

Dominic:		The Exploring AI in Government podcast is brought to you by Accenture Federal Services and produced by Government Executive Media Group’s Studio 2G. Accenture Federal Services combines the power of artificial intelligence, automation, and advanced analytics with deep client, industry, and technology expertise to help agencies reimagine how they achieve their mission, serve citizens, and manage their organization. Learn what applied intelligence can do for your agency at “Accenture-dot-com-slash-federal-AI.”
Intro Music		
Dominic:		Hello and welcome to another edition of Exploring AI in Government, a podcast series dedicated to interviewing leading global minds in the artificial intelligence ecosystem and getting at the insights that drive adoption across key industries and the federal government. I’m your host, Dominic Delmolino, Chief Technology Officer at Accenture Federal Services and I am here today with our guest analyst, Kathleen Walch — AI and Machine Learning expert, and Managing Partner at Cognilytica.
Dominic:		Over the past several months, we've looked at the current state of AI in the federal government from a number of perspectives. On today's episode, we asked the question, what's next? Specifically how the technology is likely to evolve in the federal market and what steps should agencies be taking.
Kathleen:		As GAOs chief scientist, Dr Tim Persons' leads a team that conducts technology assessments, provides oversight of federal science and technology programs and offers technical assistance to the congress, artificial intelligence, emerging opportunities, challenges, and implications is one of their notable reports. Before joining the government's largest watchdog agency Persons served in key executive roles at the intelligence advanced research projects activity and the national security- and the national security agency. Welcome to the show Dr Persons, and thanks for being here.
Tim Persons		Thanks very much, Kathleen. And thank you Dom for having me today.
Kathleen:		In terms of overall maturity, where do you see AI today and how far have we come? Because it's not a new technology, you know, and it's been around for 70 plus

	years, but how far have we come so far? And how far do you think we have yet to go?
Tim Persons:	<p>Yeah, that's a great question. I, I like the, uh, there's a, a DARPA con- or a concept or a thinking, uh, framework around AI, about, uh, the f- three waves. And I think we've come through easily the first wave. I think Kathleen is a, you rightly point out, we've been in the business for decades. Uh, I think of AI as having gone through these, the so called hype cycle, several iterations and I think we're going to be on one or we are on one now. Albeit when we look back and, and think about where we are now, there's still a lot to be excited about, a lot of potential. So uh, it's easy to get caught or stay in the trough of disillusionment, but I think part of managing our expectations but leveraging where it is is, is where we are. So in the three wave, um, concept, the first wave has been where the rules are sort of laid out. Uh, and they're known upfront and uh, that's really been the foundation of a lot of our sort of robotic like, uh, technologies we've had up to this point over the, you know, many billions of dollars invested in that in the decades. But also it exemplifies itself and things like I use personally tax software. So I like to do that at the, at the end of the uh, or uh, during the filing season rather. And I think that's a powerful way where as tax laws change the update the rules, but then when I'm there it, it runs through an interview just like a CPA would interview you. Uh, and then it customizes your tax outcome based upon that. So that's first wave. That's, that's there. It's, it's around, uh, we're in second way, which is I think the big, the inflection point we've hit is really where we're really in the statistical or machine learning era. And, uh, that is a little bit, uh, uncomfortable because the rules aren't all exactly set up, or wired everything upfront. And that's where we could get into machines doing things that seem weird because maybe the data are bad or messy or dirty to some extent. Uh, and so I think we're in that second wave now, but we're seeing it uh, commodity AI, if you think about it, on our various assistants, on our smartphones or our smart devices at home, uh, that we see, we now speak to, uh, to do that and its, It's using what's called NLP or natural language processing to convert, like our voice sounds into something to query the computer and to do it quicker and easier. Uh, and I think that's, uh, that's already here. It's really the third wave is where you get into the machines. Uh, AI where, uh, we often go right to that because that's becoming much more humanlike where it understands in</p>

		<p>sophisticated manners, uh, the, the context of the situation and it does, the machine does what we mean it to do kind of thing.</p>
<p>Kathleen:</p>		<p>Yeah. It's interesting to see how Hollywood and now the real world are merging and things that seemed, so science fiction back in the 1960s are now becoming a reality, you know, a starship enterprise where you're talking to systems and they're interacting. Now we have that with voice assistance, but we still don't have common sense and reasoning and we're kind of, that's pushing the limitations of what we can do. So do you think that we'll ever reach the end of this third wave that you talked about?</p>
<p>Tim Persons:</p>		<p>It's a great question. The short answer is we don't know. I think I do think the honest answer is the third wave is an 'if ever' a wave, meaning it may be so hard to get more toward that. What's called a general AI. Can you have a general, you know, the Bot or the, the, the entity that can sort of think and you put air quotes around that think through things, uh, like a human. Uh, and uh, I think it's important to be humble in the face of the technology. Even as there are, there are many things to be excited about, particularly in terms of the potential for AI to offload us from tasks that frankly are annoying or laborious or they, they, they, uh, keep us from being fuller versions of ourselves in whatever vocation we may be serving in. One of the most important things I'll say on, on this in terms of third, third wave is really to get to that we really need to get to what's called explainability or explainable AI. And unless that really happens, we, we really won't trust the system when you get to higher functions where that's required. Explainability, for example, will be important as we think about the shift into autonomous vehicles. We need to understand or explain why did the car do the vehicle, do this versus that huge amounts of testing on that. The same would be true for a flight control systems or other things. Certainly in a criminal justice scenario. Why did, did an algorithm recommend, uh, by the way, it's not going to take the judge out of their seat. It's just going to say we recommend this, but why did you do that? On what basis with what data and so on. And that's going to be important for the protection of constitutional rights, uh, in that process as it should.</p>
<p>Dominic:</p>		<p>Yeah. That's really cool. I, I, I, I wonder about the day when we can actually get an AI to change its mind. Right. You know, when it's been challenged with, you</p>

		<p>know, an example of decision it's made. And can I again, have it explained the rationale behind a decision. Present it with some maybe some new facts and have it consider them in context to say, Oh yes, in light of that information, this is perhaps the step I should take. And we obviously don't want them to be too gullible with what information we might present them.</p>
Tim Persons		<p>Easily broken, too brittle.</p>
Dominic:		<p>Got it. So we often talk to some of our clients about what the best way is to get started with AI. And oftentimes a question they reflect back to us is, you know, it sounds great. I think I have a lot of data. I can hire a lot of smart data scientists and practitioners, but how do I assemble a business case? And you mentioned some dimensions that might be useful for that. So what are your thoughts on best ways to start, you know, creating a business case for AI in an agency?</p>
Tim Persons:		<p>The number one first and primary step is just thinking about what is the problem I'm trying to solve? Right? And the reason we try and do that really that sounds easier than it actually is when you really trying to, if you audit yourself as it were, do a task out of how you're doing this business thing. And you may be looking at and how do I a, uh, process out inefficiencies or how do I alleviate labor inputs into that, whatever that process is, whatever I'm producing. I think you need to really think about that task-oriented nature. So looking at the, the, the entire mission end to end and then picking out those tasks. And, um, uh, what that involves I think is, is uh listening in a very strong listening posture to the employees who own the problem. And, uh, they will tell you if I've not had a conversation or an occasion yet where I approach an employee and say, can you tell me if you could just wave a magic wand technologically and it would do something for you, what would those things be? And I've always had some kind of answer or response to say, you know what, we could just solve this. It would be my life would be better, our mission would be better or what have you.</p>
Dominic:		<p>And we've also all, um, we've heard a lot about how data is the fuel for AI and a lot of agencies have collected massive amounts of data in accordance and compliance with their mission. How do they leverage that unique data in the pursuit of AI activities?</p>

<p>Tim Persons:</p>		<p>Yes. Excellent. The only question data are the fuel is we're in the air. What data are the new oil? And in the oil analogy you do just like, uh, with oil you have to extract it, you have to process it. Uh, you have to refine it. Uh, and then you have to distribute it or put it in the right places to be used. Um, way easier said than done. The concept is true, but it's way easier said than done. And not all federal data are equally accessible. Uh, it, it, the short answer is it depends on, on what it is. But, uh, we have heretofore collected or stored data in certain formats or ways that at times antithetical to the open in sharing and using, leveraging the big data analytics, which oftentimes are really the backbone of what AI is doing or is it will continue to do. So. This is actually a great point because so much of the, uh, the initial startup costs and doing this, isn't it going to be, oh great, we have all bunch data, let's just throw it in a system. It's going to have to be thought through from a data architecture, data engineering perspective. I think there's a key role for it. And there is a growth in the federal sector, particularly in the chief data officers space, but you have to have some peer status with the CIO who's equally important, right? They have to own the infrastructure, secure it and so on. But the CDOs role is to say, well, what can we do? How do we, you know, utilize the oil as the economic engine to drive us? Or the this problem solving engine is if you're in a public sector context to do things.</p>
<p>Dominic:</p>		<p>Absolutely. So, you mentioned the, uh, the emerging chief data officer role and you've also talked a little about some sandbox environments and changing the cultural mindset. Are there other structural changes that you think agencies need to make in order to exploit and take advantage of AI?</p>
<p>Tim Persons:</p>		<p>Uh, I think, um, one of the big structural change, it may not be so much structural. Again, I think it's more cultural is just, uh, in a lot of agencies, we even have agencies in the federal government whose jobs are to provide data, right? Think about the Census Bureau is a great example on putting things out. It's not like they put out raw data, but they put out very important data. It's a constitutional mandate every decade to do that. Uh, the Bureau of Labor Statistics, right? The energy information is that we have agencies that do that I think, uh, more than cultural or more than structural as a cultural issue on how do we get other agencies, even regulatory ones, rulemaking or other missions, but to think about how do they think more like a census</p>

		<p>bureau or a bill and how to provide more data because there's a lot of economic and societal benefit that can come out of the government who has a lot of tremendous datasets.</p>
Kathleen:		<p>I agree. I mean, you know, we talk about data being the heart of AI. So if you're allowing these public datasets to be out there to be used, I think everybody can take advantage of. And we come, like as a community can grow from that, agencies who put their data out there can gain information from civilians and civilians can use that to help with their AI projects. So we've talked about, you know, agencies who have that mindset with data and there's a lot of examples about individuals and agencies doing AI. Are there any agencies in particular doing it right?</p>
Tim Persons:		<p>Yes. Uh, this is the good news. There's a lot of good things to sort of mention here. Uh, let's just start with, you know, we're talking about provision of the data. I mean, one of the ultimate data providers of, of, of, you know, federally sponsored, but information is the National Aeronautics and Space Administration. So think about NASA. I really enjoyed getting to know, uh, their chief data officer, uh, in, uh, a couple of years ago. But just think when you really think about NASA, I always thought about NASA as the big rockets agency and sending people. And indeed they do do that. But at the end of the day, when you really think about what NASA is doing is NASA is a data providing agency, right? Why do we send the Hubble up to take, its taking pictures as collecting data in the image form of, of the deep space of the universe. So the rockets and the satellites and the systems and the incredible things that they do as an agency and they are incredible. They are continuing to go on and innovate as they should. But really at the end of the day, its provision of the data in the science community needs it. You know how and how many great things have come out of in terms of tech transition unexpected out of the data itself or just the process of putting the man on the moon and putting the satellite in space and order it. So that's just one example.</p> <p>Again. Remember I said nobody was, wants to get into a car, you know, w- on a statistical contract to say, well, we think you can mostly get from point A to B safely, right? Um, and so it needs to be tested significantly. In fact, uh, I did a panel recently with the undersecretary transportation that said, look, we're at millions of miles</p>

		<p>tested right now, this technology, but we need to get to billions. So we're at one 1000th of, of where we need to be, uh, along the way. And we, there's still a lot of things to be excited about, but DoT is doing it right. They had a chief tech officer hired a several years ago that helped set up these say, because they said, look, our role, uh, just like when you go to buy a vehicle and you have a, a safety, uh, validation independent of the manufacturer, the everyone wants to buy a five star safety car, right? Certified. Uh, their role is to say, look, we, we aren't getting in the algorithms per se, but we're looking at the systems themselves. We can throw the, you know, a garbage can roll it in front of the car. How does it react? How to have a viavi simulation of the dog running in the street, the child on the side of the road, whatever, all the various things that in real life in the mess that these vehicles would actually have to operate in or doing. So transportation is another one. And then of course, DoD uh, and there's a lot of concerns about the ethics of, you know, dod ever unleashing the kill Bot in a fully autonomous mode that's not going to happen are our ethics and moral. And our, the way our policy is set up, uh, in the Pentagon is such that there's still always sort of the human in the loop driving this. But I think DoD has been thinking again in a problem centric way, not only at, in terms of DARPA as as a main projects agency pursuing explainability, but I like what they're doing with the a, the JAKE the joint AI Center and the center isn't starting out with battle scenarios right now. They're doing creative things like how do we combat or use this, would we use this to combat wildfires in the west? Right. It's, it's, it's similar. It's an analog problem from a computer science perspective to some battlefield scenarios. But you're looking really at like, this is actually a big deal.</p>
<p>Kathleen:</p>		<p>Yeah. And it's always great to hear various use cases and how agencies are doing it because for those that are just looking to get started, I think that, you know, they're trying to see how have others done this, how have my peers done this? What can I learn from that? So are there any lessons learned that these agencies who are just getting started with AI should especially consider?</p>
<p>Tim Persons:</p>		<p>Right. I think that some, yes. Lessons learned are, uh, as Dom was mentioning and the importance of the data, you got to get the data right. The data are the, the fancy Latin phrase Sinequan non. Right, without which nothing. You have nothing if you don't have that. So</p>

		<p>there is a lot of, um, using the sports analogy of the football, the blocking and tackling you have to do to get this to work. The second thing I think is again, thinking about things from uh, the what risk am I trying to mitigate? What problem am I trying to solve? And coming from that approach versus the techno, uh, centered initiation has started the conversation. Like, I have AI. It's like a hammer and what w- everything looks like a nail. All of a sudden what gonna do with it. That's one of the things we found. You mentioned a, our AI report was that you know though fundamentally from a computer science engineering perspective, AI is the same technology everywhere at its most core basic, its expression in its context is very different, is going to be managed differently in a criminal justice versus financial services versus a warfare scenario versus a safety, transportation, whatever. So you really do have to think about what is that environment where I'm thinking about the problem itself, defining that coming up with good design. And then the third is having actually an actual space offline, uh, where you can test it and de-risk it. And those are, I think, uh, the, the three key things to, um, for this to succeed for this to move forward.</p>
<p>Kathleen:</p>		<p>Yeah, those are all great things for agencies to start thinking about. Now we talked a little bit about General AI, which is this idea that you can have almost, you know, a fully cognitive AI system acting and behaving like humans. And we're not there yet. But how far away do you think we are from General AI?</p>
<p>Tim Persons:</p>		<p>I think, uh, then this certainly nothing official about this answer. And in my professional opinion personally, uh, I think, uh, were at least a half a century from a general AI, anything that would come close to that. And so I think we still have a long way to go. I think we're gaining, we are more data rich now. I think when you, again, the convergence of other, you know, again, other convergent technologies that enable this like 5g we're going to be so awash, it's mind where we are now. Then you imagine the 5g world, it's just even super mind blowing. So data will not be a problem, but the right data, the way to have data centricity and algorithmic type, uh, thinking workforce, um, understanding exactly what we do and in all the, all the nuances and values and things that we often take for granted and a task, if you really do a strict task audit on something that it's, it's much harder than it is. And especially when you're linking tasks together and chaining them to make</p>



		something start to look like General AI. So I think we're still very far away from that.
Kathleen:		Yeah, and I think that's great to point out because this is a very, very hard problem to solve. I think that some of these narrow tasks that we're solving are very hard right now and experts in the industry have very, very varying, uh, timelines of when, if ever we'll achieve this. So thanks for your perspective on that. This also comes into if we are moving towards this goal of general AI, we need to make sure that we have the right framework and governance in place. So do you think that explainable AI is achievable in the near term and how important is this from a federal perspective?
Tim Persons:		Yes. So I think explainable AI on the the most baseline or rudimentary tasks uh is achievable, right? I think on that, I think as you go up the complexity scale, I think that's where it starts to get hard. And I think we're going to have to be rethinking about how we conduct or do quality assurance or review or oversight. I mean certainly at GAO we are and will continue to have to face and think about that, uh, moving forward.
Dominic:		So, so Tim is AI accelerates the pace of innovation and technology. How do watch dog agencies stay abreast of the technology and stay ahead of the talent gap in terms of being able to assess and understand how fast AI is impacting some of these technical areas?
Tim Persons:		Yeah, no, thanks Dom. I think you put your finger on one of the hardest things that public sector is facing on that, which is the talent gap on these things as I was just mentioning, is like, we need to, the, the tide needs to rise across mass stat across everybody. It's not just for engineering schools itself, that that's a baseline always that's always going to be there. But, uh, all vocations you have to do that. Agencies are going to have to start to think statistically now in terms of their task. And that's something that's often very uncomfortable because we're used to the black and white, you know, the straight up two plus two equals four and that's it.
Dominic:		Very cool. On a, on a positive note, where do you see AI having its biggest longterm impact on how federal agencies operate?
Tim Persons:		I think a, it's biggest longterm impact will be, uh, the, um, I think we're, we're at a, at a time where we've, we're still under, even though with all the excitement,

		with all the hype, we jump oftentimes right to the, again, the kill bod and the, you know, the job loss, all the sort of, the fear narratives, which I don't think are, are profitable for this. I think we're still underestimating how much we're going to get out of this over time as it evolves. I think it's going to surprise us. We, starting with the small rudimentary tests, right? Uh, I think it's gonna surprise us and we're going to look back and say, I can't believe we used to do things that way.
Dominic:		Super. So, uh, the close here, what does the federal government need to do to ensure continued you with leadership in AI?
Tim Persons:		I think, uh, can, the government can still do a lot in terms of thinking through its mission from a, uh, a data collector, a data provider, uh, a problem, um, definer as it were, uh, on, on various things. I think you can have it, you can do a lot of de-risking as it has done on the basic research functions of this driving and steering programs. I think it's has a leadership role, again, like you mentioned the NIST, uh, standards and framework for things, but the standards will be contextualized to the various challenge. Uh, but I think, uh, being on that and doing some of those things that don't get a lot of credit for the longterm value they have, but they create the, what I think of as the sustainability and the ecosystem for AI, which is increasingly becoming a general purpose technology where it sort of disappears when we take it for granted. So as, as, as we do that, we do want to have the US continue to be able to out compete, uh, using general purpose AI, uh, and having all of those structures in place, structural, um, and foundational elements to allow for a highly competitive, uh, private sector in the United States as well as a high performing high efficiency, um, uh, desirable, uh, public sector, uh, providing, uh, goods and services to the, to the public.
Kathleen:		Yeah, it's always great to get different perspectives from different agencies and how people are doing it. So thank you so much for joining this podcast, Tim, and sharing your valuable insight.
Tim Persons:		Thanks Kathleen. Thank you Dom.
Kathleen:		The depth and breadth of thinking on AI in government that Tim offers is incredible. He provides real confidence in our ability to transform its potential into real mission impact.

<p>Tim Persons:</p>		<p>To speak to how AI is already at work in many ways to improve care and patient satisfaction is our next guest, Gil Alterovitz, who was recently named the first director of artificial intelligence at the US Department of Veterans Affairs. Gil Alterovitz has been leading AI projects at various agencies and contributing to the national artificial intelligence research and development strategic plan. It was updated in 2019. He's also a professor at Harvard Medical School specializing in biomedical informatics and with the Computational Health Informatics Program at Boston Children's hospital.</p>
<p>Dominic</p>		<p>From what you've seen recently, how has the landscape around AI changed particularly with its adoption and interest from the federal perspective?</p>
<p>Kathleen:</p>		<p>Right. Yeah, I think we've seen a number of things have changed recently. One is the uh, computing capabilities have just increased and the types of technologies like a graphical processing units in your graph GPUs and we've had also uh cloud computing which we're seeing a lot of agencies also starting to adopt. And so adopting and being exposed to all of these different technologies as well as new methods deep learning which basically takes some older technologies, but adds a few new elements to it, along with the large data that is now being opened up across the federal government in within different agencies through different technologies, whether it be through the cloud platforms, through efforts around open data, through efforts to empower patients to access their own data and to bring that data together within a research setting. So all of those aspects together. What really are making AI come together now for really to be at a really special time.</p>
<p>Dominic:</p>		<p>And you were a core writer on the national artificial intelligence research and development strategic plan that had many different actions that were recommendations about how to proceed. Do you think we're moving fast enough on executing elements of that strategic plan?</p>
<p>Gil:</p>		<p>Well, the strategic plan is the, a, is an, is a new version that has a number of different principles as well as a new principal around public private partnerships. The exciting thing is that a number of these are, I, I'm starting to see them in a number of agencies today. I can see, for example, at the department of veteran affairs, we have the AI tech sprint, which is ongoing.</p>

		<p>And there are a number of companies involved in that. So that is a way for them to be exposed to a VA data in terms of the VA format of the data, synthetic data and open data so that they can be building tools and learn about how it is to interact and collaborate with the VA. And in doing so, they are able to build tools and see if there are potential for, you know, in the future there may be collaborations around uh research and development or other areas.</p>
<p>Dominic:</p>		<p>That sounds like, it sounds like when you're working with AI, don't go it alone, but if you can collaborate with either industry partners or other government partners that you seem to be able to accelerate adoption and really get better and fit even faster. So that really sounds like an exciting portion of the thing that you're mentioning there.</p>
<p>Gil:</p>		<p>Right? Yeah. Collaborations is really a key because one of the things that we want to do is to build AI research and development capacity at the VA. And I, I really, I see a future where the, the very best researchers in the AA in the AI area are drawn here by the mission to help serve our veterans. And we can, you know, appreciate the work of our veterans that they've done for us by facilitating AI R and D to serve their needs. And the way to do that is to first work with these different organizations, build that technical capacity and leverage all the strengths through these collaborations.</p>
<p>Dominic:</p>		<p>So that's a great use case. And you know, adding to that, are there any lessons learned from the use of AI within healthcare that we should consider?</p>
<p>Gil:</p>		<p>Yeah, that's a great question. I think when you look at the use of AI in healthcare there's a couple of different ways of thinking about it. I often use this kind of analogy or the story about if you had a way to predict- you're going in for a surgery and you could tell and that AI could predict that you're going to be 99% successful. But it will not tell you how it will do the surgery and why it will do it in that way. So it's, it's not explainable in there. Yeah. But then you've got another surgeon and they are, can tell you exactly what they're going to do. You know, that, let's see. It's either a person or a program, whatever it is, you know, they may tell you exactly how they do it, but their accuracy is like 90%. You know, you may, you may choose the more accurate one even if you don't know everything about it. And it's a little bit of a black box. And, and we, we think about it,</p>

		<p>that's how a lot of emerging technologies are, is that at the beginning, people really would like to have uh, the full explanation of everything that's done and, and laboratory results. When you had blood tests in the past, they would and uh genomics. Now they would just at the fine detail and all the quality metrics and so forth are that presented with the lab result. But then once a technology gets adopted, there's still quality metrics, but they become more standardized and they become kind of part of a more commoditized type of product. And the results are, essentially, once they pass certain metrics kind of trusted and not the, and you don't have the exact underlying pinning of how you got to that quality level. And so that's something to consider that right now, of course, you know, we're looking at explainability it's, it's quite important to understand the models and so forth. And there could be a day in the future when there are some standardized metrics that will be accepted. And, you know, some of explanations you can go and kind of read about them, but they won't be ones that will be presented kind of on the face of with the actual item because there'll be more commoditized.</p>
<p>Dominic:</p>		<p>Funny. You gave us some great examples of how the VA is starting to use AI for some, some really dramatic impact in effect. So, I'd love to give you an opportunity to explain more about that. Tell us a little bit more about how is the veterans administration leveraging AI Today?</p>
<p>Gil:</p>		<p>Yes. So there are a number of different projects actually at the VA that are going on. Um so in terms of AI in research and development the million veteran program, which has more than 750,000 of veteran volunteers that's enrolled already with their... And so that is essentially the largest such study in the country that's also linked to healthcare information. And there are over 9 million enrolled in the healthcare system of the VA as well. And so that's another resource for the, for the vets that, you know, it is their data and it is an ability that is, is presented. There's this capability that's presented to be able to help vets by using these different types of data. Another project that's really exciting is the reach fit project, which is looking at providing supportive uh phone call to veterans who are estimated to be at risk for suicide in the next month. And that uses an artificial intelligence approach as well. And as I mentioned today there was this study which looked at over 700,000 individuals across over a thousand sites looking at acute kidney injury. Very exciting work that is you know, now published in nature and really presents a nice way</p>

		to look at the paradigm of AI is in terms of being a collaborative effort one that leverages the strength, the strengths of different components in a way that can really benefit the veterans.
Dominic:		Yeah, it'll sound like some really positive and uplifting examples of how AI is being applied to service a large population of, of individuals whose, who served and are suffering and have a way to get better care quickly. And it really sounds like some, some fascinating and interesting ways AI is being applied. So what's your longterm vision for AI at the VA? What are you hoping to achieve and maybe near future long, you know, longterm, what do you really see happening and where do you want to take it?
Gil:		Yeah that's a great question. So one of the things that I'd like to do and one of the things that I'm working on is on building the AI research and development capacity. So being able to really be in a place in the future where we can pull in all the best researchers in AI in the field be able to leverage that data in our mission to serve the veterans. I think that's really an area that has a lot of potential. And the other thing is around, you know, these different research areas to be able to, to coordinate and and all this activity so that all of the VA can really benefit that so that all the VA can benefit across researchers in this area.
Dominic:		And you had talked earlier about collaboration and how that's so important. So how can the VA best engaged with other federal agencies and the broader healthcare community as a whole around AI?
Gil:		That's a great question. So we're, you know, we're thinking about different ways of doing that. And one of the ways has been you know, this AI Tech Sprint which is basically let's say you have a particular problem, let's say a clinical trial matching and you want to attack that by, or you want to let's, you have a problem like clinical trial matching and you want to target that with uh technologies like artificial intelligence. So you would have a, you have a problem statement. And then you have a number of other organizations, you know, in this case there's industry, there's academia, there's others that participate around that problem statement. And we share data with them. So there are different types of data along different dimensions. There's data that is a large amount of data, but it's synthetic data. Or there's data that's a small amount of data and needs a

		<p>small data use agreement, but it's an easier agreement than for a large data set that may have had identified patients, you know, it might be de-identified. And so there's sort of different approaches to, to doing that. And so what we're doing is making this kind of hierarchy of different types of data sets available. Some having different types of agreements, but all much easier than a, a more formal contractor collaborative agreement so that these organizations can build tools that are useful for their needs.</p>
Kathleen:		<p>So you talked a lot about data and data and AI go hand in hand. Is the VA's data ready to support this type of collaboration?</p>
Gil:		<p>Right, that's a great question. I think like any, like any organization's data, some data is more ready than others, right? And so we are looking at specific data sets that are, that have certain criteria, you know, they need to be important for the mission. They need to be have a certain level of uh quantity and quality of the data to be useful. And that there's also interest you know, for people to use that data to build AI models. So there's a number of criteria that are used to be able to select the different datasets. And once you know this, these sprints and, and or other pilots happen, you, you learn more. And that's what creates a, what we termed to AI-able data. So data that is more suitable for AI. It's an iterative process. It's not that one day you suddenly have, you know, AI Data and before you didn't, you know, it's not like that. It's more like you have data and then through an iterative process of working with users, you improve that data, you link it to intelligees and other things and, and then it becomes AI bowl and there's a kind of a scale that's been developed to have those different levels to understand what that is. And many times that really to get to those higher levels, you really need to engage users and to get their iterative feedback to, to get to those higher levels.</p>
Kathleen:		<p>And then one last question. What are you most excited about when you look at the future of AI with healthcare?</p>
Gil:		<p>Yeah, that's a great question. I think when we think About, the future of healthcare, I think it's also useful to see just, you know, how, how far we've already come, just, you know, in the, in the, in the last 10, 20 years, you know, you know, in the, in the past, I mean, a few decades ago there was no internet. Right. And how did that change, the world? Just being able to,</p>

		<p>communicate with other people through computers. In some sense. That was our first sort of human computer interaction with other humans, through a computer, essentially. I think in the past maybe people were getting more accustomed toward uh typing on a keyboard and interacting with computers. And today a lot more people are comfortable around computers. And I think the same thing as what, what we'll see in AI in the future. And I think that's what will be exciting when we're able to reach a large population of people and be able to impact them with AI. Not necessarily just a few individuals but everybody because because it will become it will, those metrics will be such that there'll be broadly applicable and not just in a, just a few areas, but in areas that apply to many individuals and people will be able to receive the benefits of that in their care.</p>
Dominic:		<p>Sure. Yeah. I think those are great points. You know, it's a benefit for the masses and no longer will it just help individuals, but it can bring about a lot of good positive change for society in general. So, you know that, that's a really great point. And Gil, thank you so much for your invaluable work supporting our veterans.</p>
Gil:		<p>Will AI fulfill its hype in the federal sector? Much of this will depend on leaders and visionaries like Gil. The potential is immense but so are the challenges. What's needed is innovative thinking that can align the technology with compelling use cases.</p>
Dominic:		<p>Gil reminded me of one of our first guests, Dr. Mona Siddiqui at HHS. At both agencies and many others, the potential uses cases are almost limitless. Success will depend on their ability to effectively prioritize their investments while also being agile enough to pivot where necessary.</p>
		<p>I enjoyed Tim's perspective – ambitious but pragmatic. Agencies need an overriding vision for how AI can transform how they execute the mission. At the same time, they need to pursue this mission collaboratively and iteratively to build up the right competencies.</p>
Kathleen:		<p>We've reached the conclusion of season 1 and have had some incredible guests on the show helping us explore ways AI in being used in government. The people that we met along the way were incredible. I was constantly amazed by their intelligence and passion for</p>



		their mission. With their stewardship, the country is in good hands.
Gil:		I think back to our first guest, Congressman Will Hurd. After our interview, he announced that he was leaving Congress – citing his desire to solve problems at the nexus between technology and national security, and the need for continued U.S. leadership in AI. Throughout this series, we’ve met a number of problem solvers that are committed to harnessing AI’s potential to serve the American public. We’re lucky to have them.
Kathleen:		We look forward to continuing the conversation so stay tuned.
Dominic		In the meantime, visit us at accenture.com/ExploreAI to catch-up on episodes that you may have missed. You can also connect with Kathleen and myself to share your thoughts on what we should explore next.
Kathleen		Thank you for listening to Exploring AI in Government, brought to you by Accenture Federal Services. To continue the conversation, visit us at Accenture.com/ExploreAI , where you can listen to other episodes and download relevant research. Or you can connect with myself, Dominic Delmolino, and our guest analyst, Kathleen Walch, on social media. We look forward to seeing you at Accenture.com/ExploreAI