



TechNJ Digital Summit Part 2

Podcasting monthly from the shores of the Delaware River in Trenton, New Jersey, this is TechNJ, Powered by NJOIT - the New Jersey Office of Information Technology. Follow and listen to discussions on a variety of tech issues, trends and topics with industry leaders and up-and-coming influencers to find where technology meets public service in New Jersey.

JS: Hello, I'm John Silvestri and welcome to TechNJ. We are back for another episode here at the 2017 New Jersey Digital Government Summit. Today, we're sitting down with 3 special guests, all of whom have special roles at the summit. Our first guest is Marc Pfeiffer, the Assistant Director of the Bloustein Local Government Research Center at the Bloustein School of Planning and Public Policy at Rutgers University. Marc, thank you for joining us at TechNJ.

MP: Thank you very much, John. Good to be here today.

JS: How are you enjoying the Digital Summit so far?

MP: I think the Summit is great. It's off to a really good start. You've got a lot of people here, you got some terrific vendors who have some good information to share, and the speakers are really good. So, I think it's another really good program that OIT and the Center for Government folks have put this together nicely.

JS: So what brings you out to the digital summit today?

MP: So today I'm moderating the panel on open data, on open government data, and it's a big deal for us in New Jersey because a couple months ago, Governor Christie signed a law that now requires state agencies to start moving toward putting their data sets online. That's a big deal. We've never had that type of a requirement before. I was really lucky to be involved in getting the bill drafted and passed, and Liz Rowe from OIT also work on that and she's now responsible for getting implemented. So Liz has a great opportunity to start unlocking the data resources that state agencies have and that... that's a big deal which should help our economy, help the public, and also provide advice and guidance for folks on public policy matters. There's citizens and there's interest groups out there that will be able to look at that data, look at things things that we haven't seen itself. So I think it's a big win for everybody and it'll multiply over time.

JS: Sounds like a big win and also big task ahead for those who have to implement it.

MP: It clearly is, it's going to be new for a lot of agencies. I myself, before I was at Rutgers, I was with the Division of Local Government Services in DCA for 26 years, and one of my jobs there was to work with data, and we were a leader and state government going back to the late 80s and early 90s in putting things like State aid to municipalities and property tax rates online

projects that continue today but there's so much more that can be done with data that's really locked up right now.

JS: So, what are you working on at Rutgers?

MP: So I'm working at Rutgers at the Blaustein Local Government Research Center, where I've been able to continue the work I was doing in state government on technology, and I'll talk about that. One of the things we've been focused on is technology risks that face local governments, particularly here in New Jersey. You've done some research on that to try to get elected officials and senior government managers to understand that they've become so dependent on technology today that there are risks facing their organizations. And, not surprisingly, a lot of elected officials see technology and IT as just a cost center. It's something that cost them money, and they don't really want to think about anything else and their attitude and budgeting for the most part is "well, you wanna replace that server, Mr. IT Director... well, can't you get another year out of it?"

JS: So as this thing like having back ups for their files and having antivirus software, being aware of the current threats out there like Wanna Cry and ransomware and all the other kinds of things like that?

MP: Those are the great advertisements for why you need to focus on technology management, but cyber security is really just one of 6 risks that we identified that face government agencies, and frankly all agencies, all businesses face these. So, in addition to cyber security, which is the big one in the room and that sucks up a lot of the oxygen, but you also need to think about legal risks, financial risks, operational risks. You're so dependent on technology operating pretty much everything you do today, not just for me email standpoint, but from a financial management, from traffic lights to street lighting. We're moving into digital controls pretty much everywhere, and attention needs to be paid on those things. But you also have reputational risks. If your organization gets a website DDoS, or the website goes down for a couple days, you get a lot of public attention on that. The people who elect council members, and the citizens and the voters are gonna say, "wait a minute, these guys aren't doing such a good job with their technology. What are they doing with social media? How are they representing themselves? What controls do they have? What are their policies?" Those all create risks that can effect the government agencies reputation, and the elected officials as well. There's societal risks as well, that if a government agency isn't keeping up on its technology, it runs the risk of its citizens getting very frustrated and not being able to meet their needs. The way we used to do press relationships and public relations government is we'd write up a press release and we would mail it to the local newspaper and that was our press. Well, now you got multiple channels. In addition to still working with newspapers, you're dealing with your website, you're dealing with with various social media channels, you're dealing with mobile applications. And you now just have to start thinking about things very differently in order to meet your needs to your clients, constituents, and citizens.

JS: In addition to just being focused on technology is a real learning and education focus. Getting these people to understand all these systems that are out there.

MP: Yes, it's understanding that... and we coined the phrase technological proficiency. It's a mouthful, probably need to shorten that somehow, but you need to do certain things in an organization to make sure you are proficient in your technology to manage those risks. And we really identify three or four things that get you there. The 1st is under the heading "Technology Management". Governance, planning, and budgeting. You've got to have a system for somebody making your technology decisions. You need a process of planning so, "okay, what are we doing in the next 6 months? What are we doing in the next year? how is that tied to our budget?" And it may be very simple, it may be very basic and elementary, but you need to have a process established. And if you've got that done, you then need to think about cyber hygiene. That's from cyber security standpoint, that's making sure your employees are trained on how to avoid infecting your systems. Not going "boop" on an email, alright, that's going to open up a ransomware attack. The fourth piece of it is technical proficiency, and this is where cybersecurity lives. Is that, "are the people running your technology and managing your systems, are they up to speed with the right protections and the right skill sets? Do they have all your unused ports blocked? So, for example, we've seen some municipalities that got a mass attack, a bulk attack on their servers, and this happens all the time, and the bad guy finds an open port, and he uses that open port to inject some malware, and it sits around and waits to see if it's been discovered, and if it's not after a couple days or a couple weeks it launches malware. And it could shut down a network on ransomware and we've seen several municipalities where this has happened. And it's a big deal. But it's more than that, it's keeping your service refreshed, it's "what are your patching policies to keep your operating systems and your applications up-to-date". It's all of those things that go into making sure your people have the tools they need, that your people are properly trained, and you are managing your system competently.

JS: Do you see a lot of pushback from some of these local municipalities? Do they say, "oh, this is not in the budget. We have to pay for things... pay for other services. We simply don't have the time or money."

MP: You sound like an elected official. (Laughs) You sound like an average elected official. That, regrettably, is what we see for the most part. There's some slow change happening as we get some younger people who are used to technology and understand it as they get elected and get involved in local politics. But there's generally a learning curve. We have a lot of elected officials who their role in technology is they have a computer, they have a smartphone, and that's what their understanding of it is. We have senior managers in organizations who that's all they understand. Nobody in senior management in most government agencies today went to school and learned about technology. Elected officials surely did not. So there's a real educational effort that we need to make and figure out how we get that message across to people.

JS: Well Marc, any last words on the NJ Digital Summit or anything going on today?

MP: I want to compliment everybody that helped put this together. It's a lot of work and a lot of effort. I'm also part of New Jersey GMIS. It's the association of local government technology managers. We've been involved here today as well. We are very happy to do some work with our friends at OIT.

JS: We'd like to thank Marc Pfeiffer for spending a few minutes with us today here on TechNJ. Up next, I'm talking with Robert McQueen, the Chief Information Officer of the City of Princeton. Thank you for joining us today

RM: No problem, thank you for having me.

JS: So you actually had a talk here at the NJ Digital Summit earlier today, and it was on Reinventing the Customer Experience?

RM: Absolutely!

JS: Can you tell us a little bit about that?

RM: Sure, one of the things that, you know, I was said in my session today, couple years ago we had a strategic plan done of the IT department, and one of the things that came back was the word "customer". I never really looked at my co-workers as customers, but that is exactly who they are. Our co-workers that submit request for us or need stuff done are our customers, just like that could change based on where you are, like my tax collector, their customers going to be the taxpayers, so it's a different experience based on what area you're working in.

JS: So it's a paradigm shift. You know, if I'm providing a service, if I'm the tax collector, if I'm working the counter somewhere, I'm working with the public but I'm working with the customer. I'm providing a good customer experience.

RM: Exactly, and my job is to make their job easier. What can I do better, or what we can do better to make their job easier.

JS: So what kind of things can we do to make our jobs easier to improve that customer experience?

RM: Well, I think it's a unique experience because as the CIO I feel that, you know, not only are my co-workers customers, but so are the taxpayers, so are the residents, so are the businesses in town. So one of the things that I have always felt is that "what can I do to make it easier for them do business with the town"? For instance, we launched an online form platform, so people don't need to take off to come in or to pick up a form or a permit. They are able to fill out these forms online and then submit them so that we can route them internally. With that said, is we've

had requests for birth certificates come in from the hospital because the hospital was located within Princeton, so our registrar processes the birth certificates. Twenty four hours of putting that form live we had a request from South Africa. We were able to process that request within a day's time, and put the birth certificate out into the mail to them, so it cut a three to four-week process down to about a week for those who live outside of the country.

JS: So we're doing away with the sitting in the waiting rooms, waiting for your number, dealing with a clerk whose been there for 12 hours. And we're just streamlining it, were using technology to streamline the customer experience?

RM: Absolutely. It's really where we need to go, because, you know, I know most people now have double income households. Both the husband and wife work. They're not able to go to the municipal building to pick up something during the day, so that's my process is "what can we do to make it better?" I mean, I don't like having to go to my municipal building to get a pet license every January because I got to renew my dog license. Why can't I put that online? Why can't I pay and get it right back immediately? And that's what we're looking to do.

JS: That's excellent, that's amazing! I notice your shirt says GMIS. Can you explain to me a little bit what GMIS is?

RM: Sure GMIS is a group of IT professionals, government IT professionals in K through 12. We have a New Jersey chapter here, and we collaborate with each other, we provide conferences as well. We do a conference every year, education conference, and we also are part of an International, GMIS International, which I happen to serve on the board as well, and so we have connections all over the country. So, it's nice because if we're looking at new software or we have a problem and we need an answer, we can put it out on a listserve and we can get answers back within minutes helping us troubleshoot a problem or get honest recommendations on whether software is good or hardware's good or what you're using for this for that platform.

JS: Alright, so a good collaborative group to get...

RM: Absolutely.

JS: ...Solutions from fellow IT Professionals - excellent! Is there anything here at the Digital Summit that you've learned personally? Is there any particular speaker you've liked, apart from your personal speech obviously? Obviously you are the best...

RM: No, I would say that our keynote this morning was absolutely... Mr. Lee was great. He brought up a good point and made me think we've got to learn. So, you know, we're never too old to learn, or learn new things. And I think we get so set in her mind that... and so set in our ways that we don't tend to sit down and think that, you know what, what can I pick up, what can

I learn to make things better for myself or others. And I think that that was a phenomenal keynote this morning, really enjoyed it.

JS: Rob, thank you for joining us here on TechNJ. Appreciate you taking time out of your schedule today to come and talk with us, and kind of expound what you told everybody here at your talk. I hope you enjoy the rest of the digital summit.

RM: Thank you!

JS: Our final guest for this episode of Samuel Conn, President and CEO of NJEdge. Thank you for joining us today here at the NJ Digital Summit.

SC: Well thank you, I'm delighted to be here. It's an exciting event this year!

JS: So you're the President and CEO of NJEdge.net. What exactly is NJEdge.net?

SC: Another way to think about NJEdge is that it's a 501c3 corporation here in New Jersey, and essentially we're the state of New Jersey research and education network. Our core competency is that we have a high-performance optical network that spans across the state of New Jersey, and we service principally higher education institutions, but we're also into healthcare and government and K-12.

JS: So, are you providing internet services, or is this more of a interconnected network like for colleges to colleges, or colleges to research institutions?

SC: Well, it's that and it's even more. We do provide internet services, so you can connect through the internet to us. You can also connect to Internet2, which is the next generation of internet, which is a worldwide network that brings together researchers and educators and other types of opportunities as well. And, aside from our network, we offer what we call above net services which are things like security, mitigation from distributed denial-of-service attacks. We try to keep everybody safe and all of that, and then we also have applications that service a lot of video-type applications so media management, digital media management systems, things like that.

JS: Can you here today at the NJ Digital Summit, you're giving a talk about cloud ecosystems. Can you tell us a little bit about that? What the talk will be about?

SC: Yeah, I actually have done the talk, so I was... a little bit earlier today. Well attended, I must say, standing-room-only, so there's a lot of interest in cloud computing. And we talked about the cloud ecosystem, which is sort of 2 components. We talked about first, what cloud computing is and what, you know, the sort of mysterious concept of the cloud is, and how it can benefit institutions in the design of their enterprise information systems architectures. So, a lot of CIOs and IT folks are very interested in what it can do. And, we put it in the context of an

ecosystem, meaning that technology has become so pervasive now, it's just everywhere, there's no one who is immune from the impact of technology these days, and so it really is a socio-technical science. Our central point, one of the central points of the day was that technology, in and of itself, doesn't really do much. It's how you use it that is its value. So the ecosystem concept is... is really about how people use technology, and have a healthy IT ecosystem.

JS: So, you're using, if I understand correctly, the ecosystem model kind of to explain how the cloud could be used for all of us, from our cell phones to our servers, as a service type things and accept it...

SC: Yeah, yeah, exactly. Yeah, that's what cloud computing is all about is providing services. We have software-as-a-service, we have platform-as-a-service, now we have infrastructure-as-a-service. So, literally, as CIOs and other IT professionals are thinking about how they can divest themselves a very difficult complex expensive things like data centers and call centers, the cloud architecture offers very convenient, scalable, on-demand services that can meet those needs. So, it's really a generational shift in the computing paradigms. It's the fifth major shift that we had since mainframe computing in the architectural design of IT systems.

JS: Apart from your talks and your participation in the NJ Digital Summit, is there anything here that you're personally interested in? Any talks that you're going to go to and highlight for yourself?

SC: Well I am, I'm certainly interested in the talks on collaboration. I think that's important, it's always good when people come together and talk. I'm seeing a lot of that at this year's digital summit. I think it's, you know, it's a well-run, well-organized summit where people are collaborating and learning and talking together. I'm also interested in some of the security sessions, and the talks that are going on there as well. So, there's a lot of highly relevant content at this year's summit.

JS: Thank you very much to all of our guests on this special episode of TechNJ. Tune in next time to hear even more from the 2017 New Jersey Digital Government Summit. If you have any questions or suggestions for us here at TechNJ, please shoot us an email to podcast@tech.nj.gov. Also, please check out our website at tech.nj.gov. From all of us here at TechNJ, I'm John Silvestri, thanks for listening. We'll catch you next time.