

Chris Teale:

Hello everyone, I'm Chris Teale, a reporter with GCM. As we continue the GovExec Cyber Summit, we're going to discuss an issue that threatens both the security and innovation of state and local governments across the country, technical debt. Reliance on legacy systems has delayed overdue upgrades in IT infrastructure and software accumulating debt that hinders modernization efforts. Today we've got a great panel to discuss what addressing tech debt looks like in practice and what state and local leaders can do in their own agencies to break the cycle.

I'm just going to introduce our panelists to really quickly, I'm joined today by Amanda Crawford, the Executive Director of the Texas Department of Information Resources and CIO for the state of Texas. Alongside her we've got EJ Widun. He is the Chief Technology Officer for Oakland County, Michigan. And rounding out our panel also from Michigan is Anthony Rogers. He is Director of Technology Transformation Services in the office of the CTO for the state of Michigan.

Thank you all for being here and I'm going to start with a first question and I'm going to start with you Amanda. When someone says technical debt, how would you define it and what does it make you think of?

Amanda Crawford:

Hi Chris. Thanks. Glad to be here today. Well, I know that my colleagues joining me on the panel are certainly going to have a lot to say about this as well. And then we think about technical debt and those legacy systems, certainly come to mind. It is all of those things over the course of time that we have not necessarily updated, modernized perhaps at the pace that it should be done. I guess that's another question as well is what does that look like?

When we talk about legacy systems, they tend to be legacy systems oftentimes because they work, right? Their legacy because they work, it doesn't mean they're broken, they still work. So part of looking at that technical debt is just how far behind, if you want to use that word, are we. And as we're looking at here in government, what does that look like and what is that picture? And sometimes getting the picture can be a really challenging thing.

I think the other thing to look at, certainly around technical debt, a lot of times it's certainly the technology, but we also know that the people and processes behind it are a big part of what contribute to what we could look at that overall debt landscape that we have as government agencies.

Chris Teale:

Absolutely. And you've left us for so many avenues to go down there, Amanda. Anthony, I'd love to hear when you think of technical debt, what do you think of?

Anthony Rodgers:

Yeah, I would certainly build on what Amanda says. I think one of the cautions I would make is that there's a tendency to view something that's old as being technical debt. And Amanda kind of touched on that when she said a lot of older systems are still in place because they work and to me at least the way that I look at technical debt, to me, and I know EJ is a slightly different sort of cast on this, but to me it's about things that prevent you doing things. And while age is a really good indicator of where technical debt lives, really it's the characteristics and behavior of a system that actually makes it technical debt.

And we do a lot of assessment based on that, particularly of incoming IT. You can still add significant technical debt to your environment if the IT that you're acquiring behaves in a certain way or requires certain things. So what I'm fond of saying is anytime you say we can't do this until that happens, that's

technical debt at work. Anytime a person has to jump in a truck and drive out to put hands on a system to patch it, upgrade it, fix it, that's technical debt at work.

So it's that sort of tight coupling. So we look at things like large commercial office suites from a certain vendor are brand spanking you, they're all patched up to date, they are the latest and greatest, but they require a certain desktop and operating system infrastructure in order to work. And that is technical debt. If you suddenly decide you want to switch to small terminals or Chromebooks or some other technology, you can't without first dealing with all the applications that depend on your current desktop ecosystem. So that's what I kind of look for in technical data is that kind of tight coupling, things that anchor you in a place because of something else that's actually tightly coupled with it.

Chris Teale:

Absolutely. And EJ, your name was mentioned and so I'd love to hear from your perspective on this.

EJ Widun:

Sure, thanks so much. Pleasure to be here Chris. Pleasure to be here with both of you, Amanda and Anthony. So from an Oakland County perspective, we kind of define technical debt as the impact of previous investment decisions on current and future state of technology. And so we have started assessing this and I've built an application with some people here called tech debt check and it's a real simple questionnaire that is basically 12 questions and to Amanda and Anthony's point about things at work, we talk about the operational satisfaction and the technical satisfaction we have with using that application. But we'll look at 10 other attributes about the risk profile of what this means.

What happens if this isn't aligned to a standard, what if identity is not covered by this? What if you do not have the ability to have tested a backup? What is going to be your hardware age issue because aging hardware isn't good. If you are in a cloud environment, it may stay evergreen for you. We look at these kinds of things, but it also led us to another concept called innovation debt, which also blocks some of the things you can do, which is bringing new features and new functions forward. And so we're starting to talk about innovation debt with technical debt, but we use that assessment to measure what this is and to get business partner buy-in with what this is and kind of tech debt check, what it does is it gives you a color coding from a score that says you're red, yellow or green.

And what we found is no customers want to be red. And they move these projects forward with us without a business case or an ROI because no one likes to see red. But that's kind of what it looks like for us and how we've tried to address it by building some of that partnership with our business.

Chris Teale:

Absolutely. Okay, so we've defined technical debt and I think all three of you kind of alluded to this already, but I think it's worth repeating, make it real for me, define what it means when you have technical debt? What kind of impacts does that have on either the IT shop or your constituents or the people that are using your services? And EJ, I'd love to hear from you first since you went last, last time.

EJ Widun:

Sure thing. So it manifests itself in two different ways for me, but ultimately it breaks my trust with my residents and with my business customers. Technical debt is going to cause unplanned outages or a lack of service to my residents and that is a failure for me to execute on the promise we've made to them. In Oakland County, we have 83 different government services, 1.3 million residents that we provide mission-critical life and death systems to every day, day in day out.

Technical debt is something we take really seriously, but the risk that comes with it and how it feels like is a system outage. It's a hardware drive, it's a hard drive failure, it is a server that doesn't come back. For those of us that may have a mainframe, it could be manifested in the concept of a hard weight. There's lots of different things of how it feels, but the real impact is those 1.3 million people can't get the service that they needed from the county and that's what the most impactful thing of it is.

And that's how it manifests itself when we spend a lot of time now looking at projects of how we're going to try and fix that going in. Because Anthony alluded to this earlier a little bit with his talk about you can bring new technical debt in when you buy that new solution if you don't look at what it does. And so we try to continue to put those sort of guardrails on that it improves the uptime, the functionality because as an IT professional, I have one basic commitment to everybody I deal with and that's to build trust. And that trust is a system that is available when it's ready and needed to be used.

Chris Teale:

Anthony, what would you add to the impacts of technical data?

Anthony Rodgers:

Yeah, I agree with EJ. I think one of the things about government is, and I've said this many times. I was at an industry conference, it was pre-COVID so it's obviously quite a while ago now because COVIDs done weird things to time. But I was at a conference and there was a major auto at a manufacturer conference and they had just merged with another one and they were saying how complex their business had become because they now had 20 lines of business. And I just fell about the place laughing.

In government, we have thousands of lines of business. My own agency alone is a vehicle rental company. It's a power generator, it's a mail sort operation. And that's not even the IT part. So for me, technical debt, I return to that sort of tight coupling thing, it's light untangling a ball of yarn. Your cat's gone among the yarn and even when you find one end, to try and update anything in isolation involves untangling that yarn because everything's coupled together.

And so to me that's kind of one effect. You end up with this sort of organizational paralysis because you really don't know when you really get deep into heavy technical debt with a large bowl of yarn, it's extremely difficult to start picking it apart and figuring out how to tackle it. But the other thing I want to really build on is something that EJ talked about, which is fundamentally we owe a debt to our residents to provide service. And I know I said in the previous question that age is not technical debt on its own, but there are new approaches to providing digital services to our residents with human-centered design, with a user experience built in. And your older systems are simply not going to have that.

Anybody who's used one of our older systems to file for benefits or file for make payments and some of our older systems do not have good user experience and that is a result of their age because they were designed and built before human-centered design was even a thing. And that to me is one of the biggest sins of technical debt that we tolerate systems that provide poor user experience.

Chris Teale:

Absolutely. Now Amanda, I'd love to ask for your impact. I know these guys have probably covered a lot, but I would also be curious to hear from you, how will you go about assessing technical debt? To lead into our next question in the state of Texas, how do you guys figure out what kind of technical debt you're working with?

Amanda Crawford:

Sure. Well first off, I want to say I think I could sit here and listen to EJ and Anthony all day. Talk about a masterclass in how to address this and really how good government IT should operate. So hats off to them. I love EJ'S phrase of innovation debt and I think that is a huge thing and that's one of the big problems that comes about when we're facing this. So just building a little bit on what the gentleman said first off, on that impact to constituents. Absolutely, when we have systems that can't be easily adapted, as Anthony said, that aren't built around human-centered design, that completely changes where we know that we need to go with government, where we're actually putting our users first, the constituents first, and really building on that experience. People want to have as the least amount of time with government as they possibly can, the least amount of hassle and the least amount of time.

And I say that as someone who spends all their time with government, we'd love to make it shorter. But it's really hard to do that when we have all these silos of excellence everywhere and everything just takes so long. And there are these burdensome systems. So that impact on constituents. I have an example of our legislative initiative that happened last session. A bill was passed to collect one additional field of data on one form, an electronic form, just one. And it should have been a simple bill. And it was, it passed. And then the member reached out to me after a while and they were working with the agency and the bill had passed and they were just so confused about why this wasn't happening and why was it taking so long. And this is somebody who works in the private sector and in a fairly sophisticated field.

And having to explain to him that yes, it just seems like you're adding one simple field to this form, but because of the underlying the platform and the technology that has to be adapted, it's just not that simple. The whole thing's going to have to be reworked. That's a frustration and that shouldn't be that way. And that slows down government and it thwarts certainly in the legislative initiative that was passed by our legislature and signed by our governor and that's certainly not good. That's not ideal.

I think the other thing around this is that impact on employees. We're talking about not just that constituent experience but our employee experience. And at a time now where we struggle with workforce with retention and recruitment and trying to draw folks to doing the good work that we do here in government, which is exciting work and which is really impactful and meaningful, but then they come in and they're working on these systems that are just, they're clunky. They may operate, but they're not really aligned with the vision of where these systems should go.

I have, for example, in our contract management team here in our agency, they have 10 disparate systems that they have to use to manage one contract. That's not a great employee experience. Certainly it's frustrating for them. And then as far as getting these contract, the transparency and the speed to market and all the things that we want to do with the contracts that we're providing for folks, it's not helpful either and it frustrates our providers as well. So those are the sort of things that when we talk about the overall collection of what this looks like.

Now as far as how we assess that, some of these intangibles are hard, it's hard to put that dollar figure on. But what we do here at the state level in Texas is we have a couple different mechanisms that we look at to try to get some rough order of magnitude on what that debt looks like. Because at the end of the day, it is going to be about asking the appropriators for funds to be able to reduce that debt. So we have one particular report that's called the information resources deployment review, the IRDR. That is a couple hundred questions that goes out to state agencies. They fill it out, they assess and they report that back to us. That gives us a little bit of a snapshot and a framework at looking at that.

We also have a prioritization of cybersecurity system and legacy systems report, PCLS. And on that particular document, that is a voluntary reporting by our state agencies to look at what are their top either cybersecurity risks or legacy system risks, which usually surprise or the same thing and they put them in a report, they fill out some questions on that and then we analyze those submissions and put

them into quadrants that are then reviewed by our legislature to make their funding decisions when our legislature meets biannually.

Typically, we've been fortunate that in the last several sessions, most of the projects that have been in the first two quadrants have been funded to the tune of around a billion dollars at least in those two quadrants, which is very helpful. And then one final thing I'll highlight that is new. It was a part of a piece of legislation last session, which is, it was our house bill 4018 and it required state agencies to submit a modernization plan.

And so this modernization plan was required to be submitted to the legislature to not just tick off systems. We're not just actually listing out things, but what's your vision for it? What is your modernization plan? So we're not just talking about the technology, we're talking about the processes, we're talking about your strategic roadmap of where you want to go as an agency, making sure it's aligned with our state strategic plan for information resources.

So a lot of words around those reports, many of those that you can find on our website as far as the templates and where we go. But those have been really helpful in having discussions with state leadership on where we need to be going with this technology.

Chris Teale:

Absolutely. And from one state to another, Anthony in Michigan, how do you guys go about assessing technical debt? Are you also asking several hundred questions?

Anthony Rodgers:

No, we have a shorter assessment form, which I'm actually sharing with Amanda as we speak. We actually have a couple of calls set up to talk to each other, which is great. And she has some experience and knowledge of how to get senior leadership and legislative interest in the results of the assessments and in terms of the funding decisions that I haven't been able... That's a hill I've not been able to climb yet.

But we worked actually with EJ, with his tech debt check. We kind of took it and kind of adapted it for our needs and then actually shared it back. And we actually have a 3-legged stool approach. We view technical debt in an organization like a burst pipe in a basement. So the first thing we want to do is we want to stem the tide. So we do assessments... And this is really the only sort of mandatory piece that we have. So in our existing policy, before we even began this, we do have a state policy that says that any IT acquisition must be assessed by what we still call in the org chart, the EA or enterprise architecture head division.

But we used to do a very technical sort of tick the box type of assessment. We're looking for very specific versions of software and everything else. But now we took a lot of the work that EJ and his team did with their tech debt check and we are really looking for behavior and capability because there are behaviors, capabilities and characteristics of IT that make them have technical debt regardless of the software title or the standards or whatever. Like I said before, we have thousands of lines of business. It's really difficult to say everybody has to use the same piece of software for the same function. It just doesn't work.

We're a 50,000 seat organization, 20 agencies, all of their own individual personalities and needs and thousands of lines of a business each. One size doesn't fit all. So we look at characteristics, we look at things like will it run in our environment? How is the contract structured? How long are we committing to, how much are we spending at once? There is research that says that only 13% of government IT

acquisitions over 6 million are successful. So we're trying to get out of that model. So that's a kind of stem the tide approach.

We are looking at the Thoughtworks tech radar tool. We want to build our own tech radar. So we want to provide what are the new pipes going to look like? Should we go with pipes, should we build with copper, should we get a tank, just water heater? So we're trying to provide a kind of map to the future so that agencies know where to go, what's the target? When we tell them that they have old stuff and we have to modernize, they need to know what to modernize to.

So we're providing that kind of tech technology radar, which is the second leg which is basically upgrading the pipes. And then of course there's still water in the basement. So we need to look at our existing installed portfolio and that's where we're going to steal EJ's tech debt check again and actually do assessments of our installed portfolio so that we can highlight where funding is going to have the most effect, where modernization is going to have the most effect and create a heat map for our agencies about where to spend their dollars and where to make their funding requests to gradually pump out the water.

Chris Teale:

Excellent. You're king of the analogy, so I definitely appreciate that. EJ, I know we've talked a lot about your tool, you talked about it earlier. Is there anything that we haven't discussed within it that you'd like to just make sure that we take away before we move forward with solutions?

EJ Widun:

I would just tell you that it is an evolutionary process that you're going to go through. So this started with me when I joined the county. I've been here almost eight years now and it started as an interview thing gone wrong. Somebody asked me what I was going to do when I got the job and I started as the enterprise architect before CTO and I said, I'm going to measure the risk of the application portfolio because I want to know what's in my environment. And they asked me when would I have this ready and I said I'd have the assessment ready to go in my first 90 days. Day 89, the person came to my office and he knocked on the door and he's, "Hey, do you have that assessment?" I was, "Oh, you mean this questionnaire right here?" And they let me actually do the pilot with it.

And so we started with just 15 applications and it spread like wildfire to the entire application portfolio. And so we used that for the first master plan and then we then took the next cut and we started sharing that with business customers. And so when they do their project investments, we showed them the scores of it and then all of a sudden we started thinking about this and we're, if we don't apply all 12 questions, we could actually score the infrastructure pieces as well as just applications. And so we've added in all the other pieces and we now slice it by critical infrastructure and we slice it by other pieces.

And now I'm starting to figure out how to look at innovation debt with this and what does it mean when I can't transform and how do I judge that? The thing that I'm really starting to toy with now when I'm playing with this thing is something Amanda touched on which is human-centric design. And I talk about designing with empathy and I talk about why do we do IT? And I think that we've missed the point that data and you mentioned silos and both of you kind of talked about work that get stuck in silos. And the reason why you build an IT system is for information to move. It's not to maintain and be in a silo. And if you don't have a data-centric design to this, you've created a different form of debt as well because you're losing the power of why you capture that information to begin with. And so those are the things I'm trying to crack next is how to attack human-centric design, how to create a data mindset to what we

do that transcends some of these pieces, which is harder to do in government because data is so protective and you can't be big brotherish and other things.

So those are the next kinds of things I'm trying to figure out where to go as I look at this opportunity. And by the way, we've talked about tech debt check a bit. Those that are interested, you can reach out to me. Chris, I don't know if there's emails shared, but you guys can reach out on LinkedIn if you're a government agency. Totally willing to share it with you. It is a macro driven spreadsheet, really simple.

Chris Teale:

Sounds good. I might not be the person to share that with, but I'm sure there's all of our audience out there will be interested to read that. Okay, so we've talked about the problem and how to identify it. Let's talk about I guess solutions and how to move forward. Anthony, I want to start with you first. How do you develop a strategy to alleviate technical debt? And I asked this knowing that it's always a journey and we'll probably never get there to a hundred percent, but how do you move forward from this?

Anthony Rodgers:

I think one of the keys is to be opinionated. So I think a lot of the sort of analysis paralysis that we get into within complex government organizations is trying to find the best and they're really what a lot of people perceive as being decisions are really more like bets. So things like on-prem versus cloud isn't really a decision. It's an opinionated preference or a bet. And some CTOs are going to bet one way and some CTOs are going to bet the other way and neither of them are wrong. It's just about setting that stall out so that your organization knows which hill to climb with you. And we're all in the valley and we're surrounded by several hills. And I think one of the most important things that a strong IT leadership can do is identify the hill you're going to climb.

None of them are necessarily the wrong hill. Some are, but there's more than one correct hill and it's being pretty focused and consistent on which hill you're going to climb and then sticking with it. And I know when we talked before, both Amanda and EJ kind of talked about that kind of stick with itness, don't be afraid because you're going to encounter resistance, you're going to encounter people who don't want to change. It's brave and you're going to need to be brave and identify a strategy for technology transformation, cultural transformation and organizational change and stick with it.

So that would be my first piece of advice. The other piece of advice is to look at the research that I briefly touched on from this[inaudible 00:27:52] group. There's a report that they come out with called the Haze Report, HAZE. And it is a survey of global government IT acquisition over the last, I don't know, 10 years or whatever. And that's where that statistic comes from, that large government IT contracts over 6 million, have a 13% success rate. That has driven a lot of, particularly the federal government or the national government digital service and initiatives in Canada and US, Australia, Britain.

And it's no coincidence that the transformative playbooks that all those digital services used is very similar. So I would encourage people to look at the US Digital Services playbook from the US Digital Service and there's 13 plays that touch on almost everything we've talked about so far. They talk about the user experience, it talks about a modern technology stack, it talks about contract structure and that is really how to start seeding that sort of a transformation in your technology and in your culture.

Chris Teale:

Amanda, I'd love to turn to you first and next I guess. And what have you done in the state of Texas to strategize about getting away from some of this technical debt? What have you learned from the experience?

Amanda Crawford:

So one of the things that we've done is really focused on our state strategic plan for information resources management. And that is a plan that we're required by statute at our agency. We set the plan, it's a five-year plan that we revise every two years and we have a lot of stakeholder engagement from all levels of government, from the provider community, we have by statute a member of the public who sits on that committee as well to build out that roadmap and what it looks like. And then we evangelize on the plan and we work on getting the communications out there because part of it is with this and a little bit about our state and the way we're made up from a technology perspective is we're a mostly federated environment.

So while we have consolidated infrastructure, for the most part, about 85% of the state's compute runs through our agency and our programs, the applications live with the agencies and the programs and all those lines of business that Anthony talked about, all of that lives there. And so a lot of what we do is collaboration, encouragement, trying to bring folks in to talk about what does this vision look like and where do they need to go. So part of it then I think it for us is selling the value proposition of reducing that technical debt.

And the value proposition to me comes in a variety of forms because I think there is a lot of value to this. So number one is the delivery of digital services to our constituents. That re-imagining of how we and government interact with our constituencies. How do they consume our government services? How do they want to consume those government services? How can we best deliver those? So that's one piece. You're not going to be able to do that in the modern world with the legacy architecture that you have.

Security. Security is huge. That's a huge value proposition when we're talking about securing these systems for the evolving threats and everything that's out there. This is something that we always have to keep top of mind and we know that reducing that debt on some of these legacy systems is going to make the state much more secure. And then going back a little bit to what I talked about with the employee experience and what we're trying to do with workforce and how we're trying to again, keep the human at the center of it all and try to make government more efficient at all levels, whether it's dealing with externally or internally with our own folks.

So we really talk about that value proposition. One of the things that we developed here at our agency is our digital assistant. That's Texas by Texas or TXT. And it connects multiple government services through one app. So right now we have motor vehicle registration, driver's license renewals, and then you have a couple of occupational licenses. It's been wildly popular. I think we're at 5 million accounts in over a little over year. So it's clearly showing Texans want this, they want to interact with their government. They like the idea that you can pull up and you can see all of the different services that you're consuming, whatever they may be. And it gives you reminders on when you need to renew these and try to make it more simple.

Agencies see that, they see the success from those anchor tenants that we got with our department of motor vehicles and our department of public safety and they want to be able to bring us on. I'm like, okay, well we can do that and there's a path forward, but we're going to have to talk about looking at the debt that you have in your agency.

And then part of that is addressing though when we have those conversations, legacy mindset. So we talked about systems, but we've got legacy mindset. And I don't mean that you have a mindset where you want to really think about what legacy you're leaving on the planet. I'm talking about you're still stuck in the past and you want to just keep hammering and doing things the way that they've always been done. And I know for us that is our biggest challenge. And I think anyone here would say the technology is usually the easy part, it's the people and the processes that are the big challenge.



And so addressing legacy mindset, and that's convincing, right? That's change management, that's a culture change. And that again goes back to talking about the value of that and that is nothing but always being out there, bringing up this topic, doing outreach every way that we can to try to put this in front of our customer agencies so that they do see the value and then want to invest their time, effort and the hard one funding that you get from the appropriators into these initiatives.

Chris Teale:

Yeah, absolutely. EJ, what would you add about how you strategize on something like this and move forward?

EJ Widun:

Wow, those are some actually really good answers and tough to follow up on. But first of all, Amanda, you are spot on that people aspect of a legacy mindset, that is going to be the hardest thing to change. And so, one of the things I would tell you, and I would slice this answer a couple of different ways, the first thing is you've got to get that partnership with those business people. You need to find out what are going to be those things that you can do that are going to be the levers they can't do today to make their world better or a resident's life better. You've got to figure out how to enable that for them.

Because as an IT professional, your job is to ascend that seat of a trusted advisor. You shouldn't be an order taker, you shouldn't be trying to do IT for the sake of IT. IT exists to do nothing more than it to provide a better way for residents to engage with us and for those business partners to do their job. We shouldn't be doing IT for the sake of doing IT. That's just not what it's about. And so that partnership becomes so important, but you have to figure out how to engage them in that conversation with you because myself, Anthony, Amanda, we're going to talk in some technical stuff potentially that means nothing to them. So you've got to meet them where they live and talk about that process piece.

But the other thing I would sit there and say is take a moment to realize what you've already done because technical debt in and of its nature is daunting. And those of you that planned through COVID and successfully made it through, congratulations because you just managed through a world of technical debt and changed the bar at which your IT organization has seen and you should capitalize on that collateral that you've just built. Now's a chance to try and get to that seat. But for us personally, as the practitioners of this work, for me, I think the biggest thing is building these connections and talking to people and sharing these things.

Like Anthony and I have been working together for a couple years sharing ideas of technical debt and how we learn from each other and what this is. And I talk with other people across the country about what are they doing with this so we can learn. And I would imagine there's a world of learning from Amanda with this about how she's doing that business engagement piece that we should be learning from because that's how we get better at doing the same thing. And so that strategy for me personally or is Oakland County is learning from others that are doing this because we're all solving the same issue at the end of the day.

Chris Teale:

Excellent. Yeah, absolutely. We only have a few minutes left, so there's one final question from me that I'd like to ask all of you. And that's about the future. Obviously we have a lot of federal funding coming down the pike, some of which to help with modernization and all these things. Would just love to get some perspective. How do you feel about the future with all this new money coming in and do you think

that we're going to get this under control? And if you are optimistic, why or why not? And Anthony, I'm going to start with you if that's okay.

Anthony Rodgers:

Yeah. I am optimistic, I think. I think there's enough sort of art out there in terms of the sort of digital service approach that I talked about. I think there's a tendency when it comes to government IT to be all doom and gloom about how old everything is and how outdated it is, this huge amount of technical debt. I wanted to build a little bit on what EJ said and what Amanda sort of alluded to as well when she was describing that kind of one stop shop. We have successes and I think part of creating that optimism and part of that journey, that sort of change of culture, that sort of enthusiastic embrace of what it is we're trying to do is about celebrating our successes. And I think there are some phenomenal successes in the states and in townships and at the federal level that we don't always celebrate outside our own little circle.

And I think we need to do a better job of that. I think part of creating the optimism is recognizing that we have made huge strides forward and both tactically on the ground with specific applications in specific states, but the state of the art has shifted forward enormously in terms of how do we structure our contracts, how do we engage with our residents and our partners and our vendors, and how do we become good product owners and good stewards of our IT budget and of our data? How do we become good technology citizens in the overall information technology profession?

So I'm very optimistic and I think there's a lot... for an organization that feels that they're behind, there's so much prior art to copy from and there's so many good people like Amanda, like EJ to talk to and get experience and guidance from. So I'm very optimistic. I honestly think we're on the crest of a wave of IT modernization in our government.

Chris Teale:

How about you, EJ, you're also sunshine and rainbows over there?

EJ Widun:

I am actually optimistic about the future, as long as you persevere, you remain fearless and you build those partnerships. I think the next level for this is different, and I think Amanda and Anthony both touched on it, which is we've got to get to the spot of that business partnership, that transformation of changing the experience for the constituent or the resident or else we're going to have a bit of a challenge going forward with how that gets received and it's not just for the sake of IT.

The other thing I think we all have to challenge ourselves with is making meaningful change to this technical debt as we use this money that's going to become available. Because a lot of the time we spend putting band-aids on cuts because there's a jagged edge on a table or something and you keep hitting it and you realize you ran out of band-aids and we buy more band-aids instead of fixing the table or the jagged edge on that table. And so you got to make sure that you're focused on fixing the root of the problem and not just putting bandages on that solution and that will lead you to a better outcome.

So I am optimistic, but it does require a certain degree of being fearless, challenging conventional thought and challenging people with a legacy mindset to go with you on a journey that is going to be transformational and be very rooted in change.

Chris Teale:

All right, Amanda, you get the last word?

Amanda Crawford:

Uh-oh, that's dangerous. No, I agree with Anthony and EJ with the optimism. And I think we have to continue to build on that. And the way we do that is we don't do that alone. We can't do that alone in our organizations. We have to build partnerships. Partnerships with industry, partnerships with other states, with our local governments, with our agencies that we work with. And then we need to have those champions and relationships with our state legislatures and with state leadership on all of these initiatives. And I am optimistic not only when you see funding that's certainly coming from multiple sources, but I'm seeing the conversations as our legislatures in session right now, conversations that we've never had before that are originating from members asking about technology in a wholly different way.

It's not that technology is a back office function any longer. They're seeing technology as the driver, technology as the enabler, technology as the way to improve that experience that we're all looking for in government. It's the path to that more efficient and effective government that we're all driving for. And so I think that is something that we all in IT leadership throughout the country are really called on to do is to continue that drive and to continue pushing on that and building those relationships because our work is important and it matters and we've got to be able to continue do pursuing and building on the good work that we've done.

Chris Teale:

Great. Well, I could have listened to this conversation all day, but unfortunately we are at time. Amanda, Anthony, EJ, thank you so much for joining us and for sharing your insights. This was an excellent conversation. Thank you to our audience as well. We're going to take a 30-minute lunch break, so stretch your legs, grab some food, the GovExec Cyber Summit will be back shortly. For GCN, I've been Chris Teale, thank you so much.