

Cyber Security Business- Episode 1: "Women in Security" with Jim Routh, CSO, Aetna

Kevin Pouche: Today's topic is equality in cybersecurity, specifically focused on women. I think it's rather fitting that we're having this discussion the day after a monumental election for women. But you know, this isn't a political podcast, it's a cyber security podcast, so we won't go there. Jim, we wanted to speak with you specifically because you're a well-recognized, highly-regarded cybersecurity executive who's really been a vocal advocate for encouraging and hiring women, for quite some time, in this field. Maybe we can start with a little background. What made you become a pioneer? How did this start?

Jim Routh: I don't necessarily think of myself as a pioneer, but I do think of myself as a survivor and what that means is I'm trying to think about what I can do every day to avoid getting fired for a major security breach. And that's what makes most CISOs tick. In my case, I recognized over a decade ago that talent, specifically cybersecurity talent was getting more difficult to find. I recognized that talent was essential and critical to any kind of enterprise resiliency for any kind of business. Doesn't matter what it was. So, I looked at different ways of finding top talent and what I discovered is we have one criteria and only one for selecting cybersecurity talent at Aetna. The one criteria is intellectual curiosity and it's not something we can teach, which is why it's the only criteria, because everything else we can teach.

We actually structured interviews to find people with intellectual curiosity. And just to give you a sense, people with intellectual curiosity don't necessarily have the best social skills because they're always asking a million questions, right? Or when you say to them "that's not very important, focus on this," they don't focus on this. They focus on what keeps them up at night or what drives them to obtain knowledge. So that is one example of a technique that we embedded in our evaluation recruiting process.

There are other techniques specifically to gender that we inject as well based on experience. For example, Erin, if I were interviewing you for a cybersecurity leadership position, I might ask you a question. Tell me how you manage work life balance? That question is relatively innocuous, probably not out of the norm. But it turns out that because I'm a male asking you that question, you're going to answer it one way. If there was a female asking you that same question, you'd answer it a different way. Whether you'd be conscious of that or not, you would answer the question differently. There's a different filter that you use for that and that's embedded in our society. But that's the norm, the point here is that to the degree that enterprise wants to attract more women in security, you have to be a little bit more sensitive to gender bias and gender differences. So we have women interview women versus men interviewing women. I do interview because if I'm going to hire you, I have to be part of the process, but I would not rely exclusively on my perspective. I'd have other women interview and then we collectively take a look at the data that we got independently and then come to a consensus.

That's that one minor technique. But that minor technique makes a substantial difference for both the candidate to feel the sensitivity to their needs, but also for us to determine whether we can make a good home to allow this person to learn what they want to learn. Those are some examples. The third example I'll give you isn't necessarily gender-specific, but it is consistently applied. I would ask Erin: "What are the two things that you want to learn in terms of skills or competencies in this next role?" It sounds like a very easy, straightforward, simple question. It's actually a very difficult question to answer. It's also unusual. I've been told this, but very few employers ask that question, but the reason that we ask that question and I insist on it is, I'm trying to figure out what you, Erin, want to learn, not what /

want you to learn, what *you* want to learn, because the motivation for you to learn what *you* want to learn is exponentially greater than the motivation for you to learn what *I* want you to learn.

So if I know what you want to learn, I have a better chance, or a higher probability of creating an opportunity that allows you to learn what you want to learn. Now, behind the scenes, what we do at Aetna is we don't hire people for roles. I know that sounds a little bit unconventional, but we hire people for the role that they want, not the role that we have, so we have an opening and often, by the way, we interview people without openings. So in other words, we do exploratory interviews. We do it as matter of course, we talk to anybody and everyone and if we find talent that is extraordinary, we create a role for them and sometimes we don't even have an opening. We'll create a role for them knowing that we'll have some attrition somewhere else to pay for it. Those are examples of techniques that we use not only to attract world class talent, but most importantly to attract world class diverse talent.

KP: I have lots of follow-up questions on what you just said and thank you for sharing. Before I get into those follow-ups, I want to turn to Erin for a minute because I'm glad you're here as opposed to two men talking about women in security here. I think it's far more interesting to have an actual woman and a female perspective. Erin, I don't know if you have any sort of reaction to the program that Jim has built here, but I guess above and beyond that, maybe you can share what your experiences have been like in the cybersecurity field and in the IT field in general.

Erin Benson: Thanks Kevin. Happy to be here. A little bit of background on me. I have a Master's degree in computer science and then worked for 10 years in software development in progressive roles. When the economy crashed in 2008, custom software development was not a place to be anymore. Luckily, in the end it worked out. That was my transition into IT audit and ultimately into cyber security. Even from the get-go from my first computer science classes, I knew this was a male dominated field and environment going forward. And I guess I kind of had an advantage in a way in that computer science was plan B for me. I originally wanted to be an architect and design buildings and I went to undergrad for that and that didn't pan out. So here I was in a position where I had to figure something out and I had job security and money in the front of my mind and that pushed me into IT with the addition of having my mother being in IT and my grandfather being in IT as well.

So all of those factors kind of put me on a path where I was already in a plan B situation. So I was probably less likely to be deterred by various hurdles or even micro-hurdles that pop up inevitably along the way for any woman in a male dominated field. And I'll kind of segue into a side conversation I was having with Kevin. He asked me if I had a mentor and I said, well, I don't really have a mentor, but I have a peer support group. Which is me and a geophysicist and an airline captain, all three of us women. And that is an important facet, to share experiences. Back to the point about these hurdles and micro hurdles, those unfortunately exist and those are realities for women in a male dominated field.

On the one hand, I will say that overt aggression, sexism, discrimination is not tolerated, but there is kind of a culture of micro, and this is a conversation I actually prepped for this podcast with my two friends, one of whom lives in the UK and one of whom lives in Norway. So I had an emergency meeting with my support group and it was really enlightening to kind of talk through and collect these thoughts. And it was really the culture of micro, the micro-inequity, micro-discounting, micro-assumptions, micro-aggressions, micro-discrimination, micro-sexism and all of those play into a culture of a workplace in an environment and are draining and can add up to death by a thousand cuts.

I don't want to speak for all women, but I think in general, that is draining to be in that environment on a daily basis or even an occasional basis. I just want to spend my energy doing my job and making customers happy and advancing the field. I don't want to have to expend extra energy to fight and overcome those micros. So one thing that I'm really encouraged by Jim saying all these things is if I were a candidate coming into your environment, pivoting back to your interview process, I'm seeing indicators that there are women here, women on my team. So to me that is a strong indicator that whatever those micro cultures that really aggregate up together, are minimized or nonexistent. So this is a place that I would like to work.

And then the questions of work-life balance. And it is true that coming from a man, it could seem like a loaded question and coming from a woman, it could see and perceive in a different way. I would feel the same way if a man asks me that question, I would think: okay, forget the balance, it's work, work, work. If I am talking to a woman, I would maybe talk about recognizing the need for downtime or opportunities to recharge. One thing about cyber security that I love in my job is there is a lot of creativity involved. And to have those creative a-ha moments and insights and innovations, it is important to have that kind of downtime to disconnect and recharge. So all of that, if I were a candidate here, would paint a picture of some place that would be appealing to work.

And then secondly, going onto the point about what my interests are. This is a place that can potentially recognize my passions and doesn't, like many companies, expect you to already be fully formed and hit the ground running at sprint on your first day. Which I think is what many companies are trying to do when they're looking for this unicorn to fill this cyber security role, is they already have a rigid cookie cutter outline, they just need the one person that exists who could jump in there and hit the ground running. I'm really excited to hear this approach. Not only for women, Jim, but for finding talent in general. If there's zero percent unemployment in the cybersecurity field, it's going to be impossible to find you one unicorn after another. So the idea that you're going to want to cultivate someone and someone is going to enjoy being cultivated and developed in the areas that are passionate or an interest to them. That's kind of a long-winded introduction of who I am, where I came from, why I'm here, why I love cybersecurity and why everything you've said is really exciting and engaging for me.

KP: You talked a lot about company culture. I think you talked a lot about equality and respect in the workplace, and I think that's especially challenging when there is a field that tends to be male dominating. Jim, I'm wondering, and my recollection is you have about a 40 percent female staff and I think your leadership might even be higher, around 60 percent. Was there a time when culture was more of a challenge within cybersecurity and how did you overcome that? I think most companies aren't necessarily in the privileged category of having so many women in the balance of cybersecurity on the team.

JR: I had quite a bit of autonomy in deciding talent management practices for the security organization, number one. Number two, I had an HR team that understood it and understood that I was going to do some unconventional things and they gave me enough rope to allow me to do that. Then the third is I had an executive sponsor and I still do, who's the best boss I've ever worked for in my life. I've worked for wonderful leaders at previous roles, but she's special. She's totally supportive and obviously sensitive to not only gender diversity but really diversity across the board. We've had a lot of success today, but frankly I'd like to get the 40 percent into the 60 percent column.

That's what we're trying to do, which means that most of the people that we hire and train and develop their skills, we're filtering out looking for diverse candidates specifically for that so that we can make

exceptions for people that have a great deal of experience and exceptions on a number of different fronts in terms of their attributes, characteristics, but also where they live. Turns out that if you want more access or greater access to a larger potential employee base, don't ask people to live where you work. Ask people to live where they want to live and then figure out a way to make the work happen and effective where they want to live. And you suddenly get access to 20 or 30 percent of the population that you wouldn't have access to before. So it's a simple thing like geography and all of us typically want some level of freedom to live in the type of climate we want to live in, whether it's from where our roots are or not. At different times in our life we want different choices of urban environment versus a more suburban environment, a more rural environment. These are all choices and options that we make for different reasons. Frankly, giving people the opportunity to live where they want to live and still work and be highly productive, gets you access to talent that you wouldn't normally get access to.

KP: So you talked a bit about having a mentor. I know Erin talked about the value of having a peer group. I know you're pretty passionate about mentorship. I think you mentor and continue to mentor people. Talk a little bit about what that means to you and why that's important.

JR: My first job in cybersecurity was as a CISO and it was at American Express and I was the first CISO there, and literally I was taking four different security functions. One was in a vendor function and the other three were in different parts of the company, bringing it all together. And my second day I looked at my calendar and had a meeting scheduled, a presentation to the OCC, which is a primary regulator for the information security strategy for American Express. And I was day one and obviously not at all prepared for what I had to do. Fortunately, a day before, this guy Mark Marco, wrote a name and a phone number down on a piece of paper and gave to me. He said to put in your pocket, call this guy when you get in over your head. At the time, I'm thinking months from now or somewhere down the road.

So I put the number in my pocket, didn't think about it. As soon as I looked at my calendar and realized that I had to do this meeting, I realized that I had no idea how to prepare for this. I called him up, Steve Katz was the first CISO ever, and Steve is my mentor today. And that relationship started 20 years ago on my first day as a CISO. And not only did he say I'll help you do it, he brought two standing CISOs that dropped everything they had to do on a moment's notice and came over and created the presentation for me that had me delivered to them and they critiqued it and that prepared me, I walked in the second day, gave the presentation to the OCC and it was fine.

That would never have happened without this mentoring relationship. It also showed me that helping others in security is not an option. It's an obligation. I don't choose to do it, it's part of my DNA. I cannot think about not doing it. In other words, I don't even think about it. Somebody said to me today, I'd like you to mentor me. The answer's always the same. There's probably 40 or 50 people that probably would count me as a mentor the same way I would count Steve as a mentor today and I've never said no and I don't think I ever will.

KP: Do you have specific mentor programs or peer groups within Aetna specifically for women or is it just embedded in the whole culture at this point?

JR: So we actually have it for different groups and I'll just take another group and that is military service veterans that are entering into the workforce or entering into the private sector for the first time. When you work in a command and control structure that's absolutely necessary in the front lines and then

your next job is in corporate America, there is a big difference in how decisions get made and the level of collaboration in the decision-making process differs from one private sector company to another but it's substantially different going from military to private sector. So the best technique for allowing an effective assimilation is a buddy, it's a mentor in that this is a person that knows and assimilated successfully in the culture and the environment, but it doesn't have to be somebody with more experience, it just has to be someone that knows what it's like to go from one step to the next step and assimilate effectively because how you behave and how a decision gets made are critical and essential to successful assimilation. So having a buddy is really important.

Anybody who joins Aetna, we look for opportunities to pair them up with buddies and potential mentors. We have these things called developmental mentors. Let's say I wanted to learn how to create or develop effective presentations. So I might go to an expert who has world class skill in creating effective presentations and say to them, these are my development activities. Can you recommend some other development activities or are there other things that maybe we should be doing? Are there books I should read? Are there other resources I should take advantage of and of course, they have that subject matter expertise and so I'm not asking them to be my mentor for life, I'm just asking them for the next year as I invest in these development activities, coach me on which development activities make sense and work for you and let me leverage your experience that way. So, developmental mentors and buddies are two examples of how to make somebody successful in an environment where they're very talented, but they need specific coaching just like I needed coaching on my first day.

EB: To tack onto that, I can't say that I've had a pure mentor relationship, but in my 20-year career, 10 years in software development, 10 years in security, there were two pivotal bosses, direct supervisors that were instrumental in helping me develop into the professional I am today, who I am. The first one, I was in a software development role. The first real IT job I had and he was a very hands-on manager and I don't think it matters that he was a man or a woman. I had someone that took intellectual curiosity and raw potential and it was not just the person, the company had the mechanism set up to develop that kind of talent.

That was a software development role. Software developers were hard to come by, which they still are, but to recognize who are the types of people that have the raw potential and let's put mechanisms in place to develop that raw talent versus maybe the traditional approach of we need someone fully baked who can hit the ground running on day one. I'm hugely grateful that I had a very hands-on boss as a very junior person, which is a luxury that maybe some people don't get or maybe they changed that, but it was just the right type of relationship. And it was kind of a click in that regard.

And then fast forward a few years making the transition from a leadership role in software development to kind of an entry level role in IT audit. I had a boss who, again happened to be a man, who took an interest in me and saw my raw potential not only in the IT audit skill sets, but in the consulting skill sets as well, and was very hands on. Even maybe bigger advantages than a mentor because this is a person that I'm interacting and working with on a daily basis. And even though it's been 10 years since he was my boss, I still stay in contact with him and I'm actually honored when he calls me on the phone now to ask for my insight and guidance on some of the challenges he does have. And I joke with him, I said you took me from when I was a little baby bird and helped me spread my wings and become kind of the person I am professionally today.

While I haven't had a traditional mentor, to me it's very important to, in the extent possible, get in a position where your direct supervisor has the bandwidth and facility and interest in developing and

cultivating you rather than just expecting you to run with it and checking in with you every now and then, especially earlier in your career, maybe at pivotal junctures in your career. And I'd love to hear from you, Jim, when you do find these intellectual curiosities, what is the onboarding or development process to integrate them into contributing members of the security team?

JR: Everybody has a professional development plan, it's the two things that they want to learn that we learned in the interview process with a little bit of refinement to get at the right level of granularity because some might say I want to be a great leader. Okay. Are you a parent? Yeah, I have a two year old. Okay. Is parenting one skill? No it's not. Okay. Do you think mastering how to change a diaper with one hand is one skill? Well, yeah, that's a skill. Okay. So let's find the skill you want to develop professionally, as a leader, that's not as broad as leadership, but it's something specific. The reason for that is if you get something specific, then you can say, with that in mind, let's identify development activities that not only expose the person to some techniques, but allow the person to try the techniques, get some feedback on how effective those techniques are, refine those techniques and demonstrate the confidence.

The reason for that is, when we go to school in undergrad as an example, most of us are paying money to absorb and acquire knowledge. That's a wonderful model, but it doesn't apply in the work environment. In the work environment, it's not how smart you are or how much knowledge you have. It's how you apply it. We get paid for applying skill, not for learning subject matter, and so having a development plan that has activities geared towards the demonstration of the skill as outcomes, that's what you get paid for and that's what gives you choices. It gives you more choices and choices are good professionally. The development program and plans are designed to give people choices. Now, I never want people to leave Aetna. I want them to have the choice and I want every single person in Aetna to have a choice to leave and then I want them to choose the opportunity where they're going to learn the most and 9 times out of 10, I think that's going to be the environment that they're in, because it's set up that way.

KP: So I think that what you've built is admirable here. It truly is. Let's pivot for a moment to the other half of the world that doesn't necessarily have a mature hiring program like Aetna does. An immature hiring program that doesn't necessarily have the capacity to hire people and take one skill and refine it for a year. Nor do they have women on staff that can do all the interviews. How do these companies catch up to where you are? Where do they start?

JR: So one option is to give women a choice to build the social support group that Erin talked about, and Executive Women's Forum is as good example of that as any. In risk and security, EWF is 600 strong women that network together and come together on a regular basis and frankly help each other develop skills and competencies that are unique and specific to what they need to advance and be more marketable. And they use their network in many ways to help them the same way an ISAC, which is a community either within an industry or across different segments of the industry, of security professionals that share security intelligence, techniques for effective controls, products and services, leadership techniques. All of those things are shared to make the collective group more resilient than any individual. And the same thing, women need a place to connect professionally with peers and potential mentors where they have a unique understanding of what they're going through. Gender specific.

EB: I agree. One observation on culture and environment and getting away from the micros is that in a lot of companies, you have to hit the ground running in a sprint and already know everything you need

to know. For any professional development, that's on your own time and you have to tuck it in around the edges and that's extra-curricular, somehow you have to find the energy to drag yourself outside of your normal work day into Cambridge or Boston or wherever to sort of enrich yourself and that is somehow disconnected with putting out the fires on a daily basis, where what I'm hearing from Jim's program here is that it's integrated into your job responsibilities and even things that you're evaluated on and contributing to as the company. I think in most environments, there's a disconnect between what's happening in the professional development realm and then what you're actually doing on a day to day basis.

Back to the point of how the direct supervisor that you have and the relationship and how they're fostering the growth in you is that many companies don't recognize that supervising people and teams takes time and energy and effort. And really what you have is hierarchical individual contributors that are somehow supposed to tuck in these kinds of managing and supervisory mentorships in addition to a full time job, and that's a complaint that I have had for jobs where I have been supervising people, it didn't take any of the individual contributor type of roles or functions off of my plate, it just added on the burden of kind of dealing with a mishmash of people and trying to offload what I'm doing on them without any recognition given to the time that managing people and developing people takes time and effort and energy. In some cases, that should be the primary function of the role is managing people and developing people rather than the reality, especially in smaller companies, that somehow that's tucked in around the edges of your day to day responsibility and then you're in that kind of catch 22 where you can't really develop new people and then you have to try and hire new people that can hit the ground running in a sprint that you can't find to begin with in the first place.

If you kind of extrapolate that, that can contribute or constrain the growth of your company as a whole, if everyone has to be rock star, individual contributor and there's no mechanism or recognition given to the value and the importance of management and mentorship in the development of talent, I think that's more true in bigger companies. There're just more roles that can focus on that. So that might be something thought provoking for smaller companies to take a critical look at where professional development would fall within the skill set we already have. And do we truly have managers who were invested in dedicated to developing the people, the resources, the intellectual curiosity that we do already have.

KP: Is it easy to spot a company that has some of these qualities? As a woman, what are some of the qualities that you look for in a potential employer and what do you see as potentially red flags to look elsewhere?

EB: Wow, that could be a very loaded question. I'm going to answer it as a human being and an employee in an in-demand skill set. And the reality is that people want different things out of a work environment and different things out of a working relationship and there are people that are content to come in and punch in at nine and turn the crank and punch out at five, which are not the type of people that Jim are looking for. It's about finding a fit for who you are and what your natural talents are and recognizing where those are. A few years back I actually worked with a career coach or career counselor who helped me understand and think through all of these things, looking in the past, what is the landscape of where I've been the happiest doing what I've been doing and what are my natural talents, what are the things that just kind of feel effortless and don't feel like a grind. There are things that feel like a grind and how to combine all of those things together to find the ideal work environment and the ideal employer.

So it's not a one size fits all answer of what people are looking for, but I think the types of approach techniques that Jim has applied is really going to surface who is the right fit for their environment. That's something that maybe even smaller companies could take and apply. There are companies that have more mature processes and we need someone who can reliably come in here and turn the crank day in and day out and that's great. And you need people who can do that and then you need some people that are going to do something completely different, to find not only that company fit, but the job fit as well, and I think a lot of smaller companies will recognize that even if they do start with a granular job description and criteria, it's almost the intangibles that can come out of five or six back to back interviews. Why not flip the script and start on the intangibles first and work into that? But that circles back to the point that you have to have the capacity to polish the raw potential and the talent.

KP: Does it resonate with you, Jim?

JR: Yeah. Every organization has to realize that we come to work to learn and that's a fact. And you know, I have 20 years in security and 35 years in IT and I learn something every day. I still come to work to learn and I'm not sure I could learn the things that I learned if I didn't come to work. I think every company, large, small, doesn't matter, has to understand that that's fundamentally what we do in cyber security specifically, the threat landscape changes, threat actor tactics change. You have to evolve and change controls. We create new controls all the time and we changed our security 1.5 times a day. Now what that means is we're always changing our security controls. And when I started as security, no one ever changed their security controls. You adopted a risk framework with a set of control standards and you spend all your time and effort implementing that. And once you did it you said, okay, don't change anything.

And today we're constantly changing our controls. It's a great scenario for learning new things because you're forced by default to learn. I think what we have to do is incorporate methods of learning into the work environment and the whole notion of expecting somebody to come in day one and hit the ground running, I don't expect anybody do that. I expect people to come here to learn and if you have an appetite and a passion for learning, they'll thrive. There's a big part of leadership that I believe in which is to get the hell out of the way. And when it comes to some of the passions for learning, I don't want to intervene. I actually want to give them support and allow them to learn what they want to learn. And that's a lot easier than trying to teach them what I think they need to learn.

KP: So I guess my last question, we've talked a lot about the culture that you've built and we've talked a little bit about equality in the workplace. When does the conversation shift from more of Jim's mentality of looking for the right person for the job and we're not talking about men and women, we're not necessarily talking about women having to interview women because we're afraid they're going to give a different answer. Have we progressed? Are we moving in that direction? When does that conversation stop? Erin, I'll look to you first. You look like you have something to say.

EB: It's such a complicated question, right? One thing I don't like is doubling down on the idea that men are better at this and women are better at this, so let's just assume by default there's these inherent inequities or gender stereotypes and double down on those as a way to get to more women in the workplace.

That's kind of the opposite of what we all want, but it is a loaded environment of micros in my opinion and that we can't ignore that that reality doesn't exist, so I think it's navigating the reality while supporting the progress on the future and not backsliding into the idea that men are technically minded

and women are organized and can do project management and communicate and just really trying to advance the landscape just like we do for the threat profiles in cyber security continuously so that all of those things are minimized going forward. So it's not a silver bullet solution. You can't ignore the realities, but we can try and promote equality and meritocracy throughout the environment, beyond attracting women, retaining women. Right? If it does happen that me or another woman gets in a culture of heavy-micro and it's just death by a thousand cuts to your energy, as an employer you're at a competitive disadvantage that the women are going to leave. And that has happened to me. I was in a company and there were three women and two of them left, including me, all of a sudden, so you need to recognize that that probably has happened to you and will continue to happen to you.

I guess, what is the micro, right? And that's the tolerances of all of these subtle offhanded types of things that are in the direct professional context and even ancillary in the break room or speeches at a company Christmas party and all of these things, and it's not on the shoulders of the women to counter these. Everyone, including the men, needs to work together and not tolerate when these types of things happen or continue to happen. And it's really about the tone being set from the top down if those things are acceptable or tolerated as kind of the fabric of a "boys will be boys," male dominated industry. Women just deal with it. And that's not what women want. We just want to focus our energy on doing our jobs and advancing ourselves professionally.

KP: Jim, we'll give you the last word.

JR: I think diversity is a fundamental strength, and if you acknowledge that, then it's actually diversity. It's not just gender diversity, it's not just ethnic diversity, it's not just geography diversity, it's diversity. And in fact, gender as an example, there are a lot of people that are going through an evolution in their definition of gender for themselves. We've talked about men and women in the workplace and the challenges associated with that, but what about people that are in between? Right? So the reality is that diversity is a strength and we always have to evolve and adjust our techniques and approaches based on growing diversity because the marketplace always will have constraints in resources in terms of the types of resources that are available at any given time based on demand. The more diverse an enterprise is and the more committed they are to diversity, the less of an impact it is that there's a scarcity of resource available. Diversity is a strength and frankly a level of resiliency in the marketplace that we all aspire to.

KP: Well said. I think we're about out of time. So, Erin, thank you for participating and sharing your personal unique insights and Jim, pleasure to hear from somebody who has built such a successful and more importantly, diverse cybersecurity program. Thank you both. As always, you can find this and all of our podcasts at klogixsecurity.com/podcast.