

# Reforming the SBIR program with Ben Van Roo

[00:00:00] Welcome to acquisition. Talk a podcast on the management technology and the political economy of weapons systems acquisition. I'm your host, Eric Lofgren. You can find this podcast and more information, including links, commentary, and articles on acquisition. talk.com. Thanks for listening.

[00:00:37] **Eric Lofgren:** I'm pleased to have Ben van Roo on the podcast. He's filled many shoes from software engineering to supply chain policy analysis, tech companies, and he is recently took a new role as CEO and co-founder of an AI startup called Yurts. Ben wrote a three part series on the small business innovation research and technology transition programs, SBIT/STTR..

[00:00:57] And that's what we're here to talk about today. Ben, thanks for joining me on acquisition talk. Thanks

[00:01:01] **Ben Van Roo:** for having me, Eric

[00:01:02] **Eric Lofgren:** Let's dive right into it. We actually talked about a year ago last summer about this subject and now you're actually pretty involved and active in the C discourse and reauthorization.

[00:01:14] What's that story? Can you just catch us up?

[00:01:16] **Ben Van Roo:** Yeah. I think it's a comedy of errors. I was working with a venture capital fund last year in the summer in some of their portfolio companies. Trying to help them get introduced to different programs in the federal government. And I have some experience in that and we can talk a little bit about later, but specifically with the S B R program, I wanted to understand, who is winning these awards and why and get a little bit of the inner workings of it.

[00:01:41] And what's intriguing about it is the data's readily available for anyone to use. And I'm an analyst by training and so I, I just dove into it. And you and I had a conversation and I talked to a bunch of stakeholders and I learned a little bit about the, where the program went.

[00:01:55] And then I just I used that information for some of the companies, but I sat on it overall. I wrote a half wrote up a blog and. Life happens. I had a

second child and yeah, everyone knows that's busy. I think sometime in the early spring, I decided I'm just need to get, write this thing out.

[00:02:12] And and then I prepared what I thought was an interesting perspective. Really from the stakeholders that I was trying to write to were other tech companies, venture capitalists, and a little bit to the DOD of just okay here's how a company might think about this entire program.

[00:02:29] And that was the Genesis of the first article that I wrote.

[00:02:32] **Eric Lofgren:** And sometimes these things take a life of their own don't they? So can you give us a low down on who reacted to it and what happened.

[00:02:40] **Ben Van Roo:** Yeah. So that was interesting. Again, for all I intents and purposes, it's like a blog and I have at least six followers in my life on, Twitter.

[00:02:47] So I wasn't expecting a lot if you have read it or haven't read it, I've got some pretty dope memes in there. It took about five days before congressional staffers called me, which I thought was like a, wow. This thing has moved a little bit faster through my network and the department events I, I talked with folks in Congress people from at AF works Naval X, you can tell D IU a number of different companies reached out to me to share their experiences, which was pretty cool.

[00:03:16] you know, I, I think at least I got the messaging out for at least a perspective of how a founder slash VC would think about this. And then, people gave me other information and I started to dig a bit deeper and then that's when it really became a series in and of itself.

[00:03:32] And

[00:03:33] **Eric Lofgren:** so what did you actually start finding in the data itself? Yeah,

[00:03:36] **Ben Van Roo:** so I, at the highest level what I observed was that and you can read about this later. The majority of S B I R dollars and again, I focused. Almost all of my efforts in the beginning on DD S B I R dollars S TT R is a bit of a different beast.

[00:03:52] And then there are a number of other agencies that participate in the S B program. But for the most part, like 46 is percent of the dollars are coming from DD. And so that was my primary focus. In what I found is that, again, there, there are a handful of companies that were really being reward or awarded most of the money.

[00:04:08] I was trying to figure out why, and if that was a bad thing and just, in the beginning, it was just like, this is what's happening. And so what's intriguing about that is that, if you look at it, there's eight companies that have received 10% of the, all the total awards.

[00:04:22] And I'm looking in the most, I was looking at the most recent years about,

[00:04:26] I did a deeper dive later. If you think about okay that's something you know about one percent of the overall companies have about 25 percent of awards. You can start to see that only a select few of companies were getting award after award. And so this starts to lots of different questions.

[00:04:42] Is this good? Is this bad? How is it happening and why? And and so that was like the high level view.

[00:04:48] **Eric Lofgren:** . And then, you drew like a nice DOD sipper power curve, which I think it just showed, right? That a large fraction of the the wart go to the small few.

[00:04:58] And then you have a large tale of companies that are getting like, just small little pennies in terms of percentage of the total amount. So there's a lot of interest in the accounts. But just like in the broader, I think D O D industrial based ecosystem, you probably see that same power curve.

[00:05:15] So the silver power curve probably looks something similar to the power curve of prime contracts in the larger industry. What'd you take away from that? Is that similar to other industries or sectors, or is this kind of unique?

[00:05:27] **Ben Van Roo:** Yeah, I think it's this happens in, , in other industries and verticals, but what's unique here again is like, it starts to come back to the fundamental questions that I think we should be asking with.

[00:05:38] SBIRs. What's the purpose? And so when people talk about. Stimulating the industrial base and, growing new businesses to be great defense companies of the future. What this demonstrates is that's not happening. It

shows that, okay, there are hundreds and thousands of companies that have gotten some money, a little bit of money, but for the most part, it's only going to a select few.

[00:06:03] And again, what I was trying to accomplish is what is the case? And then from a company standpoint the picture that I was trying to show is if you are an emerging tech company, should you even be going after this money? And what's the likelihood of you winning it all together. And what I wanted to try to understand is if we assume that a good majority of the funds are gonna be going to a select few companies, how much is left for everyone else and who else is winning.

[00:06:30] **Eric Lofgren:** And what is the, like the probability of winning or like the P win rate for these companies? You probably don't have the data on it, but I'm sure like the big guys who do this over and over again, must have a much higher, like win rate on these things. But for like, I guess a non-traditional who's coming at it their first time.

[00:06:47] Do you have a sense of what's their probability of actually winning if they do submit? Yeah, I think

[00:06:51] **Ben Van Roo:** the short answer is no, but I have some intuitions. What would be very intriguing is if the, we really had good insights into the number of applications that came into S SPS, that's a big missing piece, but we do have the DOD, we have the winners.

[00:07:07] And then we also know is that there's been a kind of a cottage industry that I read about, For the most part,

[00:07:13] there's kind of a cottage industry that has existed, but has grown over the last few years of X DOD procurement people that understand the systems. They understand how SBIs work and they can, for a fee, and it's there's ways that they monetize, help companies win. And so what I was trying to understand was, okay, so if you are one of the companies that takes a lot of these DOD zips out of the out and you're awarded each year, and or if you are one of the companies that is hired contractors, like what's left, what's that pop look like.

[00:07:49] And so in the analysis, what. I've talked to a number of people I've talked to people at these companies. I found that, look, you could expect that about 20 to 30% of the awards might actually be affiliated with a third party service. And so as a company, you're saying, okay if something like 30 to 50% of the awards are gonna go to one of these end companies that wins every time

and then 20 to 30% of the awards are gonna be going to companies that have that are, that you have to pay to play.

[00:08:17] Then you know, what you're looking at is if you're just Joe company off the street, even if you have some cool tech, your likelihood of winning one of these awards is probably pretty small.

[00:08:25] **Eric Lofgren:** what are like the costs or fee structures of these, third party consultants who will come out and help do, kind what's the relative size

[00:08:33] **Ben Van Roo:** of that. So it ranges per group, but rough proxies, I would say you're looking at three to \$6,000 a month. and then they have different fee structures where they can take chunks of equity of your company, or they get chunks of the award.

[00:08:47] And that can look like something between five and 50% of the total award. And again, this is I'm not knocking these guys. This is a service that's being provided in part because of imperfections in the overall system. These are grant dollars. These are, I think it's a little bit different than programmatic dollars.

[00:09:03] It's non diluted grants. And so it's it like, it's a thing it's just a, it's a cost that a company that wants to engage with the DOD and hasn't before has to consider. And so overall what's trying to paint was a broader picture of, again, what are the likelihood of you engaging in winning and then what are the economics around that?

[00:09:21] The last kind of piece is given the way the overall broad structure exists. Not a lot of these winners from phase one and phase two are turning them into phase three successes. And that's just that is just an honest to God truth. There are other structural reasons for that we can go to later but you have to as a company, is this how I should spend my time and resources?

[00:09:40] **Eric Lofgren:** And one of the aspects that seems to be hard there you said like the CI grants, I'm not really sure, like how many are actually grants. It feels like at least in a department of defense, most of them are just like actual contracts. You have to be like, this is what I'm specified, I'm gonna do, and this is the cost to go do it.

[00:09:55] And that's why it's gonna, look like this. Do you think that has an aspect of it? One of your recommendations was actually very interesting to me where you talked about this difference. Point solution solicitations and then like

cross service, thematic streams so having a little bit broader, solicitation or things that you're trying to go for as opposed to specify exactly what you're gonna do.

[00:10:18] Or something like that. What were you recommending there and what have you seen?

[00:10:21] **Ben Van Roo:** Yeah again, this is one of the things I didn't want to do was to Wade into like PPBE and value death stuff in this first approach. Cause I, I think for a company that doesn't understand the do D like, they're gonna look at that and their eyes roll back.

[00:10:34] Like they have no concept. They have no reference point of where to even start. But without trying to dictate how we do longer term planning and policy, cause that's obviously wrong and dumb with me. I do think that something that's really missing that would be very intriguing for the DOD is to put out.

[00:10:51] Thematic look, we're gonna invest in counter UASs of roughly about this size over the next few years. We're not totally committing, exactly which dollar in pot it of comes out of. And again I'm sure people's heads are exploding somewhere around the world of color of money and legal considerations.

[00:11:07] But if you're a company, what you want to fundamentally know is if I invest my time in energy and working with the government, is there really money? That's sitting somewhere that my company and my services, my products can go after, like that type of communication doesn't exist. And so what you see instead is, open topics aside is like, okay it's a point solution.

[00:11:31] I log into DOD server site here, all the new topics. I'm an AI company right now. This is not really that close to the AI that I'm doing. I'll come back next year. And I think that's, it happens in other places too. You look at DIU different organization. Great. But it feels, I tell people, it of feels like it's Easter.

[00:11:50] Like you hope you find the Easter egg and you can participate otherwise, you wait. And I think that's where, if you're doing cutting edge technology that you think is probably important to the government and yet these are your only ways to potentially engage with them. It's it's just clunky and so you have to find other venues.

[00:12:10] And so I, I would be really intrigued to see, you look at it now. We put a pause on the CIS for or 22, 3. I would be interested in seeing maybe they're gonna come out with some more thematic ideas to say, look, we're focusing on open topics of AI in X we're focusing on drones in Y and maybe you'll offer a little bit more flexibility for people to participate.

[00:12:30] That would be really intriguing, all legal and color of money stuff aside, I'm just speaking as, a lay founder slash VC slash policy person. Like I that's it.

[00:12:40] **Eric Lofgren:** How would that look different in your mind than, I guess AppWorks who has their open topics, which was just like, some of them are commercial solutions, openings kinds of like long, these solicitations can stay open, be very broad take white papers at any kind of time.

[00:12:56] Usually they give you specified times, but is there a way that you're in your mind that this might look different than that? Or you think Afros is of showing the. With that strategy or should it be more constrained? Like you actually say, here's the thematic stream. It's gonna be like counter UAS, blah, blah.

[00:13:10] Like each of these little yeah. Subtopics, but still broad. Yeah, I think

[00:13:13] **Ben Van Roo:** That's a great question. So I think they're really onto something there. I had written the first article and more recently AGA report talked about the AF works open topics and it's not necessarily broadly loved by everyone in DOD in Congress.

[00:13:28] But I think, again, from my perspective, if you're trying to inject new blood and you don't necessarily believe that the DOD has all the requirements or knowledges beforehand of what's out there, open topics is a potentially really interesting venue where, you know, from my perspective where it might fall short over the next 10 years, and there, I think there's ways that they're bridging this.

[00:13:50] Is this broader idea of, is it connected to a PEO and how do you get longer funding streams tied to thematic areas of SBIR? So like that would be intriguing to me. It's look, if it's counter UAS and we know that there's, there is gonna be money that is attached to be, and there is a really formalized funnel.

[00:14:10] I think there's all sorts of ways to plug in funding streams in between. And I think that's maybe to answer your question of where I think it, it maybe differs today from open topics is, I don't know how, the, an open topic is really tied to let's say what might be a multiyear X hundred million commitment to X.

[00:14:29] Does that make sense?

[00:14:30] **Eric Lofgren:** You talked a little bit about this in your blog post as well,. Cuz you said you have CI R can it be tied to more program of record E type things. One of your recommendations in there was also, Hey, maybe we get rid of some of these smaller phase ones.

[00:14:45] Is it your kind of contention that well, if you have a thousand or several thousand phase ones, not all of these are probably investments that will make it across this value death. We should probably narrow it down to those that have the, capabilities and competence and potential that these might be our winner.

[00:15:04] So we're gonna focus more money on these guys. So get rid of some of the smaller awards, constantly trade on some of these bigger awards. What are some of the pushbacks to that? Yeah, so

[00:15:12] **Ben Van Roo:** I, I think the idea of a phase one is thoughtful.

[00:15:16] It gives companies a little bit of money, a little time to go and do B. I think in reality, there's some at least observed and then broader implications I've heard about. If you look at the data itself, there are companies that are just really good at producing, SBI applications.

[00:15:32] They've hired capture teams. They have like whole grant writing arms. And again, it's not just mills when you talk about them, but it its people that are just really focusing on turning these out. Now, what do you get? You get two things. One, you get like a clog of just a delusion of applications that reviewers have to see.

[00:15:50] And so it's like a dirty discussion that no one really wants to talk about. But then everyone will say it behind closed doors. It's yeah, people don't actually have a lot of time to look at a lot of phase one applications, cuz there's just so many of. And then, so I think that creates one issue because I think it might create some delusion of focus when people are.

[00:16:06] I think the

[00:16:07] **Eric Lofgren:** office is by the way they. If you're gonna take on CI R your staff is dependent on your obligations, but the CI R obligations that you're funding doesn't contribute to your staff or something like that. So it's it's seen as a little bit of a burden.

[00:16:20] And then if you have all these applications, who are you matrixing from other organizations, or, where to get that support on the evaluation? Yeah. So

[00:16:27] **Ben Van Roo:** then I just hear, you hear the dirty rumors of just like lots of people are brought in to really quickly review them. And that seems something that could be structurally addressed.

[00:16:37] I think the other thing that I see is sometimes you just see abuse of companies that do win lots of them, and there's actually overlap. I, I won't name the name, but there was an example of a in, for space force company that recently won like 13 phase ones that were higher priced.

[00:16:51] And they got between something like two and 3 million to basically talk to the same four or five officers. And it's okay I get it. They didn't do anything wrong. But that's, that's one example, you see the really big zip mills. They just, they get so many of them. It's what's what are we really trying to accomplish?

[00:17:07] And then the final thing is just, some agencies spend more money or offer more money than \$50,000, \$50,000. Isn't that much money to anyone. And so there's part of it that are just, I would just consider cutting it out and going to larger awards and award more people, more meaningful amounts.

[00:17:23] That's why I would consider at least this is a fairly reasonable view on why I would consider killing it. Or being really mindful on what the purpose of phase one is moving forward. What

[00:17:33] **Eric Lofgren:** if you had a phase one that like the 50,000 was really like you do the phase one, it's like very lightweight.

[00:17:41] But then the phase one cash is actually there for you to actually bid on phase two or something like that. So you're actually covering some of their upfront expenses cuz you know, or Hoffman here. He had a, I think it was about a year ago now he had a, also a post on some of the cyber stuff.

[00:17:57] And he said the success rate was 20% was his estimate of a submission. And it takes three man months. Let's just say two man months of time to put together a silver proposal. And so when I look at that, I'm just like okay. If I put that together, if I have five companies on any given civil proposal and I price them out at, two man months, each and a man hour is just a hundred dollars an hour, let's call.

[00:18:25] Like the total cost of input on the proposals, just on the industry side, not on the government side is over 160,000. And these civil rewards aren't really that big. So I think you're trying to say let's cut out some of that small stuff in some of that churn, cuz I'm sure like the proposal process is relatively large compared to the winnings in phase one, but could you actually use some of that phase one?

[00:18:46] It is always nice. I think in my mind, cuz it's like for the big companies or maybe these CI mills, they have a bunch of existing kind of government contracts and portfolio stuff, so they can expense that. Or it's just like one more thing where it's like a new company. It's here's a big investment upfront for you to even play.

[00:19:02] So could you level the playing field in that way? Yeah.

[00:19:04] **Ben Van Roo:** I think it's a fair argument. You know what I don't know though is With the hit rates of phase ones to phase two, if sometimes you're sending false signals to these, to smaller companies that are starting to per to, to engage.

[00:19:15] And then, again, your best likelihood of winning is to engage a third part, third party service. And so maybe it helps cover their costs a bit for sure. But yeah, I think it's fair to contemplate what that could be, what we could do with that money. And is that a better use of money just to award more people with phase twos or larger phase twos?

[00:19:34] And these are trade offs. Yeah. That's exactly right. And I think the the cost of producing applications for large companies is for the, that are the CI mills. It's very low because they just have, they have this is in some ways some of their biggest innovations is to produce grant.

[00:19:48] Grant proposals at a lower cost and then stay connected the networks and do what they do to get it done. It's not to say that they aren't producing innovative technology, but you really do have to look and see some of the other

factors that in performance metrics that say not all of these really big mills are really doing the best by way of the war fighter.

[00:20:06] And so yeah, I think changing the phase one is one way to think about it.

[00:20:10] **Eric Lofgren:** I think one of the issues here that kind of frames, the whole thing, is just people come to CI R with very different perspectives of what it means and what it's for and what are the purposes of it.

[00:20:21] So you've talked, one of, in one of your recommendations was deciding what is CI about and have a consistent message. What'd you mean? What was, what's the confusion going on?

[00:20:30] **Ben Van Roo:** Yeah. And I think If anything that stayed even consistent throughout my experience in this whole process is that everybody thinks it means something different.

[00:20:40] And that's maybe a good thing. It's maybe a little bit of a evolutionary thing. It's maybe a bad thing. Some people think CI R is fundamental research, basically you're augmenting the national labs. Some people think the goal of CI R is to protect the American manufacturing base or the defense manufacturing base.

[00:20:59] Some people think it's look ways to see early technologies. Some people really think it's about transitioning dual use technologies. And then some people think Hey, this is discretionary funds that like the MAJCOMs are gonna use. And and when I say some people I'm talking about. You could see people in the same organization in the DOD have very different views.

[00:21:17] Like it was sitting in a room with congressional staffers and liaisons on this that have been around working on this for a while and they have very different points of what success is and what the money's supposed to be for. And and then frankly other agencies think about it differently.

[00:21:31] The way NIH thinks in NSF, like drastically different than what the do D looks at and the way that they award people is different too. So I I think part of the problem is that, or opportunity is that it's everything to everyone. And it's nothing to, to everyone at the same time. But the, again, from a company perspective, what I was concerned about was if we're gonna market this as a way for dual use technologies to jump over the line, it really may not be that.

[00:21:59] It's certainly not sure that's what it's being used for and that much money's being allocated to that specific need. But the D O D could say to Congress, Hey, we need more money for innovation. And Congress might say, Hey, you actually, you have this sip thing. Why aren't you using that?

[00:22:13] And it may not be cranking out the next innovative drone or counter drone or AI system or whatever. And so that's where I think a lot of the I dunno if you go to LinkedIn and you look at some of the comments, there's a lot of debate of what this is used for, what it's not used for. And people get really passionate about it, but if you step back.

[00:22:32] And you look at how people are being used. It's look, that's why everyone's confused. And I think if SBI or SBA say, look, we want it to be everything to everyone, then say that, but then also market, Hey, there's actually gonna be a pretty small slice that will probably really be used for dual use technology transfer.

[00:22:50] I think that would be a little bit fair. But that overall experience of everyone has a different viewpoint on what it should be used for guided how I tried to frame different aspects of the subsequent articles.

[00:23:02] Yeah. You

[00:23:03] **Eric Lofgren:** brought up the, uh, GAO report, which, you know, looked at how the air force used their CIBER funding in a different way.

[00:23:11] Geo was in somewhat of a glowing review to a degree, cuz they're like, Hey, they said they wanted to bring in non-traditionals and they did actually bring in more non-traditionals compared to the conventional CI awards. And they actually were able to drive down procurement administrative lead time as well.

[00:23:27] So is this is some of the confusion, just like different offices are marketing it in different ways. Like Afros here, just Hey, we got all this. Can we just put it in one place and leverage it for dual use. It doesn't seem like other people were saying that like fros just decided and the air force, Hey, this would be a good idea.

[00:23:46] And they were like the loudest about it. And they got a lot of traction for it in terms of LinkedIn. And so maybe it made it seem like that was more than what it was relative to the other agencies. Do you think. That was something going on with Afros that led to the confusion, but it also seems like

for Afros with their stratify and everything else, they're at least trying to follow through on at least your vision of the dual use.

[00:24:11] Or is that not true?

[00:24:11] **Ben Van Roo:** Yeah. Yeah. Yeah. I think definitely not only are the agencies different, but the services behave differently. And you can see in the data the, how the different services will either be, bringing on lots of new companies or not with these funds. And so F works and the air force is the most progressive in terms of trying to use the money for different ways and bringing new technologies and bringing in new vendors.

[00:24:36] And again I think that there can be I personally believe that is a very good thing. I don't I don't see lots of other meaningful paths for new companies to start to work with the DOD early. Even if you look at DIU, that's a later stage engagement, they're looking more at a series B series C company that's already got fair amount of commercialization than the other markets.

[00:24:59] Intel is varies in between, but it's also something similar. And again, those are only gonna take in the case of DIU. It's only if someone has a specific need in the case of Intel, they're a little more thematic, but they're not making thousands of investments right now. So I think my personal belief is that's the way that app works is trying to address open topics is thoughtful.

[00:25:20] And I think that is a path that will lead to both new technologies coming in new founders coming in a more diversified group of founders coming in. But there are also some issues with that. Again, I brought up the P issues, like how is it tied to long term funds?

[00:25:35] That's interesting. I'll also say that I think a challenge is companies that are very cash strapped and don't know, the DOD will still be outta luck because they can't necessarily pay for, or will can't necessarily make the investments in consultants. And so there are still some barriers I think, for real kind of equity across those application process.

[00:25:58] But I think it's, I think it is progress.

[00:26:00] **Eric Lofgren:** You had an interesting idea. There's this new, of course agile procurement fund that is used for getting companies across this quote unquote valued death and like into operational stuff. So it's actually procurement money. It was a hundred million dollars.

[00:26:14] They announced it recently to 10 companies. So \$10 million per company. And one of the parts of it was. It had to go to companies less than 500 million of cumulative defense contracts, you recommended in one of, and I think it was your third blog posts that a program like this should just be funded through the civil withholds or institutionalized rather than having these random pots on the side, that Congress, by the way is also skeptical of, could you like institutionalize it into CI itself?

[00:26:45] And I think that gets back to some of our discussion on get rid of phase ones, and use those that CI Monday more strategically. What's your kind of is there anything you'd like to add to that

[00:26:54] **Ben Van Roo:** yeah, I think that's fair when I looked at app fit it's, there were, there are a couple companies that I know that are doing some really interesting things that were selected and Here's I bring it up in, in the third article.

[00:27:08] It's here's a shining program. That's super exciting and let's market it and that's cool. And yet, I called it the, let the me cake moment because you, on the other hand we're trying to do this reauthorization of the S B program. And I don't believe any changes are gonna go through.

[00:27:24] I actually think this thing is gonna go into continuing resolution. I think it's gonna get punted into the next Congress. And I think that's so where I'm of tying these two together is we're talking about how this program is a really good way to bridge the value of, but we have this program where there's, a billion to 1,000,000,003 each year.

[00:27:39] That for the most part you could fund two to three to four full APFIT programs. That's a couple hundred million every year. If you wanted to just by adding some reforms on 30 to 50 companies that are abusing the system now. that is to say, it's you have the money, you don't have to do it as a one off.

[00:27:59] You just have to think about reforming what you're doing today. And what I like about the program is I think it actually shows that they're motivated in finding better transition pass for companies. And yet we still are, the largest amount of money that's normally dedicated for that could be dedicated for something like that is not really being touched.

[00:28:18] And so that, that's where I think that there's a lot of politicking that's happening right now. There's a lot of lobbying. There are key constituents that

do not wanna see anything changed. And I was just trying to bring up, you. Why this is a, is an opportunity to move forward.

[00:28:32] **Eric Lofgren:** Maybe let me I guess rephrase what I think some of your your blog post was trying to say and put it together for our audience. And then I want you to comment on it. So you were saying, Hey, look, there's all these companies that are, going back to the sipper trough and getting millions of dollars from sipper over their lifetime, tens of millions of dollars in many respects that could be like hundreds, hundreds of millions of yeah.

[00:28:55] And significant portion of their overall company revenues, or at least their total awards from the government. And so you're saying look, you have all these companies, they don't seem to be like transitioning something. They don't seem to be wanting to grow or scale or transform the department in some way with these technologies.

[00:29:12] So if we just instead of giving these dollars back to these CI mills, some of which are very high dollar public companies as well, there's already the money's already there. We just need to reallocate it in a strategic and different way. So if please just go off on that, but also just describe what are mills and what'd you find about some of these companies?

[00:29:31] **Ben Van Roo:** Yeah. So when I wrote the first article, I tried to stay away from it a little bit. I was identifying that a small number of companies would take a large money amount of the money only with the intention of saying look, there's actually not a lot of money to go after if you're a new entrant or you just people have the right context.

[00:29:47] But. What I did is I decided to spend more time really trying to understand these companies because it's, if these companies are doing a great job by way of the DOD, then it's really hard for me to say, no, actually you should go fund this ill fled startup in Silicon valley. That's two dudes in an AWS account.

[00:30:06] So what I did though, is I was trying to look at how do you, how would you quantify, how would you define what a mill is? And people there's different stuff written on that. But what I was really trying to get at is how sustainable are these corporations with the do D without CI money?

[00:30:21] And if you can look at the blog post, there are companies that have made hundreds of millions of dollars and have received hundreds of millions of dollars in awards from the DOD. And it represents, it can be 30, 50, 80% of

their overall DOD. A total like pool. So what that means is they're super dependent on the DOD and what it also means is that they're not necessarily commercializing any of this technology at scale.

[00:30:46] So a lot of this argument is really What are we giving the war fighter each year with these dollars and it, and I get really angry that no, one's not really angry, but I get upset that people aren't talking a lot about that. That should be the guiding force. I think personally, of all of these different topics, like what are we really doing for the DOD and company after company, you can see when companies are getting 50, a hundred, 200 million in CI dollars, they're not actually producing commercializable technologies, and this is something that's debated, but you can see, there are some companies that are, but there are a bunch that aren't, and then there are other nuances that I found.

[00:31:23] It's there's, there's a company that's still competing for SBI dollars and they've had a billion dollars in DD contracts. And you kinda think okay maybe those guys should just like, you've won. You've done a good job guys. Let's bring in the next batch of small companies. .

[00:31:36] The other thing that I highlight was there's a company, Luna tech Luna, incorporated Luna technologies in corporate stuff like that. It's a public company it's traded on the NASDAQ and they're highly dependent on SBIRs and that's, thank God that they did. Not that they don't give a dividend, to me, that just seems, this is non-dilutive grant dollars for research for different topics.

[00:31:58] It's, it is not a contract it's not necessarily binding the same way as a, procurement order. And yet, here's a public company that's bidding and winning. And is that right? And so the second article was really trying to understand, how do you even think about dependence on the DOD?

[00:32:14] Are these companies being successful in commercializing their companies year after year? How much are they really taking. Some of this stuff is gonna be again, opportunity costs. What are we not investing in? Who are we not investing in? What technology is not being fielded.

[00:32:29] And I think that was, some of the motivation of really looking at those. And then I did explore coming up with policies, what would be policies that maybe would work for everyone. And that's where I I push some ideas there. Yeah.

[00:32:41] **Eric Lofgren:** And why don't you just tell us, what some of those recommendations are, cuz you had a nice little chart about, what's the current

state and what might make sense in a future state in terms of if you've, I iPod you're on the you're on the stock market maybe you shouldn't be able to get sipper dollars.

[00:32:56] What are some of the other things that you recommended in that lane?

[00:32:58] **Ben Van Roo:** Yeah. And again, I'm not associated with any policy arm or Affiliate in any Congress, actually like people would send me emails and say oh, you're just working for such and such.

[00:33:08] And you're a DOD plant or whatever. It's no, one's paying me at all for any of this. But the policies that I thought I was trying to say, okay, how can we think about ways to encourage new growth, to free up certain amount of capital for new S who come in? One thing that I push as a need four, two with the idea was eight phase ones per year per company, four phase two is per year per company.

[00:33:29] And then I called it phase three, but really I was talking about STRATFI/TACFI fives as a that's a cap. And the basic idea was if every company was capped at that annually, you can compete year in, year out. That's actually like I would argue. And I've worked at companies where we've won awards.

[00:33:46] That's actually a fair amount of work right there. For you to be successful and make products that will ultimately be commercializable for the DOD. That's a pretty good cap. And then what I found is that would free up basically about 200 million a year for other companies to participate or the Mon money to be used again for something like app fit.

[00:34:07] And so like that, only we're talking about a few dozen of companies that would, that, that would change their

[00:34:14] **Eric Lofgren:** business model. How many phase twos are they getting? In one year, one of the biggest guys, , like they're getting 30 or something? How much is that?

[00:34:22] **Ben Van Roo:** Yeah, there can be, there are some that are getting 30 to 50 a year,

[00:34:26] **Eric Lofgren:** so that's where , if you just made that cap, cuz that cap seems that's a pretty high bar, eight phase one. So we're talking several

hundred thousand dollars, four phase two. So that's probably three to 4 million or maybe more. And then two phase, two point fives or whatever stratify T files. So that could be in the tens of millions. I would, I don't think anybody's gonna win two phase two point fives or Strat fives in a year, but still that's a reasonable limit there.

[00:34:53] Did people say oh, you're being political or this must mean that you're like this. Oh yeah.

[00:34:58] **Ben Van Roo:** Yeah. They I've been told that if we moved. So this is something that you, I would encourage everyone that's in participating in this, the word small business are thrown around.

[00:35:10] Like you're gonna crush small business. The reality is we're talking about a handful or a couple handfuls of businesses. Small business would greatly benefit for some of these changes. A handful of businesses may have to change how they operate. And very recently was told if we change benchmarks or we change caps.

[00:35:32] We in these companies could not do that over a span of three to five years. That's my point, if you can't change and commercialize in other ways, over a three to five year span and you are so addicted to the sugar, that is S B I R dollars. That's what we, that's where we really have a problem.

[00:35:51] And that's what we should really focus on correcting. I get the argument that says, Hey, these people have been operating, participating in the world and helping the DOD, and now you're penalizing them. Sure ish. There's been a lot of there's, that's a lot of free cheese for a long time.

[00:36:04] There, there's a great example that I call out physical optics was a company. That's got something like 600 million in total funding from the DOD through S B R grants. And they sold for 310 million. There could be reasons there, they're not the only ones. I called out Luna labs and they said, they've recently sold off their or Luna.

[00:36:25] They've sold off their labs division for 20 some million to a company. 20 million is about their annual take in SBIR. I'm just showing that this is just the data that's saying, Hey, if they sold for a billion dollars okay, clearly they were doing some things really well. But they're not, and so that's why I think it's at least fair to question and talk about reform.

[00:36:47] But , it gets to be a pretty hot topic, especially within certain parts of the congressional debate.

[00:36:53] **Eric Lofgren:** This all just gets back to the purpose and the perspective of what is CIBER for cuz if you think it's for scaling things to the war fighter from nontraditional, or even just that first part, right?

[00:37:05] Like commercializing and getting new things to scale you might have a different perspective than if you're just like, no, this is for small businesses, more of a social program or just to make sure that the labs get what they want. Maybe the labs are well served, as you said. But yeah, I would think that if they wanted to get rid of the 8 42 policy, which seems again to be like, you're only gonna affect the very biggest guys who are getting these all the time.

[00:37:31] 8 42 in one year, not over your lifespan. If you do that, then I think that they should have to show, at least for those big companies these are the things that we have helped develop with the labs and here they are at scale in production being used every day. And if they can demonstrate that, then I think you have a harder time on your cell, right?

[00:37:51] **Ben Van Roo:** Yeah. Yeah. And I think that's super fair. And. Where it's a little challenging is a big argument is, Hey we're we are helping the labor force. We're, we're seeding America defense manufacturing. And if you, again, you look at the rules will basically say you are, you're capped on the number of people that can work at your company to, to receive these dollars.

[00:38:11] And you're only gonna receive about so many if you're a mill. And so what happens is these companies go into stasis and they're only gonna have, let's say a hundred, 200 people that work at the company. So you're seeding dollars that aren't growing into thousands of employees. You're not, qual bring this out.

[00:38:28] As an example, Qualcomm is an, a great example. They took a million or 2 million in their, their market cap. It's tens of billions right now. It's massive. But they only took a small amount of money because they, their objectives were to commercialize outside of it. So we actually get into a scenario where it's very fair to argue that you're actually hurting the manufacturing in the defense industrial base because they go into an addiction in a stasis mode where they're not commercializing outside of SBIRs.

[00:38:57] And, I call out a couple examples where took on a huge amount of venture capital, but there several thousand people now where whether their products are perfect yet, like that's a different thing. But if you look at the startups that are doing a mix of DOD dollars and venture capital that you can do private equity, you can do loans.

[00:39:16] I don't care. This is not a pitch for venture capital. Those are companies that are very motivated to commercialize and to grow their employee base and to continue succeed. And I Don know that's the American way. And so that sounds, A little over the top, but really we should be thinking about is this really helpful in growing our our labor force and our industrial base in defense and I'm not, I'm far from convinced that, that is the case.

[00:39:41] Yeah.

[00:39:41] **Eric Lofgren:** So it's not about growing, like just sustaining the labor force, making sure people have dollars. It's are these people working in companies that are providing tremendous value and we can debate on whether Anduril is or is not providing value . But I think one of the points is Enduro, I think they were a hundred million to 150 million last year or so is what I heard in an article.

[00:40:04] Let's just take that as true. But there're valuations like \$8 billion or something like that. Whereas if you look at one of these silver mill companies, they're getting something comparable in terms of revenue. If a lot of it's coming from CI, they don't get those types of valuations. Do they? What is the kind of the valuation of GovCon companies or CI mill type companies relative to a Silicon valley or a private sector.

[00:40:27] And does that say something about what you're trying to get at? I think

[00:40:30] **Ben Van Roo:** I think there's actually an important point in that. Um, There's a recent article, even that with a venture capitalist, that's saying, Hey, our CIS are important to us and we want reauthorization happen because wanna maintain, we don't wanna break our relationship with the industrial base. And I get that.

[00:40:44] I, there's a little bit of irony in that the DOD is effectively put it on pause anyway, for about six months by way of their own choice, so we're already putting a little bit of a, a. A pause on the frequency of the, of SBIs coming out. But there's been more than one, probably less than 10 venture

capitalists that told me, we actually don't like seeing many CIS being won by our companies because it's a false signal.

[00:41:09] It just means that they've gotten good or they've paid people to, to reapply and reapply. It's fine to engage to an a point, but if you're co going year after year and your main dollars are CIS, then that doesn't necessarily show me that you're commercializing in the DOD. And the companies that I call out that I know that are different Silicon valley companies.

[00:41:28] Yes. They have won awards. Frankly, and really only won a one large and that was through an ABMS program and it was actually just vented to be dollars. So that, that was a unique thing that will did. Many of them, many of the kind of hot Silicon valley startups that are doing defense tech have taken very little S B R dollars in part cuz their main goal and they're being pushed to commercialize and get real deals.

[00:41:54] And so I think the way that I would think about, valuing gov tech, it's hit or miss there's you said highs and lows. It has been more attractive. There was more money put in it in 21 and than in the last several years.

[00:42:06] And I think defense will be more and more attractive again. But the civil process , it can help seed the start of the conversation, but I don't think companies are gonna get massive valuations based on, if they were getting \$5 million a year in SPR contracts. I think most VCs can kinda see through that quickly.

[00:42:21] **Eric Lofgren:** one of the, the special parts I guess, about CI, is if you did the phase two, then you can get a phase three sole source. So that allows you to get a sole source award without going through the competition or have all these business systems or other requirements. I've seen, Enduro and certain others.

[00:42:38] They have been able to receive some significant, phase three follow ons, but those are actually, about a billion dollars a year. I think when I looked at the data. So it's not like it's not even bigger than the amount of phase twos. So I think at some point the system comes back in on itself and says, okay, we can do some phase three type things like this, but we gotta fold you back into the process at some point.

[00:42:59] But before we get or maybe we won't even get into the phase three type discussions, I wanted to actually bring us back a little bit because You said

you, got a little bit emotional there about actually what are these dollars for, and are they actually going for military strength and for the war fighter?

[00:43:14] And so you also said in one of your blogs that the tech community itself has a duty and moral role to support the department of defense. And there's all, of course all this consternation about, oh Google kind of left, actually, they're now back in and on the system, but they left for project ma and DOD looks over at Silicon valley and is like, oh, , those guys don't want to do business with us, but you're saying, you, you do have a duty and a moral role to play.

[00:43:41] And so what was your kind of personal journey to come to that conclusion? Have you always been interested in this space since you were a kid or how did you get there?

[00:43:48] **Ben Van Roo:** Yeah. Yeah. I And my dad flu. F 80 nines, one oh twos and eight tens.

[00:43:52] And, grew up watching them blow up stuff at VO field in Wisconsin. My, my brother's a wing commander. My, the, probably the four most important people, male influencers in my life are all military. And so I'm gonna be super biased. I think I get that my career, I worked with the ran corporation for a long time main, mainly with the air force.

[00:44:11] So some people would not view me as objective, and I think that's fair. But I, I was at a startup in building up the national security arm in 2017 through 2020. And I actually think it was a super interesting time to be engaged with all these different programs.

[00:44:27] We were fortunate enough we were working with Intel and in some of the agencies there we were awarded SBR dollars. We, Through advising and or our own contracts. I'd say, I at least saw the early, very early inception of ABMS. While I was still at the company, when we were starting to engage with other people, thinking about what ABMS would be and was definitely pretty close to some folks at project Maven.

[00:44:50] And, I think what was intriguing is you had this, I felt like 2018 was like the low point where we really saw pushback from employees at Google pushback of like, why would anyone wanna engage with the fence? And it was a little weird for me. I felt like I was taking crazy pills because at the same time we have some of the EST engineers in the world that were still pushing out ads and news feeds.

[00:45:12] And, I didn't necessarily know that they were really helping the world. And so there was this strange time where people weren't proud of trying to support the department of defense and and there are many people that I think have progressively pushed to change that.

[00:45:25] I think I touched on it a little bit. I think that's very different in 22. I think there's a number of reasons what, why that is. I think one companies are needing more sources of revenue and so they're more open to working with the government. I think Ukraine changed the perspective of the tech community a bit in part, because there were a lot of engineers at working for a lot of companies in various capacities that were, that are from Ukraine.

[00:45:52] I think at least my experience, I knew companies that were immediately trying to find ways for their employees over there or contractors over there to get out. And that was a new experience for a lot of companies that just haven't ever had anything to think about like that. And so I think it's an interesting time where if the DOD really wanted to.

[00:46:11] We could seed hundreds to thousands of new companies that could engage in various aspects of defense. And this frankly could even just be productivity tools at the DOD or in the USG that just helped people get their email better. And I think across the board, there's a great opportunity to engage.

[00:46:29] But yeah, I I think, in terms of moral duty and responsibility, you can go back to the beginning of Margaret Amira. You can, look at the history of Silicon valley and the relationship there you can look at, you could read a bro Bo bros kill chain to think about the motivation of future competition with China.

[00:46:43] At the end of the day, I guess personally, it was just like always what you should do because that's the family I grew up in. And I don't know. I think it's a little weird seeing DJI drones being used in Ukraine to help deliver precise munitions. And is that we can't produce an American cheap competitive drone like that.

[00:47:01] Yeah, I don't know. We can't off the shelf right now. And I think we're gonna see that across the board. I just think we're gonna continue to compete with China. And until we can field really interesting commercial technologies in certain areas that get DOD backing and DOD support we can fall behind in some key areas

[00:47:15] **Eric Lofgren:** in your mind.

[00:47:16] One of the things that, I suspected about some of those tech companies, when they started rebuking some of the department of defense in my mind, I was like maybe there's a handful of people who actually felt that way, but if you're the leadership. It might be just easiest to go along with that, because it might not be worth it to do business with the department of defense.

[00:47:36] If DOD, let's just say companies were getting trans dime type profits and everyone knew about it, like you get a thousand percent profit on this. I'm sure those companies would've been, flooding into the space. But it is the government sector.

[00:47:48] Like you're just not gonna get the types of margins. Even if you're thinking, venture private funded stuff into it, you're probably just not gonna get the same type of margin structure as you might as like a SAS company

[00:48:00] so what's your kind of view there potentially. Do you think that the structure of profitability and contracting needs to look more like the commercial sector or do you think there's somewhere in the middle from where we are today? Where the companies, it's their duty to support the government.

[00:48:17] So they don't need the exact same types of profitability in terms of actual sales like margins. But they, but the government could, come along a little bit. What's your view on that?

[00:48:27] **Ben Van Roo:** Yeah. I think that not to go super deep into political philosophies, but I think companies are pretty quick to step up and in my opinion, rightfully support certain types of marginalized groups and certain scenarios and say, Hey, we stand behind this.

[00:48:43] But if they're not gonna stand behind the government because it's not profitable, that's BS to me, so I don't like, I, I'm also not a leader of a extremely large company whatever, take that for a grain with a grain salt. So yeah, I don't necessarily like that, but I think, look, actually you're bringing up the more interesting questions that I actually been disappointed that the DOD and that Congress haven't been thinking about or actively engaging as part of this overall reform process.

[00:49:12] And that's really around okay, why is it not profitable? And why are certain companies not wanting to engage? And like I highlight in one of my articles about how the great majority of companies that get backed by Intel and or DIU, haven't actually engaged with S B I R. And then you can maybe say this more broadly about engaging with the government.

[00:49:32] But they're not doing it in part because it's not really economically feasible or make sense at all. And and that could just be, it could be the dollars awarded, but it also could just be about aspects of the process. How do we think about time, from inception, creative idea to, to a meaningful contract and all the roadblocks that sit between. so let me give you one example.

[00:49:57] There's a company I'm not affiliated with them. I know some of the guys there, second front systems this idea of game warden, right? So whether it's good or bad, and I'm not, do you wanna describe that? Okay. So they're gonna destroy me for describing it wrong, but one way I like to look at it is this is actually your app store play to, to get in onto DOD networks where all you really have to be able to do is push your bits over.

[00:50:22] They are going to be scanned and maintained by professionals in the second front community. And you don't have to worry about that. There's that cost money and whatever, but look as a company, I've gone through some of the process to get facility clearances, to get clear personnel to get all of your kind of accreditations your Atos along the way.

[00:50:43] That is so much time and energy that, spend a hundred million dollars and not necessarily on second front, but on companies like that, that are going to reduce barriers for companies to engage and plug in their bits into the system. And that's like an oversimplification, but it actually I really think that's the type of stuff that we should be thinking about, whether it's them, Palantier has like the Apollo platform that kind of helps with parts of the DevOps process to get you Fe Ram compliant.

[00:51:10] Like those are things that are to me, Where we really should be engaging and talking about how do we unlock this process quicker? That the other things I do mention is like, if you look at the actual CBRA application process, I always pick on the cost volume sheets. Like no one knows what that means.

[00:51:27] No one knows how to, no one knows how to fill that out properly or where you're gonna fall outta bounds. And so I think prepopulate what's government accepted and then allow companies to augment and say, okay, no, actually I fall outta bounds here. But if you don't know, don't penalize people for not speaking the same government talk and doing the same types of overhead.

[00:51:45] So I think like little things can be done like that. I think big things are areas. Would be really exciting to say, all right, CIBER, there's actually

gonna be, if you get this award, there'll be a hundred thousand dollars credit that will already plug you in. So people can start using this thing right away.

[00:52:01] , that would be super intriguing to see innovation in that space. And that I think would excite the coming full circle. That was a very long answer, that would excite the people to think more about the economics of the opportunity in a more positive light. Yeah. So

[00:52:16] **Eric Lofgren:** one of one aspect of this, I think the former part was.

[00:52:19] Like having Twilio, right? Like I don't need to build an SMS like type app, so I can do that. I just plug in Twilio. Can I have that same kind of thinking which already exists, right? Like AWS, a lot of the fed ramp stuff for new contractors. If you adopt AWS, you're adopting a lot of those security controls already.

[00:52:39] Can we just take that thinking and massively expand it to make that, just reduce the barriers to entry through that. And it's not necessarily like a lot of this bureaucratic type stuff necessarily. It's actually what are the incentives to derive these types of capabilities that can

[00:52:54] **Ben Van Roo:** be used or program it in?

[00:52:56] Yeah. To spend 30, the 30 million of killing phase one and, or parts of phase one and just be like, Hey look, everyone that wins a phase two that reaches this milestone is gonna get the AWS credits to be fed ramp compliant. You just like to me. Start the process of evaluating companies, assuming that they're gonna be successful, especially for SBIRs that are more transitional nature to, cause when people talk about the Val part of the people talk about the value death, part of the problem is the clock doesn't often start until you've completed, like the phase two, and then people you have to go out and find sponsors for facility clearance.

[00:53:34] You gotta hire people like in some respects that we should be thinking about compressing that amount of time. So once you're, maybe even in the funnel, you've put in application phase one, there's some degree of vetting that's going on in the background. There's, distributed databases across parts of the DOD.

[00:53:51] So everyone's got really views already exist. And I just think if we're really, if we believe Sr is a way to help fund companies to participate, unlock new technologies, the. The most intriguing bits that are still falling by the

wayside are how do we trim down that time from application to a fully functional application for the DOD users.

[00:54:16] And that's the stuff that would be really intriguing to see improved in the future. So as we

[00:54:20] **Eric Lofgren:** wrap up here you've obviously started your own company recently that's in the artificial intelligence space. You just want to give us like what's that company about and what are you trying to do with it?

[00:54:30] **Ben Van Roo:** Yeah, so I think there's been a generation of artificial intelligence, applications and models that have been built and a process of labeling lots of data and tuning models and monitoring them and putting them into production. And more recently, you've seen some really large architectures being transformer architectures being rolled out T3.

[00:54:50] G4 is gonna come out soon. You see Dolly people making images of Pandos playing poker. What these models represent, I think is the next generation of how people will engage with AI. But there's some real challenges in that. And that for the most part, they're locked up by only a handful of players.

[00:55:05] And they're so big that although they can answer questions and be trained really efficiently they're, take tons of GPU or TPU and they're not that performant for certain flows. What we're focusing on is what we believe will be, really important both to the broader commercial sector.

[00:55:19] And also the DOD is how do you take advantage of these really large transformer architectures and make them extremely useful and available for organizations with their actual workflows. We'll leave it that vague. But that's where we're going right now.

[00:55:32] **Eric Lofgren:** All right. Cool. How can our audience find your work

[00:55:35] **Ben Van Roo:** or reach you? It's on subs stack. You can just look up my name on sack it's there, or I think people wanna reach out and ask questions usually available on LinkedIn and yeah, I'll try to get back and answer or Twitter any questions that were hate mail?

[00:55:48] I'm happy to receive both Ben

[00:55:49] **Eric Lofgren:** van Roo. Thanks for joining me on acquisition talk. All right. Thanks

[00:55:53] **Ben Van Roo:** later.

[00:55:54] This concludes another episode of acquisition. Talk, if you have comments, interview recommendations, or just want to chat, please contact us@acquisitiontalk.com. Thanks again. And until next time.