a community, we need to figure out, especially as we're promoting more cloud use software as a service use, we're starting to

see software computing storage all in one place. And while there's tremendous value in that integration, there's also a little fear of, can we still use some third party tools knowing that ERPs are optimized in some areas and sub-optimized in others? How do we make sure that we keep competition and avoid that vendor lock-in that I talked about earlier?

And so the big push that you'll see from some online base brokers, the DOD, CDO and Secretary Hicks data decrees, is really to keep that open data architecture going, so we're able to move with the market, compete but also to be able to get the data out of these multiple tools now that single pane of glass so we can make really important decisions that are very much fact and evidence-based with data.

Jonathan Moak: Thanks Greg. Mia, take it home for us.

Mia Jordan: I definitely think the panelist hit home certainly on costs and building a future state technology, architectures that allow the government to, and I'll use an old adage here, to plug and play. That as technologies become obsolete, that it doesn't become as onerous as it has been in years past to swap out something that you use for your user interface, with something else or something that you use in terms of your integration layer with something else, et cetera, et cetera. So I think that they've hit it home there. I will just highlight though from a Federal Student Aid experience, our focus is much like what Tina talked about, which is very much focused on our customer experience.

And with that, again, we can not lose sight of the fact that we have an extremely diverse demographic of citizens that we have to be prepared to serve. And so that is offering certainly what we talk about in omnichannel experience, that omnichannel experience has to be built in a way that again, it can take care of the needs for our customers who don't want to pick up the phone and talk to anyone, but get all of their information through a website or using a virtual chat bot to someone who actually does want to pick up the phone and talk to a human being. We've put a lot of emphasis over the last year in terms of creating that more seamless customer interaction with FSA, where we're looking at that at our digital platform and certainly Mobile Complete, but I'll also highlight mobile continuous solution.

We know mobile phones or mobile access isn't going anywhere and so with that, we really have to aim to reduce the complexity and improve the stability of the solutions that we offer. I'll highlight just one example in that is our virtual chat assistant, named Aiden. And so we've had quite a bit of success with Aiden, Aiden helps answer customer questions with over 3000 variations of frequently asked questions, including some common financial aid questions. And we just recently had a release of Aiden to the public and to date Aiden has had engagement with over 1.5 million users since its go live. So we're now expanding Aiden to our non or unauthenticated customer base. And it will be added to myStudentAid app, which again, it takes into account the varied and wide demographic that we're serving. And we are looking forward to a lot of future advancements in that space as we go forward.

Jonathan Moak: That's great. Well, look, I got to say that I'm just so impressed with you all and the work that you're doing. And for me personally, this has been an incredible experience listening to you all talk, and I know it is for everyone watching as well. So I'll say it, that concludes our time here today together. And I want to extend my sincere gratitude to each of you for your commitment to public service and all the work that you do each day. Thank you all. And that's a wrap.