No time to waste in defense innovation with BMNT's Pete Newell

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[00:00:28] **Eric Lofgren:** I am pleased to have Pete Newell back on the podcast. He's c e o of B M N T Inc. Co-founder of Hacking Def Ford Defense, and a retired army colonel who ran the rapid equipping force that fielded hundreds of products into Iraq and Afghanistan. Pete, thanks for joining me again on the Acquisition Talk podcast.

[00:00:47] Hi. Happy to be here. Thanks, Eric. So you've had a couple recent interesting articles, but I wanna start with kind of the National Defense Strategy, which just came out, and the geopolitical conditions. You argued that the United States needs to really rethink the approaches taking entirely to national security.

[00:01:03] What's the cause for this rhetoric? .

[00:01:05] **Peter Newell:** And so I say it bluntly the national district strategy came out and then the, the defense budget came out. And I think first we have yet to acknowledge the operating environment, both economically again and from a national security standpoint has significantly changed.

[00:01:23] And I'll probably point to, what's going on in the Ukraine over and over again. Which is not radically different than what happened, you know, in the inner war u years between World War I and World War II with Germany. And the bottom line is we're in an era where people are looking at the adoption, in the adoption of emerging tech and building new operating concepts and putting them to work in real time in warfare.

[00:01:52] And the Pentagon is built on a system that does that in 30 year cycle. So the question is how do you do this in three to five year cycles? And despite the fact that, the MDs calls for innovation and it recognizes many of the same problems, there's not been no kidding concerted effort that's changed that and there are multiple issues.

[00:02:13] There's the one is that. US problems are not just US problems, they're allied problems. The supply chains for building the things we employ don't necessarily exist within the United States. They exist within our allies. The folks who are going to be in conflict first or our is not the united.

[00:02:31] So the numerable things that, that, are inter combined with what we would consider to be a different world where we have to approach our national security in a different way.

[00:02:41] **Eric Lofgren:** and have you been tracking like what, what's happening with companies in the US trying to get their products into the field in Ukraine? And then how about companies that are foreign trying to do business with the United States? What are those key issues?

[00:02:56] **Peter Newell:** and I can start with the foreign companies.

[00:02:57] You know, We run a Hacking for Allies program that looks at common problems between our allies and then looks at the companies in the allied companies that are advancing technology that actually solves those problems and then looks at the US market and says, is there a place for this company?

[00:03:14] Yeah. And first and foremost just, it's a business challenge for the company that says, I'm a company in Norway. What's it gonna take for me to do business in the United States? I'm a Norwegian company, I'm just not gonna get a contract direct through an S B I R with the United States government.

[00:03:30] Or it's, I'm not Rodeo Day to a contract. I need investor dollars. I need to build a better company. And I think, and I over and over again, I'll look at people and say, but the problem with the way the government approaches this is not necessarily about getting government investment dollars to fuel the widget.

[00:03:51] It's about building a better company to build a better technology that can survive and scale. So we look at this allied program as first and foremost about building better companies and then building the business case for that company, actually doing business in the United States successfully.

[00:04:07] And then obviously then there are all those barriers of if you think it's hard for a US company to get past security issues and classification issues and contract issues and issue after year after issue. Imagine what it's like to do it from a third country. It's almost impossible. Where they are successful is when there is a commercial reason for extending that company into the United States.

[00:04:30] Then it becomes much easier because you're talking about a US entity doing business in the United States, the Byam America, and some of the other rules that have been, put in place to protect US businesses in many cases

have been misused. Or misunderstood. Or misinterpreted that are also preventing, perfectly legitimate companies from countries that we have bilateral agreements with, from getting excited about doing business in the United States.

[00:05:01] So there's a simple thor of issues with the allied side of the technology. For companies in the United States. It's still. I applaud the work that AFWERX and many others did in opening up S B I R to more companies and get more money to them. That did not fix the far based contracts that companies have to get through to scale.

[00:05:22] It just created more volume against that. impenitrable Wall. We still haven't figured out what the program or record is for something that's not a program or. . So how do you sustain the development and deployment of something for three to five years? That's not gonna be a 30 year program. How do you do DOTMILPF you know that, how do we train equipment, do that?

[00:05:44] How do we do that in six months instead of six years? All those things that are getting in our way, we just can't seem to get out of our own way with the current. . We I'd we have all these people who have been given jobs related to compliance and nobody's willing to look at 'em and say, we want you to be barely compliant.

[00:06:01] Stop trying to perfect compliance and prevent people from moving forward. We just want you to be just good enough to prevent a train wreck. .

[00:06:08] **Eric Lofgren:** Yeah, that's in, I was looking over all the product support stuff and there's hundreds of handbooks and like the Laura analysis and maintenance task analysis.

[00:06:18] It's just it's almost endless. Like at first I thought acquisition was scary and pen role with the far and the 5,000, and then when I looked at product support stuff, I was. that, that's even scarier . And

[00:06:30] **Peter Newell:** Steve Blank and I and Steve Spear just deep into this conversation, and it's just Steve Blank.

[00:06:35] And I really started nagging him about doctrine probably five years ago. And after two years of it, he finally figured out what I was saying. But the three of us has really dug into the, this concept of why do we need a doctrine for Producing new capabilities and new operating concepts at speed and scale, which means I can do it fast enough while I can scale up far enough to actually have an impact when I need to.

[00:07:01] Putting a bandaid on the current P B E system is not the answer to doing that but this isn't and should not be construed as a replacement for the current system. The current system's inadequate to do what we need it to do by. And simply trying to put Band-Aid on it is not going to create an end-to-end seamless pipeline that delivers capabilities at the speed we needed.

[00:07:24] Is

[00:07:24] **Eric Lofgren:** it possible to reform large institutions, or do you really have to build something new based on new paradigms or technologies go around that system? What's your view?

[00:07:34] **Peter Newell:** When's the last time a dod. , the last great reparation, water. You

[00:07:38] **Eric Lofgren:** could say Goldwater,

[00:07:39] **Peter Newell:** yeah. So in many cases, I'll tell you the Pentagon is too transient. The generals and the leadership and the political leadership comes and goes, fairly rapidly. So the idea that the Pentagon is gonna create a massive change on its own. Is probably farfetched and I don't wanna say it's a briefly far, it's the wrong ask.

[00:07:56] The idea that the Congress will probably have to drive that change so whatever the, what was it, the Packard. , there were substantial commissions that were put together and lots of hearings and lots of discussion before Goldwater Nichols became a thing.

[00:08:11] we probably need to kick that process off, or at least have an honest discussion about whether it is time to reform the Pentagon. It's structuring its output to ensure that we are doing both delivering capabilities rapidly at. And delivering long-term capabilities using the resources as best we can for the United States.

[00:08:33] It's not either or. We have to do both, but I don't think the system is acknowledged of both or are equally important. .

[00:08:40] **Eric Lofgren:** Yeah. We had the Weapon Systems Acquisition Reform Act in 2009, which maybe went in the wrong direction, really focusing on cost growth and risk reduction, but, and then we had 30 years after Goldwater, there was those series of hearings that led to the 2016 N D A A middle tier acquisition, the revitalization of other transactions.

[00:09:01] But I, I feel like you're saying something like those were smaller efforts. It wasn't like a packer commissioned gold. But there's also the issue of okay, it needs to come from Congress, but who's really driving that? Because it's not like constituents are like super involved and really are gonna be like, voting on this issue.

[00:09:20] How do you get that groundswell?

[00:09:22] **Peter Newell:** I think the. And I have I've spent, a numerous hours with numbers of Congress having, personally taught Mike Rogers Adam Smith and a number of others that are on the HAS and some of the appropriations committee.

[00:09:33] I think there is a sense , that the dollars being put against innovation aren't necessarily achieving innovation and capabilities. the, in the manner we need to, and obviously, the big boogeyman is competition with China, but I think they're also recognizing, quite surprisingly about how fast the Ukrainians found new operating concepts and applied technologies and implemented them to the auto dismay of the Russian.

[00:10:01] That's probably more of the future than it than it has been of the past. So you can't look at those two and say, we're in the right place. You just don't come to that conclusion. I think the back to that compliance thing, as you said in the risk reduction only reduces the risk of program failure.

[00:10:19] It does not reduce the risk on the battlefield. In fact, Every delay that you go through in delivering something increases the risk to a war fighter on the battlefield, and it's catastrophic on the battlefield, and you don't deliver the right capability on time. We haven't created a profession that does that, and I can look at all of the innovation platforms out there and the people that were involved in 'em.

[00:10:42] It's not that I have a, an ax to grind over the demise of ref, but the demise of REF was just a catastrophic screw up on the Army's board.

[00:10:51] **Eric Lofgren:** And that's the Rapid Innovation Fund? Or the rapid equipping force? Yeah. Both of those are now gone, but. .

[00:10:58] **Peter Newell:** Yeah. And look at it, I know that Nate Diller retired the other day and unfortunately, Nate raised his hand and it's gonna go to work in Congress as a professional staff member.

[00:11:09] But if you look at the people involved in the innovation cells that have been successful with this D I U the former REF or Army Futures Command or F Works or even Naval X they're all gone and. I would say all but about two or three left service and went someplace else, which this tells you there's no profession that values what they were able to do so much that they were held in servicing and kept doing things.

[00:11:37] I come back and belabor the point about doctrine is doctrine creates organizational structure in jobs and outputs and divines things and actually shows you what's valued and what's not. doctrine eventually will give you a human resources system that values what these people are doing and will allow you professionally to build a professional development system that, that finds, creates grows and retains them without which you're not going to be able to achieve an organizational change.

[00:12:07] I mean, That, that's part of what joint doctrine mandated that we all go get joint duty billets and get joint assignments and go to joint schools so that we could get promoted. Imagine if you had the same mandated about innovation and

[00:12:20] **Eric Lofgren:** what would that look like? Is it, cuz there's all these types of things you have to do to go to the next level at oh four or 5 0 6.

[00:12:27] **Peter Newell:**

[00:12:27] Maybe you have an option. Kinda like joint duty credit is that we give the same credit to people that were Stanford fellows that spent a year at D I U who rather than a joint duty assignment, that's what they did and that still qualifies them for promotion to oh six and the general officer.

[00:12:43] Imagine if a young captain who's running. 18th, the Born Corps's innovation platform. Were given constructive credit as a branch officer rather than be told, if you're not a company commander by this time, then you don't have OERs to do this. You won't be selected promotion of major. So I can give you tons of examples.

[00:13:04] The system says you have to get all these jobs done and if you take a detour and do this, you're putting yourself at risk.

[00:13:11] **Eric Lofgren:** It seems like a lot of this is to really change the mindset. I liked what you said there about risk. Pete Modigliani actually had a really good post on something, exactly what you said, where he had this nice

chart where it was like, as we drive down acquisition risk over time, you know the risk to the war fighter.

[00:13:28] Gets driven up you know, risk appears somewhere else even where you're not expecting it potentially. But every time it looks like we go back to the system. Defense officials often say something like if I'm not gonna accept a new system, unless it does everything my previous system did, but better.

[00:13:44] But it seems like that's contrary to this kind of mindset of how destructive tech is adopted and then scaled. Can you, would you like to comment on that?

[00:13:51] **Peter Newell:** Yeah, I see. You know, We had a saying, a ref and we used to say that the natural ref was about speed of delivery we would sacrifice cost and performance for speed of delivery.

[00:14:01] Which means I would accept a 70% solution that I paid too much for in order to get out to the battlefield faster so that I could get feedback on the problem I was solving and feedback on the capability I was delivering. And then over time, we would improve performance and reduce costs. So I'm gonna sacrifice.

[00:14:24] performance and cost in order to gain speed. And then I'm gonna use what I learned to improve performance and drive cost down. The current system says you gotta get all that right before you deploy it, which means more than likely you're gonna deploy something that doesn't really solve a problem, or you're gonna delay delivering a capability because it's not perfect while people are dying on the battlefield.

[00:14:49] Do you think you've heard anybody in Ukraine say, we're not ready to deploy drones yet because we don't know how to fly 'em. , all they said, give us the stuff. We'll figure it out. And the more they gave 'em, the more they figured out, and then they actually got better at it. But I'm sure that the first few days of employing switchblade was probably not the prettiest thing you ever saw.

[00:15:08] but today they're actually pretty damn good at drone attacks and it's only been a year in, in, in the current PPBE system that would take us five years. And in the case of switch blade 10, I put switch blade in on the battlefield in Afghanistan at 2011. And here we are in Ukraine for the first time actually using it.

[00:15:26] That's the crutch of the problem.

[00:15:27] **Eric Lofgren:** It feels that a lot of these technologies, autonomy, a lot of the commercial space, additive manufacturing, these things are just in my view, almost bound to revolutionized defense. And maybe it's within the decade, maybe it's longer.

[00:15:39] I like, we can talk, we can debate, when's the right time? we are always slowing these programs down until they're perfect and everyone wants to reduce that risk. How do you, do we have to look at Ukraine? What is it that we have to do with dot Mill, ppf and all that kind of stuff in order to get really people to come along?

[00:15:58] Is it delegating these decisions down to folks like you who are the program managers? Would they be willing to take the risk or are they not empowered to do this? Or they wouldn't even do it even if you did. ,

[00:16:09] **Peter Newell:** so I'm gonna use the doctrine word again. Doctrine produces a common language around the relationship between things.

[00:16:17] Now that common language, quite frankly, is the basis for our culture. So you're talking is what's the culture change we need to have happen? That aligns the recognition, analysis and articulating of emerging problems. and provides that to a body of people whose job it is to look at current capabilities and say, can I modify a current capability to solve that problem?

[00:16:39] Or do I have something that's currently in the work that I can just accelerate? Or is there something else in the commercial world that's in the realm of possible that I can advance and attach to that problem and perhaps make it go away? You want a culture that does all. . You're developing this thing for this requirement over here, but if I gave you this, what would you do to change or combine these different things to answer that problem? If I told you had 60 days to do it and the floodgates would open up with people providing answers and you'd find, people from companies that were supposedly competitors actually talking to each other about if we took one of my things and put one of your things on it, we could do this.

[00:17:14] And that's how smartphones made it on the battle. , and I probably never told that story of I'm sorry, I'm not taking a left field leader, please. I was in Afghanistan in 2010, right after I became the REF director and I was sitting in the headquarters for 10th Mountain Division talking to Steve Townsend, who just retired as a four star.

[00:17:33] Steve had been my boss at Third Ranger. . Then I went to see Steve because I could have an honest conversation about things were going on, and he literally poked me in the chest on the way, on the door and apparently a couple of nights before I got there, two Navy corpsmen were killed on a fracture side.

[00:17:49] there was a combat outpost that was attacked and the corpsman were trying to move to the combat outpost and were mistaken for the Taliban who were also attacking and were killed on the process. And Steven, his frustration, he picked up his phone and he says, why is it I can pick up a phone like this?

[00:18:06] And I can tell you exactly where every one of my Afghani counterparts are, but, and I can pick up a blue first tractor and I can tell where every vehicle is. Why the hell can I figure out where my people are so that this doesn't happen anymore. And I just, I don't know. But lemme go back and work on it.

[00:18:22] So I went back to ref and it just happened that there was an engineer from Harris and an engineer from General Dynamics in one day, . And I said, Hey, you guys are smart. Explain to me, because it's a digital radio, I got a. , why I can't tell my phone to a radio and send a digital signature that's got personal located information on.

[00:18:44] And the two of 'em looked at, I said, oh yeah, it's absolutely possible. It's not hard, , it's just so why aren't we doing it? And the guys literally on the driveway report, I wish I saved a picture of, but they actually drew it out the cable that had to be constructed in order to do that. And I just, I looked at and I said, this is bullshit.

[00:19:00] If it were that simple, we'd be doing. and the guy said, no, really? I say, fine, you prove it. So the guys showed up a month later and at first they said, don't tell anybody we did this and certainly don't tell the FCC that we're doing this, but I got a Harris Radio, I got a cable built by General Dynamics.

[00:19:16] Then I've got an Android phone and there's one in my office and there's one on the other side of Fort Lv and the guy flips it on. He says that blue dot, the guy's driving down road X, Y, Z and it's his. and he can see, you can see that easy. So I asked him, can you gimme 10 cables? And I went through this whole nut roll with folks on the Pentagon about radios and who had the authority to put something on a radio versus not.

[00:19:40] And I got my butt chewed by more general officers than I could take a stick at. But eventually I put that system on the ground at. Fort Bliss for one of

the exercises out there and fought tooth and nail with the acquisition folks who said, no, you're not allowed. Can't do that. Can't turn it on.

[00:19:59] Can't do can't, can't, can't, can't, can't . And eventually got out in front of the vice chief of staff who saw it and said, I don't know what hell you people are doing, but stop spending money on that other stuff and do this come to find out, the guy who ran. Demo lb, which was the radio service of the Army, came back to me.

[00:20:16] He says, you literally just knocked three years and 1.5 billion off the program on record. , because cuz by this point, I'm tell you, the Army had been at the development of this ability, the objective control unit for damn near 10 years. They had spent over a billion dollars.

[00:20:31] trying to replicate what Apple was doing on a fly with $300 phones. And within a year we were deploying capability sets that had phones, tele to radios. And so I go back, I said, it's a culture thumb. There's no doctrine for what I was doing, and I just did it. And by forcing nature got it done.

[00:20:48] Even amidst the threats and the pushback from other. , imagine what life would be like if that was the norm rather than the exception to how we do things. I don't say that's not, but that's what we're trying to get through, is recognizing that an emerging tech, sometime we'll completely outpace the thing that we was JCIDS that was a requirement and we just need to dump it and do the other thing.

[00:21:14] But that's not a cultural process for lots of reason. . Yeah, that was

[00:21:17] **Eric Lofgren:** a really great story. you know, It relied on these like personal heroics from you having the right person, the right place, and then the vice chief happened to be there and just could cut through the bs. But that's scary for a regular person in the regular program office.

[00:21:32] How, how do we get this beyond the personal heroics? It's uniquely

[00:21:36] **Peter Newell:** unpleasant, listen I called myself the most investigated colonel on the face of the Earth for about three years while I was at REF. Wow. As you remember, I was also the guy that funded Palantir. And I don't say I was impervious to it.

[00:21:46] I was just so dismayed , over the just incapability people to get past that and just. and eventually I realized that the vice chief of staff of the Army

really did have my back. He yelled at me a lot, but he never threatened to fire me. I get yelled at by a lot of general, but nobody had the ability to fire me except him, and he didn't.

[00:22:06] But it shouldn't take heroics like that to, to go to your point is it does take, it's like being in a startup world. Not everybody is tuned and has the wherewithal to go through the intense of building a company. And I will tell you, having done it a couple of times now, it's intense. But there are people who are really good at it that's all they want to do.

[00:22:27] So why shouldn't we grow that culture and keep those people inside government service? And this is just, isn't just dod, I think the entire government has this problem.

[00:22:36] **Eric Lofgren:** It feels like there's always gonna be people in acquisition and otherwise it seemed like there's a lot of people that came to you that were like, this is my turf.

[00:22:44] I have these contracts going, whatever it is. Actually, could you just say what's their perspective and how do you bring them along? Or like why do you think they took the stance that they took?

[00:22:53] **Peter Newell:** One of the things that's interesting, and it's a really good question, one of the things we teach our students in Hacking for Defense and BMT works on with his clients is this concept of stakeholder mapping.

[00:23:03] And one of the things that, that lean methodology that Steve built that was so enamored itself with me was this process of discovering, and it's not just discovering the why and the what it's discovering the. . So you have to understand what the value proposition is for solving a problem and what the value of the pain point is versus all the other things you could be solving.

[00:23:25] And then you have to create a really good story around that so that you can sort out who is gonna support that, who's gonna advocate it, and who the saboteurs are and the saboteurs are, this my program. Don't screw up my program, don't mess up my program. You can't do that on a compliance program in all those excuses.

[00:23:42] The beauty of it is young people don't run away from the saboteurs because the most powerful advocate you can build is a saboteur. You've converted to being an advocate. So in fact, as you turn into them and you sort out, what's their motivation for trying to prevent me from doing something, and

then see if you can't attack the motivational and reduce that to a point where, oh, okay, I get what you're doing and it's a safe.

[00:24:04] there are always gonna be somebody, and I call it, the entrench 10% that dig the heels in and it becomes a personal thing. Turf battle is my turf. You can't touch my turf, don't touch my turf. And I don't care what you don't touch my turf. And obviously there are plenty of ways to get round over through people like that, but you can't make that a profession cuz that takes time and energy away from doing the work you need to do.

[00:24:26] So if you can avoid that but this idea of creating a series of hypothesis and collecting data and validating that data and producing analysis based on really good data is indefensible. And people who will try and prevent you from doing something, have a hard time arguing with your data because they have none.

[00:24:45] And your data tells a really good story. You tell the story in the right places. People haven't, no squish, but to listen to. and it makes it really hard for them to just say you're doing the wrong thing. It's my turf. Cuz you make 'em look dumb

[00:24:57] **Eric Lofgren:** but you had to mandate at the rapid equipping force, a lot of times you can't even, like, how do you even collect the data or get the empirical evidence?

[00:25:05] When I needed to go through a requirement, I had to do all of these things. I had to get everyone on. Before I could even get the empirics to validate what I was doing. Because you were able to basically like, Hey, I talked to these guys. They said it was easy to connect the radio to the cell phone, and they just went out and did it and said and I was listening.

[00:25:23] Whenever I go back into history and I see where a lot of these, new systems come from, oftentimes they're very irregular in that exact same way, and it took these types of heroics, but that's not a repeatable process Necess. .

[00:25:36] **Peter Newell:** It, the process is certainly repeatable. I would say the heroics are dependent on social connections.

[00:25:41] So I don't think, venture capital in Silicon Valley built on heroics. You have the heroics of people who start companies and suffer through, growing them and the risk. And you have the heroics of investors who take the

risk and but you can't tell me that's not a repeatable process because they repeated over and over.

[00:25:55] So they're harnessing the heroics inside a set of norms and networks and things like that. And then using the social connections of people who are used to doing this with one another where they're able to trade, I need help with something versus you need wrote a great example.

[00:26:10] I wrote a wonderful note last night. We have a company we're spending out at BM and t that's an AI company, and you this year is the absolute worst year to raise money. But there are people coming to this company and helping them. And one of these comments was the CEO of the company looked at a guy who was helping to connect them with investors and he said, why are you spending so much time helping us?

[00:26:28] And the guy said, first and foremost you get a great product. And I like the idea. He goes, but even more importantly, I owe the team at BM and t so much for the time they spent with me over the last three years. So trading on that personal collateral that you've earned from people actually to do hard things.

[00:26:42] but you have to be able to work with people in our environment that do hard things to earn that collateral, to be able to use it. And I have no doubt that you went back to the same people over and over again when you were trying to get stuff done because you trusted them and they trusted you and you were able to get things done.

[00:26:59] I come back, I wanna come back to this doctrine thing again. We need to create that culture so it's not ad hoc, it's not hero. And it's not fleeting as the people disappear and along away we need to do it intentionally. We want to create this social cultural connection around doing this really hard work with a set of guidelines I set of rules that works and we want them to do it over and over again and repeat it and grow and get better at it.

[00:27:24] So it's a permanent party of national security system not a passing thought whenever there's a war going.

[00:27:30] **Eric Lofgren:** Whenever I look at the the program planning and milestone acquisition process, it's all about, I see process on a program. But I see

[00:27:40] **Peter Newell:** the process for the sake of the process,

[00:27:42] **Eric Lofgren:** but I don't see people any, like literally, I don't see people or relationships or networks anywhere in that, right?

[00:27:48] You're gonna have to like decompose whose functional job is this? And they're there for two years and they just kind handed off in a piecemeal fashion. , like everyone touches the elephant. No one owns or is really responsible for the elephant. Does that make sense?

[00:28:01] **Peter Newell:** Yeah, it does.

[00:28:02] And I, I'll take it one step further. Nobody says, when you're getting hired to be a PM or something is how good your network can you prove that you have a network that expands beyond just the military and Right, and you touch these other that's not a grading point. But if I'm hiring the CEO of my next company, it's a, it is a grading point.

[00:28:19] So I it comes back to is how do we, create an environment, where we're not just in coring zone people, but we're actually grading them. How well connected to the technology world or the operating world are you in terms of the capability of doing your job? And then if, and if we make that a point, then what are we doing to ensure that you have the ability to.

[00:28:38] what things do we send you to or what experiences do you need in order to create that viable network out there that, that actually will help you over time versus telling you're not allowed to go? T i, you need permission to go to this and three bosses up need to say it's okay to talk to these folks.

[00:28:54] **Eric Lofgren:** Yeah. I was listening to a podcast with Bob Iger from Disney, and he said something that was funny because Disney had a little bit of a culture problem. And they said we would just source these movie ideas, and then we would just go find a director and throw it at the director. And when they acquired Pixar, the way that Pixar did it, The director was intimately involved from the start of the idea and it, and he owned that idea all the way through, which felt a little bit more like a startup ceo, right?

[00:29:23] Does there need to be something like that in the DOD versus often like we throw them a requirement as opposed to who generated this requirement? Are they the right person to actually see it through?

[00:29:34] **Peter Newell:** I think there's part of the research process. They're not I don't know who was working with probably a Navy where we walk 'em through this idea of if you have a problem and the first thing you get, first thing

you ask is why is this a problem? Is somebody already working on this and just didn't?

[00:29:52] it? Or is this the first time it's been recognized? Say, first thing is anybody working on the problem? And if somebody is working on the problem, what are they doing? If they're moving in a different direction, maybe they don't have access to the information you have. So maybe if you gave 'em the information, you actually get something done.

[00:30:07] Or if you partnered with 'em, and if they're not, and then it's the case of, okay, whose domain is this? Who should be working this? Why aren't. , not cuz they didn't know about it. They don't have a requirement, they don't have the thing. And sometimes you find out that it doesn't sit in anybody's domain and it sits on the white space, which means you have to start looking at leadership and say, okay if I'm going to solve this problem, what program is supposed to have it, and then and somebody eventually figures out, okay, it's gonna be this.

[00:30:37] I said, okay, you're it. And you know why? That you were selected to be the PM in charge of, robotic mind clearing, for donkeys, you, whatever it is, the then the pm. Okay, now I understand why I'm doing this and you're the person that's gonna help me get it done. But I think you have to go through the process of discovery in order to actually make progress.

[00:30:58] The flip side of that is if we're talking about speed, more than likely we're not inventing something new. We're taking a capability of something that's sitting someplace at rest and combining it with something else and putting 'em together and actually employing them in a new operating concept. In order to do that, you have to know what's out there, which means you constantly have to be searching and talking to people and recognizing things so that when something happens, you go, oh, wait a minute.

[00:31:25] I saw something over here and I saw something over here. Lemme go back and talk to these. and that process of the conversation produces new ideas about both am I on the right problem, but also what's the scale of this? What's the potential scale of the speed or delivery of the capability, which means how fast can I get it?

[00:31:45] And it will, every once in a while you're gonna be told, that's a chemistry problem and you can't throw enough money at it to make it go faster. So stop trying to. . In, in a lot of cases. It's wow. Yeah. There's the capability of

sitting on the shelf that DARPA worked on five years ago. It was at this company.

[00:31:59] Go see if you can find them and if you combine that with something else and now you have a potential solution. That's, I think that mantra is at the heart of this thing that I think the DOD needs to be reformed to Ashley Em body and build.

[00:32:15] **Eric Lofgren:** Yeah. It seems like we're in the danger window with China to a degree. We don't have time to create all these new technologies and build things from scratch. , what does that look like in order to, if we're gonna create radical transformation within the future years defense program within five years, we have to start from what it already exists, right?

[00:32:35] **Peter Newell:** You nailed. , there is absolutely nothing that's gonna be delivered the next three to five years. That counters what people say that Chinese are capable of doing in three to five years. Nothing hypersonics, man, three to five years countering denial access, not three to five years.

[00:32:54] The thing after thing is we're building, you capabilities that'll be delivering. , maybe eight if we're lucky. But you're right out. It is first is do we recognize what the cap the Chinese are capable of doing within the next three to five years? And we do. And do we have a process of pulling things that are already out there and recombining them to actually count those capabilities or produce capabilities wrong, that will disrupt the Chinese?

[00:33:18] That's not a professor inside the do. . Somebody said that's a and S'S job, and no, that's r e's job, or, no, that's the services job, or it's the combatant command. I said it, it doesn't belong to anyone, which means no one's doing it. That's, I think, the argument that, Steve spear, Steve blank out make, cuz it's, as long as it's not someone much a job and there's not a PE line that goes to it and a document for doing it, it's not going to happen except in an in heroic basis.

[00:33:44] **Eric Lofgren:** what's the size of that PE and who does, who should own it?

[00:33:48] **Peter Newell:** The last appropriations bill distributed a billion dollars for innovation. That's not gonna produce innovation. So it's at least a billion dollars, if not more. But given the size that the Pentagon budget, I think we're talking the smidgen, there's probably several billion dollars. And a sizable workforce that's trained to do it, plus they're not there, it is not insignificant.

[00:34:14] If you simply looked at, I think we counted up the number of innovation activities across the OD and well over a hundred of 'em. If you look at how many people are involved, it's not insignificant, but the size and the number of people and dollars are spend. is not producing the effect that you would expect from it because they're all completely disparate, different rules, different players, different reasons and they're completely passing and they're still fighting an older system.

[00:34:38] Why don't we start with a couple of billion dollars then and a thousand people and work our way up from there?

[00:34:43] **Eric Lofgren:** Do they have to own the end to end of this life cycle kind of cradle to the grave? Because a lot of, like when you look at the diu, the. They don't take on something unless they know there's like a P e o or a program willing to take it on, and there's all this kind of machination that goes along there.

[00:35:00] But if they own the cradle of the grave, then people will probably also say it's gonna be unsupported. Like, how can I fund something that's not gonna be supported in sustainment? And these guys don't know what

[00:35:09] **Peter Newell:** they're doing. So I think this is a design flaw. First is, DIU, this is just me, doesn't belong under R&E.

[00:35:16] doesn't belong under a and s, it belongs someplace separately where it can fall from the best in place. It should have a PE line from both A and s and r e so that it can do short-term sustainment in terms of years of some of the things it's working on for rapid capability development. So I hate to bring up REF over and over again, God bless the guys who designed it.

[00:35:39] They did a beautiful job. , it had its own PE line that provided o and m, procurement dollars, and a smidgen of R D T and E that was mostly test and evaluate and had all that authority. But we also had the ability to sustain, not just for short term, but for years, some of the things we put on the battlefield that did not fit neatly into a program.

[00:36:00] and even when I tried to transition something from REF to a program or record, I paid for the first two years of sustainment, which would allow the program to actually POM for the money they needed to take over that capability. undeveloped, I think is the concept of how we do transition from the diu, from Afros and Naval X to programs of record.

[00:36:23] and right now, d i u trying to push things in rather than the system trying to pull things out of d i u because the money and the contracts and the job, they're not set up that way. So I think that awful falls in this category of if I were to do it, how it would be done differently. Lawyer

[00:36:40] **Eric Lofgren:** any other thoughts on how you would organize to make sure within the next five years we get a radical

[00:36:45] **Peter Newell:** transformation?

[00:36:46] I could start with, I hate the thought. I keep saying the record of a need for a substantial study or discovery or something by Congress that goes past me studies, but it's actually no kidding. We are going to do something. The question is what we need to get to that we are going to do something, not what should we do?

[00:37:07] We studied it to death and there are enough of us experts out here that can talk at nauseum about what this should be, but we actually need to get the point of we committed to actually doing something in the next couple of years. That's step one. Two is we need to look at the ones that are successful today and ask them what can be done to free them up to do.

[00:37:26] And I know that, Mike Madison and the folks at D I U or Casey Flu and Naval X and whoever took over afterwards, they can talk at nauseum about what could be done if they were just given the authority and the access from the funding to do it. And I think that those are easy to me.

[00:37:42] I just, when you get past the fif stones and really free them up to work wherever they need to work versus saying, you can only do this over. .

[00:37:51] **Eric Lofgren:** So I wanna circle back maybe a little bit to the international before we wrap up. We tend to think that the US always has the best tech for defense in the world.

[00:38:00] Have you seen that? Yeah. I wanted to ask you that. Is the US in fact, behind in some respects, other nations, would that alarm us and maybe, get us to, to act in the way you're suggesting?

[00:38:09] **Peter Newell:** Yeah. I think, I've been fortunate to spend time in a lot of. I would say a lot of the allied startup cultures.

[00:38:17] I sat on a board for a company in Canada and I learned a lot about just how friendly the government of Canada is to building startups. Our time with the Norwegians and Akron for Allies program has been fantastic. The, the fact that there's a BM a T in the UK and, we're constantly engaged with companies in UK or, BM a t in Australia is given us really unique opportunity of what their perspective of the US market is.

[00:38:40] And in many times, as you look at it and say, Australia produces some of the best mining related technology because a lot of their economy depends on. . Mining technologies have an immediate transference to national security technologies, but you have to be able to step back and look at, I'm not just looking at this from a military perspective.

[00:39:00] I'm looking at it from a commercial perspective of how do I produce a viable commercial company that can actually produce an answer to a tech problem in the United States? That's not solely a tech problem or not solely a defense. , if it's solely a defense problem, it doesn't exist anywhere else.

[00:39:16] That's probably the purview of a prime someplace but if it is something that has to be a viable because it's a commercial issue then it's probably not. And then you really need to search for the best emerging technology and figured out how do I get it to where I need it, whether it's Allied or whether it's whether it's coming out of a prime is something, or whether it's coming out of.

[00:39:38] That's, I think there's a beauty of many of the programs that we've started is they've all been focused on that idea of finding the best stuff. And I'll figure out what the process is to get it to the point that is needed. And that's virtually where we're, hacking for defense and hacking for allies, hacking for Climate from a bunch of the defense investor network.

[00:39:56] They were all built as is answers to pain points along that process.

[00:40:00] **Eric Lofgren:** in just the last minute we have what's your view on the Office of Strategic Capital? Will that help? Or what's your view?

[00:40:06] **Peter Newell:** My votes out. I know the folks are standing up and they are brilliant. I know that they understand the problem.

[00:40:13] I know that they understand why the trusted capital marketplace was such a colossal failure. I hope they're able to implement what they understand and knowing that it's the government and here's just my perspective of anybody

who says you, I'm a defense ventures, or I'm doing venture capital for defense, or whatever else is there's tons of venture capital and private equity available in the United States today.

[00:40:35] We don't need any. , the US government's the only person in the national trade who can write a contract to a company to actually build something that helps them produce a better product and a product line that actually makes it more valuable and more attractive to venture. So you really need is US government to focus on doing their job right?

[00:40:53] Contracts, right? Production level contracts were short term production lines. In that three to five year timeframe for things that aren't programs of record, because they'll help a company build a better product, both commercially and for defense, that makes it more attractive to venture dollars. That helps them build a better company that will eventually deliver a better project, better product for less money back to the government.

[00:41:17] We just need the government to completely do its job rather than try and do the job of private equity and private capital and other folks. I know that the guys running and building the office strategic capital understand that. I just hope they're capable of actually building something that, that does what needs to be done.

[00:41:34] **Eric Lofgren:** It's a great call to action. Pete Newell, thanks for joining me on acquisition.

[00:41:38] **Peter Newell:** Hi, Eric. Thanks for letting me take over the podcast.

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