

ERM VIDEO INSIGHTS

Transcript of Jennifer MacKethan and Bruce Branson

Advanced Risk Scoring Techniques

Bruce: Hi, I'm Bruce Branson, I'm the associate director of the Enterprise Risk Management Initiative at NC State University. I'm speaking today with Jennifer MacKethan. Jennifer is the Global Risk Manager of Integrative Risk Management at Cisco Capital. Jennifer, I understand that you've developed at Cisco Capital a really evolved risk scoring system. I wanted to talk to you a little bit today about the various facets of that process. I assume that it starts with a fairly traditional approach of asking about likelihood of occurrence, impact if it were to occur. Can you talk a little bit, first, about that process and the type of guidelines you provide to the people that participate in the assessment or exercise?

Jennifer: Sure, so we started with what is a traditional, sort of five-by-five, the impact, likelihood, five-by-five. We found that what we did was we expanded on what likelihood means. So, we not only looked at, of course probabilities, you know, probability is very statistical, likelihood is a little more qualitative. And so we have the statistical piece but then we also had things like, how likely it is to show up in the news and things like that. So we try to create something that allowed for qualitative data to be assigned a quantitative value. And then the same thing for the impact. We had a five-point matrix, but we ended up doing was developing, what we considered to be the range of values for the points. So we said what is the bare minimum value that our senior leadership needs to know about risk. We tied that bare minimum to the lowest level risk, so a one. And then we went through and said okay, what is a five? What is the catastrophic risk? What is the risk that is just absolutely devastating? And how much would that be? What dollar amount would that make us really just devastated? Tie that to our five. Then we basically split up everything in between to create ranges. So that helps us with having that dialogue. So we can talk about the probability beyond just a percentage and then we can talk about the impact beyond, you know, just high, medium, or low. We can say, you know, well based on this, you're saying that the impact would be around two hundred and fifty million, if it's a three. And that will usually drive a, yeah that's about right, or it may drive a, oh no that's way too big. And that helps us again then fine tune that scoring piece.

Bruce: So who participated in that process? Is that when you're talking with the subject matter experts? The risk owners, I assume. They're giving you that help to understand the dollar impact of some of these events.

Jennifer: Absolutely. The first thing we did in terms of finding that range, was working with senior leadership. And just, you know, you start with the basic question, you know, what is it that keeps you up at night? But it was, what is the dollar amount that keeps you up at night? So working with the leadership to find out what was their threshold for wanting to know things. And then from there, we just did really sort of back in to the data. And then in terms of who we interviewed, of course obviously senior leadership and then functional and subject matter risk owners. So we would talk to our credit people for the credit and delinquencies, and you know, supply chain people for supply chain risks, making sure that we have all of those. So we would

get the details of the data from the people that are actually the boots on the ground that manage the risk. And then we would do the review and the evaluation, quantification and prioritization with senior leadership.

Bruce: I also want to talk a little bit about the four dimensions that I think you all explore with the mitigation efforts that you have in place or maybe that you have planned for particular risk. Can you tell us a little bit about how that's been developed and how that actually works in practice?

Jennifer: Sure, so we have, we calculate the risk, the inherent risk, we value the control efforts, we get the residual risk and then based on the residual risk score, which is still, again, you back into that number, whatever it's been reduced to is that number, so then you go from whatever your original five-by-five was to whatever your residual risk score is and then that helps drive and determine what action you have to take. If it's considered a high risk, we absolutely require that a mitigation plan must be in place. If we have something that is high red risk you have to be ready now to deal with an adverse event. If it's a yellow, then we have some other factors we look at. We look at velocity. So how quickly are we going to be dealing with the pain of this risk? That really helps us drive, because if you have a high risk with high velocity, you need to be extra prepared. So then we also look at whether it's a strategic versus operational risk. Because strategic risks are very difficult to create any kind of simple mitigation plan. We've created projects to reduce data risk loss, we've created projects to improve security in our funding processes. But things like, improving your go-to-market strategy or achieving your financial objectives, these are very high level strategic risks that the senior leadership has to focus on. These aren't things we can create mitigation projects to really target. So then we look at the risks from a mitigation perspective of what requires a mitigation plan, and then, is it an operational risk that we can actually create the mitigation plan, or is it a strategic risk where we then punt on it to the senior leadership and say okay, this is your risk and how are you going to mitigate it. We make sure they have a plan for that. Which again, for your big risks, like strategy and achieving financial objectives, they usually do.

Bruce: Is it true, I thought I understood that ultimately you come up with an overall risk score that obviously factors in the impact and likelihood assessments, but then also these adjustments, like you say, going from inherent to residual, does that actually make its way into an ultimate dollar value at the residual risk level also?

Jennifer: Oh it does. It's a complete calculation, so we start with something, like for example, like one of the ones I work through is a business continuity risk. We have that valued, the number that is assigned to it is seventy-five million just because that's where it falls in the range. Then we talk about, we have our plans and we have annual testing and all the things we do. And that cures about fifty percent of that risk. The remaining fifty percent you can't do anything about. There's nothing we are going to do, plan or write, create, that's going to impact hurricanes and tornadoes and earthquakes. That part you cannot do anything about. So that's the part that we then have to make sure that we've got the preparedness for. That we make sure that we are able to respond to that.

Bruce: I think that's everything I had for you today, Jennifer, I really appreciate you spending some time with us.

Jennifer: Great, always happy to help.