

Trend 1: Stack Strategically

Kyle Michl [00:00:09] In Trend One: Stack Strategically, we examine the role of the technology architecture in enabling agencies to meet mission needs and be positioned to meet the next set of unexpected changes in our world. The challenge for federal agencies is transforming decades of technology debt into technology wealth. This requires a long-term commitment to digital decoupling marked by smart investments and agile execution. In today's fast paced world, agencies need to be built for change. At its core, they need a modern, cloud-based architecture that is designed to be flexible. However, they also need an operating model and skill sets that allow them to capitalize on this adaptability. Joining me for this important conversation is Sara Abiusi, Accenture Federal Services' Quality and Risk Lead. Welcome Sara.

Sara Abiusi [00:00:58] Hey, Kyle, how are you?

Kyle Michl [00:00:59] So you know what - a question, Sara, that I think is often out there, which is we talk about technology evolving faster and faster. So how do you really architect for this unknown future?

Sara Abiusi [00:01:10] Yeah, Kyle, that's a really good question. It's never really easy, but there are some central building blocks to consider. The first is leverage the cloud, but not only for infrastructure, but for its platform capabilities and assets and make your data part of your assets, whether it be cataloging and architecting master data or enterprise data strategies. The second is keep extensibility in line. You have to build with the idea that every release has to have some technical asset development and whether it's looking at the new service that comes with the CSP or an evolving option for open source, bringing those pieces in incrementally has to be part of your roadmap and your release plan.

Sara Abiusi [00:01:53] Another thing is the idea of Big Bang implementations is really starting to become a thing of the past. They're highly risky, and essentially you have all of these things that you're relying on one big moment in time to figure out. So while we might think that sometimes it's harder to do a less big bang, it is incredibly more - least risky for us in the future. So what does that mean? It means decoupling your application, loosely decoupling as we used before, and then also thinking about something called living systems. So the idea is that you have the old, the old legacy up running and then you start to bring up incrementally the new system and you basically have data integrations that behind the scenes are essentially keeping them in sync. And the beauty of that really is that you can see the application, the new application coming up with a lot less risk. You know that the data is good. You can compare the two data sources as they come up individually and you really have something to essentially leverage and you get an ability to test a few things out before it goes big bang. And the last thing is something that sort of underpins everything we've talked about is agile methodology, continuous integration and dev ops. Without those things built in from the beginning, you're always playing catch up. So these things are critical to

not only being quicker, but also to let you evolve as you continue to build out new applications and continue to modernize your old ones.

Kyle Michl [00:03:21] A lot there, Sara. I think some really great points. Can you explain a bit on how technical wealth and technical debt relate to one another in the way that we're using them?

Sara Abiusi [00:03:29] Yeah, so I love the idea of this term called technical wealth. It actually brings me back to being a kid where you basically talking about your bank account, first learning about interest and how to actually put your money away. So technical wealth is this idea of continuously building out your infrastructure, your application architecture and your data components. And again, when I go back to feeling like a kid and I think about my bank account. You know each sprint, I will add a little bit into the bank account, I add that little bit of technical wealth as I build incrementally. So I set a sound time to build out those new capabilities or build them out in new ways to integrate with them. And as I basically put them in the bank account, I actually generate interest. So therefore I can use it for other things and I essentially can be there faster to respond. So the interest compounds in the way that I build out capabilities. I can go back to my account later and see what I have to leverage with my interest. And I can quickly respond to the mission demands, which is really what we want. We want to be able to have this idea of these libraries, of APIs, of data architectures and cloud architecture components there so that when we need them, we can quickly respond and get to where we need to go.

Kyle Michl [00:04:42] You know, one question that I think is maybe warrants a little further dove into is we've both been talking about cloud a little bit today, and cloud has been around for a while. So how should federal I.T. leaders really view the cloud both today and as we look forward?

Sara Abiusi [00:04:57] Kyle, that's a great question. I mean, cloud is ubiquitous, it's not something of the past. It's something of essentially the present and the future, and it's always going to be there. And you have to think about it with many layers: infrastructure, platform services, AI, the edge. And one of the other things I think that is becoming more ubiquitous is the idea of a more complex environment of multiple CSPs. So you're not necessarily going to only have one cloud service provider in the future. You have to think about multiple and how you might think about how do you leverage them for different missions or actually use them as sort of a backup recovery plus your application space. So the idea of multiple CSPs, I think, is also becoming something that we're seeing in a lot more federal agencies as well.

Kyle Michl [00:05:42] Sara, thanks so much for joining us today and for the great discussion on this topic.