

Linda Moss, Vice President of Global Enablement, Palo Alto Networks

Diversity Generates Innovation

As a lifelong technical trainer, Linda shares her insights into the different ways people learn and believes training should accommodate them. She highlights the dismal statistics of women in cyber and talks about Palo Alto's efforts to redress the diversity imbalance.

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Ashwin Krishnan: [00:00:47] With me today I have Linda Moss from Palo Alto. Welcome to another edition of the UberKnowledge podcast. Linda, why don't you explain what you do in your role at Palo Alto Networks, and then we can dive right in.

Linda Moss: [00:00:59] Absolutely. Thanks Ashwin. Yeah, Linda Moss, I'm Vice President of Global Enablement, so think of me in my organization as responsible for a lot of the training involved in the go-to market motion here. We get involved with our sellers, technical, and sales partners to make sure they have the skills and capabilities and, most importantly of course, the customer. And as they work with Palo Alto Networks and acquire our technology, we help them get the most out of their technical solution. So, the training arm.

Ashwin Krishnan: [00:01:40] Absolutely. So, just going down that path, I know we talked about it briefly before the podcast started, but just for the benefit of our listeners, given your long history in the training, enablement, and education arena, how has training evolved over the years and particularly with some of the new initiatives that Palo Alto is driving forward? Why is there a need for people to embrace this new mode of learning as well as training?

Linda Moss: [00:02:11] I think that's a great question and place to start. One can look at the evolution of the training world in two fields. We know a lot more now. There's first of all what we know about how people learn, and then there's always the engagement of technology and innovation. So starting with the first piece, like any important area there's been an awful lot more research on what training works, how people learn, and so we understand a lot more than we did in the past. We understand that you can't just lecture to people for five days and expect them to retain things. So, you know, understanding the idea of how people learn, neurological kinds of things, we've had to really change the way we approach learning than we did in the past. I remember the days where — I've always been in technical training, so let's focus there — you know the whole morning would be spent listening to somebody drone on with PowerPoint and then it would be late in the afternoon where you get the hands on. Right?

Ashwin Krishnan: [00:03:21] Yeah, yeah!

Linda Moss: [00:03:22] And I think there's been a realization. I think TED talks really helped us understand, seriously, it's 15 minutes before you have to switch it up because we are getting to understand that you can't retain that. We've done a lot of work as an industry on the forgetting curve, that we lose information very quickly. So, it's things like that, that make us different — how we design training, a lot more interactivity, a lot more chunking, the importance of “how do we reinforce this over time.” It's a discipline, it's become a lot more scientific, and I think that's really helped us. Think about the whole idea of retention and changed behaviors because that's what we want out of training. We want people to leave with more skills and capabilities than they had coming in.

Ashwin Krishnan: [00:04:15] Correct and going back to that example that you said, whether it's a TED talk or the drone on in the morning and then you get hands on

the afternoon, people like to implement and play with stuff as they learn. A lot of what you're talking about would also have this component of not just learning something but being able to practice that, almost in parallel. How has that changed the infrastructure, the modality, even the psyche of a trainer going into a class, for instance.

Linda Moss: [00:04:53] I think you're absolutely right. It's got to be designed with that in mind. We still have the approach here at Palo Alto Networks where there is a little bit of learning first. Maybe in a formal learning experience, there's not your hands-on as you're getting the input. It's still designed from an instructor-led point of view to get everybody on the same page but straight into the learning activities as soon as they can. Now technology, I think, has allowed us to really enable that hands-on component and the understanding that people learn in different ways. The self-directed learner. We've seen such a great increase in digital learning and also connected the ability to do hands-on labs and get their hands-on immediately. This is where reporting and data shows us there's a lot of learners, as you say, who from a self-directed place will go straight to the hands-on. How much do they know? Can they do this first? And then, there's others that do want to start with more of a prescriptive approach: let me listen and then I'll go and try it out. And that's why we've seen here another change — just a huge growth in online learning. I think the use of technology allows what you're describing to happen, to occur, the learner decides how they want to learn, and technology allows that self-directed, that always-available learning. But you're right, we do see those patterns where people want to go straight to the hands-on and we should allow that. As learning professionals, we need to understand people learn in different ways, people are at different starting points, and they're going to make sense of information in a different way.

Ashwin Krishnan: [00:06:47] Yes, it's interesting. So, I'm drawing an analogy now with cybersecurity practitioners and learning. This might be a farfetched analogy, but I'll try it anyway. One of the issues that the practitioners face is this whole long tail. You might have, let's say, a threat from 20 years ago. It never really goes away. You can't really say, "Oh, phishing attacks from 20 years ago are gone; I don't have to worry about that." So, drawing that analogy with training right now, yes, maybe data sheets are not something people really read anymore, but you still need them, or, like you're saying, you need instructor-led training because there is a subset of people who still want that. Yet at the same time, you're getting pulled into this world where you need to have these two-minute videos with a quiz.

Linda Moss: [00:07:39] Yeah.

Ashwin Krishnan: [00:07:39] So how does this stress and organization, just in terms of these skill sets that you have to build into your team as a training and learning organization, but also this long tail of you can't really stop something in order to

add something, so you end up with these pretty large, diverse ways of delivering training, correct?

Linda Moss: [00:08:01] Yeah. It does put more of a stress on the organization, in that you can't just be a one-trick pony saying this is how we're going to do things. We talk a lot about the macro and micro and I think they are quite common terms: macrolearning, microlearning. I think you need both and organizations have tended to evolve. What I've seen in my own resourcing is what at one stage was large delivery teams now becomes large development teams because people learn in different ways and we have to be crafting and creating content that is looking at that. And what I mean by macrolearning is more of that prescriptive "I want to go from here to here", or I should say from here it's people watching on the video to here, they want to build that, they want to have gates along the way and certifications, we have to build that. We should be building that for those that want it, but at the same time, as you say, those microlearnings, that just say, "how do I" that are very task-based — how do I set my password, how do I set a policy on — those are kind of five-minute ones and so little bit more stress. But that's how we set up and resource the organization accordingly and then leverage technology and different modality to push this out.

Ashwin Krishnan: [00:09:29] Got it. You mentioned the word resource which leads me to the next question which is on diversity. You and I chatted about this briefly, and it's a really interesting take that you had. Cybersecurity as an industry is abysmal when it comes to inclusion, and let's just talk about male and female for now. It's a highly male-dominated industry and there are obviously significant efforts to try and correct that. But your role as the head of training and enablement is a function which historically hasn't suffered the same lack of inclusiveness when it comes to women leaders or women employees, yet your peer group that you work with does suffer from that.

Linda Moss: [00:10:16] Right.

Ashwin Krishnan: [00:10:16] Give a little bit of color about what your world looks like when it comes to interacting with your peers and you still have to be the lone woman leader in that room, and yet when it comes to your organization, you feel much more included. As a champion of women, what are you seeing, the steps that both you personally have taken as well as the broader industry?

Linda Moss: [00:10:42] Right. Got it. There are a few questions there, so I'll unpack them one at a time and you remind me if I'm missing things. You're absolutely right, when we come to cyber the situation is improving. There are quite a lot of stats out there on gender diversity in the industry. I think people still use the old quote from about 2013 when there were 11 percent of women in cybersecurity, and it is predicted by the end of this fiscal year to be up to 19. So on that, I say great,

great growth. In five years we have that move of almost eight points. However, 19 percent is still dismal. In the end it's a dismal stat, and I think that's why so many organizations are putting a focus on it. How do we change that? I think we've got to just change the mindset much earlier. I love the work that's been done in schools in general on STEM. STEM is kind of making science, technology, maths sexy or cool to show young girls that there are great careers. I think cyber's got to be treated similarly not just for the diversity aspect but to fill all these unfilled jobs in the industry.

[00:12:08] So we need diversity, and we need women — men and women — to be stepping up to these millions of unfilled jobs that are likely to be out there by 2021. And it's got to start early. We've done an interesting initiative here at Palo Alto Networks in partnering with the Girl Scouts of America to introduce 18 badges on cyber. And we may not have that much time with the generation in the workplace now, but I am really excited about the actions that I'm seeing in colleges, universities, schools, even education organizations who think about cyber as a career with a focus on young women. I do believe with that 19 percent that we're doing the right thing. We're never doing it fast enough, but we're doing the right thing to get more female presence in cyber overall.

[00:13:04] So that's cyber overall. I think we were talking about how do I feel in a cybersecurity company being a woman, and am I in the minority. And I said working in the education space, that's one field where we probably have more balance and diversity than maybe other organizations. And I think it's because in the learning field, in education it's always been quite a diverse field. Think about it, looking back at our colleges, our schools, there were just as many female role models and teachers in that sphere as there were men, perhaps in certain ages even more. So, I think we're used to seeing women in education roles but not as much perhaps in technical education.

[00:13:55] My world as I look out of my office here is quite balanced. But we do want to absolutely see it at all levels of the company, all departments, and we do have a big push here to just be very thoughtful about getting more women in and to be thinking about unconscious bias because in all areas we do tend to hire what we look like. So if we're a white male, we're probably going to ... and you know, this unconscious bias doesn't tell us that we're actively doing that, but that's how naturally we kind of step out there. So, we're doing a lot of work around that. But I guess I feel encouraged by the focus because I think that's how we change things from early mindsets to being prescriptive and just being a little bit overt let's say on that piece.

[00:14:53] And you had a final question, remind me what that was?

Ashwin Krishnan: [00:14:57] I think you covered most of it really, which was how

does Linda deal with the fact that there is inclusiveness and diversity in your organization, but when you are the lone woman in a room full of peers, how do you feel? So, I think the last question was given the success that you're seeing in your organization just by having this diverse mindset, how successfully or not have you been in influencing your peers inside your organization to be more inclusive in numbers?

Linda Moss: [00:15:28] I think there's a couple of things that we see in both behaviors and what research tells us. There's a big focus, we're in tech, huge focus on innovation, huge focus on disruption. That comes when you have different thinking going on and different thinking comes from different positions, different points of view. And diversity is a great way to affect diversity of thought, diversity of innovation. Data is telling us that, research is showing that, you know, diverse companies do better. There's more innovation in diversity and where we see it here — I mean I don't think this is easy, it sometimes means more conflict, more discussion, but it does surface a lot more different thinking. My PhD, interestingly, was on different ways of learning, and there's books on male ways of knowing and female ways of knowing. And I think that combination of thought as we put together programs does help us be more impactful because we are being more inclusive as we think about how people learn. And I see that replicated through other areas of the company as well. And as I said, underlined and rubber stamped by a lot of data out there looking into this.

Ashwin Krishnan: [00:17:03] That's great to hear. I think the influence that you're having is obviously a really positive one. So, one last question on the role of certifications. I still remember when I started my career, I always used to look at somebody's resume or business card and the number of logos or stamps that he or she had was really reflective of, "Oh, you're a guru!" Has that changed?

Linda Moss: [00:17:26] Yeah, that's a great question. And I think it has, I use the word properly, evolved? So, certifications are a great way, particularly traditional certifications, let's say those where we are taking tests or looking at scenarios and making choices in a test environment, that's a great way still of validating. Do you know the key to this? I think in the world we live in, particularly in technology, that's only half the question. The question is, "Do you know, but can you do?" And that's why I'm a real great advocate of when we are measuring somebody's abilities, we move outside the taking an online test and it's A, B, C, and D "Can you do?" In technical, it is a series of technical challenges. My favorite way of learning that we have introduced here at Palo Alto Networks, and I know that's quite common in the industry, are things like immersing yourself in cyber ranges and some of the capture the flags. Isn't that a great way of validating "Can you do" as well as "Do you know" that's why I think it's evolved.

[00:18:58] I think certifications will always have a place. It's a neutral way and, let's

say, an objective way of looking at does somebody know the key learning. But I think we've got to evolve it. We've got to take it further, different ways of credentialing, and it's across all areas, it's hands-on type certification. We have something called a customer simulation lab for our partners and employees doing PS. They've got to spend a whole week completing a set of exercises and they may be certified at the end, and by goodness do we know that they can "do" by exiting that! That's why I would call it certification will continue to be there, but our interpretation or definition of it I think will be very different to the legacy way of just go to a proctored test and complete your A, B, C and D, right. What do you think?

Ashwin Krishnan: [00:20:05] I completely agree with you. I think the cyber range is just fantastic because it gives real-world examples, but it also gives you this almost fun-like environment ...

Linda Moss: [00:20:16] Yeah!

Ashwin Krishnan: [00:20:16] Like you said, capture the flag, where you achieve something as a group dynamic which is very, very infectious. I think it's amazing.

Linda Moss: [00:20:26] And your fun element, again, I think that's something. The whole gamification of training, as we talked about learning techniques and technology, you know those kind of things are important both for validating "do you know" but also learners these days want to feel they're progressing and hitting gates, and I think we can learn a lot from the gaming world. As you succeed in round one and you move to round two, there's a sense of progress, there's a sense of achievement. I think elements of that, the fun element but at the same time that sense of, yes, I'm progressing, I'm expanding and up-leveling my skills, is really important.

Ashwin Krishnan: [00:21:15] Absolutely, I think this has been a fascinating conversation. Thanks for your time. I know we always knew coming into this it was going to be really fun, but also I think some of it is, just like you're saying, the evolution and the ability to adapt as a practitioner, a vendor, or as somebody trying to become relevant in this constantly changing world. Again, thanks for your time. I'm looking forward to more conversations.

Linda Moss: [00:21:39] Anytime. Thanks again, Ashwin. Take care.

Ashwin Krishnan: [00:21:43] Thanks.