FEDERAL TECH PODCAST

EP114 Improving Digital Adoption for Secure Federal Technology

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John Gilroy here. In the next 30 minutes, you will learn how Google can help federal agencies reach their goals hit the music, Manny.

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Welcome to the federal tech podcast where industry leaders share insights on innovation for the focus on reducing cost and improving security for federal technology. If you like the federal tech podcast, please support us by giving us a rating and review on Apple podcast.

00:36
Welcome to the federal tech podcast. My name is John Gilroy and I will be your moderator. Our guest today is Lee Palmer, Vice President Google public sector. Everybody knows about Google. What we're trying to do today is expand on how Google can help you reach your goals as a federal agency and how other startup companies can use Google and leverage that power there in order to help their currencies reach their annual goals or quotas, cybersecurity, expansion and everything else. So leap before we jump in here, give me me a 30 seconds and your background. And we'll start talking cloud. Hi, John,

01:10
thanks so much for having me here. Today. My background, I spent 30 years in the integrator community. So I spent 30 years building solutions with other people's technology. And now I'm a Google and it's like a kid in the candy store. Google is such a company, there's so much tech, right. So I I'm really having a good time figuring out, you know, what the what the most important tech to deliver to federal customers are. And what I've really learned here is that what the integrators have is that deep mission understanding of our customers and our community, and technology customers have, you know, deep innovation and deep tech. And the magic is really about bringing the two together. So I'm here to bring those two together. We know

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I do a bunch of podcasts yesterday, I interviewed a company that is a startup in Arlington, Virginia, and they have a contract with NASA, and they produce a digital twin. In other words, before you send something up into space, you probably want to make sure it's going to interact with things properly in space. And so they have digital twins to test that out what that does, it saves NASA a lot of money because they can test out the hardware ahead of time in a virtual environment. Now, when I asked him, I said, Well, how did you folks do this? 10 years ago, he said, Well, 10 years ago, it was done on desktops, it just really wasn't done. But now what the cloud affords him is to use the compute in the cloud, to enable NASA to save money. And so really,

that's what we're talking about is just new tools that can help agencies save money. And I think that's so exciting. Yeah,

02:36

I think when we were talking before the podcast, well, first of all, you're talking about it, a company that is also related to my alma mater. So go Virginia Tech. But we're also talking a little bit about cloud native, right, and what it means to be cloud native. And depending on who you ask, I think you get a lot of different different definitions for what it means. But basically, at the end of the day, what it means is, you know, an approach to building and running an application that allows you to take full advantage of the cloud, right. And so what that means for our federal customers, in order to be cloud native, you can't just do things the way you've always done them. So an example that I really like, that I really like to use is the electric car revolution, right? If you are going to make cars more gas efficient, there's things you can do, like, you know, my car, you know, turns off at a stoplight and things like that. But if you want to have a car, not use any gas at all, you have to reimagine what a car looks like, what a car feels like how a car drives how you're going to power a car. So that's what you know, really, Tesla did with the electric cars. So if you think about that, for our federal government, if you think about building applications, the old school way, like when I was coming, come in through client server, you know, architectures and you know, single log ons, these monolithic silos, and you try to just move those to the cloud, you're not going to get full advantage of what the cloud has to offer. So cloud native, or cloud native architectures are like a bunch of building blocks, right? A bunch of Lego bricks, that allow you to do things rapidly at speed, agility scale from a software development perspective. And, you know, it allows companies who may not have the resources for an on prem data center or tons of compute, to be able to take those building blocks, put them in the cloud, and leverage the power of compute, storage, artificial intelligence, you know, whatever it may be, you know, across a broader across a broader scale. So I'm super excited about helping our federal customers reimagine how to take how they do business today and put it in a cloud environment.

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Yeah, the old terminology is lifted shift, and then we might move to the cloud. Well, that doesn't work. I mean, if you can leverage what's going on, you have to be cloud native. Okay, we got a bunch of clouds out there. And the phrase that pays is hybrid cloud, so it's not a hybrid clouds. Now there are some who argue that the hybrid clouds just adds to the complexity. And the complexity is the enemy of completion success. So, so what about the hybrid cloud? And and the complexity at that edge? Is those challenges been overcome? Or how does Google justice,

05:12

I don't think that hybrid clouds bring more complexity, I think hybrid clouds are needed, right. So you don't want to have just a, you know, a single cloud provider, or there may be cases where you don't want to have all your data in the cloud, you want to have some data in the cloud and some data, you know, on prem in your own in your own data center. So Google is very committed to multi cloud strategies and multi cloud hybrid cloud solutions. We have a long history in sharing innovation with the open source community, we're very, you know, we're very committed to making our tools open so that they can be shared. But what I think is really important when you start thinking about a cloud strategy is the partners, right and the partner network. So the best way to

reduce complexity and redundancy is to find the right partners, because we find our customers aren't just buying technology. They're buying an approach and approach to service installation and approach to service delivery. And you need partners who can really help you think through this. Recently, I think we were just talking about our Google Public Sector forum, we welcome to new partners to our to our, our expanding ecosystem with Deloitte and Accenture federal services, just examples of partners who can help folks think through, you know, what a hybrid cloud strategy and where to process what is the best environment for processing data on prem off prem, which cloud you want to use?

06:36

Yeah, the public sector, I didn't make it to that event, I think it was in October of this year. But I love it, because you sit in the back of the room, and then someone will come up and say, Well, I had the screwdriver. And then I used it to prop up in a window. There's, there's so many tools that Google has, I can't even I can't list them. But you'll see a creative way that someone's used one of your tools that Well, I didn't know, I could use this for that or so I think that's the most important part is that Google is just so well known and so ubiquitous has got so much going on a leader Kubernetes I mean, tense, I mean, so many different areas of technologists. It's awful hard to just okay, no need to sit down. And just just one line, a piece of paper. Just tell me what one of the tools that are federal. And that's what these public sectors forum, do. They they show listen. So I use this tool. I think some people just dazzled I mean, when you launched public sector a couple of years ago, it was just as so much as almost a firehose of information from Google, wasn't it? Yeah, well, so

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what I really like about our launch of public sector, and we're just, you know, our entity was stood up just a little over a year ago, so 14 months ago, and, and what this has allowed us to do, first of all, it's doubled down Google's commitment to this market, right? We are here, we are committed, we are really eager to bring to bring this technology forward either directly to federal customers, or, or more importantly, through partners. But what the entity has allowed us to do is it's the best of both worlds. So we have an independent entity and Google public sector with an independent board of directors, which allows us to be isolated when we need to be in order to do business with the federal government. However, we're still deeply integrated with the rest of Google and in most importantly, Google engineering, right to bring that best magic forward. And you're absolutely right, there are so many tools in the toolbox, if you will, that you don't want to stifle the creativity of how to use these tools and what you can do with them. Right, which is why it shouldn't be all about Google, it should be about the network and the ecosystems and learning from each other, and what our customers are doing what our partners are doing. Because they're often going to find, you know, more creative, innovative solutions using our technology than then then we can, you know, just sitting here envisioning, you know, what the art of the possible is,

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while the federal government is no stranger to the cloud, about 10 years ago, they came up with some recommendations called FedRAMP, and sat on a shelf for 10 years, and then all of a sudden, boom, whoa, what's going on here? We've had some changes. And so perhaps you can take a few minutes, and you've got a long view of what's going on. You were you're active in the government before FedRAMP. Before FedRAMP

was cool, and now that it's changing and so tell us about these new changes and and what do you think they're what are they trying to adapt to something and what's going on with these changes? Yeah, so

09:18

for for listeners, I want to be recently published a new draft guidance on on changes to to FedRAMP, which is basically the government wide program that standardizes and approach to security, authorized authorization monitoring, you know, security in in federal it not just in the cloud, but in federal IT and in products we use in federal it. What's really exciting about this, about this new memo is that they are rethinking and modernizing the way they approach security. So, what I what I mean by that is that the old way of approaching security is this, this idea of you know, Castle and moat if you will, Right, so we're just going to isolate everything off, we're going to have our own instantiation of things, and we're going to lock it down so no one can get in. And, you know, we've seen that that doesn't always work, we've seen, you know, lots of lots of press, you know about recent hacks and breaches and things that have happened, what the government is saying now, is that, instead of this, you know, air gapped solution to how we're going to go after security, we're going to allow us to to do security in a logical fashion. And instead, that means through encryption, or through you know, making sure data at rest is encrypted thinking about the data, right, at the end of the day, what we're protecting is the data. And because of that, we're what Google has done is we've gone after going through the FedRAMP certification process for our full commercial cloud. And what that means is that people who want to use Google technology can use our commercial cloud and have the full power computational power, compute power, all the things we were talking about about being cloud native in our commercial instantiation of the Google Cloud, as opposed to, you know, an isolated, you know, an isolated air gapped instantiation, where you have to think about how much more compute you're going to have, how to refactor tools to be in that isolated environment, etc. So really exciting to see the government, expanding the aperture, and, you know, changing the way they think about going after security.

11:23

I can say the obvious. I mean, 10 years ago, no one dreamed of COVID, it wasn't like it was on the horizon. No one thought about it. And, and I think I've seen this over the years is they solve a problem that was presented to them 10 years ago, and it seemed to work. Okay, now, COVID has come in. And the amount of innovation that's come up in the last 18 months, has been, you know, we talked about just from Google on all this innovation, and so, so they have to adapt to that, and I think allow federal agencies to access this software as a service with more flexibility than before, because 10 years ago, Google Public Sector did exist, I mean, five years. And so all of a sudden, they have to things have changed here, John, to sit down and maybe adapt to this. So I view it as adaptation more than anything else, nothing

12:06

like a good crisis to force force you to innovate to write. So it really accelerated our digital transformation. And

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it does force it. So in the business, there are things called Gulf clouds. And so what position has this suggestion, this draft taken on golf clubs? Yeah,

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well, so it, it encouraged, it discourages the use of golf cloud in this draft, and it encourages the use of more commercially available systems, right, assuming that you have all the encryption and you know, data protection in those in those systems. And the reason for that is, you know, just as I had stated before, when you have a separate instantiation, then what is also said in the business, commercial parody is sometimes very difficult, right? Because that new innovation, whether it's AI tools, or you know, something is getting built on the commercial platform first. And then you often have to refactor that for that air gapped, you know, or that that, you know, physically separated solution, which causes a delay, right, and also that physically separated solution, just because you don't, you know, if you're constraining it to a certain region, or a certain, you know, area, then you don't necessarily have the compute compute power that is needed to run some of that those more calm, highly complex innovations, such as AI that are coming out. So when you think about, you know, going after certifying your commercial cloud, you have that global compute, or you can have it be just, you know, in a region if needed, right, but you're looking at things from a, you know, faster innovation cycle, a more a more appropriate computing computational cycle, especially as we enter worlds like AI,

13:47

I live in a small town, and we have two grocery stores, I frequent both, and I go for best price and best value and a wide range of selection. And they respond, believe it or not, and, and this is a teeny tiny town I live in, however, there are federal agencies are spending big dollars on cloud. And I think what can happen is that if an agency is locked into one vendor, Schumann's being humans, they can take advantage of that. And sometimes, they may be paying too much. So I think what hybrid cloud allows is that an agency can go knock on someone else's door and go, I don't know, what about this, and all of a sudden, gets the American competitive economy where things get better. And so I think that's when I asked you the hybrid cloud earlier, I was thinking about the technical, but this is just a business. No, my daughter has a master's degree in finance. So she's really down to Okay, let's talk about the money. So this is really what is it's like, it keeps everyone honest, doesn't it?

14:42

Yeah. I mean, you don't you don't want vendor lock in, right? You don't want vendor lock in with a with a, you know, individual cloud or with an individual software component, or whatever it may be. So multi cloud and hybrid cloud is is absolutely the way to go. And Google is very committed to it. One of the things that we've been really talking to our federal customers about is, is demanding it. Right. So I mentioned that we have a long history in sharing innovation with a open source committee there with the open source community there is, there is a way to leverage multiple clouds. So for example, Wells Fargo, you know, Google and Microsoft are working together, Wells Fargo uses both a Google and Microsoft solution Maderna, Amazon and Google are working together, right Maderna uses both Amazon and Google solution, the data may sit in Amazon, the data analysis may be done by Google technology, right, for example, with the with the Maderna case, one of the you know, conversations around the Gulf clouds we were having before is that sometimes those physically separated clouds make it harder to have those interoperable tools across, but we have to figure out a way, you know, in the if we can do it in the commercial side, we can certainly do it in the federal side. Right and, and use each vendors technology where their strengths lie, right. So you don't have to be all in on one, which can, as you just mentioned with your grocery store, example, increased price,

16:06
and I was all in in preparing for this interview. I got up early this morning. And I do have here and there and I use Google Trends every day, I went to Google Trends, typed in some words. And I went to the Google Public Sector blog and read a couple of blogs about some of these exact issues here. And so I think our listeners might want to visit there. If they're listening to this, and there's snow on the ground, and they want to learn more. That's a really good place to start. Because a lot of things we're discussing today, maybe some of the lessons learned at your summit there. They're expanded in this blog, aren't they?

16:37
Yes, everything. Everything we talked about is is in the blog. I think I have not I did not prepare that for that today. And I didn't go read it today. But yes, there's a lot of information there. And, you know, one of the things we didn't talk about is, is AI and how rapidly the world is changing around AI. And I know we have a lot of that in our blog as well.

16:58
Well, our mutual friend David Linthicum, he says that in his latest book, AI and ML are old concepts with new life, thanks to cloud computing. a thank you note to Lee dear Lee Trank, this satellite to a digital twin mean, this is exactly the conversation I had with David two months ago. He said, You know, he also said, you know, John, somebody's cup. Companies are overcharging for this. So you got to keep people honest. It's like, yes, yes, it's good. Yes, sir. But, you know, go to the Harris Teeter as well. That's the lessons from today's interview?

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Well, I do I mean, the promise of AI is real, right. And we are seeing, you know, you mentioned COVID. And a lot of acceleration, we've seen just in things like using AI to process unemployment claims to get in from, you know, to get money in our constituents hands faster. I mean, there's, there's things that we're going to be able to do with it that we haven't even imagined. But at the end of the day, I think what David really meant is that it starts with data, right? And the only way to process massive amounts of data securely is in the cloud, you just cannot do it without access to cloud technology. So we call it like aI fundamentals or AI preparation, right? You need to, you need to get to the cloud, right? Getting to the cloud makes you more secure, you need to be able to unlock your data. So imagine if you're a federal agency, and you can do Google search on just the data that's in your agency that nobody else can see just, you know, the IRS only searching data within the IRS and not having to say what was that document from 2000, I don't remember that document from 2000. Just being able to unleash some tools to get access and unlock all that data and then run the AI ml tools on top of it to make sense of it. I really think it's going to accelerate what the art of the possible is for our federal workforce. And for our partners who help the federal workforce do things like save NASA money by building digital twins, the art

19:02
of the possible that's a t shirt for your next conference, I'm just saying it's a pretty good phrase. I've given a talk to a bunch of people next week, and I try to come to you to be snappy lines and you know, read punchy and, and so one of my points is in order to be terrific. He got to be specific. So I'm going to challenge you Lee to be

terrific. And I'm reading about a couple of these pools in the Google toolbag and one is called Code AI. And so what this can allow coders to do is that there's this mysterious world out there. But all of a sudden, this is like a this is a practical application for a problem that developers have. And so maybe can you expand on that a little bit? How that can maybe help? Yeah, so we've got,

19:42

yeah, we've taken our AI tools. And we've made some very specific industry verticals in those tools. So Cody is one of the tools or code or code AI, which allows you to automatically generate code, and I don't I don't remember the exact specific cuz of how accurate it is, but it is extremely accurate much to our developers, Google engineers chagrin sometimes. So what that what that basically does is, you know, somebody like me who hasn't written code in a really long time, yeah, unleashed a tool like that and say, write me a piece of code that does, you know, X, like, you know, searches through the entire database of a federal IT organization and returns me a result, right, you can, you can automatically have an AI tool do that for you. We've also done some very specific industry verticals around health around security. So one of the things you'll also see in our blog is the purchase purchase of Mandiant, which is a security firm that we purchased a year ago. So we've been taking many Mandiant analysts, and pairing them with AI tools around security, right, so that what we found is that it allows those analysts to be much more productive, right, you can run those tools loose on something that may be happening on your network, and then use the human brain for the things that are most important. Are the anomalies, anomalies that are, you know, most most signify where an attack may be happening as an example. So we've been we've been rapidly incorporating, you know, feedback and getting super specific around those tools. So it's not just a fun, a fun chat with Bard, which is our you know, AI chat tool where you can ask it things like are the are the capitals going to win next week. And fun tools like that they did not win on Friday, it was not a good game. But you know, really specific for an industry around coding or health care or security, or things that our customers really

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think at this interview is brought up. So I've known mandate since we started and I remember him in Alexandria and whole evolution of the company, but I don't think many people even know that I think that's kind of like a little secret. I don't know if that's I haven't seen any skywriting with that or having the front page of the Washington Post if people read newspapers anymore, but I think that's a that's a key addition. I think it's almost like maybe your hockey team the capital adding a key player this is really meant he has a very strong reputation as community and bringing in someone like that is like bringing in, in the baseball world. Juan Soto are a really a strong, recognized player that has a lot of the trust that boy, I don't know, if he even grow trust anymore. Trust is the most difficult commodity to habit. Mandiant has it. And so I think that's a it's a real good addition. And I'll have to use that next time. I'm sitting with some coffees. Hey, here's here's something chump. Mandiant Whoa, I didn't know that. I was always surprised. Yeah, it's always surprised to know that LinkedIn is owned by Microsoft, that's a little fun fact that most people don't know. So leave. Not your first time at the rodeo. I've seen a lot of changes. We've seen the changes in FedRAMP in the last 10 years. So where do you see this whole technology heading? Do you think there's going to be a AI apocalypse and enter the world as we know it? Is it going to be managed? So where do you see it going?

23:00

Yeah, I definitely am not in the AI. Apocalypse realm. However, I do strongly believe that we need to AI needs to be used responsibly, right. And we have had lots of conversations in our, in our AI principles and AI ethics are out there on the web, for all to see around responsible use of the technology, I don't think the technology is going to replace humans, I think the technology is going to allow us to be a lot more efficient, a lot more effective, and allowed humans to use what they're best at, which is, you know, reasoning and, you know, thinking through, you know, a very, very difficult problem and get those mundane kind of, you know, tasks, you know, off the plate so that, you know, an AI, you know, or our machine learning can do those mundane tasks and let humans do what they're what they're best at. I really think also that we have yet to see what the art of possible is to use that phrase again. And so it's going to be the combination of the technology providers, the partners, the mission owners, to really figure out, you know, what, what the best use of the technology is, and, and how to make sure that we're using it responsibly.

24:20
I'm trying to come up with a simple metaphor, I have a three year old grandson. And if you put him in a room with a couple other kids and all different safety boxes, and toys and animals, they would come up with come up with the silliest things. This is a transformer and this is the nozzle. And so I think if Google can provide partners and people are interested to helping solve federal problems with the tools, they come up with things as almost like leaves the leaves the toy directory and puts the toys in the room and say, this can do this. Nobody can do this. We can do this with storage problem and then come up with the products. So that's, I think that's the key with, especially with young people come up with creative solutions, not the three year olds, maybe the 33 year olds coming up with creative solutions and and if We can come up with ways to save money for the federal government make it more secure than, hey, we've done something today, Holly. Yes.

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And I think make people's jobs more enjoyable if they don't have to do all the mundane tasks. So yeah, you can just point something at your email box and say, what are the three meals? I need to respond to you today? Yeah,

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I do it randomly, so randomly, or alphabetical order? Well, we're gonna have to end the conversation if you haven't listened to fiddle tech podcast. Our guest today was Lee Palmer, Vice President Google bought the sector. Thanks, Lee. Thank

25:31
you so much, John.

25:34
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