

# Sabra Horne Creating Innovation Navigators

[00:00:36] **Eric Lofgren:** . I'm pleased to be speaking with Sabra Horne at BMN T's office in Rosslyn. Sabra spent a career in cyber and intelligence communities serving as the Innovation Hub chief at the Cybersecurity and Infrastructure Security Agency, the deputy for information sharing and collaboration at the National Security Agency, an advisor to the chief of staff for the director of national Intelligence.

[00:00:57] Last year, Sabre joined BMTs and Executive in Residence and she has recently released a new book, creating Innovation Navigators, achieving Mission Through Innovation, and that's what we're here to talk about today. Sabra, thanks for joining me on Acquisition Talk.

[00:01:10] **Sabra Horne:** Thanks for having me, Eric. Glad to be here.

[00:01:13] **Eric Lofgren:** It's a tremendous book, and I definitely recommend people, pick it up and take a look through it. I, felt like as I was going through it, I was like living the bm n t kind of philosophy.

[00:01:22] But one thing that kind of struck me in the report you actually like looked at and started characterizing over 300 of these federal innovation efforts. So can you just just talk to me a little bit about those efforts and what you learned in that research.

[00:01:34] **Sabra Horne:** Absolutely, Eric. So I'm glad you took a look at the book. It was a lot of fun to write it. It was the book that actually I wish I had been handed on the first day when I was asked. Stand up something at CISA that might help us with an innovation. I had no guidance just like any other government challenge, right?

[00:01:53] We need to do something new. Go figure it out. So I went and did a lot of research. The first thing I did was talk to everyone I could within DHS who was doing anything related to innovation. I quickly learned through both reading and talking to folks that d o d was a leader in so many ways in government innovation.

[00:02:12] So connected with a lot of folks there, and also found people all throughout the government that were doing really creative, innovative things. Whether it was specifically organizations that were called innovation or that they were trying to bring innovation to government. One thing that I did learn was that d o D is very focused on the commercial technology aspect of innovation, but having come from the intelligence community and having come from sisa, which has quite a different mission set, there are many ways to do innovation. it's not just about emerging technologies and bringing in commercial technology into the government.

[00:02:53] There are a lot of different ways we can go about bringing in innovation, whether it is through changing policy, changing strategy, changing organizational structure, changing communications, changing processes. We need to look at all of these ways , in terms of bringing about innovation and be open to all of those options.

[00:03:13] So for instance, CISA's Mission is basically to share cyber threat information with the critical infrastructure owners and operators. There are 4.7 million of them around the country. We spend a lot of time sharing information, and so therefore, we're not putting widgets into various places around the country, around the globe, which is, as we know, so much of the role that D O D plays in some ways.

[00:03:42] So we looked to other things that helped us bring about innovation. One of the biggest stumbling blocks within CISO was being able to bring in great talent from the outside more quickly and effectively so that we could get people starting to work on. As soon as possible. Therefore, one of the things that we did was work with the head of security and the head of HR in order to change our security policy so that we could diminish the time of bringing in people and getting them through the clearance and the suitability process, **reducing that time from about eight months to about six weeks.**

[00:04:18] So it made a huge difference. I would also say we salute d o d for having so very many innovation efforts. There are over a hundred of them within d o d and you can look at so many different examples of great ways that they've gone about doing their work. I think though, that we have to really think about innovation in a couple of ways.

[00:04:39] Are we utiliz. People within the government to do mission focused work. Are we bringing people from the outside in to help us do mission focused work? So both of those have advantages in bringing innovation to what it is that we're trying to accomplish for mission. But you really are drawing upon

different skill sets and you have to hire differently and you have to contract differently in order to be able to do that.

[00:05:06] And so understanding what the agency's mission is in critical in being able to develop the right way to utilize innovation to solve your mission problems.

[00:05:15] **Eric Lofgren:** Maybe it scares some folks in D O D to hear that. Oh, do OD is actually the shining light in this respect, cuz sometimes we look over and we.

[00:05:23] Maybe some of the agents, the other agencies are doing this way better than us, but you're telling us that do, because usually the way DOD goes, the rest go is that kind of how you're seeing it?

[00:05:32] **Sabra Horne:** I would say just like everything in government, right? We are gonna see advantages and disadvantages to everything.

[00:05:39] And we can look in so many places across the US government to include nasa, right? What incredible Practices they've had since their very standup. And we often all talk about a moonshot, NASA actually did do a moonshot and they got it right. So good for them. I had the grand privilege and honor to serve at the National Security Agency for five years.

[00:06:03] And I will say, just the sheer raw technical talent that exists there, it is simply they approach their work as innovation just inherently in so many ways.

[00:06:14] **Eric Lofgren:** . one of the things I thought was really interesting on the you brought eight months down to six weeks to get the right people. And like these people can think of themselves as like entrepreneurs, or entrepreneurs or however you wanna say it, within government.

[00:06:27] , one of the challenges always seems to be the government loves metrics. We run on metrics. And then you have good hearts law, which is like any metric, becomes over optimized. And then it becomes a bad metric, right? Because you're always like abstracting away from what, what actually matters.

[00:06:41] , that's just what we seem to deal with. It's just like cost, schedule, technical, that's my mission. I don't care about these other things. , how do you get someone to get out of that because they're being actually measured on those metrics, right? And now you're saying, wait, we want to do some innovation and

it's probably not built into the metrics or I need to think of different metrics or whatever it might be. How

[00:07:00] **Sabra Horne:** do you think about that?

[00:07:01] That's right. Wonderfully in government, we know we have very rich and robust systems of evaluating people, and so therefore, it's not only about what metrics are we trying to keep track of and achieve, but what are people being incentivized to do?

[00:07:17] And so oftentimes I think it's an easier remedy to be able to tweak performance evaluations and performance expectations for individuals who are in key places where they could make a big difference in our ability to be innovative. If we could build in, I. To the individual such that we recognize that your attention to bringing in new ways of doing things, and your ability to not only understand and utilize those ways of acting differently are important, but we want to see that at the end of the year.

[00:07:52] . I think so often when you are engaged in simply put emergency events, which is a lot of the time that I've spent in my government career addressing huge challenges like the release of classified information by Edward Snowden or the discovery of Russian interference into the 2016 presidential elections when you are in the heat of an emergency, what we call an event, it's very hard to figure out what to do, how to do it, how to come together to be most effective. And metrics simply are very difficult to think about when you are in that emergency mode. And so I like to think of innovation as measuring innovation in the same type of way as how you measure your progress with an event, which is you don't know what the measures of success look like because you're trying different things and it's important to be able to fail.

[00:09:00] Sometimes you're try if you're not trying different things, and if you're not failing, sometimes if you're not accepting failure sometimes. You haven't really pushed yourself far enough. We can't be successful at everything, but we know as good stewards for taxpayer dollars, we must not fail.

[00:09:19] We cannot fail. Those two things are at odds. I think it would be really important for us across the government to adopt more acceptance of where failure is going to be acceptable and what measure of failure we can have in order to learn effectively and then to keep moving forward. Only when you're halfway down the path can you start to see what success might look like and therefore how you can measure that.

[00:09:47] **Eric Lofgren:** One of the things uh, we often hear is like black programs, they can actually do this faster. Maybe they're a little bit better in that respects in terms of you can maybe fail or maybe try new things or pivot. Is that true? Is that, was that your experience in like the Intel community or do you think it was pretty like, here's the program you go execute?

[00:10:07] **Sabra Horne:** I will say again, I had the grand honor of surfing this country in the intelligence community, and I am proud to say that **when mission calls people deliver** and so therefore, you are not looking at processes in order to execute. Sometimes you've, you are facing a challenge you've never faced before, such as with the release of information by Edward Snowden.

[00:10:34] How are you going to put together a plan of attack? How are you going to know the full team of people that you need to execute to handle that emergency? It was only over a number of weeks where we were able to figure out exactly what needed to be accomplished and how it needed to be accomplished.

[00:10:51] So I salute the intelligence community and the professionals there who are so creative and able to focus on the mission at hand and solve the problems.

[00:11:03] **Eric Lofgren:** you know, one of the things is I often see , there's some flexibility specifically on the operational side and we see that everyone knows alright, you're not gonna be able to predict that this threat is gonna happen next week.

[00:11:17] And so we're gonna program these people to be there at that time to handle it with this plan. So there's a little bit more reactive capacity. . Imagine did we know three years ago whether, Ukraine was going to be invaded by Russia at that time? I think of a lot of what you were saying, it feels like, that kind of reaction function should also exist for things like technology.

[00:11:36] I think the, there's a similar amount of surprise and reaction and we have to learn how to deal with new technologies and new ways. Do you see a relationship there?

[00:11:44] **Sabra Horne:** Not a not a productive relationship. Again, to cite the challenge of an event, there is a natural fluidity and flexibility and rush to the mission that precedes processes all the time.

[00:11:59] You figure out what the challenge is and then how you're gonna attack it. In contrast, I do think our ways of trying to solve technological challenges inherently then moves into the requirements acquisition, budgeting process, which is so long and unwieldy.

[00:12:19] And I think, sadly, in many ways we've created a structure and a process that yes is legal and keeps us all out of jail, but yet that we have not been able to figure out how to go about creating process that enable us to do things like finding the best technology to solve X problem in six months.

[00:12:42] We simply are so hampered in our ability to actually do that. And I find it quite frustrating. I will say I think the use of OTAs and other alternative authorities, I think are more creative and more flexible in helping us to quickly get to a solution. And so therefore, I think back to my time at CISA when one of the projects that we worked on in the innovation hub was to , make use of a commercial technology that AFWERX had provided to us.

[00:13:16] It was a black box communication device that they used on the fields of battle in Afghanistan to unify and coordinate communication amongst so very many different people and agencies and even countries. They thought perhaps there might be domestic applic. For the use of that technology. So I brought it to our head of emergency communications division, Billy Bob Brown, and said, is this something that we could utilize?

[00:13:44] And he had been working on a similar capability for nine years unsuccessfully, and was thrilled to find this capability. We were able to use the commercial solutions opening pilot program authority that DHS has and we were able to purchase that technology in 18 days. A remarkable achievement, and I am very proud to say that technology Creus [?] Has been piloted on use of how we might go about prioritizing.

[00:14:17] Emergency communications within the United States and doing so such that we can rank and prioritize emergency communications. That technology is now has been piloted and has been refunded. And so it, it's a great success, but we haven't been able to replicate that success in many ways. I think we can all see that there are any number of requirements that could be solved by amazing commercial technologies that are being developed all the time.

[00:14:49] It's just the challenges of how you actually go about getting those technologies purchased in a way that doesn't take nine years.

[00:14:57] **Eric Lofgren:** It was actually pretty surprising to me. It sounded like Billy Bob Brown, he was working on this thing and then he actually accepted something else cuz like all the time we always hear non invented here syndrome.

[00:15:07] Yes. What did you experience the non invented here in other respects and that was one of the barriers or what stopped that from scaling or getting additional types of success, stories like that through the cso?

[00:15:16] **Sabra Horne:** So let me break that down into several things. First of all, I do wanna salute Billy Bob Brown, who is the director of emergency communications in CISA and has a great name , and has a great name and a great personality.

[00:15:29] He was always an incredibly innovative thinker and saw possibilities wherever he went and he was a. Let's try this person. He didn't have fear of what might happen. He knew that we were gonna have to try new things and it was gonna be difficult. He was willing to accept the possible failure regardless.

[00:15:52] And so he was the perfect partner and you could see it a mile away. So if you're gonna try something hard, that's the right kind of person to try it with. Why did we not have more success with that? At dhs, I will say that I am so proud of DHS having so many. Alternative authorities and flexibility in so many ways.

[00:16:13] I'd like to cite two really important things. One is we had a chief acquisition officer, Soraya Correa, who fought so very hard to make sure that contracting officers across all of DHS and its eight component agencies understood , and felt empowered to utilize those alternative authorities. She also worked so very hard on the hill to ensure that DHS didn't just have access to those authorities, but they became permanent authorities.

[00:16:45] She wasn't always successful, but she set a standard that I think will be hard to. To match. So good for her. I'd also like to cite within her office an office called the Procurement Innovation Lead the Pill. The person that I worked with, the Pill Poly Hall, was a remarkable partner who tried very hard to look at all the possibilities and how we might be able to get to Yes.

[00:17:11] And what are all the different ways that we could do that. So having a really critical partner who had let's be honest, at the end of the day, she had contracting authority, right? And she was able to say, I am the CEO here and we're going to make this happen. **It's having that kind of leadership and having**

that type of confidence that supports that leadership that together we're gonna get to the end successfully.

[00:17:36] I think there weren't as many folks as I would like to have seen who opened up their mind, let's be honest, right? As government workers, we all have so very much work to do. And sometimes using OTAs requires you to think differently. It requires you to understand what the processes are.

[00:17:57] It requires that you've had training on how to use something, and it also requires you to do something you've never done before and have faith that it's gonna work out. It's not always gonna work out, but if you don't have. Contracting partners in that process to help guide you through you, you will stumble along the way.

[00:18:17] So I, I am looking for government contracting officers and representatives to get the help that they need in, in being able to utilize these creative authorities and alternative authorities. I'm a giant fan of the Defense Acquisition University, and I'm so pleased they have so many fantastic courses available to people.

[00:18:41] I wish we had more of that capability that people felt like they could access .

[00:18:45] **Eric Lofgren:** Talking about some of these innovation hubs and stuff like that.

[00:18:48] We've also had, like a lot of new people come into the department, or a lot of these agencies are just like chief of everything right? The chief XXX officer, chief innovation, chief AI officer, chief data officer, software officer, a lot of these guys have come in and they've tried to shake things up and they're like, oh, you're gonna be like this innovation, agent, right?

[00:19:08] But then they don't really have any kind of authorities and it just seems to be like we've seen a few of these come through, like Nick Shalon and others. But like what's going on there? Is there just like a systematic problem or were they thinking about it wrong?

[00:19:20] Or how do you hack that kind of thing? Like where you're given this big title but no big dollars to go after it. Like how do you use your influence?



[00:19:27] **Sabra Horne:** So I think that's a great question. And let me kind of spin it in a different way, which is anytime you are asked to take on and stand up a new effort frequently it's not provided resourcing in the same way.

[00:19:43] And so there's the expectation that you start small and build from there. You show quick wins, you show small successes, you show partnerships, and then you are able to illustrate that this is something that is of value and we as an agency will invest in that. I think that's hard because it, let's look at D iu, right?

[00:20:04] I'm not given all of the resources that, I think they could make great use of. I salute the Defense Innovation Unit as being one of the shining examples within the US government as how we are able to make use of commercial technologies. But if they don't have the support that they need if they don't have the resourcing they need, they're inherently going to be hampered in their ability to achieve.

[00:20:30] I will say, Having been asked to do a number of different efforts across the government, you learn the ways of operating within the constraints that you are given. Which means how do you find partnerships that work? How do you find people who are able to help you get to where you're trying to go?

[00:20:48] If you have no money, how do you then use the money of other people to achieve not only your goal, but their goal as well? I will, I'll cite. One really great example was hacking for Homeland Security, which was a program I got started. With the support of the DHS Science and Technology Group that funded the Hacking for Homeland Security Program for 1.2 million.

[00:21:12] It's now in its six running at dhs it's a course taught at universities that employs the smart. Folks that are students to solve tough challenges within the government. Problems are provided to the students and then they work throughout the semester to solve those problems and the solutions are then provided back to the agencies.

[00:21:36] We've had tremendous success with that program at dhs, and it was only by having s and t utilize their great resources to support sisa, fema, TSA in achieving their mission results. I would say also it is about finding partnerships in as many places as possible so that you can build in a collaborative environment such that you are helping many other people while you're achieving your own goals as well.

[00:22:10] I will say one of the great partners that we were able to find within the Sisa Innovation Hub was working closely with our Office of General Counsel at the time. And they provided us on the Innovation Hub a representative from their office who attended almost all of our meetings so that when we were meeting with contracting officer representatives who were nervous about utilizing alternative authorities or OTAs, he was able to allay their fears.

[00:22:42] We would start each meeting by saying, if we were doing a training, we would say, you will not go to jail by utilizing these authorities. This is the person who would help put you in jail. We can commit to you. This is a legal action, so let's try to learn this together. So I think, finding people who can help you get to the goal is a vital part of being able to build in and endure yourself from challenges.

[00:23:08] **Eric Lofgren:** Yeah. It seems like what I'm getting from you is almost like you have to get in and understand you're gonna be part of this network and you have to bring the stakeholders along. And a lot of it's building coalitions and all of that. And the Hacking for Defense I think is interesting because I remember, Pete and Steve Blank, they were giving me the low down on Yeah.

[00:23:28] When we have our students do this, they go talk to all like 50 or a hundred different, people within the government that have to do with this, or they will actually go be part of the training or go see the equipment in action. And I'm just like, That's just part of it, right? You have to go see it and then come along with them and bring everyone.

[00:23:45] So one of the things that you had in your book was, you talked about stakeholder mapping. Yeah. Can you talk about like how do you do that exercise and then what is what is the process to get to your end?

[00:23:55] **Sabra Horne:** Absolutely. And that is one of the things that's probably the most successful part of our Innovation navigator's course, which is the three and a half day course that is taught to bring the book, creating Innovation navigators to.

[00:24:09] To life. In that course we cover the contents within the book, but we have an afternoon where we focus exactly on how do we map the stakeholders who are important to the innovation efforts that we're trying to bring to fruition, and how do we identify their roles in helping. Or potentially even in hurting us.

[00:24:30] So we know there are things such as senior leaders who are going to be our supporters, that we must have the support from those most senior levels within the government or else you're going to not make it at the end of the day. Knowing who they are, communicating with them effectively and helping them understand what you're trying to achieve and how you're trying to achieve it is important.

[00:24:54] They're technical experts who are critical in helping us understand the technical aspects of the work that we're involved with. We need to make sure that they understand the bigger picture goals as well.

[00:25:06] And we also have people who can be saboteurs to our efforts and our goals. People who perhaps don't want a certain program to succeed because it threatens their own efforts. Perhaps people who do not want us to be funded for something because it takes their own funding away from what it is that they're doing.

[00:25:27] There are myriad of reasons why you might have someone who's a potential saboteur, but number one, being able to identify those people. Number two, understanding their motivations so that three, you can help figure out how to get to a different place so they're not so damaging to your program.

[00:25:46] Understanding that mapping it out and creating a plan is fundamental in being able to bring everyone along in your innovation effort.

[00:25:56] **Eric Lofgren:** Yeah. We often see, like for milestone decision or something like that, there's 30 to 50 different decision makers like, or people that you have to go along the way.

[00:26:05] And one of my questions is you broke out like the different type. There's leadership there's other like technical stakeholders, there's all these, adjacent programs. Not all of them can veto, right? Who, should you map out Of the people who can actually like veto or make this thing go forward versus the people who, you wanna take their input, but they're not like actually involved or they don't have that decision.

[00:26:25] How do you like, decide, when you're gonna be like, I have to turn every single person onto my side verse, look, I'm just gonna go gung-ho because you can't stop me even if you have this functional duty over here,

[00:26:37] **Sabra Horne:** approval concurrence versus awareness. Those are two very different things. And so I think, any any person who is involved in

leadership in the government has to understand early on who has the ability to say no to what it is that I am doing, and how do I help ensure that they understand what I'm trying to achieve, how I'm trying to achieve it.

[00:27:02] And what it is that I need to do to get to, yes. I think it's, that's a fundamental that any senior leader has to deal with. And of course we are always trying to minimize the number of people who can say no. The concept of saying no within the government is a fundamental that must reside at the right levels of the organization. So I think your point is know who those people are, understand how you get to Yes. And do the best you can in helping to make sure they understand how you're both going to get to Yes. Together. ,

[00:27:42] **Eric Lofgren:** You also said innovation organizations have to have, they have to have the collaboration. So we have all these stakeholders, but then we also have to have a bias towards Yes.

[00:27:50] Do those things. Is there something conflicting there between those two things?

[00:27:53] **Sabra Horne:** Sometimes there's, you can get to yes quickly if there are fewer people that you have to bring along in that decision. But I think you bring out a great point, which is there are some key characteristics that I think you must really be attuned to.

[00:28:08] You're looking for people who have an optimistic outlook that yes, we can. Yes, we will get there. They have a bias to yes versus no. We can't. They have a bias to action. They have a high tolerance for risk, and they're able to stomach the risk that's associated that they need to take on in order to try new things.

[00:28:32] They have to be creative in how they approach solutions. They have to have a speed in addressing the challenges that will befall them at every turn, and to be able to bring , everyone along at the same speed as well. I think the collaborative spirit is really important because you're gonna get so much more done by working through and with others than against them.

[00:28:56] It's an ability to have persistence in fortitude because you will face so many closed doors and you have to keep going. Somebody who has flexibility in finding different solutions, and at the end of the day, somebody who is resilient because you have to keep getting up every single day and doing it one more time.

[00:29:19] **Eric Lofgren:** No, I hear that. I remember when I was leaving my consulting job and I was like, I want to do push p b reform. I was like, I know this is a 30 year effort. If I can't burn myself out, I just need to be like persistent and maybe I can contribute. That's right. Over the long run.

[00:29:34] And maybe that goes back to what, I brought up earlier with some of these people who come in okay, you're Chief X officer and here's your tour for one or two or three years, and then they leave. It's to build those networks, to build those stakeholders to kind of understand how the physics of the system works, you're probably , it's like, it's sad to think about was like, you can't like treat this.

[00:29:53] I'm gonna like super scale a startup from, zero to a hundred in a year or two. So it seems like a longer term effort. And is that distracting or is that the way you think it is? Or do you think that's over

[00:30:03] **Sabra Horne:** overdone? No I think right, that's why speed is so important. How much can we get done quickly before anybody notices and make some great things happen? But you're right. It is a long game in many ways. The processes that we know have been built up over so many decades that although are there to keep us safe and out of jail and to be a good steward of the taxpayer dollars, they are hampering and they are preventing us from achieving what it is that we must get done. It's very frustrating to see how long the process has to be, but it doesn't have to be like that.

[00:30:45] And I think there are some great shining lights that we've seen some people who've tried to move us forward. Hondo Gertz did a remarkable job. While he headed up as assistant secretary and tried to move us forward and make some really smart bets on where we might be able to bring in technologies faster, quicker, easier.

[00:31:10] What a great leader in so many ways. We need 20 Honda Geurts, we need 20 Mike Browns. There are a lot of folks who can help us do this, but we must support them and we must reward them. And, those great Americans who want to come help us, how do we help show them it's worth their time and energy?

[00:31:34] **Eric Lofgren:** Yeah. And one of the things I think D IU was trying to do of course, they actually got cut down. They used to report to the sec def and now to r e and there's some conservation, are they losing some of their. Sway and influence within that organization. I think what d iu, one of the things they were really doing since 2015 was also trying to like, bring this kind of

language of innovation to the department, which was just like, we have TRLs, we have milestone decisions like this is how we talk about innovation.

[00:32:04] And I think D IU was no, we that's good for certain types of things, but for other types of things, we want to be more innovative. We want to do things more like the commercial industry because that's who we're trying to bring in. And so you, throughout the book I would say like , you mentioned that through the book we need to standardize language of innovation.

[00:32:22] And what really kind of popped out to me from that was just this innovation funnel, is that kind of like a top level idea? If you had one thing that you could focus on, would it be that innovation funnel or what is what's the common language that, that we should use in government?

[00:32:35] **Sabra Horne:** That is a great question. Eric and I would point to creating innovation navigators, the book and the corresponding course as being critical pieces in trying to help frame a common body of approaches and models, and a framework for how we might approach this in a very coordinated and systematic way.

[00:32:58] It seems where we are in innovation is where we were with cyber. 20 years ago. the word cyber was created in 1984, and we didn't really have a concept of what cyber cybersecurity looked like. It took many years and so many efforts for the concepts around cyber to really form for government agencies to figure out how do we deal with this concept and how do we deal with the ensuing cyber threats and security threats that we're seeing?

[00:33:32] You saw organizations pop up in FBI in Secret Service, then there was the creation of CISA to help defend. Then there was a creation of an organization with NSA in order to defend against these threats. And then you saw the body of policy that began to populate, and then you saw our NIST.

[00:33:53] Published the cybersecurity education framework, which delineated here are the roles and skills that we need to defend ourselves from cybersecurity. That was a basically a 35 year process. I think we're in the same place with innovation, which is what is it that we need to do in order to be as effective as possible?

[00:34:16] We know we've seen innovation theater, people talking about innovation, but not doing. we need to achieve things consistently, and we need to be able to do so in a way that everybody understands here are the components

of innovation, here's what the process looks like. Here's the policy and the doctrine related to innovation.

[00:34:37] Here's the common language that we're utilizing. We, within BMNT, have created the concept of the innovation pipeline, which is how do we take a lot of problems, look at them across an organization, carefully understand them by talking to end users and customers, and then create solutions that we then transition into operational capabilities within our agencies.

[00:35:05] Those solutions can be technology, they can be processes, they can be policies, strategies, communication. Innovation takes a lot of different forms. But if we're able to look big picture at how we might be able to do this, I think we'll be able to make more progress faster. The innovation pipeline and the way that we think about innovation is agnostic when it comes to a lot of the innovation methodologies that have already been around for some time, whether it is agile and how we utilize our development.

[00:35:40] DevSecOps Even we can look to things that have been around for a number of years, like lean, all of those fit within the innovation pipeline, and we are able to utilize a lot of different approaches within this broader framework.

[00:35:58] **Eric Lofgren:** Yeah. One of the things that kind of jumped out to me from the innovation pipeline, you had a bunch of charts showing all of this, and it seems like, you have the problems and then you whittle 'em down and you do like MVPs and it's kinda like this continuous process, lots of gates.

[00:36:12] And you're whittling things down and then you go to production and you, it works, but so I think that works when you have a responsive system, but it seems like at least in government, you can do that to an extent. Like maybe at the front part, but then eventually you have to, you have like a batching queue.

[00:36:27] It's not like a continuous model where okay, I have money reserved. I didn't know which of these four were gonna make it, but now I know this one, and so here it is, I have money for you. Whereas like usually our process is you get to a point and then there's one, and then you're like, okay, now it's time to go find out the requirements and get the like money and go get the acquisition plan.

[00:36:49] And so it seems like our whole process at some point in the innovation funnel, which is continuous, you have to put this huge break and now we call it like the valley of death. But you have a huge break in there. Is that idea of this innovation funnel, is it fundamentally at odds with government or do you it, there's like a way to smuggle it in?

[00:37:07] **Sabra Horne:** I think The challenge is that allocation of funding generally is tied to requirement. Or a certain program of record or things of that sort. And being able to find and grow innovation solutions, that falls outside of the requirements process oftentimes.

[00:37:28] I would say that I am a fan of the separate allocation. of funds for innovation because I think that we see when we are able to utilize a different process, you're able to speed things through that process, transitioning them to operational capability much more quickly. Not everything in innovation takes money.

[00:37:55] It doesn't take money to create a strategy or a policy. However, if we've set aside funding that can be utilized in creative ways, I think you're much more likely to be able to be successful in finding that operational capability. Short of that, I think that identifying within existing programs of record existing structural organizations, how you can use innovation to meet their needs and their requirements.

[00:38:28] Partnering again, collaboration's. So very fundamental. Being able to help achieve the innovation goals while achieving the operational goals at the same time, I think that is a road for success. I felt like we were about to go down the road of whether P P B and E is the right way to go or not.

[00:38:48] I think we all see the challenges with the system and there are a lot of people who are trying to help us think about that differently.

[00:38:56] **Eric Lofgren:** and what would that look like? You said we need to carve out like an innovation budget. One of the things that it looks like Congress is talking about now, they're like, we actually don't like those open-ended funds.

[00:39:07] We don't trust you that you're gonna transition and one of. Issues, like when I look at the commercial sector, it's all about making sure that you are coordinating with the customer and you understand what they need so you get the product market fit and you go through those cycles very fast.

[00:39:21] Whereas, like in government, I don't know why, but it's it's, they just assume unless you pre-program the 10 year future of this thing, it's never gonna transition. You know what I'm trying to say like, where's that breakdown? Like, why is there no



[00:39:33] **Sabra Horne:** trust? So I do think the processes that we've built up around acquisitions and requirement and budgeting have nothing to do with understanding from a true human centered design approach, asking many people, what is it that we need?

[00:39:50] How does this look? Is this working? Does this not work? How can we make this better? Can you think of something that might work? That is a na. To the existing system. And so I understand the need for oversight and the need to ensure that taxpayer dollars are utilized effectively, but it's simply at odds sometimes with being able to be more fluid and flexible in figuring out how to meet a customer's ultimate needs.

[00:40:21] , I'm excited. It turns out that AFWERX which I think is a good example of, an important service innovation capability. They now have grown to the size where they have 10 million in funding and a hundred billets personnel to support that effort. That looks very different from what it looked like.

[00:40:41] Three years ago. But let's be honest, when we compare that to the size of the entirety of the D O D budget is so far away from being an effective and powerful use of funding to help us really make some very innovative things happen. So I hope we can get to a more creative way of funding. We'll see .

[00:41:05] **Eric Lofgren:** Throughout the book, you guys had these nice little case studies of different things. Like one of 'em was the, I think you did use the procurement innovation lab was one of 'em. Another one was the rapid equipping force. And one of the lessons learned in there was flexible funding allowed the rapid equip equipping force to actually field far more things than like any other organization ever had.

[00:41:26] And one of the things that I think was interesting there, I think this gets back to your idea on. Well, Can you also just use the requirements of a current program? You mentioned in the book you gotta start with the outcomes, right? And work back from those outcomes.

[00:41:38] Where do you define an outcome? Is an outcome something like at a rapid equipping force level? I need to get soldier, gear out fast to meet emerging requirements and that's the outcome. Or is the outcome really like it needs to have this wave form be in this form factor. It needs to look like this, these are the requirements. So if you said something pretty high level outcome, like it would never make it through a requirement, they'd be like, there's no detail here.

How am I gonna base, how am I gonna cost this? How am I gonna do all this stuff? I hear you need to tell me what it is. I know.

[00:42:07] And so I always, I'm like, okay, so you always wanna start with the outcome, but then you get into these very detailed requirements analysis and no one, and everyone says they're doing outcomes

[00:42:16] **Sabra Horne:** with not but here's the thing so let me give you an example. When I was. CISA, right? So let's use the commercial solutions opening pilot program.

[00:42:24] I definitely wanna figure out how we can utilize this alternative authority. It turns out right, D IU also used CS o, well they call it cso. Same authority, different approach To their credit, it turns out the way in which they gathered the requirement and sent the requirement out such that industry was able to review it.

[00:42:50] It is one paragraph of information that can be gathered in one day. Compare that to, and I thought we had a fantastic approach at dhs, right? It was a, an eight page delineation of what needed to be articulated by industry. But because d IU was able to get. A solicitation out in a day, in two hours, they were able to get to solutions so much more rapidly and utilize that authority.

[00:43:21] So there was collaboration allowed between the government and the program that was responsible for delivering that capability. They were able to have conversations with the industry representatives, so there was close collaboration and understanding of exactly what needed to take place. They made that process so fast, and I think that is basically what we need to be looking at when we're thinking about outcomes, which is how do we stay focused so quickly and so rapidly on our ability to understand what is needed and how industry can.

[00:44:03] Deliver that, that we can iterate on what that looks like. I don't think the right solution is, let's spend 18 months developing a set of requirements that are articulated in X number of pages. By the time those requirements get out, in many instances they're almost irrelevant. .

[00:44:25] **Eric Lofgren:** I definitely hear you on that.

[00:44:26] And it seems like with these requirements, and I think that's one of the biggest benefits of the commercial solutions opening, right? Because so often you hear from a normal federal acquisition regulation contract, it's okay, I

can talk maybe in the request for information stage, but once the solicitation goes out, it's blackout.

[00:44:43] We ain't talking. So you can do that with the other transactions and with the commercial solutions opening that kind of collaboration, you think don't redefine the the requirement you're working through industry the whole way.

[00:44:54] **Sabra Horne:** I saw it up close. In two hours of conversation between the end user and industry, they were able to cut out.

[00:45:06] I mean, Literally months and months and months of back and forth in a blind fashion. It was so powerful. And everyone was focused on how do we do this in the right way to be legal, to ensure that we are not giving undue preference to this company? Or how are we not jeopardizing the government's interests?

[00:45:33] Everyone was trying to do their best, right? And it worked. So let's do more of that. Why can't we do more of that? I'm not

[00:45:41] **Eric Lofgren:** sure. Why is it. One of the things that scares me a little bit about commercial solutions opening, I think it's the right method. And I think you, you still have competition, right?

[00:45:50] Especially if there's a commercial base, like the competition's out there. This competition and contracting act from 1980s, it's like the definition of competition is you put out a firm requirement and then they give you their bids, and then you choose the lowest price that equals competition.

[00:46:06] Whereas I think like the CSO opens you up to there's supposedly best value considerations, but it seems really hard to actually do that in a real source selection kind of environment. I

[00:46:17] **Sabra Horne:** agree. The competition is there. It's just flipped in a different way. So we have a broad. Broad announcement for we need something in cyber. It might look like this in very general way. If you have something, please let us know about that. I think that's a fair type of competition, right?

[00:46:38] If someone feels that they could meet that need, we'll then send in information and let the end user then figure out which of these is gonna be something to start pursuing.

[00:46:49] **Eric Lofgren:** Yeah, it's like almost an open call. People can give you unsolicited proposals, but actually they are solicited and there's a process to go get 'em without having to do all this rigamarole.

[00:46:58] So it's a really great process. Glad you highlighted the cso. One thing, when I was looking at Your innovation funnel chart. One thing that came to mind for me was that government does all, a lot of these like innovation efforts and stuff, but they never set them up like an experimental design such that you can actually understand whether what's working or what's not working or what lesson should I have learned or, anything like that.

[00:47:22] Is there any way to with these experimentation funds also set it up in a way that we actually can get some signal out of the noise?

[00:47:30] **Sabra Horne:** Nobody who sets up an governmental organizations ever gonna do experimental design.

[00:47:35] They just aren't. I do think there are, look, let's look at Kessel run or let's look at, tank or some, I think there are groups that have been quite. Fluid and how they developed, it's like a startup, right? We've seen a few startups in the national security space that they've changed what they really are over the last couple of years, a couple of times according to what they found success in.

[00:48:06] So I think , you can use experimental design in a way with government structures, but it really isn't actually. Something that government is going to be inherently good at, nor comfortable with.

[00:48:22] Congress doesn't wanna give you, X million of dollars to do X, Y, and Z. If you're like, we're not quite sure what this is gonna look like and we'll probably change it a couple of times over the next two years, trust us, it's gonna be fine. That's not their job. .

[00:48:36] **Eric Lofgren:** And I understand also it's like all of these things must succeed.

[00:48:41] It's can you do an experimental design on students in class is is that even like the right thing to do? Even if it does give you additional data. Yeah. But it seems One of the things, again, with the innovation funnel, you're getting faster you're getting a lot of ideas, and then they're funneling down, but you're also getting faster reaction times to get data on what works and what doesn't work.

[00:49:00] Absolutely. Whereas like usually the government's I have a 15 year program, and so I get one data point outta 15 years and \$10 billion. And you can't make any inference out of,

[00:49:09] **Sabra Horne:** one. That's right. I think you're right, though. The emphasis is on really understanding, get a ton of information from a lot of different sources and better understand what it is that we're trying to achieve together and how we might be able to meet the goals in the end.

[00:49:24] I think you're right. It's a, that's the nature of human centered design, right? Who's gonna tell us better than the person who's gonna be using this at the end of the day?

[00:49:32] **Eric Lofgren:** So everybody I think understands technology readiness levels. You brought in a couple new concepts that I didn't hear about or I'd never heard of.

[00:49:40] So technology readiness levels obviously are from ideas that's like a technology readiness level one. And then nine is gonna be like, this is fully, operational and we know everything about it. And we like segment our acquisition by TRLs. You talked about investment readiness levels and adoption readiness levels.

[00:49:58] What are those things?

[00:49:58] **Sabra Horne:** Thank you so much for asking. The reason I did that was because I came from a part of our government that was not focused necessarily on buying commercial technologies. And so I'm trying to ensure that people see innovation. Outside that realm to include the creation of policy, the creation of strategy, the creation of processes, communications.

[00:50:26] There's so many ways to be innovative, and if I had only included trl, which we all know is a way to measure commercial technologies or technology development, whether it's, internal or external to the government, people would ignore the fact that you have to be looking beyond technology to do innovation.

[00:50:46] So I came up with ways to think about these other types of innovations. So investment doesn't just mean are we paying money to bring this to life, but it can be, are we gonna invest resources in bringing this to life? If you're creating a strategy or a policy, For instance you can see where it is along the development process of ideas that you can continue to invest energy, resources, efforts.

[00:51:18] By looking, standing back and looking at a policy that absolutely falls along an investment readiness level. If you're thinking about investment outside of just dollars adoption similarly is a how do we look at where are we going to be mature enough in developing that policy, that strategy, that process such that it's ready to be deployed and implemented.

[00:51:45] **Eric Lofgren:** And with the adoption readiness level you have a few of these things here. Like you get leadership commitment teams funded pilots. It seems to be bridging into the investment as well. They're pretty related, right? They

[00:51:56] **Sabra Horne:** are. They really are. Creating a policy can be written by one person and so therefore the investment is not gonna be that great. But you still need to understand, is it ready to have that policy adopted by the agency at whole? If not, where are we on the adoption process level and how do we develop it further in order to mature?

[00:52:22] **Eric Lofgren:** So as we come up on time here, Sabra, is there any last things you'd like to tell our audience?

[00:52:28] **Sabra Horne:** I'm excited about where we can go with innovation in government. I feel like we've done so very much to lay great and important groundwork. There have been some really important early efforts. I feel like the next 10 years is a lot of good, hard work to take us to the next level.

[00:52:49] I'd love to be able to think back on this time when it's 2032 and say, I remember when we were in the same place when we started cyber, and look how very far we came. I'd love for us all to be able to look back and see a lot of great changes that we made and a lot of great investments that we made that brought a lot of incredible opportunities to the government.

[00:53:17] **Eric Lofgren:** Processes for cyber took 20, 30 years. Where are we with innovation in that timeline? And I think, one of the things people keep saying is the 2020s are gonna be dangerous, is that timeline need to be collapsed severely? Is there a call to

[00:53:31] **Sabra Horne:** action here? Absolutely. There's a call to action.

[00:53:34] I think we can look around the world. That's the beauty of coming from a national security perspective is you always see the threats on the horizon. And I think we've had the wonderful experience of how our world has shifted and changed over the last two and a half years due to the global pandemic.

[00:53:53] And we have an opportunity to move forward quickly and I hope we can.

[00:53:58] **Eric Lofgren:** Sabra Horne, her book is Creating Innovation Navigators, achieving Mission Through Innovation. Thanks for joining me on Acquisition

[00:54:05] **Sabra Horne:** Talk. Thanks Eric.

[00:54:07]