

## Data, Diversity, and the Federal Government

### SUMMARY KEYWORDS

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Welcome to the federal tech podcast. My name is John Gilroy. And I'll be your moderator. Today we have Ted Burgess, Senior Vice President, public sector at Tanium. And we're going to talk about something new for John Gilroy and new for a federal tech podcast talking about diversity and the tech workforce. And who better come in here than cheddar and talk about round of applause. Yay. You go to LinkedIn, she's getting all these awards. Like she's walked around with like, confetti thrown at her and everything. So what's it like having paparazzi 200? I mean, I see all over the place, get these awards and everything.

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Thank you so much, John, I'm really excited to be here with you today. And it's humbling and a great honor to be nominated and to receive some of the awards that I have over the years.

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Well, before we began recording this, I was stating that I personally think diversity is important in order to win. I mean, I don't think it's important to have, you're going to tall guy and short kind of just get a woman and a man. No, I think you have to win and, and no football team has everyone's offensive lineman, there's not a concern on the football and on defense. If everyone's a cornerback, then no one can block a lineman. And so I really think you have to be diverse to win in any area of life, whether it's sports, whether it's information technology, whether it's cybersecurity or, or anything. And so and that's the topic today. So give us some of your thoughts on this and what you're doing at the Tanium to to promote this agenda.

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Again, thanks so much, John, on diversity is incredibly important, as you said, across all industries, I think in our personal lives and our professional lives, it's important to ensure that we match we represent the communities that we serve the communities that we interact with the customers that we work with, whether that's public sector or private sector, from A to Z, we absolutely need to surround ourselves with diverse people with diverse thoughts with diverse ways of approaching things on innovation, innovation, I think that we're all looking for in many, many different areas is absolutely fueled by that diversity. I have the opportunity to to come on to the Tanium team. Last year. I've been here almost a year. And I'm just absolutely humbled by the culture that we have here at titanium, the focus that we have on opportunity and collaboration And then diversity, and the opportunity, frankly, that the company also affords me to be able to join folks like yourself to talk about this important topic.

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You know, I teach at Georgetown and every time I walk in the classroom, I get humbled. And you know, I walk out of there with my tail between my legs. So a couple years ago, I was giving a lecture on a

website designed by saying, Well, traditionally website, design your logos on the upper left hand side, because that's where people read from, from left to right, and that a student raised his hand, he said, I'm from Saudi Arabia. I got kicked in the head. And that was it. Well, I guess I'm wrong. The point is, if you know your audience, then you can design a website better, you can have greater unit of fit. A lot of people talk about improved CES and experience. Well, you know, if you just take one small segment of people from Pittsburgh and get their feedback on a website, what about someone on an Indian reservation? What about someone in LA? What about someone in Hawaii? You know, is that a wedding I met a guy Konya from Hawaii. And he's got a son named Samuel Ella. And it's just that, you know, it's not going to work if you don't realize you have a diverse short answer. And so I think that's, I think citizen faced, I think you have to be taken into consideration, don't you?

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Absolutely. Absolutely. Now, this

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isn't exactly a new topic. When it comes to executive orders. I think Obama had an executive order to increase diversity. And I think maybe last year, Biden had the same thing. So is this is this part of what you what you work with federal leaders on is implementing this, these guidelines for diversity and expand the federal government?

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Well, it's a huge topic, I think, for the government, it's a huge topic from from public sector, private sector, we see many, many agencies taking the time, right to really focus on and be intentional about the recruiting strategies associated with with diversity and inclusion. You know, really great example of this is, you know, CES is recent announcement, they will begin partnering with a really great organization called Girls Who Code, you know, that collaboration really aims to kind of close that gender gap. And that continues to persist today in the cyber workforce, you know, the focus there is to provide awareness, training, critical resources needed to cultivate, you know, today's young folks that are absolutely going to become tomorrow's cyber defenders.

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I think if you look in general at the information technology community in town here, I think I can make a first statement by saying that in the cyber community, there is less, fewer women and I think in general overall, however, in the satellite and space community, there seems to be a very healthy group of women involved in their the Chief Technology Officer space versus a woman. And so I think it's almost like this cybersecurity really to focus on in order to bring it up to speed. I mean, I've read several articles just this morning preparing for this interview saying, Well, you know, if you'd look at statistically, the cyber seems to be the one of the lower areas for inclusivity, isn't it?

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It has been and what's also really interesting if you take the intersection of that and consider, you know, those the talent shortage that exists today, there's almost 500,000 Open Positions today, according to cyber see.org that are vacant, right? almost 3 million cybersecurity roles that are open today. So, you know, when you think about the lack of diversity, lack of inclusion, um, that exists there. That's a whole

area whole population of folks that, you know, have an untapped market so to speak, that we can absolutely be tapping into to combat combat the cyber shortage.

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I don't want to be preaching to the choir here. But I read this morning report from the Proceedings of the National Academy of Science, it sounds pretty important. Doesn't it says, more diverse, more likely to outperform more homogeneous teams? I hope so. Makes it feeds right into discussion, doesn't it? It sure

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does. You know, as the cyber landscape itself continues to evolve, it stands to reason that our teams need to evolve as well. As the as the threat actors continuously work to advance and modify expanding their tactics. You know, why would we not do the same? From a defense standpoint, our cyber teams have the ability through creative problem solving and diverse ideas and additional tactics to meet those those emerging threats.

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I live in a very small town Virginia and about five blocks from me as a little semi pro baseball team. And these are feeder teams to to AAA and it's the Washington Nationals URLs or wherever and many times you have to grow your own talent. And in the federal government, many times I think it's hard to get a entry level person Question cybersecurity, isn't it? I mean, so this is one of the challenges the federal government has in trying to be more diverse, trying to get entry level positions for cyber talent.

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No, absolutely. What's interesting, though, is that there are actually a variety of ways to enter cyber, and to be kind of cyber adjacent, if you will. And not every single role available across cybersecurity is purely a technical one. We know that these these agencies, we know that businesses in the private sector need that cybersecurity talent. And, you know, aspiring professionals can upskill themselves to be ready for those those opportunities. And that can come from someone that hasn't has a college degree today, perhaps in a different field, or even someone that doesn't have a college degree, but has, you know, some necessary experience and that takes the opportunity to, to really dive into some very specific training that will make them you know, eligible for some of those entry level roles. You know, with the right training, someone in an early, mid or even late career can absolutely find an opportunity for themselves across cyber.

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I was just thinking, this is probably back when you were in grade school, there was a meme on the internet. And there was a some dogs online. And they said, Well, when you're online, you don't know your dog. Probably seen that one. If we look at the people who are attacking United States, they're incredibly diverse, I would say, I mean, no, there's an argument being made that people all over the world are coming off United States has all kinds different cultural backgrounds and ages. And it's just it's incredible. So I think in order to understand those attack vectors, you got to have a wider group of people who who are going to be not thinking like my friend from Saudi Arabia, the left and the right. I mean, you can get blindsided just by this simple mistake, couldn't you?

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Yeah, absolutely. There, it's critical that we continue to invest in how we protect and secure the nation. And doing so we have to work to prevent those, those future shortages that threaten our ability to meet those threats head on inclusion in these cyber populations, really does positively impact business outcomes.

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So if we look at opportunities to grow a diverse group of people in cybersecurity, I think we mentioned on just hiring an entry level positions. But once you have a person, let's say my daughter, Brittany, she gets an initial position. Many times it's kind of like a garden, they got to be mentored, they have to be shown opportunities, what to do, what not to do, how to grow, what organizations to participate in. And so if you can break through that, that is a whole separate skill set that maybe you can communicate with two, I mean, this is different from just entry level, and isn't it?

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Absolutely. And representation matters, people want to work where they feel comfortable. You know, it said that, you know, when you can see it, and you believe that you can become it yourself. Also, in this time of what they're calling the great resignation. This is a candidates market, you know, if people don't feel like they're going to be welcome, they won't, they simply won't choose to work for you. And there's so many available opportunities out there. And we see the talent shortage solely in cyber, but you know, focusing in on that, but it exists everywhere. So, moreover, we should be prioritizing diversity, because it's the right thing to do. But it really does have a tangible impact on who we are as organizations.

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Now, when I think about diversity, I think of people who have, let's say, mature careers in the federal government, and perhaps they need some guidance in these challenges of diversity recruitment. And I guess that's a matter of just being more open minded. I mean, at one o'clock today, I have a meeting with two software developers, and I think they they're very siloed and tunnel focus, you know, and, and because I have to concentrate so hard, but I think they have to take that skill set and open up in order to overcome some of these recruitment challenges. So So what guidelines can you give my listeners who are trying to get better at recruitment?

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They have to be intentional. You have to have a recruiting strategy associated with how you're going to go about finding these. These folks across diverse populations. We can focus on this by partnering with, with educational institutions partnering with some of those training opportunities that exist, again, early career late mid, you know, and at the very beginning, working with children, especially in introducing folks to these opportunities. So we have to have a strategy we have to also look inward, I think and take a look at the metrics that we have before us the goals were actually trying to achieve, we can't just say we want to be diverse and, and check the box by simply starting with women, there's so many aspects of diversity.

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You know, my back to the wedding this weekend my daughter, one of my daughters is an engineer. And they had to get up on a ladder and do some electrical. So guess who did it? Lauren got up there in a ladder? And did Alexa work up there? Problem Solving? That's what engineers do they solve problems. And I think that's what cyber scrape people? Do they have a problem, and they try to solve it. And so how do you evaluate that talent? I mean, probably some of the engineering bracket is going to have that talent. But how do you evaluate that talent, financial position, or maybe you see someone touted on your staff, you want to suggest that this person, maybe take a look at an opportunity in cybersecurity? I mean, that problem solving is difficult to evaluate, isn't it?

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It's definitely as I think it's all and asking the right questions of those potential candidates. It's important to frame scenarios and questions that give that candidate the opportunity to really give you an idea of their critical decision making process. You know, ideally, you want to be able to walk away from an interview with the confidence that the individual showed initiative and recognize the key steps to solving a problem, you know, were they able to identify the problem, were they able to analyze it and assess the problem for potential resolution, so they, you know, able just to settle in on a plan on how they were going to tackle something and implement that plan. You know, some of the other things that we can consider is, no does a candidate see the opportunity and a potential problem? Do they have the interpersonal skills to handle workplace, diplomacy, social sociability, etc, did they exhibit the self awareness and dedication needed to overcome personal challenges, shortcomings, all of those types of things play into critical decision making problem solving.

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For Christmas, my daughter got me the black swan book, and I reread it. And you've probably read that years ago, everyone seems to have read it at some point in their career. And he talks about these unexpected events, you know, and it would just seem to me that if you just have a limited number of people on your team, you're not going to be able to anticipate any events, Black Swan, or white swan or any events, but the wider background on your team, I think it would give you more insight into this whole idea of expecting the unexpected and preparing for that. And that's what the role of the cybersecurity person is trying to anticipate something or how someone else is thinking, a black swan event? Ah,

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yeah, absolutely. I mean, we now I, you know, I don't want to have an entire team with the exact same skill set the exact same experiences, the exact same, you know, opportunities, even that they've faced in their own life, the exact same challenges, if you have that, the level of group thing that that creates, you everyone's going to be pointed in the same direction at all times. And the problem is over here, and we're not going that direction. So we absolutely have to have that diversity of thought, that really, really enables us to be to be better to continue to rise and continue to elevate our ability to to protect our enterprises.

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I love this guy to see him. I guess he's from Lebanon, or Syria. I'm not sure where he's from. But here's the credit code fits perfectly with this interview. He calls him in a black swan. If it's unpredictable, not because it's random, but because our outlook on what's possible was too narrow. Wow, that's a t shirt. They're

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serious. That's a good one.

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It's like, Hey, buddy, you got hit not because, you know, maybe it's because you're too focused on one thing, and all of a sudden the wave hits. Yeah. And and you look at the sand or something, you know, it's just, I think it's so important. So we touched on real briefly entry level positions, and then trying to get managing, try to get maybe people in your team to focus on cybersecurity, then we have diverse teams. And there are some people that are naturally easy to manage diverse teams, and some people that aren't. And I think that's, that's a whole separate challenge. No saying cybersecurity and CISSP. And, but the whole separate is managing groups of diverse people and, and with COVID. It's remote diverse groups, too. So this gets to be much more complicated, doesn't it?

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Much more complicated. And what's interesting, though, about this virtual world, this hybrid world that we've been in, I think it actually leveled the playing field for some folks, you know, especially those that maybe tended to be more introverted. They weren't as put out in front it so to speak, everyone and a zoom box has their individual zoom box, if you will. And I think it leveled the playing field in that way. So you know, of all of the things that we've learned and all the things that we've encountered encounter, there definitely have been some positives to come out of it.

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Just thinking just raw mathematical perspective, if I don't know what the number is, how many open jobs are for cybersecurity, let's say 500,000 Odd numbers.

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Yeah, 505 100,000 in the US 3 million worldwide.

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So even if there's 500,000, if you just limit your candidates, the people with a Bachelor's degree in Computer Science, well, you're the you're putting yourself in the hole, you're the one who's in the silo now. I mean, probably the best technical leader I ever met, was a guy I work with who he was out of work. And he was an environmental science major from UVA. And he was working in a coffee shop or something. And one of my friends when they're talking to him, and brought him in as a test engineer, and he became the CTO within two years, not because of the code, but because he understood the relationships of complex systems. Okay, so maybe it's not knowing TCP IP and firewall settings, but understanding the relationship of complex systems, but they should you should go out and recruit environmental scientist, that's the place to look for him, I think, because that's just as complex and everything's interrelated.

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Absolutely, absolutely. It goes back to what I was talking about, of, you know, folks that make a change. That's exactly what you're describing, right? Changing direction, and their years of expertise and experience in other areas, can absolutely kind of pave the way for them to to move forward into a cyber crew.

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Well, what about tanning? What are they doing in this area? In general, the next few months actually have any specific plans for increasing diversity? They have any outreach efforts, or what are they doing?

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Yeah, we have very, very specific efforts that our recruiting team talent management team does to, to focus on diverse populations, again, teaming with those educational institutions I talked about, we have a university recruiter that's very much focused on, you know, bringing folks in in that way, we have a phenomenal internship program here that really does become a great feeder, into Tanium. first successful individuals coming through that, and we also internally through our own recruiting and hiring practices are constantly reminded of, you know, how to ensure that we are approaching each and every candidate without bias.

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Yeah, it's a, I think it's a challenge for every human on the planet. And I just don't know how I mean, is there management workshops? I mean, they have to, it can't just be take this pill, and you're good. It's almost like a recurring annual workshop for everybody. And oh, by the way, did you know these numbers 51% of the population of women 24% work in cybersecurity? It's it's a large percentage of the population. I mean, if you don't constantly reminded of that, I mean, it's not. You know, I get constantly reminded by reading Black Swan about, you know, the importance of not being too narrow, but I think anyone in the commercial world or in the federal, it almost has to be an annual workshop doesn't or maybe quarterly. I don't know me, is that the initiative you're taking there with the folks that work at your place?

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Yeah, and a minimum, I think, I think quarterly makes a lot of sense. We need to be, it's not a one and done. It's not diversity isn't something that you do and you know, for a period of time, and then you're done. Diversity is absolutely, you know, has to be who you are as an organization, who you are as an agency, and how you approach things, that it's important. It's it is a critical, critical element of our success. And that's not something that she would simply focus on once a year, or just occasionally. Yeah.

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And I think, I think I've, I did an interview with someone last week about medical and the medical field, I think it's a lot of different fields, not just technology are challenged in the area, including diverse people. And it's, it's just a whole talent pool there that you're walking away from, if you just limit yourself to

maybe just one school of, you know, we just hired people from Stanford. Oh, really? Well, guess what? There's going to you're going to be, you're gonna get weakened by that West Coast approach. And I just hired people from Carnegie Mellon. Well, guess what, there's another knot that certainly runs Carnegie Mellon think it's a strong school. But there's so many different talent sets out there. I think that's what I think diversity is as far as educational background is as important as anything. And there's some people who are career switchers. And and I guess that would be like maybe someone who's a math teacher might be a good target to recruit for your cyber scraper. I would think what you

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absolutely, absolutely talk about a transferable skill.

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Sure. And so if someone's listening to this, and they're in an essential position, the federal government and they're considering making movies to cyber something, it would you suggest they start taking CISSP courses in the evening, start coding events, or what's the next step for the people listening, trying to learn more about this?

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I think it takes a certain amount of risk. certs to really determine you know what area of cyber, and that an individual is interested in CISSP might be too much, might be too technical of a lead for someone, but it might be spot on for someone else. So I think each person really does need to kind of take a look at, across cyber and see what what interests them the most, there's all types of, of self assessments that we can take to see what we have a tendency to lean towards, etc. So, you know, lots of different avenues. But first, I think it's just to figure out what what appeals to you most. And then taking a look at, you know, where you are in your career, whether that's a training course that you want to take, whether it's a certification, you need to obtain, you know, see what opportunities are out there and to network, right. People are genuinely interested in helping other people provided that they have time to do so. And, you know, we collaborate with team, and we come together across meaning and in many different different mediums in person, virtual, etc. So all types of opportunities to speak to someone that's doing what you think you may want, to me, it's a huge piece of that.

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So I have three sisters, a wife and two daughters. So I'm involved in this. And I can I'll make an observation that maybe we can shut me down on this, I think that if women go to events where they're exclusively women, I think they're going to be probably more open to talking to someone walking up to you and go, Well, how did you do it? And I think in, in other environments, you know, there's a lot of military people in town. And a lot of these environments are a little harsher. And, you know, I participated in a women's networking group last Friday, and they had some topics are that I would never think would occur in, you know, an ex military cybersecurity group, but very important have, how do you dress for an interview in a job? Well, I never thought about that, but came up in the women's networking group I participate. And so I think there's some groups in town is women and technology, one group you think maybe listeners should participate in?

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Yep, absolutely. Women in Technology is a great group. And I also always recommend that women take the opportunity to, to your point to participate, and perhaps leadership programs or specific programs that are targeted towards women, where you have the opportunity to interact with peers, interact with leaders in the space that you are interested in, and or, you know, simply leadership functions, leadership programs, there is so much value to having the opportunity to interact with women across different industries. Also, to your point, John, that's where you find the similarities and challenges, the similarities and areas of success that span industry, but women face these things. And it's very easy to think that you're kind of pigeon holed and going it alone, until you have the opportunity to really interact with others and see how many other people are experiencing the same thing that you you are or have to have the opportunity to help each other.

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And I'm gonna plug you, you can go to Tedros, LinkedIn profile and take her she's a speaker. So go to her LinkedIn for all connected, find out the next place she's speaking, get down there and grab her and go, Hey, come here. I listened to your podcast. And while I'm stuck here, I've heard that like, I'm stuck here. And I don't. How do you? How do you break you've broken through? How did you break through Tinder? I mean, I'm stuck in this thing, you know, and it's all male, aggressive military environment. Well go to women and technology, maybe that's the breakthrough and women's leadership courses. That I don't know. But there's ways in you know, your LinkedIn profile is great. Go to that profile, and you should have a profile like hers. Okay.

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Thank you so much, Chad. I appreciate that very much. But I am always open to having those conversations. And again, you know, I've said, you know, representation matters. And it is it is my privilege to be able to share my experiences and hopes that they help someone else. And I have my mentors out there that I still reach to, you know, as well. So you can absolutely be a mentor and a mentee at the very same time.

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Now, what I do in my classroom is, so last year, I had a student who wants to get a job at AWS. And so we figure something out. And all of a sudden, she got a job at AWS. And so this year, I was stood in a classroom and she wants to get a job at AWS. I said, Look, talk to him on from last year. And then I connected up on LinkedIn. And they shared ways to work the system to figure it out. One woman was from Ethiopia. And this woman is from Kazakhstan. I don't care where you're from. And they learn from other people the correct way to break through barriers. And I think that's just I think, I think LinkedIn is great for that, because does break through barriers allows everyone to keep it at a professional level. There's nothing going on there. If anything goes down there. You can block them instantly. So It's a great way and absolutely

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goodness inside of government inside of industry, especially industry, those of us that work for global companies like myself, it the wealth of experience and expertise that exists within our companies is amazing. And over the course of my career, I had the opportunity to work with women and minorities from all over the world. And sharing in those experiences has been invaluable.

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And the biggest secret is, why would they not help you? Of course, they were You were literally I said, last year, Herrmann was in your seat, that same problem. Why would they not help? I mean, because they've been helped to you know, that the people, your mentor were probably helped by someone. So it's a, it's a, it's a good cycle. Unfortunately, here we are running out of time, Tim, you've been listening to federal tech podcast with John Gilroy. I'd like to thank my guest Tedra Burgess, Senior Vice President, public sector at Tanium.