

52. Stephen Devaux, Mike Hannan, Randy Ifill, & Carl Pritchard: PMBOK® Guide 6 _ Risk

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0:00:03 Carl Pritchard: After you consider probability and impact, you should also consider urgency, proximity, dormancy, manageability, controllability, detectability, connectivity, strategic impact, and propinquity.

[noise]

Stephen Devaux: I think for me, controllability is the one that's the most important for the simple reason that if you can't control it, then what difference does it make?

[noise]

0:00:28 Mike Hannan: And if we could just aggregate all that variability, uncertainty and risk across the whole project to just manage it at a higher level, like an insurance company might, that could be a really great step forward for everyone.

[noise]

0:00:39 Randy Iliff: When I was taught risk from kind of an engineering and system perspective, I was taught that every element brings risk, and every interface between every element brings risk and every interface between every element and every interface on the outside world introduces risk, and that's why you're basically struggling to impose a deterministic probabilistic model on what is essentially an infinitely chaotic genuine environment on the outside.

0:01:05 Kendall Lott: Wait, what?

[laughter]

0:01:08 KL: This just got complicated.

[music]

0:01:11 KL: Stay with us though, on our risky ride with high return. You might want to have a pen handy to jot down some notes.

[music]

0:01:21 KL: Risk PMBOK 6. It must be time for another PM round table here at the PM Point of View® and I want to remind all listening PMs to check out the other project-related podcasts on the PM Podcast Network, you'll find it on iTunes.

0:01:34 Announcer: From the studios of Final Milestone Productions overlooking the White House in downtown Washington DC. This is PM Point of View®, the podcast that looks at project management from all the angles. Here is your host, Kendall Lott.

0:01:46 KL: In an earlier podcast we heard a statement, a claim that once you move past learning all the techniques and some of the related tools of project management, what a PM really is is a risk manager. From how to manage the flow to communications, to team members to stakeholders, it's all about the known and unknown changes that are about to happen or could happen. And what you're supposed to do about them. With us today at the PM Point of View® round table to talk risk and PMBOK® 6, are our usual suspects, Randy Iliff, author and founding member of the International Council On Systems Engineering, INCOSE. They know something about risk, yeah? Stephen Devaux, author of Managing Projects as Investments. And the guy that teaches us that scope scheduling cost are not an iron triangle, but a golden triangle. And suspect three, the man who blends Lean, Agile, and the Theory of Constraints to dramatically increase portfolio throughput and performance: Mike Hannan, author and consultant. And yes, your organization can hire him.

0:02:46 KL: Our big news today though, anchoring our table, is our special guest, master thought leader of risk, Carl Pritchard, author of seven project management text books, including two on risk management. You've probably read one of his books if you've studied for your PMP outside of a prep class. What makes him special, though, for us today is that he was a principal contributor to the risk section of PMBOK® 6. We're getting it from the horse's mouth today.

[music]

0:03:16 KL: So Carl we're going to start with you since you're the special guest in the hot seat. You are the Principal and Founder of Pritchard Management Associates, a veteran SeminarsWorld instructor for over two decades, I have here, and the US correspondent for the British Project Management Magazine, Project Manager Today. Your bio reads that you were also the second PMI RMP, certified on the planet, the second risk management professional, certified on the planet. Is that true?

0:03:44 CP: That is true.

[laughter]

0:03:45 CP: I took it on the very first day the RMP was offered and there was only one other guy who did. So I was all excited being number one, so I had to email this guy and I said, "I see you took the exam on the first day", and he emailed me back, said, "Yes I did", and I said, "I got to know where you live, and what time you took the exam", he said, "Took it in the morning. I live in Bangalore."

0:04:08 KL: Ooh!

[laughter]

0:04:11 CP: So I got skunked by about six hours.

0:04:14 KL: So, do I understand that you're the first risk management professional, in the Western Hemisphere?

0:04:19 CP: That would be correct.

0:04:20 KL: Alright. So Carl kick us off here a little bit before we get too deep into it. Just in general, being the project manager, instructor and understanding person, that you are, what made you turn to risk? What was interesting about risk, that's cued you up to be a key person that PMI drew on.

0:04:39 CP: It's funny I'm actually going to disappoint big time here because my life is entirely risk based, my entire existence, my professional life, everything. And the reason I say that is because risk is both threat and opportunity. And one day I was in the office and the boss came in and he said, "you heard about Nick" and I said, "Oh I heard he got another opportunity. That's great for him. And wasn't he the risk guy on this big contract?" And the boss looked at me and said, "Yes, he was," and I said "Yeah, just out of curiosity, who's the new risk guy?" and Ed looked at me and I said "Ed, I really don't have that deep a background in all this stuff." And he said "It doesn't matter. You've got six weeks to get up to speed".

0:05:27 CP: So that was my introduction to risk and from there it became... I became kind of like the risk addict. You get the taste and then you just can't get away from it... So it became a big deal for me. It's been what, 26 years now? So the interesting thing is, again, an instructor wasn't able to show up for PMI's risk management training for the National Congress. And this was in '94, and I got the call again. "Hey, do you think you could cover this content?" So that started the relationship with PMI a little more deeply. I do need to make one correction though. I have worked extensively with the people who did PMBOK® 6, but I was actually the lead chapter author for the risk chapter of PMBOK® Fourth Edition.

0:06:21 KL: Oh, fourth.

0:06:22 CP: Yeah, I'm completely immersed in PMBOK® 6, don't get me wrong, but I do want to make sure that we're clear on just what my relationship is. I was a reviewer, I was not a contributor.

[music]

0:06:37 KL: So Carl, what changed if anything, in PMBOK® 6 with respect to risk, based on what has been said before?

0:06:45 CP: I'd rather pick the brains of the people who are here as I go through these, if you don't mind?

0:06:51 KL: Sure.

0:06:51 CP: Because I'm really kind of curious whether they think this is a value add kind of thing.

0:06:57 KL: You got three guys that have no problem telling you.

0:06:58 CP: So the first thing that really changed is they added more paperwork. They actually dropped in, in addition to the risk register, now they have the risk report. And the risk register is all the tracking and organization of the individual risks, but the risk report is a much grander document. It's a big, healthy, chubby little document that tells management on a kind of global project-wide perspective, what are the risks and how do we stand? And it's designed to be that kind of executive summary or big-picture look at the risks, without getting down into the weeds. And PMI now says this is not something that is a nice to have. This, among all the other mountain of documentation that we generate as project managers, is a must-have. And I'm just curious about my peer's thoughts on that. Is it a must-have?

0:08:04 KL: Hey, Mike, I know you think about risk.

0:08:07 MH: So I think it's actually a good thing. Even though, as Carl said, you have the mountain of paperwork we're already supposedly, we have to generate as a must-have, tends to be somewhat unmanageable at times. But I do think that there's got to be increased awakening of how to actually do things like what they also said in the new PMBOK® guide, implement risk responses. And so, if a risk report can help us assess how well we're implementing risk responses, for example, then that's probably a really good thing. I think similarly, if we could figure out how to get that report to help us identify opportunities to aggregate risk. I know there's nothing in the PMBOK® guide for the risk report that requires this, but I think it's a step in the right direction, if we say, "Hey look, there's lots of little risks all over the place in projects." There are risks that a given task might not complete on time, a risk that the procurement cost of some key element might come in higher than we thought. And if we could just aggregate all that variability, uncertainty and risk across the whole project, from the lower level, to just manage it at a higher level, like an insurance company might, that risk aggregation benefit as a risk response, that might result from some sort of risk analysis report, that could be a really great step forward for everyone.

0:09:32 SD: I'm just misting over here on. I'm weeping openly.

[laughter]

0:09:38 SD: Sounds way, way too pretty. It really does.

[music]

0:09:46 CP: Some of the other things that they changed, one of the other things they changed actually ties to something you just said. On the qualitative analysis side, they added a whole mother lode of different things that we should consider beyond just probability and impact. We've always been the probability impact people. You worry about whether it's a high, a medium, or low in terms of probability, and in terms of impact. But essentially, they've come to the conclusion, as often happens, you get too many of the high risks, too many of the high impact things you could ever deal with. And so they said, "If you've got too many, let us makes this worse for you."

[laughter]

0:10:28 CP: And the way they did that. No! The way they did that was to say, because after you

consider probability and impact you should also consider... " Let me suck a deep breath and I'll go through these fast, then we'll go through them more slowly.

[laughter]

0:10:43 CP: But "Urgency, proximity, dormancy, manageability, controllability, detectability, connectivity, strategic impact, and propinquity." And yeah, this one... I was an English major in college. I even had to look up propinquity. But going back to what you were just saying just moments ago, are we actually controlling the big picture? One of my favorites out of that laundry list was connectivity. How many other risks, projects, people does this impact?

0:11:19 RI: Exactly.

0:11:20 CP: And I thought that was just a sweet add. Out of that whole list, I thought that was the one that just was the prettiest really, because we don't tend to look at cascading risk. And cascading risk is one of the biggest concerns we've got going. It's the old Morton Salt "when it rains it pours" thing, and indeed, we tend to be the ones who forget the umbrella.

0:11:45 RI: As the system guy, you're speaking the language that makes my heart throb and sing over here. Because when I was taught risk from kind of an engineering and system perspective, I was taught that every element brings risk and every interface between every element brings risk, and every interface between every element and every interface on the outside world introduces risk, and that's why you're basically struggling to impose a deterministic probabilistic model on what is essentially an infinitely chaotic genuine environment on the outside.

0:12:15 RI: It's no surprise that people never really get close. The amazing thing is that we get close enough to be successful in a project which explains in some part why the PM's role is so dynamic over time. There's a limit in the quality of the model that anyone could economically put in place as a tool for management. It needs to be good enough to guide informed decisions, it doesn't have to be perfect. And that's where people struggle with the "Either I give it 5000 pounds or I blow it off", but when I read this document talking about what I would call emergent properties to use the language of systems, there's something that emerges from the pieces that is not directly associated with any individual part, it's a composite thing. You can speak of the soul or personality in humans that you couldn't find from individual cells. That's the really daunting part of large projects. And if you look at the nature of interfaces, some are a pure linear cascade but others are a mesh topology, to borrow a term from Telecom, and those are the ones that grow exponentially in scale. That's why the really mega projects are so overwhelming in terms of the uncertainty both in opportunity and downside that they bring.

[music]

0:13:27 CP: I think part of it though is that when you look at this list, it's FMEA on steroids. For those of you who do failure modes effect analysis, it's kind of like it's got detectability in there, but now we're supposed to take all these other things into consideration. And I'd like to get everybody's individual favorites out of the list and let me walk through them more slowly so that you can actually pick out which one you think out of the list is your favorite. That's urgency. What's the last point of which we can actually do something about it? Proximity, how close are we to it, how directly does it impact it? Is it going to be a glancing blow, or is it going to be a direct head-on hit?

Dormancy. How long does it just lie there before it explodes on us? Manageability. Can we actually, if it does come to pass, cope? Controllability, can we actually not necessarily cope but at least kind of nudge it in the right direction? Detectability. And for that you can go back to failure mode effect analysis.

0:14:30 CP: Connectivity, we were talking about that. Strategic impact, does it blow up the company? And finally propinquity, the one I didn't even know what it meant. Propinquity is "Does anybody really care?" Which I think, I thought that was like the most fun thing they added here [chuckle] because it is kind of a, "Oh, does anybody care?" So which one of those and one by one, I'd just kind of like us to go around and share out of that laundry list which one of those do you think is kind of like, yeah, that is something we definitely need to take a look at.

0:15:08 KL: And just before we do that, for those of you following along at home, this is this list and their explanations are on page 424 of the guide to the PMBOK® Version 6.

0:15:18 CP: Randy, what do you think?

0:15:20 RI: The real quick thought I had was that all of these are very useful in the prioritization because you're faced with this infinite amount of complexity and always a limited amount of time and resources so prioritization comes to the top. Frankly, if no one on the outside cares it's really tough to move it to the top of the list. If it's not strategic, it's tough to put it to the top of the list. Connectivity, the extent to which this one creeps into other places would probably be my highest level because it's the only one of these that has an engineering term stage gain to it. It has the potential to make it radically worse. All of the others are kind of a discreet measure. They're all important and there's probably a half a dozen more that you could think of adding. Really, what I picked up when I read this was a caution to think beyond merely high, medium, low, and really bad, ugly and life-ending as simple labels for things, because there's a tremendously lossy compression when engineers and PMs move from talking about the actual source of the risk to labeling it with the probability and an amount that is often driven by political factors such as "You can't ruin my project or my bid by calling it that number." It was a way of keeping the reality of the circumstance present rather than simply defaulting into very lossy demerits or scoring systems.

[music]

0:16:44 CP: Mike, we haven't heard from you, what do you think? Which one do you like?

0:16:48 MH: So just like you Carl, the word "propinquity" was completely unknown to me until about five minutes ago. But I got to say, I think the one that's of more practical impact in my point of view to we PMs is plain and simple manageability and again I go back to my notion of our ability to aggregate risk and how rarely we take advantage of that. We're often so consumed with the details, right, with the sort of engineering mindset that we PMs are taught to employ that every little task must come in on a due date or every little budgeted item must come in on budget. And really, there's just normal variation and unknowns across projects and the bigger they are, the more complex they are, the more opportunity we have to aggregate that risk and have things come in on time.

0:17:38 MH: A favorite example I have is helping the NAVAIR systems command a bunch of years ago and they had a big problem trying to get aircraft turned around from the maintenance cycles for

the missions that were required of them. And they found the biggest problem was just trying to get all the aircraft on to an actual carrier, an aircraft carrier for deployment on the deployment date, and especially in war time of course that's crucial. And I just thought this is so big and so complex and the due date is so hard and fixed and important. How do we possibly manage it? And the reality is, they had so much opportunity to aggregate risk of any one aircraft taking more time or less time or more unknown issues of maintenance being more technically challenging and involved and requiring more parts to be ordered ahead of time, and all this stuff. But if they could aggregate it all, they'd actually have an easier time hitting that goal. I wish we PMs could employ those concepts and common practice better. So if we can start on that path with this notion of... Let's focus more on the manageability because we can manage this stuff.

0:18:45 Stephen Devaux: I couldn't agree more. I think for me, controllability is the one that's the most important for the simple reason that if you can control it then what difference does it make? [chuckle] You know, you have to have control of it, either by adding more contingency to the plan if you think the risk is going to explode on you or manage the specific risk by taking measures. But I'd just like to read if I could. One very simple paragraph here, which is on page 446 of the sixth edition of the PMBOK® guide. And it talks about what, for me, is the essence of managing risk, which is cost-benefit analysis. And under cost-benefit analysis, it says "If the impact of an individual project risk can be quantified in monetary terms, then the cost effectiveness of alternative risk response strategies can be determined using cost-benefit analysis." Well, if we take the opposite of that, what it says is, it's if the impact of an individual project risk cannot be quantified in monetary terms, then the cost effectiveness of alternative risk response strategies can't be determined using cost-benefit analysis.

0:20:09 SD: And I think that's so clearly the case and unfortunately we continue not to quantify the key aspect of risk. And I'm going to give one little example. Let us suppose that we identify a risk. The cost of removing that risk, managing it so it will not have an effect or let's say, it'll have an effect of delaying us one week. Okay? If we use this method, it'll delay us one week and it will cost us \$100,000. On the other hand, if we don't manage that risk, it will have a 25% chance of delaying us by five weeks. Can anyone tell me which is the better way to go – to ignore it or to manage it? There's only one way to know and that is to know what is the cost of one week of delay versus what is the cost of 25% chance of a five week delay. And that unfortunately continues to be the problem with risk management which is so important, but if we don't know the underlying factor in projects of what is the cost of time, then we just can't manage risk adequately. We may pretend to, but we can't manage it adequately, and I would suggest that we really can't manage much of anything else because the cost of time is crucial. As Ben Franklin said, time is money, and if we don't know how much money it is on a project, we really are in great trouble.

0:22:06 KL: So, Carl, I want to step in here with something. Interestingly, it turns out, all you needed to know was in my introduction. So, our golden triangle schedule guy, know the cost [chuckle] of delaying or inserting more scope or more risk or more risk management in the system has told you his answer – if you don't got dollars, you got really nothing to talk about. Our engineer has spoken to connectivity. Done and done. And our portfolio manager says look, you've got to roll it all up to a level we can manage it anyway. So, I guess there was no surprises I'm sorry, I wasted your time today.

[laughter]

0:22:44 CP: I find it completely surprising because I am the qualitative guy. I frankly think most of the quantitative analysis, that's done on risk management with a limited very few exceptions and the few exceptions are the mega project, it's big oil and large companies that have a huge historical database. Without that stuff, I think most people who pretend to do quantitative analysis are measuring mud with a micrometer. I think they are out there, just creating and to your point, it's a matter of how much does a five-week delay cost us and the manufacturing, the huge manufacturing companies I work with, it's kind of compelling because there of all places you would think they could put a specific distinct dollar value on people's cost and people's time. And yet, shockingly, they don't. And, I think that's a huge shortcoming, but I also think it goes to... You've got to dance with the one what brung you... So you have to deal with the fact that in most organizations, those numbers are not going to be prevalent, but you still should be doing something to identify which ones are the priority risks. And that's what qualification and quantification are supposed to bring to the table.

[music]

0:24:12 RI: I think this is why propinquity was added to the bottom of the list, because it says that whenever cost-benefit analysis is either not done or unavailable, the PM defaults to whoever is screaming in their ear the loudest or most likely to agree with a given position.

[laughter]

0:24:25 RI: Which is probably not the way we wanted to go, but I think that's why propinquity slipped in there as a kind of secret communication between PMs to watch out for your boss. Didn't mean to interrupt, please carry on.

0:24:33 SD: That's a great explanation Randall. I think you're absolutely right, but the one other thing I would say is that the project manager, and indeed the project management community should be screaming that we need this information on projects. That right up-front, in project initiation, the one thing the project manager absolutely needs in order to manage the project adequately is an estimate, and of course it's an estimate but everything's an estimate, of what is the cost of time. What is the cost of being a week late versus being two weeks late, versus being a week early? What is it... Or the value of being a week early. If given that information, the project manager can then make great decisions about schedule, about cost and about risk management. Without that information and Carl you're absolutely right. With these large manufacturers and everyone else, they're just... They could do their research to find out what the cost of time is on their production lines or whatever, but they just don't and without that information, they're expecting a project manager to perform miracles and mind reading.

[music]

0:25:56 RI: There's a huge time component to this as well. I was thinking as you were chatting Carl, that this is a little bit like you're driving on a mountain road and something pops out right in front of you and your choices are to scrape up the side of the car against the hill, or go flying off the 800 foot cliff. It is possible to sit down and do a cost-benefit analysis, check out the cost of depreciated vehicles in your lifetime, settlement and policies and stuff. However, in the split second you have, you have to almost go from instinct. I've seen an awful lot of PMs with experience make good judgement in those panic moments, and I've seen a lot of people without the experience fall

into the trap of whatever is simplest or easiest. And almost none of them use the available time, whatever small amount that may be, to do either a back of the envelope, a one page, a two page or if necessary, a three inch binder worth of analysis. It's the inability to take whatever time is present and use it as effectively as possible. That's probably the day to day sense.

0:26:55 SD: Yeah. This is the sort of thing that Daniel Kahneman addresses in his Thinking Fast and Slow book. The urge of people to use quick decisions and thus get the wrong answer, when in fact, just a simple back of the envelope analysis would often bring them to the right decision.

[overlapping conversation]

0:27:17 RI: The decision is simply go right or go left as opposed to a specific action that can be determined a little bit later. As we talked about the cascade impact of risk, there's an ability to apply that same cascade logic to the exposition of risk and response to it. I don't want to die, I do want to die. That's a pretty easy one to sort out. Then if I don't want to die, what are my options within that path? So there's a branch and path analysis that I think is kind of wired into the innate decision making, but it could certainly be more effective if it were brought up to a conscious level like we're talking about here in the PMBOK®.

0:27:52 MH: Hey guys, I've got to jump in on the Kahneman reference because it's really beautiful here. Also in his book, Thinking Fast and Slow, he said, if you're just learning to drive, your system one or your immediate fight or flight response, could be to do something like slam on the brakes even though you're sliding on ice. But that as you gain more experience, your first response would never be to slam on the brakes on ice, but you can still implement an immediate risk response almost without thinking that's much better informed by experience. That's where Steve Devaux's coming from saying, if we only got a little bit better over time as seasoned PMs, we could even face that immediate fight or flight decision in a risk situation and come up with a much better response than what the new driver would do.

0:28:45 RI: Even a 30 year driver who has experience driving in the UK and then comes to the US, where we "drive on the other side of the road", as opposed to the wrong side, will find their instincts out of sync. The analogy here is if you've been in a manufacturing environment where there's no development, it's very likely that you'll bring a manufacturer's response to the variability in a development mode or vice versa. They're different enough to think of as right and left hand driving.

[music]

0:29:15 CP: I want to make sure that we carry through the other stuff that actually wound its way into the PMBOK® while we're all together here. One of the things we're talking about here is largely known known risk. We're dealing with the known knowns. The stuff we're aware of, the stuff we have on radar, the stuff we can see in the windshield kind of thing. One of the things they did in the new PMBOK® 6, and I'm very curious to hear other people's perspective on this because... Thank you Don Rumsfeld for bringing this conversation to the floor, the whole distinction between known knowns, unknown knowns, unknown unknowns, but now in PMBOK® 6, they have incorporated known unknowns. Now, there's a whole school of thought that says there is no such thing. But in PMBOK® 6, we now have known unknowns. And these, per PMBOK® 6, are the whole notion that there is just general... They call it things like "ambiguity risk", I love that. But I also... I read through it and I was like, "Oh great. So, they're talking about free-floating

anxiety."

[chuckle]

0:30:34 CP: They're talking about just basic paranoia. And I'm just... I wanted to hear from you folks as to your thoughts on... First off, is there such a thing as "known unknowns"? And if so, is it something we should be investing our flipping time in?

0:30:55 RI: If you look at this as the difference between a bottoms-up estimate and a top-down estimate or a comparative estimate to like things, when I read that, I... What I picked up out of that was, instead of just looking at the bottoms-up risk you encounter when you do a deep dive within your project scope or within the current circumstances, if you then say, "Okay, I found all of this stuff. But what does a project like this, running for 10 or 15 years, typically encounter?" I think that's where the experience flows in. You think then of things like currency issues or exchange rates or stuff that might not be seen within the narrow focus of the scope of the particular requirements you're working on. You think about transitions in government, you think about technology changes, you think about as-builts that are different than what we're promised that you discover only when you begin doing work in the field. So, I think it's that ability to compare this one to other things like it, that is our best hope of filling in some of that cloud.

0:31:53 CP: I think you're right. I think you're looking at the big picture view. But if it's known, how could it still be unknown?

[overlapping conversation]

0:32:00 RI: Well, I've seen a lot of risk that's known to the people with experience and completely unknown and flat out denied because it gets in the way of the sales process by a large portion of the organization.

[laughter]

0:32:12 RI: And yet it's very unwelcome to bring risk to the table when somebody's trying to convince someone that they need something at a particular price and schedule that isn't realistic. So, I think a lot of it is self-imposed in just that stage of the effort.

[music]

0:32:29 KL: Hey PMs, new symposium for those of you in the Washington, Baltimore, Northern Virginia Metro area. The Washington, DC chapter of PMI will hold its annual symposium this year at the Sheraton Tysons in Tysons Corner. That's out in Northern Virginia, a short walk from the Spring Hill Metro and right on the beltway circling Washington DC. This year's theme is "Set Your Course Today to Meet the Challenges of Tomorrow". It all happens on Friday, September 28. So, mark your calendars now. Come learn, come share, and maybe even find your next job if you're in transition. As we've often discussed on PM Point of View®, networking is a skill we PMs need to take on, head-on. So sign up and show up for the all-in-one-day event. Seven PDUs, food, networking and presentations for just \$260. Google it or go directly to pmiwdc.org/2018-pm-symposium, or simply hit the website, pmiwdc.org, you'll figure it out, they've made it very easy. Now, back to the round table.

0:33:37 SD: We're back again to some extent, I think, to the difference between theory and practice. As someone once said, "You know, in theory, theory and practice are identical. But in practice, they're very different." And the way that people do risk management is very different, I think, from the way it's laid out in the PMBOK® guide, which overall, if followed, would be much better than the way that it's done in most places. However, what passes for risk management in many places, is what we might call "risk tools", "software tools". In other words, Monte Carlo tools, where we come up with three-point estimates, run the software on a default, which invariably is chosen at random, and get answers.

0:34:34 SD: Now, Monte Carlo tools can be good, but they require a huge amount of effort in order to make them accurate. And invariably, they're just left there to run on their own. The most important factor is what is the distribution of the three points? And that I would suggest, is a known unknown. Nobody ever really bothers to figure out what is the distribution for each of these 3,000 activities in our projects. When we come up with these numbers, they simply run it as though it's a triangular distribution or very occasionally, a beta distribution. And in fact, the difference that you can get if you run them on one distribution, default distribution versus another, is anywhere from 8% to 12%. That's a 10% variance, that's huge. That's the difference between saying that the project will last 20 weeks and will last 22 weeks. Well, how much is that two weeks worth? And I think that that's one of the places where we use this term "risk management" and we do something we try to call "risk management" and we believe that we're doing some kind of due diligence. And what we're really doing is throwing in an eye of newt and nothing more than that.

[laughter]

0:36:01 CP: It's all very true and it does get down to, it goes back to the whole notion of what we need to focus on is what's in front of us. And I think more than anything else that's really, when the more we can put in front of us, great. The more information we have, great. And the thing I love, they also in the new PMBOK® one of the other things they did for us, and this was like a special courtesy. The project managers for PMBOK® 6 were Dave Hillson and Cindy Stackpole Snyder and I called and talked to Dave because he's also a risk guy, he's the risk doctor over in London, and I called up Dave and I said, "Dave I've got to ask you a question about the new PMBOK®", and he said, "What's that?" I said, "I'm reading risk responses here and one of the new risk response is escalation." And he said, "oh yes, it's wonderful." And I said, "Yeah, yeah, but it makes no sense." And I said, "Isn't that just transfer?" And he said, "No, in transfer you're still dealing with residual risk and in transfer you still own it." He said, "In escalation you've determined that a risk is basically too big for you and you hand it off to your senior management and at that point you're completely off the hook."

0:37:29 SD: I love it, I hope you are. [laughter]

0:37:32 CP: Yeah, yeah, well, thank you.

0:37:32 RI: That sounds theoretical to me.

[laughter]

0:37:36 CP: Well, yeah, that goes back to in theory versus in practice.

0:37:40 CP: Yeah, I love that line, by the way.

0:37:42 CP: It is one of those things where when I heard that and I've shared that with a couple other peers since I had that conversation and I'm still not comfortable with it. Are you all okay with that?

0:37:55 MH: Not at all comfortable with it personally, with the possible exception, the risk of sounding like Johnny One Note here, that by escalating you help higher level people do a better job at aggregating. So perhaps that risk touches other related programs or projects, perhaps other programs and projects have escalated similar risks, perhaps there is a better risk response at a higher level, as we can aggregate it up an organization. But the notion that we can just hand it off and be off the hook is ridiculous.

0:38:26 RI: Yeah, I like the idea from a system perspective of, "If I can't solve it at my level I move it up to the appeals court above me, which has more range of options, the ability to trade off between other goals and objectives of the project, or the program, or portfolio you're talking about. But I don't know that it ever really goes away, I mean I've always been taught that you can hand off the risk but you're still responsible.

0:38:45 SD: I would agree, in my experience, moving it up escalating, really is sort of a CYP, which it stands for Cover Your Posterior, to be polite, and it sometimes can do that for you to some extent, but your posterior is often still hanging out there.

[laughter]

0:39:08 KL: I'm concerned with any training that tells me the way to learn how to do this more professionally is to realize that at the end of every chapter, you can always offer someone else to do it because if that's true, I'd like to take PMBOK® 6 and this whole idea that I'll be a PM and say, and if it's really complex and there's too many pages to read, delegate it to someone else, that's the best way to be a PM in a crisis. That has me a little concerned.

0:39:35 CP: Actually, you know, and by the way before I run away from this, I don't want to leave, if Dave Hillson ever hears this, I want him to know. I understand what they were trying to accomplish with that, I also just think that it's daunting to get to where you think you can actually, even if management says, "We want to take on the risks that are this high," it's never going to be completely off your plate.

[music]

0:40:04 KL: Carl, I wanted to ask one last question, it won't be a lightning round because it's this team. In your mind as you understand it and as you wrestled this, can you tell us how you're seeing the more aggressive incorporation of new development techniques and project management techniques, including Lean, and Agile, and some other ones that are flagged in the book and how that has impacted risk from where you sit?

0:40:27 CP: I think the Agile people, and if you've read the Agile manifesto it's a beautiful thing, and the reason I say that is because I believe in third question risk. The three questions in the daily

Scrum: What did you do yesterday? What are you doing today? And then comes the magic risk question, What's standing in your way? The amazing thing is, I've sat in on a handful of scrums, I do not claim to be a Scrum master, I do not claim to be an Agile expert, but at the same time I've been in on a couple of scrums and a couple within the same company and it was funny because in the same company they kept coming up with the same answer to the third question, What's standing in your way? And I'm like, "Whoa! Are you noticing that you keep answering this the same way?" And it's the same thing we've done with risk for decades, which is, people identify a risk and then we get slapped by the risk and go, "Ow! That really hurt." And then, "Oh, well, but we survived, we got through it." And then the next project comes along, "Oww! That really hurt." And we keep getting slapped by the same risks over and over again. What we should be figuring out with Agile, and why I dearly love Agile, is because when you're asking that third question, that should become the resident repository of things we're freaked out about.

0:42:02 CP: And how extraordinarily helpful if we were just to catalogue those consistently and look for, where do we have that crosshatch? Where do we keep seeing the same things, or at least the same sources over, and over, and over again? And instead, it winds up being this little one off, day-to-day experience in the daily Scrum. We should be looking at it from more of that aggregate view, if you will, to steal your term, and looking at it from that perspective. But yeah, I'm thrilled, I'm tickled. I think the whole Agile thing is a step in the right direction.

0:42:37 MH: Yeah, so on the one hand, the PMBOK® guide, with the Agile practice guide appended to it, does a nice job of saying things like, "Hey, you know, certain projects by their very nature do have a high degree of risk of scope changes, like a classic software development project." Where Agile first originated, right? And so, why not put in place an actual set of techniques designed to expect it, and manage it, nip it in the bud as soon as it happens, and change course appropriately. That's wonderful to see, and probably been sorely missing in prior editions of the PMBOK® guide, but I think there's additional aspects of risk management that have come to the floor that have gone unrecognized, at least in the PMBOK® Guide Version 6. And that is things like, you know what, when we as a team, like a Scrum team, come together and decide we're going to collaborate on some things, and that that collaboration will be more effective than if we all went off into our individual cubicles and worked individual tasks, we've already aggregated risk there, right? The risk that some guy gets sick, and can't do his task, and we fall behind.

0:43:47 MH: Well, you can never remove all risk, right? There's no guarantees in project space, but the notion that we can take some of this and address it better with some aggregation techniques. One other thing I really liked that they included was a really intelligent, comprehensive discussion of Lean and how Lean has integrated its way into the Agile and Scrum worlds. And things like, like what Carl said about, what were you working on until now, what do you plan to work on next, and what's in your way? A lot of the Lean techniques with Kanban boards and stuff, makes some of those questions things you can answer without even having time spent in a meeting. Like, we can all see what you did yesterday, we can all see what you're planning to do today, and maybe we can all see the things that you're stuck on. And instead, let's spend time on actually removing the risks, removing the impediments, and focusing on improving the flow. Which is something, of course, Lean is all about. So I think it's not explicitly handled as a risk management technique, but it's beautifully incorporated as something that can really speed projects and deliver a lot more value.

[music]

0:45:02 RI: You've heard me talk before about a lot of the success or failure in projects being honoring just the innate nature of the work that you're doing. And I'd like to second the comments we've heard already, and again, a nice kudo to the PMBOK® 6 team. This document, for the first time, really honors the dynamic nature of projects in progress, particularly, those that have development involved. You can't aim a rifle at something that is moving randomly from something that's moving randomly and have a hope of hitting it. I mean, there's a reason the F-35 doesn't have a blunderbuss in the cockpit, like World War I had. So, you need a curve-following mechanism. So, if you think again in this kind of military analogy, what you need is an air-to-air weapon that can follow this, and that comes down to how fast can you maneuver?

0:45:47 RI: And that's where Agile has its huge contribution, is it allows you to take information that becomes available only today, and use that information to plan your next stage. And not all Agile has to be second-by-second. I mean, I've worked on systems where nanoseconds were long and others where weeks didn't make any difference. But that curve-following ability lets you do two things: It avoids this false sense of security that you can have a Soviet planned economy beginning, and have everything all thought out, and just go execute on a plan. Life doesn't work that way on projects. You need not only the sense of the risk as a whole that you can have from the very beginning view, but also you need to see what risks are being introduced by the actions you take, and which ones are being mitigated. Because everyday, every action by every member of that team has the ability to alter your risk profile.

0:46:35 KL: Do you see this actually happening? Do you experience it?

0:46:41 RI: A portion of that does happen but I'm coming to this from the system engineering community, where things like a Nyquist equation are much more commonly used to describe how fast should I sample a waveform to have confidence I'm repeating it faithfully. But then when you have some grounding in a technical domain where something is real and tangible to you, it's relatively easy to transfer that understanding over to a space like Agile, and not just copy and paste a term, but copy and paste an entire body of understanding and tuning capability to it. But in general, no, I'd say there's a lot more headroom above than there is below current state-of-the-art.

[music]

0:47:22 SD: In terms of Agile, I think that Agile adds a huge amount to any sort of product development process. Second, my problem with Agile is that people have taken Agile and started pretending that it's project management. Agile is not project management. Agile is a product development methodology. And I will wind up in the Massachusetts home for the bewildered if I hear one more person say to me, "Oh, we don't have a plan or schedule, we're using Agile." The fact that you're using Agile does not mean that you don't need a plan and a schedule, it just means that plan and schedule may be more agile, it may change more often. And for me, what Agile brings to the table is better risk management. It ties the process and what is going on much more closely to where we are going to go to next. And I think from that point of view, it adds great value and particularly again, by reducing risk. However, not all risk should be reduced if there is a cost to it and until we are able to judge how much any given decision, whether driven by an Agile process or otherwise, that how much that decision is going to delay the project completion and what the value of that is. We're making decisions on the basis of best guess, but I really wish we could make it on the basis of cost-benefit analysis.

0:49:16 KL: Your argument is, is have better data so you can use this traditional tool of cost-benefit analysis. What would you suggest as a recommendation to be able to get better at costs, and actually have that data? My thought is, is people get this and yet they can't do it. So what are we missing? Is there something that's not been developed yet? Is there something magical? Or is there something that people have not chosen to do when they really could do it? Is it a training problem?

0:49:40 SD: They're not choosing to do it. Large companies certainly have the ability, I mean, there are huge finance departments who are out there figuring out what the overhead cost for each of the 100 plants in North America a company has, and what should be the overhead rate that is applied to employees, and all kinds of other things that are being examined by the bean counters, to use an uncomfortable term, in the finance department. Those folks would love to be given the job of figuring out what is the expected cost of a given week earlier or later than a target date and two weeks earlier on later. How much are the overhead costs increasing? How much is our ability to deploy this new system a week earlier worth, etcetera, etcetera, and figuring that out and making those calculations. It's not something that would take forever.

0:50:43 SD: In all probability, a couple of person-days would be enough to get a pretty good approximation, but no one's bothering to do it and they won't until the PMBOK® Guide puts into its initiation processes that one of the things that needs to be done in the business case is determined what's the cost would be for being each unit of time later and what the value would be being each unit of time earlier than a target date. And doing away entirely by the way, with that horrible term "deadline."

[music]

0:51:24 RI: What you point out is that organizations have the capacity to measure a great many thing. A lot of information is available that goes unused simply because a question isn't asked. But in many organizations, that information isn't seen as valuable, at least within this increment of time or cost account. So in a modern world, if I take some of my money on my project to do better data collection and record keeping for the benefit of a future project, I don't have a budget within my project to do that. I typically don't have an overhead account from someone who understands the value of it that's building a repository for the future. So it is only the things that have stakeholders outside of a project community that are getting tracked and captured in that way so that there's a lack of project-related estimating information.

0:52:10 RI: And if you pardon it... A quick bit of humor, people are asking me why organizations make such bad decisions and I ask that individual, "Well, how many people in your organization either directly or indirectly have some role in calculating cost?" Okay, they give an answer and it's, "Okay, now tell me about the value accounting department." "The what?" "You know, the people who actually decide what all of those costs are actually worth." And if you're looking for why organizations fire the engineers one quarter to make the analyst happy and then are surprised the next quarter when they can't support or maintain their projects, that's part of the reason is there's no balance between those two sides of the equation and a lot of corporate structures to do.

0:52:50 SD: Randy, my heart is going pitter pat. It started doing that as soon as you said the "value department," maybe that's what we need in any project-driven organization is a value department.

0:53:01 KL: I can see what this round table needs to be.

0:53:04 RI: Well, if you think about it, because the PM is a lone agent talking about value in a structure that is only interested in looking at cost. I mentioned earlier the difference between manufacturing and development. In manufacturing, there is a certainty what done looks like and there's also a certainty that things can only get worse than that. They never get better than the perfect golden unit coming off the end of the line. So everything is truly a cost. And when you're in development though, the value of another day spent exploring a potential interest or making a connection can be orders of magnitude different. But if there is no precedent for that possibility within a pure manufacturing variance eliminating thought process, it's hugely self-limiting. So in terms of all of the aspects of this PMBOK® people might want to think about, it's everything we've talked about with a negative, you just put a minus one multiplier on it and you're talking about opportunity. So if there are people out there in the maker community entrepreneurial side highly aggressive developmental projects, there's far more value in exploiting the opportunity by these probabilistic methods than there is worrying about the down side.

0:54:06 KL: This round table, is interesting, it's almost like a star chamber if we can haul some of these manufacturing PMs in and say, "Justify your approach." We know we want to talk to you about this. And then I realized, "Wait, maybe that's the learning exercise. We could have people offer to come and have some analysis on what they're missing at this highest level. Because what you just challenged them to is pretty straightforward. What I heard also is actually the skill sets exist that could help get this kind of information that would lead to improving the project performance. That's what's being overlooked and that's what's perhaps a waste.

0:54:43 SD: Absolutely.

[music]

0:54:49 KL: So Carl, as we close up here, one last thought from you then. When it's all said and done, what do you think is the biggest idea in risk that's the next part to explore? Where does this lead us as a guy who's focused on it for 26 years? Beyond PMBOK® 6, think, what do they do now? They skip a unit sometimes. So, maybe PMBOK® 9? What's left to start tackling in risk that hasn't been explored?

0:55:18 CP: I think the Einsteins who are here actually figured it out, and that is the whole idea of "value." And I don't think it requires some grandiose new process, I really don't. My lovely wife, Nancy, she's a CPA. We're a fun couple. And one of the interesting things about Nancy is, she's always marveled at the fact that people fear accountants. And it's like you're looking for the first thing that we should be doing, it's exactly what they were describing. If you're looking for what belongs in PMBOK® 9, then yeah, it should be, how do we actually start by or initiate projects with a relationship with our finance people, with our accounting people, with the people who are actually going to be determining, Is this of value? Or isn't it? And I think that everything they were saying up to that point, I was just sitting here listening going, "Wow! Right on. Right on." It is exactly where we need to be, and it's something that is sorely lacking that we should be looking at as a profession.

0:56:27 RI: Maybe more political than we're thinking because when you mentioned the CPA model, I think engineering test equipment, I would never want to be in a lab or a development environment where I could not trust NIST or other standards, the quality of measurements I was

getting. I would never want to be blind to all of that because it's the secret of success, unless it's giving the information that impacts or keeps me from doing something that's a higher priority in my world. So I think there's an insidious counter force that we have to actually acknowledge existing in a lot of publicly traded companies that works against having accurate information that conflicts with the propinquity involved. [laughter]

0:57:04 CP: Yeah, true.

[music]

0:57:11 KL: Carl, I want to ask you now, for members of our audience that may want to follow up with you about your ideas, find out what you're writing about, talking about, selling. How can they reach you? What are the places that they can reach out to you, websites, LinkedIn, etcetera? Tell us like it is.

0:57:24 CP: LinkedIn is great. I'm just there under my name. As far as my website, it's there under my name, it's carlpritchard.com. And if you're trying to pop me an email, I will always, let me underscore that, always get back to you within 24 hours. Always. And if you're on Gmail, I'm in your spam box, if you think I lied to you. But it's carl@carlpritchard.com.

0:57:52 KL: If you want to talk risk, you want to find out about risk, that's the man to reach out to. Randy, best way to contact you? Or follow you?

0:58:00 RI: Easiest way is just through LinkedIn. Randall, the last name is Iliff. And you'll find resources there. Please give me a reach out through either the messaging system there or send me a connect message, and then we'll take it from there. I've got a lot of things that I might be able to put in your hands that would be useful to you.

0:58:17 KL: Excellent. Steve.

0:58:19 SD: Yes, I'm Steve Devaux. You can reach me through LinkedIn, Stephen Devaux. Last name is D-E-V-A-U-X. My company is Total Project Control. If you're interested in my approach, it's described in my book, which is Managing Projects as Investments. But I also respond quickly and rapidly to any LinkedIn emails.

0:58:44 KL: Where is it best to find that book if they want to buy it?

0:58:47 SD: You can find it on Amazon.com or at the publisher, which is CRC Press.

0:58:50 KL: Excellent. Thank you. And Mike?

0:58:53 MH: Easiest way is probably LinkedIn as well. It's just Michael Hannan.

[music]

0:59:00 KL: There's a lot to ponder in that one hour discussion. In case you weren't able to take notes, look for the transcript on the PM Point of View Facebook page. There, you will find links to all our podcasts, along with the transcripts. Thanks to today's special guest, Carl Pritchard, along

with our regular Knights of the Project Management Round Table: Stephen Devaux, Mike Hannan, and Randall Iliff. This is the fourth in our series of round tables and I would love to have these experts take on more topics beyond the PMBOK®, the issues that you PMs face the most. So send us a topic that you'd like to hear Randy, the system's engineer; Steve, the value master; and Mike, the portfolio optimizer delve into. We look forward to hearing from you.

0:59:40 Announcer: Our theme music was composed by Molly Flannery, used with permission. Additional original music by Gary Fieldman, Rich Greenblatt, Lionel Lyles, and Hiroaki Honshuku. Post-production performed at M Powered Strategies.

0:59:55 KL: PMPs who have listened through this complete podcast may submit a PDU claim, one PDU, in the Talent Triangle Strategic with the Project Management Institute's CCR system. Use provider code 4634 and the title, PMPOV0052, PMBOK® Guide 6th Edition Risk. Visit our Facebook page PM Point of View® to comment and to listen to more episodes. You can also leave a comment on the projectmanagement.com portal, evaluate us on iTunes and of course, you may contact me directly on LinkedIn. I'm your host, Kendall Lott, and until next time, keep it in scope and get it done.

1:00:29 Announcer: This has been a Final Milestone Production sponsored by M Powered Strategies.