PMPOV096 Design Thinking

with Charles Lambdin
0:00:05.5 Announcer: From the Washington DC chapter of the Project Management Institute. This is PM Point of View, the podcast that looks at project management from all the angles. Here's your host, Kendall Lott.

0:00:17.8 Kendall Lott: And still not quite spring as March weather comes in like a lion and out like a lamb from 80 degree days to incipient snowfall back in DC but PMs, I find myself in a hotel room perched above the banks of the beautiful Arkansas river in downtown Little Rock. Yes, indeedy, a river runs through it. To my left, the elegant Broadway bridge. I am Kendall Lott your co-host and with me, the ever effervescent co-host, Mike Hannan. Mike, how do you bubble and pop today?

0:00:45.1 Mike Hannan: I don't even know what to... How to respond to effervescence. [chuckle]

0:00:49.6 KL: You're always bubbling, man.

0:00:50.4 MH: Isn't that a rock band? No, that's Evanescence, right?

0:00:54.3 KL: No, that's Nirvana. How you doing, man?

0:01:00.4 MH: You know, I'm closer and closer to Nirvana. Thanks for asking.

0:01:01.9 KL: Where are you sitting today? Where did I catch you?

0:01:04.4 MH: I'm just outside the DC area in my primary place of residence. Bethesda, Maryland. Yeah.

0:01:09.1 KL: With us tonight, Charles Lambdin, a program manager focused on narrative strategy within the comms and quality group at Intel. He's kind of an internal consultant trainer. And what I want you guys to know listeners is he catches my eye with his content on LinkedIn every time he posts. So yes, you should follow him. That's Lambdin, L-A-M-B-D-I-N. His blog is lateral thoughts on strategy quality and coaching. Don't worry, I'll repeat it at the end, Charles, how be ye?

0:01:40.8 Charles Lambdin: I'm great. Great. That's the Lateral Lens. That's...

0:01:45.7 KL: Well, I'm sorry. Did I get that right? It's the Lateral Lens. Thoughts on strategy, quality and coaching.

0:01:49.1 CL: Yeah, yeah, yeah, yeah. Yeah so I'm sitting here in my home office. It's freezing, but I'm happy to talk to both of you.

0:01:56.8 KL: Well, I'm sorry. It's freezing. You're out on the west coast, right?

0:01:58.9 CL: I am. Yeah, in Oregon.

0:02:01.4 KL: So everybody's colder than I am sitting in the middle of the country. Okay.
0:02:04.9 MH: Hey Kendall. I gotta chime in and say every time Charles posts something, if I... If it catches my eye, I know it's worth a thorough read.

0:02:12.7 KL: Yep.

0:02:14.2 MH: And so I strongly encourage everyone who's listening to check out The Lateral Lens, and also maybe follow Charles on LinkedIn.

0:02:19.1 KL: Yep.

0:02:21.0 MH: For his posts there, I'm really excited about this session today because of the brain power you've brought with Charles, Kendall. Thanks.

0:02:28.6 KL: Well, I'm glad that we've got colleagues who can come and talk to us about it, as we say, elevating the conversation. So Charles has been around town, he's seen a few things built and designed, and he's worked with large organization. Today we've got him here talking about basically the design mindset and how you can think about changing your mindset to focus that way, to bring some more value to the organization you're working with and to your teams. And the reason we can talk about it, it's because he teaches a class on it and has for a long time. Charles, tell us a little bit about kind of in the big picture, why would that even matter to be thinking this way? Tell us kind of what the thesis is.

0:03:02.8 CL: Sure. The thesis of the design mindset is, is that it kind of unleash your problem solving potential. And to de-risk your thinking, as soon as you have the opportunity to, instead of, I mean, so it's natural to think that you know what the right thing to build is, or, you know what should be prioritized or you may have already kind of decided what you think the direction should be. And instead of doubling down on that and trying to you know, accrue evidence that, that you are in fact, right, it's more value adding to take the humbler more counterintuitive approach and actually try to poke holes in your thinking as soon as possible and then flesh out alternative narratives to improve your thinking instead of just bolstering it. And so that's kind of the premise of the class. It's been the premise of a lot of the posts I've done on the blog. And then, also the book that I did with Leo Friberg called Presumptive Design.

0:04:09.0 KL: Presumptive Design. Oh, I didn't catch that. When was that published?

0:04:11.0 CL: That came out in 2016, I think.

0:04:14.3 KL: Presumptive Design, 2016. When you just said it that way with your thesis it made me think that is so not just counterintuitive or in my experience, that is so how we are not trained coming up through high school and college, even in my background in kind of a liberal arts critical analysis thinking it's figure things out and prove your point. The whole point is why are you talking to me without data? Like get your act together and be right.

0:04:40.5 MH: So hang on one sec. What if so... So we've all learned even us liberal arts guys and are all three of us liberal arts guys? I know Kendall and I are.

0:04:50.2 KL: I am.
0:04:50.8 CL: Yeah.

0:04:51.7 MH: We're also taught they're still sciences, in the arts and sciences category, right? And aren't even humanities folks taught that science is humble. That's why we don't say that gravity is a fact, we say gravity is a theory.

0:05:05.3 CL: Mm-hmm.

0:05:06.1 MH: And all it means is we haven't come up with a way to disprove it yet. At least not in our context here on earth. And so isn't it by nature for following the scientific method we're only testing hypotheses and we're constantly encouraging ourselves and others to come up with new hypotheses that might have proved our original thesis wrong.

0:05:25.4 CL: Mm-hmm, yeah. If only.

0:05:27.0 KL: Well, 'cause that's gonna go to my question, Charles, what made you get into this? Like why a class? Why the topic, why the book, like what took you there? There's so much stuff to study.

0:05:38.3 CL: Yeah. So the background on that... And thank you for asking that. I don't know if I've really fleshed out this before even to myself...

0:05:46.1 KL: You're hearing it here first people.

0:05:48.6 CL: Yeah. So my background is actually in judgment and decision making. So I have a PhD in psychology and I wanted to study cognitive science and where my wife and I went to grad school together was Wichita, Kansas. And in Wichita, if you're not familiar with Wichita and most people aren't, that's where most of the planes are made. So user experience kind of evolved out of something called human factors engineering, which kind of mostly came out of World War II and was originally mostly about things like cockpit design. So in wanting to study cognitive science and judgment and decision making, I ended up in a human factors engineering program. And so being interested in judgment and decision making and just reasoning and having a background in more in academia and in designing experiments and publishing research, it was very much so a culture shock to then move over to the corporate setting and, getting thrown in the pool of project work and how project planning is normally done.

0:06:57.5 CL: And a lot of it just seems so odd to me, that when I started learning about things like taking a more hypothesis driven approach to project work, or reading books, like, if you're familiar with the Lean Startup series, there's a great book called Lean UX, which is all about this. It really, really resonated, that to be able to treat your work more in a scientific fashion, and that's in a lot of the thinking in these different fields, whether you're talking about user experience, and design, which has always been somewhat iterative that are kind of building and critiquing, and then also Agile. And then after that DevOps, they... A lot of them stress this notion that you... To the extent that you can take a more, hypothesis driven approach to your work and that you are, increasing investment as you learn your way forward.

0:08:02.1 KL: Hmm. Increasing investment. I think Mike's gonna start vibrating here when you
start talking about Lean, increasing investment, the hypothesis, Mike, what do you have to say about all that coming out of the PhD from project management?

0:08:12.0 MH: Well, I'm actually really... You're dialed into my psyche, Kendall, as usual.

0:08:16.4 KL: So... [chuckle]

0:08:17.9 MH: What I heard... So it's funny, the words increasing investment just sound like, I'm gonna invest more and more, but the... I guess the connotation that I maybe inferred from that too, was that we're, refining as we go. We're not just adding.

0:08:35.6 CL: Mm-hmm. So when I say investment, I don't even necessarily mean money.

0:08:41.2 MH: Sure. Like time, energy.

0:08:42.5 CL: Well that you are...

0:08:43.1 MH: Head space.

0:08:44.8 CL: Yeah. So when I talk about the design mindset, I guess we should define what, you know, what's design to me...

0:08:51.2 KL: Yeah. Let's talk a little bit about that...

0:08:53.4 CL: Alright. Let's yeah. So I think I originally got this definition from Erica Hall and I've probably tweaked it a little over the years, but to me, design is about it's really just problem solving, right? That the medium of design is decisions made and design is about optimizing those decisions within a set of constraints to achieve an outcome. So that kind of changes how a lot of us think about the topic. Normally when we talk about design, we associate it with a job title or a specific role, and we equate it more with, like visual design or graphic design. And we kind of confine it to making an interface look better when really the more mature or core function of design and even user experience research is discovering the right things to build. And so when I talk about increasing investment, I more mean that as you progress, the more decisions you made, the fewer degrees of freedom you have left. And in that way, you've... You are increasing investment just by spending those degrees of freedom.

0:09:58.9 KL: Huh? You're actually spending, removing the degrees of freedom. I hadn't thought of that as spending it, like you have this great value of so much freedom and you're...

0:10:11.1 CL: Mm-hmm.

0:10:12.2 KL: To me it's almost like reverse. But you're giving it away as you hone in on what you want.

0:10:16.2 CL: That's right. And that's...

0:10:17.6 KL: It's as much a learning mindset, it's a design mindset then.
Well, the way I look at it, tell me if I'm on track here, Charles, it's kind of like, when you start any analysis task, whether it's a design challenge or some other analytical challenge or decision making challenge, you wanna start with the most open trade space possible. Like you don't wanna have to trade anything off before you start.

Right. But keep all options on the table. But your job is to narrow the trade space intelligently as fast as possible to get to something that actually hits the mark.

Is that what you were talking about?

Yeah, I think that's it. I like that. So yeah, I think it's in the Agile world sometimes you'll hear about making decisions at the last responsible moment, if I'm saying that right, that you want to preserve your optionality, you want to avoid premature convergence or avoid solutioning too soon. Sometimes in the Agile world, the... You'll hear this idea that it's not necessarily applicable because you can always change software. So that has not been my experience though. Often when something is coded it's yeah, it might as well be a building.

I've even heard... Some practitioners that I work with now actually have said things like if your first iteration, isn't terrible, you're doing it wrong. Explain that to the boss.

Like you're just been too... You're playing it too safe. You're waiting too long until you actually do know something. When in fact you should... You'll get there faster if you just start saying, what about this? What about this?

Obviously you need to have the end in mind or some desired outcome in mind. You're not just throwing spaghetti against spaghetti.

Right, right, right, right. That's... Well, and, but that, I guess implies, you are creating actual product though, to test your first best guess. And even that might be an over investment in your initial thinking, you might wanna start with something cheaper than that. There's a great diagram from, I think it's Gabriel Benefield that you have options for achieving a target outcome, and there's different ways to iterate toward achieving the outcome. And you should distinguish between research, which is cheaper than running an actual experiment, which is also cheaper than a full product increment. So if you're always building a product increment to test your ideas, you might be over betting that that's, that whole notion that you wanna make smarter bets, not just more bets faster. Sometimes you can test an idea just by capturing the assumptions being made and having the right conversation about it with the right people. You don't always have to build something to...

So you just give me a giant aha moment here and I wanna make sure everyone
listening can share in that...

0:13:09.0 KL: It's about early off ramps.

0:13:11.3 MH: Yeah.

0:13:12.7 KL: I'm going for the bang.

0:13:15.5 MH: Yeah. And well, and it sounds also like the smarter bets is what's the smallest possible increment of effort that can produce the next wave of result to guide us toward the right way to close the trade space.

0:13:29.5 MH: Yeah. So some people in the Lean and Azure world have said something slightly different than that, which you're saying we shouldn't overemphasize or we've too long, already been over-emphasizing, which is, what's the smallest possible, smallest increment of effort that could possibly work. You're saying, well, it doesn't need to work if you're designing something to actually work, you're getting ahead of yourself.

0:14:07.5 MH: I like the spirit behind it for the record. Yeah.

0:14:10.5 CL: Yeah. Well yeah. So that, and that's...

0:14:12.0 KL: Well let's talk about why we don't like it. Go ahead, Charles. [chuckle]

0:14:12.3 CL: Alright, so well... Okay. So the more ways that different people can interpret the same term, in a way, the lower quality that term is. And so there's the more opportunity that there is for, I guess you could illusory agreement, that you hear it, and it sounds great. And we're like, oh yeah, we're agreed. And actually, you mean completely different things by it. And there are certain words like Agile or minimum viable product is another term. And it doesn't even have to be like a hot topic or a buzzword for that to be true. Sometimes it's a very seemingly innocuous term, like customer where we all think we know what we mean by it. And we're actually talking about completely different things, but with minimum viable product, that's an interesting one because people do sometimes mean completely different things by it, and I think it's Marty Kagan, who has argued that really, it should just mean like minimum viable experiment.

0:15:10.5 CL: What's just enough research to quote Erica Hall. What's, you know, what is the doing just enough research to test the hypothesis that we actually have right now, it doesn't... And that doesn't necessarily have to be building product and shipping it. It might just be the way I, the way I hear the way I tend to think about it, 'cause I've thought a lot about this. And I've read a lot about decision making. I've taken some classes in decision quality, which is a separate field from judgment and decision making. I like to think about it in terms of frame optimization and that you start with the problem, not the solution and you explore the problem frame and define the target outcome and then generate alternative ways to possibly solve or achieve the target outcome. And then you pick one of those, that's the first bet you're going to make. And then you try to... And in picking those, you're trying to think, what is the minimal path to value here?
What's the cheapest fastest way that's gonna get us this outcome, a story that I use sometimes it's, it's actually from the Harvard Business Review, I think from like the 1960s or so. So I updated it, try to make it a little more contemporary, which is that this say somebody opens a restaurant. It's like a little hole in the wall restaurant, local restaurant, but it's very popular and it's super busy and the staff can't keep up and orders are getting mixed up. And so the customers are complaining sometimes. So the owner brings in a consultant who looks at what's going on and comes back to the owner and says, you know, what you need is a computerized point of sale system. It'll give you a buffer against these incoming loads of orders. It'll have a visual cue, you'll see the order, everything up there. And he looks at the price tag and says, if I could afford this elaborate computerized point of sale system, I could just hire more staff. And one of the cooks who's been there since the restaurant open says, do you see this thing here that we don't use this old metal carousel hanging above the window? It does everything this point of sale system would do. Why don't we just use it?

And to me I like that story because there's always this assumption in product work, that the focus should be on the output of whatever that team happens to focus on, instead of thinking about what are they actually trying to achieve and what are other ways to achieve it that might have nothing to do with what the team normally does. So for example, if it's a software team, you don't always need software to achieve an outcome. It might be just changing a workflow a little bit, but if you can't step out of that box, you're not going to discover those quick value adding things that you can sometimes do.

And you know, that sounds to many of... Many people listening, certainly to these ears, almost almost obvious, right? Like of course you don't wanna overcomplicate the solution. Of course you want to focus on the simplest lowest cost, fastest path to just solving your actual problem, but it's quite interesting, I think only maybe five or 10% of the clients I've ever had have actually come to me with a clear articulation of their problem, they'll say things like, well, we need to be more Agile.

So I like the spirit there, kind of like, I like the spirit behind minimum viable product, but this notion of, well, what if viable is gonna kill us in the market? Like barely, barely viable might not be the way to win. But there might be some other way to win that could be still
small or minimal, so to speak, but drive just enough value or just enough differentiation in the eyes of our customers that now we're starting, you know, to gain momentum.

0:19:32.3 KL: Take me back to your idea about creating hypothesis, just laid it out about get the outcome we've already discussed, it's so hard to define the problem really well, and I think we probably had to talk about that, what constitutes a well-defined problem, and then let's do multiple... How do you think through multiple hypotheses of achieving it, but first, what is a mark of a good problem, how do we know when we've defined one well?

0:19:54.3 CL: Yeah, so if... Well, assuming you're starting at the beginning, 'cause depending on where you are in the process, you're looking to learn different things, and if you're always using the same research tool, that's not going to work equally well for the different things that you should be looking to learn so if you're really upfront and you're thinking about, well, what really is the best problem to solve here, instead of just, we're on this hill, instead of just focusing on climbing the hill, we're on... If you can actually look and see if there's a better hill to climb, you might wanna start with just capturing the assumptions that are being made and facilitating some conversations around them, and then doing some user interviews to see if there's really a need there, and that's... 'Cause that's gets to the... When we talk about discovering the "right thing to build," we have to talk about, what is the right thing to build and that... So you often you'll see a Venn diagram that has like a feasibility, could we actually build this? And implement it, and it has a desirability and viability, yeah, so viability is, if we do this, will it actually help the business achieve its goals and desirability, and that's kind of the... Desirability to me is mostly the crux of the matter that...

0:21:18.7 CL: And this is what Mike was kind of alluding to a little bit earlier, I think that what if you building something and it has great usability, but users don't adopt it and use it the way that you are assuming they would... Well, that's part of what we mean by discovering "the right thing to build" that, you are looking to build something that they will proactively use the way you're hypothesizing they will use it because that's where the rubber meets the road, that's the only way to create business value the only... Another way to say that is there is only one way to create business value, and that's to change someone's behavior, no matter what it is, no matter what you're doing, some population of customers or users, you're wanting them to change their behavior in a way that generates some kind of value for the business, and really the only sustainable way to do that is to build something that they will proactively use in the way you're wanting to create that value for you because it happens to meet some need for them. So they're coming at it from their own self-interest, and in that collaboration, you're generating bidirectional value for each other, and so this kind of bidirectional value generation, I think I got that concept from Joe Natoli, and then this notion that you can't mandate usage, I got from Jez Humble.

0:22:52.0 CL: That's often what we try to do, especially in IT, if the users are employees, fellow employees, we think we can just roll out some tool and "mandate usage" what, that never works, they'll just put in whatever the minimum is to meet the mandate and then to make their own... To meet their needs and make their work lives better, they'll start developing work-arounds and creating shadow IT and additional costs. And...

0:23:19.6 MH: And that's best case.

0:23:22.6 CL: Yeah.
Well, there was a whole bunch of what he just said there, I think actually, we can spend about an hour in each piece there... Mike, what did you grab the most?

One of the many things that I've learned to appreciate about the Theory of Constraints as I get smarter and smarter at it and more practiced at applying it, are some really fundamental precepts, like Goldratt said, “Honor all the needs, challenge all the assumptions.”

What would have to be true in order to change this decision we think we've made or that we're ready to go forward with. But we maybe haven't quite probed it fully and tested it for weaknesses and all that sort of stuff that Charles is talking about. So to a point challenge, all assumptions right? Challenge all reasonable assumptions, or things that won't take an inordinate amount of time to deliver minimal value, that might actually reveal some weaknesses in our long-held assumptions.

Yeah, so yeah, I agree with what you're saying, that we're all making more assumptions than we'll ever know, just to perceive the world, the brain is making assumptions, it's sampling data, filling in the gaps it's yeah... You can't make an exhaustive list of assumptions and then start challenging all of them, but if you facilitate a conversation around capturing what are the big assumptions we're making here, and then it will become clear usually hopefully which of these assumptions if wrong are going to result in failure with this endeavor. And you can talk about that in terms of design thinking. There's an older corollary that you've probably heard of lateral thinking, Edward de Bono going back in the 60s and 70s, and that's what a lot of that his stuff is about, that the way he talks about it in lateral thinking is that your assumptions are kind of like tent tethers, and if you identify assumptions and then start challenging them with thought experiments or conversations or I would say research interviews, and if you learn that what we could do without this assumption, we could do without that assumption, or we could reverse this assumption or change this one that un-tethers you in a way that creates degrees of freedom you might not have had before and that can reframe your thinking that's...

So try to tie this back to something we're talking about earlier with conversation on minimum viable product, and maybe what we're really talking about is not product outcomes or product... A developed product as the outcome, but as a learning as an outcome... Or as an interim outcome, as we iterate forward.

It's an often used example of MVP where I think it was Zappos or some company like that, where they're saying things like, Well, before we do anything, before we build anything, before we ask investors for money, before we hire people, before anything, our biggest question right now before us is, Will people buy shoes online? And there's lots of reasons to believe they might not like number one, they've never done it, so old habits die hard. Number two, they might have unique needs that can only be met by having an expert help them through by taking specific measurements, and my left foot is different than my right foot, and I can only really meet my needs by having this sort of custom in-person experience.

And then it was like, Well, let's test it and then see if anyone actually buys anything, and then if they do well, Oh no, now we have to run to the shoe store and go grab the actual shoes and ship them off to them.

But the point isn't that we're gonna scale this massive business and be massively
successful tomorrow, point is, could this be an interesting business to pursue? I think what I'm hearing from Charles is we're always trying to figure out what the... What would actually be something that people would buy or feel comfortable buying and in what manner they prefer to buy, so I'm curious if that's the sort of thing you're talking about here, both Charles and Kendall?

0:27:16.2 CL: Yeah, absolutely, and this also, and this relates to... It reminds me of the concept of intelligent failure in that if you look at where that concept originally came from, well, to the best my knowledge, 'cause we hear about that a lot today, but often today, what people mean when they say intelligent failure or fail intelligently is that all failure is feedback, just treat it as learning, but ultimately you're still trying to succeed with the direction that you're on, that's actually not what Sim Sitkin, who originated that idea originally meant by intelligent failure, he was more talking about actually, you are trying to generate failures on purpose just to have a more diverse base of outcomes and a more... I don't know, a broader horizon of thinking to start from that there is an opportunity cost to succeeding too soon. You're constraining your thinking.

0:28:10.3 KL: Yeah, I can hear that, but there's an opportunity cost in not succeeding fast enough, and I think pulling that trigger... So now you're talking to me it sounds like life cycle. When is it that I get to... When is that get to say, I've now... I'm willing to accept these costs because I'm moving in the direction of an outcome that I need... Again, I wanna go back to your opening structure with this let's talk maybe some practical ways to tackle this, how do I create the hypothesis and then another and another and then start pulling them away, and what are the signals getting rid of them? What you just described there is you never do it. So maybe we're challenging something even deeper, but at some point, I think a project manager listening to this says, Look, I'm not really allowed to spend 50 minutes of the 60 minutes thinking of the right question, or think of the right question and come in with a bunch of ways this isn't gonna work, in fact, we don't like that in some cases, where people get attached to that, so how do I winnow or maybe first tell us how you wanna generate the hypotheses, and really my question behind that is, is what is the signal that that's one to ignore?

0:29:13.0 CL: Yeah, so let's go back to the very beginning. Let's go back to the definition again of design, that you're trying to solve a problem by optimizing decisions within a set of constraints, to optimizing decisions within a set of constraints to achieve a given set of outcomes, and...
calls or a 20% reduction in time on task, or do something related to actual user and customer behavior.

0:30:57.1 KL: But not just place bets, you want us to place smarter bets, not just bets and not just real bets but smarter bets, and there's a way of thinking to get us there, take us home.

0:31:06.1 CL: Alright, well, so here let me tell... So here's two stories. Let me tell two stories, so first, I mentioned Jeff Patton. So if you've heard of User Story Mapping, that's the guy that created User Story Mapping, well he likes to talk about something he calls the Client Vendor Anti-Pattern. I tend to think of it as the fast food approach to product work, so this what often happens in an organization does an Agile transformation is you end up in this kind of dysfunctional relationship where you have most of the Agile teams or product teams in IT, and then you have people outside of IT who are kind of like the sponsors or stakeholders who then come to the Agile teams in IT, and the whole focus instead of being on agility, which is actually supposed to be about nimbleness, flexibility, I think it's Don Reinertsen who says that a bullet is fast, it's not Agile, a tricycle is more Agile than a bullet.

0:32:05.7 CL: So the focus instead shifts from agility to just velocity, and you have the stakeholders come into the Agile teams and the focus is on them placing their orders, and they're acting like they're pulling up to a fast food restaurant, and the poor Agile teams are just the line cooks and the whole focus gets reduced to these poor guys and girls...

0:32:25.3 KL: Feeding the carrot…

0:32:25.4 CL: Yeah exactly.

0:32:27.8 MH: Charles I saw the fast food reference in your design mindset content and I didn't... It's nowhere near as funny as how you just described it.

0:32:35.2 CL: Well, it's demoralizing. The focus is just on them filling the orders as fast as they possibly can and there is a disconnect. Yeah, that's right. Think about it, if you're a consultant, there's more of an authority there to challenge that dynamic. Or think about this, when a patient comes to a doctor and you've Googled it and you think you know what you have, how do doctors react to that, they treat patient self-diagnosis with skepticism, this should be no different. If all you do is assume they already know the right thing to build, where is the differential diagnosis, how are you helping them de-risk their thinking, you're assuming that there's been some smart research or strategy upfront that's kind of replaced these assumptions with information already. Often that never happened, just somebody had a bright idea and they got funded because of some advocacy or they think they know what should be built, because they asked some users and some users told them, which is not how to do user research, users can't predict what's actually going to meet their own need, because we can't... 'Cause we're all people and we can't predict our own future behavior.

0:33:48.3 MH: And was it Henry Ford who said, if I asked my customer what they wanted, they would just say, a faster horse.

0:33:54.1 CL: Allegedly... Yeah. The fast food thing. Here's the second story I wanted to tell. So I think I saw this, maybe it's in the DevOps handbook or Jez Humble. There was a study that was
done at Microsoft, and I think the lead author was named Ronny Kohavi, and what they did is they started doing some AB testing where they were looking at what was built and what was the intended outcome metric, and then did the features that were built actually move the target outcome metric in the right direction or not, and what they found was, or I think it was for features added to existing products, only a third moved the outcome metric in the right direction, a third had no effect on the target outcome metric and the remaining third actually made the target outcome metric worse.

0:35:00.7 CL: So another way to say that is... Well, no another way to say it, think about it, it cost money to build and implement what you build, and implement, and there's an opportunity cost, 'cause you could have built something else that would have been more value adding instead of really...

0:35:12.4 MH: So you're saying it's guaranteed, negative ROI.

0:35:15.3 CL: 66% of what was built had negative ROI for new products...

0:35:16.8 MH: And the 34% that was positive, couldn't possibly make up for that 66%, therefore, the whole thing is negative.

0:35:26.5 CL: Therefore... And that's the joke that they make in the DevOps handbook, therefore, if you're not actually focusing on the intended outcome to kind of suss out what's the ratio of how much value to waste you're generating, you might save more money to just pay people to go on vacation and not build anything at all, 'cause you're adding complexity to the environment here... Awesome.

0:35:53.8 KL: By saving more money, I think then tell us how we're gonna test these hypothesis, I still wanna get back to the practicality.

0:36:00.7 CL: Yeah oh Sure, sure, sure, sure.

0:36:02.7 KL: And I was struck by something that you had mentioned earlier that was driven by your book, that I do wanna get to the Cognitive Bias because there's something that's not naturally... It seems counter-intuitive to me, which is as we go through placing these bets, as we go through testing these hypotheses, which I want you to talk a little bit about, it seems that we should be getting smarter or we should understand more about our environment and one of the hooks that you highlighted was the more I understand, the more confident I get, and then not better my outcomes are... Which is kind of weird. So tell me what we're testing and what we're learning.

0:36:35.0 CL: Well, there's a couple of different things in what you said, this is the hard part, 'cause normally the request is in the form of required output and nobody is focusing on the intended outcome, so the hard part is facilitating the conversations that capture or surface what actually are we trying to achieve here. And that's the hope the part, that's like pulling teeth.

0:37:01.4 CL: Before COVID, when I would teach in person, I used to do an exercise, if you've heard of the KJ technique, where you give groups a prompt... And so sometimes I would teach to a room of 60 people, but I'd group them into groups and I'd give them all the prompt that's what... And it was, what's your biggest challenge in creating value for your customers? And I'd have them
write responses, one response per sticky note and throw it in a pile, so you're free-listing or brainwriting instead of brainstorming, that's a good trick to do in meetings 'cause you're gonna capture way more ideas in a far shorter amount of time than if you have everyone talking in a meeting and it's the same few people who usually dominate the meeting and while one person is talking, everyone else is, there's some production blocking going on and where they're just tuning out and multi-tasking, and so after that, you have this big pile of information that you've gathered.

0:38:03.0 CL: And you can say, "Look," and we're going for quantity here, not quality, don't... Not write something down, 'cause you think it's silly, 'cause what you think is silly right now might not be for other reasons later. And then we do some affinitizing or clustering where the group again, without much conversation, 'cause conversation is really a distraction, at this point, you start grouping like stickies together and these clusters emerge and you look at what are the overarching themes of each cluster. And then you can do some kind of stack ranking or dot-voting or something to prioritize what are the most important clusters. And what I found, I taught this class a lot of times in different locations, and one of the weird, cool... Just really neat things about the KJ technique is that if you use the same prompt and go through this process even with different people, usually the same... Often the same clusters emerged, and with the exception of once, every time I ever did this, the winning theme was...

0:39:04.4 CL: And remember the prompt was, what's your biggest challenge in delivering value to your customers? The winning theme every time was, We don't even know why we're building what we're building. Nobody is focused on outcomes. What are you actually trying to achieve if you don't chunk up to that and draw that line in the sand, you don't have the degrees of freedom or the thought space to then explore alternative ways to achieve it, and that gets a...

0:39:35.3 MH: That's the most empowering thing for any project team, just to realize we can be the problem solvers once we actually understand the problem...

0:39:43.0 CL: That's right, I love that.

0:39:43.0 MH: I had a challenge very similar to this... I've been at this for 30 years, right. And I like to think I know a thing or two, but I'm often humbled as I face challenges that I thought I knew how to handle. And then kinda have to dig deep and take a step back and... I wish I had called Charles actually on this one. But luckily, I think I figured it out, but bottom line is a client and I can't say too much here, so let me see how to [generalize] it, they were gonna do something truly innovative and dramatically separate them from their competitors, and a lot of it had to do with the attractiveness of packaging of consumer products on an actual physical store shelf... Okay, yeah, there are some online channels too, but let's just simple, keep it simple for a moment, and they said We wanna build a platform and we want you to be the program manager, Mike, to show us the right way to build this and help us build it fast, so that we can have this amazing capability, then I said, Great, it sounds cool, I'm happy to do it. What's the business objective? And they said, well, to have this platform that can kick our competitors' butts, I said, Okay, that's close or closer, but what are we actually trying to achieve, because that's a pretty broad statement, like stuff that beats our competitors, like that could be a lot of things, right?

0:41:03.2 MH: And they said, Well, we're trying to build a platform. And I was like, Oh, well, that's a solution, I don't even know what the platform is, but I just know that it sounds like a solution.
0:41:12.3 MH: So again, what's the problem? What are we trying to solve? What's the business objective? And they got quite impatient with me because like, duh, we're trying to build this thing... We're trying to run consumer tests on whether they'll pick our products over our competitors’ on the shelf or not, and if we could get smarter about that, then we'll just beat everyone. I was like, Okay, well keep going there. And they said you're infuriating. You're like, just get to work, start building, we got... We gave you a team, we gave you money, build this platform for us, and I was like, So again, what's the business objective, like how do we know once we were successful, because we could have a platform that does all sorts of cool stuff, but maybe it doesn't kick our competitors’ butts the way we thought it might. And again, they're getting more and more impatient with me and they think I'm just trying to dodge the actual work that's in front of me and just have philosophical debates.

0:42:06.1 MH: And of course, I'm not... Long story short, it took us, I swear, a good like three months, and maybe that's just a sign of my own, like had I called Charles maybe I could have gotten there in three weeks or whatever, but at the end of the day, they basically said It's to accelerate learning cycles about our customer at a lower cost per learning, and the reason it took so long is because they never thought... They never thought of it in terms that I'm hearing Charles sort of echo today on this podcast of accelerated learning cycles, we've heard that term, we know it's thrown around a lot, especially in Agile, and Lean and DevOps circles, but the power of that like, Oh, anything at all, it doesn't even have to be a technical platform, anything at all that helps us accelerate learning cycles about our customer and why they make the decisions that they do at the time of purchase is stuff we wanna do, and that completely freed the team to get really creative of how we're gonna go do that.

0:43:03.3 MH: And sure it does involve a technical solution in the mix, but it's so much more than that.

0:43:07.7 KL: I gotta jump in here if this is what we're talking about because I'm a baby in this and I'm not talking about a product, and I had one conversation with Mike around this that has changed two... In the last two weeks has changed my world and how I'm interacting with my own team, because of something as a federal contractor, we look at how we have to get essentially throughput of contracts, we have to win contracts, so the question is, How do we bid the ones that we're gonna win, and so there's all sorts of ways to measure this, and of course, everyone measures input, and then you measure... You get your team thinking about output, and you use data that you've learned before, look, we're hitting about 25% win record, and we gotta look at that side that is...

0:43:48.1 CL: Deal size.

0:43:48.4 KL: And what's the complexity? And we go through this, and I build my people, and I have particularly smart and agile people even, who think about it and they're like, Hey boss, I'm gonna do then based on what you said in our target, we need to bid 32 of these, 'cause that would probably give us the right number, so any time I bid more than that. I came at it as, I believe I'm looking at signals, which is signals are different than targets, signals tells me what's going on. But you can never plan the thing you don't own. I'm like, we're not testing this right. I don't know how many you really want. You can intuit some of this, and I said, Mike, help me think about this, and it took me about five seconds 'cause he said, “Think about not what you get accomplished, or what the signal is, how far you're moving along it. Think about what you learn, are you doing things that are
creating a learning that is meaningful to you?” So I took that immediately back, and it's already in two weeks, it's already changes, but I shifted from now that we know it's a process, I wanna know every time we don't bid something, we lose something, and then something I heard from another setting about six months ago was when you win something, you need to ask yourselves why do we win, why did we win.

0:45:02.4 MH: And ask the customer.

0:45:02.4 KL: What is it we're doing that causes this to be a viable thing, and here's a fun thing, you don't have to guess or do market research, you have a client who just said, We like you for some reason. For some reason, right?

0:45:12.1 KL: And so it's asking all these things, so Mike, by doing that, we've already shifted to the point where we... And I've invited my staff to make sure they ground me in this, I am spending time writing a proposal that by the time this is aired, we will have lost. But there's a reason, every consultant has a methodology until it runs into a client.

0:45:31.6 KL: And so we're trying to map to a real use thing to understand, Are we improving or are we... Or is this even a hypothesis worth following up. It has changed why we do what we do and what we're paying attention to. It feels more fun. I'll tell you that now I do need to get a win some day, but it feels...

0:45:52.6 MH: Oh yeah. And to tie it back to the theme of this podcast, there's a humility in it that you actually you forced me to accept, 'cause I was in the federal contractor space for quite a long time, and I thought I was a pretty good sales guy in that space, and all that, but what you forced me to accept that I guess I'd always known but I'd never said it out loud, was that we don't actually control very much in that process. There's so much that's not in our control, and we tend to credit ourselves too, much when we win, and blame ourselves too much when we lose, because we like to think that we can control more than we actually do, and the notion that, well, let's test some hypotheses there, and you were basically forcing me to realize. I said, yeah, I always made a practice that not too many people did, at least they didn't used to do, which is when I won, I'd ask the government for a debrief and by law the government has to give you one, and I made a practice of it and they were like, every single contracting officer, I was like, Well, this is so unusual. Why would you want a debrief? You won. And then I'd say, Well, I'll tell you, once we're done with the debrief, and sure enough, like nine times out of 10, and this came out when we were sipping bourbons, Kendall, was, you won because your competitor goofed on the final offer and added a zero when they shouldn't have or something I just got lucky. It was total luck, I patted myself on the back all day long.

0:47:14.7 MH: And sure I did do a number of things right, and my team did lots of things right, but at the end of the day, what made the difference was luck, and that learning alone is massively valuable because let's not focus on the stuff we can't control... Let's just roll the dice on it if it's luck, and let's find the things we might control and keep learning.

0:47:37.9 CL: One of the things I really like about your story, Mike, that you told, is that this shift of... You take the output they're talking about and you try to elicit what is the outcome they're trying to achieve, your story illustrates an important point that often you will get a response that you're kind of being a pest and by having this conversation, right? So let me share something with you that
I think about that. Your stakeholders, they often don't want you to maximize value as much as they actually want you to just make them look successful, and those are often not the same things, so if you can have the presence of mind to show them that you can do both of those things.

0:48:24.1 KL: So what is it we need to be learning to do this, so what are some day-to-day things you can be doing, talking about how to facilitate better and how to engage? Give us a couple of hits on that in the few minutes we have left, what are some ways that we can help as somebody who's either the project manager or consultant to a group, give us some ideas to think about.

0:48:41.3 CL: Yeah. Okay, so real quick, some ideas to think about... So I mentioned earlier that the kind of research that you do should be like choosing the tool that fits the kind of question that you're trying to answer, so keeping that in mind, if this is like a... You're more at the beginning of the project, you probably don't want to invest a lot of time mocking up something that looks really nice and then taking that out and testing it, because you're then ignoring that the fidelity of the artifact your testing itself conveys information, if it looks like a polished, pretty prototype, the testing will then be more geared toward refining that artifact, improving it, so sketch your idea.

0:49:27.2 CL: This does a number of things. First, sketching forces you to think differently about your own idea, it forces you to get concrete about things, just to be able to draw pictures about it, If you... There's a cool exercise where you take a big piece of paper and you fold it in half a couple times, and when you unfold it, you'll have different cells or quadrants just from the creases, and then you can set a timer so that you have a minute for each quadrant on the piece of paper and whatever your idea is, if you have six quadrants set a six-minute timer and draw your idea six times, and that leaves you with only one minute per sketch, and one of the things that does is that often you'll find that a lot of your thoughts about this idea are exhausted in the first couple of sketches, so to complete the task, you're having to think of new ways to think about this that you probably wouldn't have thought of had you not started doing an activity like this, and then you can take your sketches and you can take them to a group of people and say, Look, here's something that I'm kind of tossing around, Why don't you poke holes in this idea and help me improve it. You're not gonna hurt my feelings. I wanna know in every way, this is the worst idea you've ever heard in your life, and they can tear it apart, and then you can go back and do that again and you will have thoughts that you would not have conceived to have had you not gone through this exercise. One thing that I really advocate doing is before you try to build a tool for users or solve a problem for users, research how they already go about it, it's kind of like go to gemba, you don't have to... It's not a factory floor, you don't even have to be there, have them share their screen, get on the phone, what are some of the common tasks? Watch them do it and then have them voice their thoughts out loud as they go through these tasks, and you'll quickly learn what they're struggling with.

0:51:22.9 KL: That's a great one I would highlight to people from a consulting background that I've got this one. The few I've been able to use readily is once you get all into the methodology and what they want done is just to ask, So how do you do it now? Because sometimes what's amazing is like so the users don't feel whatever is happening is a problem, which becomes really interesting, somebody else on their behalf thinks that's a problem. It's like, Well, how do you do it now? So what's the problem? They're like, Well, there's not one... Well, there may be, but they don't perceive it that way, so anyway, that's a great way...
0:51:54.1 MH: Kinda like the fastest horse.

[overlapping conversation]

0:51:56.0 KL: But that's how I do it in consulting... Sorry, go ahead, Mike.

0:51:57.3 MH: I just want a faster horse.

0:52:00.7 KL: Yeah. Well, but how do you do it now, I ride the horse.

0:52:03.4 MH: I ride a horse.

0:52:03.7 CL: That reminds... I heard a story once, and it goes from Jared Spool that you see a user doing something and to you it seems like this long cumbersome process and you might say, you know, there's a much faster way to do that. And they might, in the moment, they're like, Yeah, that I'm in a hurry, so I'm gonna take the long way.

0:52:22.5 MH: Alright. Which is just their way of saying, the devil I know is better than the devil I don't.

0:52:28.5 KL: Well, I would also say though, that people are very good at maximizing, or rather optimizing, what they need to be doing, so they're operating within some constraints, they may be assumptions, but they're operating within constraints. Most people figured... There's a reason you would observe what you're observing, that's not... They're too stupid to know better. Because we're them, right? It's us, that's how we operate.

0:52:52.8 CL: They know what they know and if you can... If you know of a... If you have options they never would have considered, then you can improve the way they do their jobs in ways that never would have occurred to them, and that's part of the process, that's part of running a research.

0:53:10.7 MH: And that's by the way. That is so much fun when you can do that.

0:53:12.1 MH: It's such a joy.

0:53:14.3 KL: So that requires some skill and knowledge coming into it, any other techniques that you run across that we need to keep in mind, when were thinking about this design mindset?

0:53:23.2 CL: Yeah, absolutely. So one of them, if you've explored, the problem frame, is this problem worth solving, you have a target outcome in mind, and then when you do start solutioning, you want to generate some options, you don't just want to go with your first best guess and driving that to what you call success, you want to explore multiple alternative ways to go about whatever it is that you are trying to achieve, and that really gets to the heart, we mentioned cognitive biases earlier, and we didn't really get into that in this conversation, but that's one of the big takeaways from that whole field of judgment and decision-making, a lot of people know about that field today through Kahneman, in his book, Thinking Fast and Slow, there was another researcher named Robin Das who wrote a great book, and he basically argued that you could summarize the whole field, with a few takeaways, which are that; once something kinda gels or clicks to us and we think we've made sense of something, we will defend that thinking in light of later better evidence, and
we will fail to generate alternative explanations or options to that. And then we will spend more calories defending our earliest thinking on it instead of you were...

0:54:48.5 KL: And worse we look and we sure pick the evidence that proves it. There's a bias towards evidentiary support.

0:54:54.8 MH: Kendall, you and I are both trained in economics, John Maynard Keynes said, I believe strongly in what I've developed expertise on over the years, but the moment I come across data that contradicts what I thought I know, I don't change the data or cherry pick it, I change what I think I know.

0:55:12.5 KL: And he famously was challenged, everything you just said is different than what you said before, you've changed your mind, what do you think, and he said like, Well, what do you do when you're wrong? I don't know if it's true but it sounds good. So yeah, we heard that. Actually, we did a podcast on that cognitive bias recently, and you just touched on something I'd like to ask you about then, you talked about generating options, and I really like that idea. It's something I have to keep in mind, but one of the things we heard was under time pressure, one, we feel like we don't have time to do that, but secondly, it actually changes how we think, so what do we do with project managers, faced with time pressure who don't get to tell the CEO, Well, the problem is we really need to re-validate the value proposition of the whole organization right now, time to always generate the hypothesis not lock in too early or to lock in too strongly for confirmation bias. How do we do this with time pressure?

0:56:03.8 CL: Well, so yeah, so often what you'll find is that you will get push back to introducing some of this thinking because of time pressure, that if you start talking about doing some research and vetting some assumptions, people will come back and say, Well, that sounds like added time and added cost. And we don't want that. And so a couple of things you can do first, it's kind of a judo move to whatever they think is the right thing to do is, just agree with them and say, That's really... That's a really good idea. That's such a good idea. I wanna go test that right now, can I? Yeah, another thing I like to do is start talking about it in terms of how much of their own money they would bet on the idea...

0:56:55.3 MH: We would love that.

0:56:55.4 CL: Yeah, so I don't know if you wanna talk about that or as you're testing the idea though, it really isn't added time or cost. Often, you might be interviewing five people, it doesn't take long to interview five people and the returns that you're going to get are far going to outweigh the time that it takes to have those few conversations, so this notion that you're adding a bunch of time and cost to the project is often not valid, so with some finesse, you can find ways to counter it.

0:57:30.6 KL: With your idea about how much would they bet their own money on it, you're trying to create so-called skin in the game or this idea that it's costly to them to be wrong. I'm wondering if that actually... I'm not sure that's helpful, or do you think it works?

0:57:42.3 CL: You're already betting a certain amount of money on the idea just by prioritizing it, so you can have a conversation around... This is a trick I got from Allen Holub, I think his name is, he's an Agile consultant, and you can run some numbers really quickly find out where you work, how much does a full-time employee on average, fully burden employee cost, if they cost the
$185,000 a year and you have a team of seven people and you're going to put them on an idea for one, two-week sprint, you factor in some kind of loading factor for the space they occupy, the computer that you give them, whatever HR support. And so a pretty normal loading factor is times two, and you just do the math and by the average number of work days per year, you can come out with a rough figure, so in this example, if you're already putting one team on an idea for only one sprint, of 10 business days, you're already betting $100,000 on the idea, and that's just the cost of the team working on that idea, that's not the opportunity cost of prioritizing that idea versus another idea.

0:59:03.3 CL: Yeah, so I had a large organization where they had multiple verticals that all had their own KPIs that they were trying to bring together and realize they had collectively about 100 KPIs...

0:59:17.1 KL: Of course they did.

0:59:17.2 CL: Yeah, well yeah.

0:59:20.4 MH: So in other words, they had 100 PIs.

0:59:23.0 KL: Which were all signals and not targets.

0:59:28.0 MH: Or maybe some of them were noise who knows?

0:59:31.2 CL: You could apply what we just talked about, we applied this to that. We wrote every PI on a sticky one per... There's 100 stickies on the wall, if you got the right people in the room to cluster them and looked at the themes that emerge, meaning these stickies are together because these PIs are all attempting to actually measure some larger construct and... Yeah, so we surfaced, what are those seven big things we're actually trying to measure here, and once we agreed on that, we didn't need the 100 PIs anymore, you can throw those away, and now we have...

1:00:08.8 MH: Oh neat, so you're helping everyone see the forest for the trees.

1:00:12.3 CL: Yeah.

1:00:13.5 MH: Or the seven forests.

1:00:15.6 CL: You can bring the K back in maybe. There you go.

1:00:18.1 KL: And now you had 7Ks, right? So okay, so with that, I think I'll bring us to a close here, so that's our show here, and that's kind of the summary version of just one part of the course that you end up teaching a lot there, Charles, so thanks for showing up and giving us the news here today. I want to highlight again that people should be following the blog and tell us what you're blogging on again? I'll let you say it in your words.

1:00:44.2 CL: The Lateral Lens. Yeah, check it out, there's a lot of different posts about product we're coaching, some about facilitation. Yeah. I'd love to hear from you. If you type the Lateral Lens it'll come up.
1:01:00.0 KL: So the man, Charles Landon, the blog, Lateral Lens, Mike, final words, biggest takeaway tonight or a challenge to our listeners?

1:01:06.9 MH: I just got like, I don't know, like 10 or 12 'ahas', and I've written some notes and things, I'm gonna go apply tomorrow. I never get the big chance, so just a big, a big thank you, Charles.

1:01:19.3 CL: Thank you.

1:01:20.2 KL: Yeah. Thank you. I absolutely thank you. I agree, I've got... I've pounded out a bunch of notes here, and I hope, I noticed on one of the podcasts, the keys, you can hear the keys clicking, and I thought... So I'm trying to take notes over here on a pen and paper, but I'm not very good at it, but with that, I do wanna invite PMs that remember that they have signed their ethics agreement, which means if you have actually listened to this whole episode, you can register a PDU, you can go to ccrspmi.org/claim, scroll to the fourth banner on the left column online or digital media, that's what a podcast is and manually enter code 4634, you can select M Powered strategies, manually enter the name of the episode, PMPOV0096 Design Mindset, so like technical project management in the italic triangle. So I'm your co-host, Kendall Lott, inviting you to go back and take notes on this episode and do not... Absolutely do not share this with a colleague so that you can keep these hacks to yourself and be head and shoulders above all your peers, and of course with a design mindset, keep it in scope and get it done.

1:02:26.8 Announcer: This has been a Final Milestone Production sponsored by M Powered Strategies. Final Milestone.