TASKTOP

Episode 2: Gene Kim
Episode Transcription

Mik Kersten:
Hello and welcome to my new podcast, Mik + One, where I sit down with industry leaders to discuss the Project to Product movement. I'm Mik Kersten, founder and CEO of Tasktop and bestselling author of 'Project to Product: How To Survive And Thrive In The Age Of Digital Disruption With The Flow Framework. On today's episode, we dive into part two of my discussion with Gene Kim, bestselling author of The Phoenix Project, The Unicorn Project, and co-author of The DevOps handbook. If you haven't already tuned in to the first episode, I highly recommend listening to that first. But now let's learn more about The Five Ideals from Gene Kim.

Mik Kersten:
Let's move on to the third Gene. So The Third Ideal: Improvement of daily work. To me, this is the one I probably try to remind myself and my teams of the most frequently. This is on a daily and weekly basis, and is the most important one to ask yourself, where this is going, how this is going. Give us some more color on this one because there're different ways of thinking about it, I think the power of it is the way you interpret it for your own teams. But tell us more about this one.

Gene Kim:
Yeah, so the improvement of daily work. That actually showed up in The Phoenix Project as well, which came out in 2013, and that was very much informed by the Toyota Production System. There's a statement and implication that, improvement of daily work is even more important than daily work itself. Which sounds crazy. And I think one of the most famous examples of this is the Toyota Andon Cord, is probably of the most recognized and studied tool in the Toyota Production System Toolkit, and that's the famous cord that's on top of every work center that every line worker is trained to pull when something goes wrong: So if you create a defective part, you pull the cord. If you get a defect depart from someone else, you pull the cord. If you have nothing to work on, you pull the cord. Even if the work takes longer than documented, you pull the cord. And when you do, the entire assembly line stops.

Gene Kim:
And one of the shocking statistics, that certainly shocked me when I took this training in 2011, was how frequently the Andon Cord was pulled in a typical day, in a typical Toyota plant, and the answer is 3,500 times a day. Which is just astounding, right? And, just a quick clarification, right? The Andon Cord is pulled 3,500 times a day, and the assembly line stops if the problem cannot be resolved by a supervisor and the team, within 55 seconds, right. In other words, if the problem resolution takes longer than the attack time, then they stop the line - it doesn't stop 3,500 times. But it's such a great example of - what they're saying is that - to make systemic fixes, is more important than the daily production targets. And one of the most vivid examples, reasons given for why they do that, is: people say that if we don't fix the problem then and there, tech debt accrues downstream so it becomes more expensive or maybe even impossible to fix and even more viscerally they'll say, if we don't put it in a system to fix, we're going to have the same problem 55 seconds later.

Gene Kim:
And so, that's the notion of the daily work around. And so daily workarounds exist in knowledge work, but the problem, is that it's not as visible because our work takes longer than 55 seconds, but it is just as destructive. And so, one can argue that improvement of daily work is even more important than knowledge work. And I think, this is very consistent with something that you taught me was, just a level of investment that the tech giants have made in improving developer productivity, right? The statistic that I shared with you, I was like, "Mik, you'll never believe what I just learned. I met the product owner at Google who said that they spend $1 billion a year on dev productivity, 1500 developers." That was two

years ago. You came back and said, "Oh, Microsoft is probably spending 3,000-5,000 developers on dev productivity."

Gene Kim:
And it just shows the massive amount of investment given, which is almost opposite of what we see in most organizations, where tech that is ignored and the people working on dev productivity, they don't have 1500 developers on dev productivity, they put a summer intern on it. And it's kind of a complete inversion of priorities at the tech giants versus what we see and kind of organizations that are stuck. So the notion is really greatness is not free, greatness is created and it comes through dedicating time to paying down technical debt, investing in architectures, investing in debt productivity.

Mik Kersten:
Yeah, exactly. And I think I've been... It's interesting that it worked in the last stage, and it's still as important this one, but I feel like it's been getting more ignored in this one, right? I think leadership often thinks that how much more important work is, than improvement of work. I recently heard a horror story where - sorry I actually heard this yesterday - where a person that I deeply respect, they had a reorg within IT, so new leadership come in - and this is a person who's been learning a lot from the DevOps community, sharing a lot - and was told, well, if you're going out and having these speaking engagements and engaging, you clearly don't have enough work to do. So this is a Taylorist - even worse than a Tailor, but what we associate with Taylorism - but this is a pre-age of our own mass production mentality, right?

Mik Kersten:
Because again, in mass production, we realized that improvement of daily work was as important as the work itself, right? I actually think this comes from a just complete misunderstanding of complexity and uncertainty, where we learned in manufacturing that it became more and more complex, but they were always pushing the barriers of complexity. When you've got that much complexity, no one really can make a proper 12 month plan with every single activity that you can map out. Which is what Taylorism is for, right? That's what Gantt charts were for. Which is mapping out those levels of uncertainty to be perfectly decomposed. We can't do that in software; they couldn't do that in car production plants and mass production plants. So, improvement of daily work becomes as important as the daily work itself, because it's the only way you'll learn that you'll keep up as everything is changing underneath you, whether it's the tech stocks or the market.

Gene Kim:
This is heartbreaking, right? Just to give another concrete example, right, if you're out speaking, you actually don't have enough to do. Oh that's heartbreaking. Here's another one. We can't fix these architectural issues because we don't have a project code for it. We don't have a feature. Capital is only allocated to these features, and if we can't charge against it, we can't work on it. I would say equally heartbreaking.

Mik Kersten:
Equally heartbreaking, right? And this is the fact that I've never seen a Gantt chart that actually had improvement of daily work on it, or reduction of tech debt on it. Because it's not how you think if you believe that you can map out a project plan for a year and budget with certainty. But, again, completely different to the way that innovation works within a tech company that understands how important scaling is, leveraging the latest technologies is, keeping people in the flow is. So, Gene, just to make this concrete, the way this has been such a massive problem as we're helping organizations do these transformations, this was the whole point of the flow efficiency metric, right, is just to oversimplify this

problem for people so that they could measure it, and see where the wait states for those developers are, and then what the implications of those are.

Mik Kersten:
That's a really interesting analogy, I've never thought of that. That analogy that you made with tech debt, and how work arounds work between manufacturing, how they're just different. They just become invisible, right? The key thing that I realize, is you realize, we've got to make tech debt work visible. It's a good thing to do the work on tech debt, it's a good decision to take on tech debt sometimes, as long as you realize that you've got to bring in that work, you've got to do that work in the future.

Mik Kersten:
And so, we've been seeing some real important results of just making that tech debt work visible because all the developers know it. Your teams know how to improve their daily work, that's the bottom line. If you're not giving them the ability to do that, if you're not trying to overload your robots to 100% all the time, not 80 and give them some slack, you're going downhill.

Gene Kim:
In fact, what I thought was such a breakthrough and so visionary and brilliant about the Flow Framework as put into your Project to Product book, was the four mutual exclusive, completely exhaustive categories. Features, defects, risks and debt, right? Love that, right. For me, that helped create the mental model that made so many things make sense. In fact, the first thing I would assert and attest is, when you say if people aren't working on tech debt, you're concerned. So if you could see inside of one of your teams at Tasktop, you have a team that's working on 100% features and zero on tech debt. I'm guessing you would be concerned. Right?

Mik Kersten:
I'd be panicking. And the amazing thing to me is that the reaction is usually the opposite. Why are they spending time on non business value work?

Gene Kim:
And that's how hardwired that is into your brain, is that when you see people not working on tech debt at all, that triggers a warning for you that something is wrong.

Mik Kersten:
Exactly. And I think the four flow items are critical. One of the most profound things for me over the last year is just the importance of elevating tech debt as a good thing that delivers business value. And actually, if you don't work on it, you're going to get into a death spiral, and never deliver any features anyway, right? So I think this tie in together - improvement of daily work, giving your teams the time to do that, and elevating tech debt, that was a good thing. And if you're not seeing improvement of daily work as something your teams are elevating and practicing and doing, seeing that as a massive red flag that you've got an organizational problem, again, you're off track.

Gene Kim:
And as a leader it's your problem. So what the Flow Framework did for me is that it made a whole bunch of kind of case studies suddenly makes sense because they're all the same thing. One of the things that we see in the tech giants who made it, is that they all went through a period of re-platforming. Get that language from you, right? Is that eBay, they spent years rebuilding it from the ground up. In fact, they did

it five times, right? But most famously during around 1999 when it was crashing all the time, right? Marty Cagan, who was VP of product admin there, wrote a great book called Inspired. He said he didn't ship a major feature for two years because they were all just trying to keep the site up.

Gene Kim:
Microsoft, the famous security stand down in 2002, the year the famous trustworthy computing memo, where Bill Gates said, "If a developer ever has to choose between fixing a security defect or working on feature, always choose security." And so again, every major product line went through a feature freeze, where features went to zero, tech debt reduction went presumably up to a hundred percent in many cases. Amazon, the famous Jeff Bezos memo that we were talking about, that was a multi-year effort by some records a billion dollar spent re platforming all of Amazon, so that they could break the abidas monolith, then enable teams to work independently. Twitter, LinkedIn, Etsy. They all went through these phases where in order to enable developer productivity and reliability, they had to take features down to zero, and that was all a mammoth tech debt reduction exercise.

Mik Kersten:
Yeah, exactly. It was all supported by leadership and this is the problem. The teams know what's wrong, right? They get what the problems are. If they're not given the space and the time to invest in The Third Ideal over the span of six or 12 months, you're going to be more frustrated than less. Even though you think you're driving faster to some day.

Gene Kim:
Yeah.

Mik Kersten:
Gene, let's go to The Fourth Ideal now. I think this one is probably, to me, this is the least understood one. I find myself, I've learned a lot from you on it, and the last three or six months I'm surprised at how much this one is coming up to me. So tell us more about it. I'll tell you one story that blew me away a couple months ago, where I felt like for the first time I ended up living the outcomes of this ideal missing in a pretty bizarre way.

Gene Kim:
The Fourth Ideal is Psychological Safety. And this was something I learned a lot about through the State of DevOps Report. One of the top findings was the importance of culture and we use the Western organizational typology model. So that was, work done by Dr. Ron Western, who studied patient safety in healthcare organizations back in 2004, and he found that organizational culture was highly correlated with patient outcomes. The organization with the worst patient outcomes had what he called pathological characteristics. Information was hidden, messengers of bad news were shot. Bridging between teams was discouraged. That'd be like doctors, ER, nursing, pharmacy, outpatient care. We cover up failures, because messengers of bad news are shot, and new ideas and crushed. Kind in the middle you had bureaucratic cultures. This isn't unknown as merciful cultures, or just cultures, where the goal is to sort of create a sense of justice through process, right?

Gene Kim:
So it's kind of the [inaudible 00:12:00] treatment. And then at the highest level you have, with the best patients outcomes, you had what he called generative cultures where we seek information, we train messengers to tell bad news, bridging between teams and responsibilities are always shared so we know that availability is not just opposite job. Just like InfoSec is not just Infosec's job, it's everybody's job. Especially developers, failure cause a genuine sense of inquiry, and new ideas are welcome. So that

instrument predicted IT performance, and organization performance. It was gratifying to study the work of what Google had done through this work called Project Aristotle, and Project Oxygen, where for years they were, Charles Duhigg wrote a book on this. They studied for years what made great teams great, and they found that one of the top factors always was psychological safety. To what extent do members of team feel safe to talk about problems, to share ideas without fear of being made fun of, ridiculed, castigated, being embarrassed.

Gene Kim:
That was one of the top factors. Other ones that contributed were dependability, structure and clarity, meaning of work, impact of work, but psychological safety dominated. So the aha moment for me was, going back to the Andon cord. You need a culture where it's safe to pull the cord. There are many instances of General Motors plants installing Andon cords, but no one pulling them because whenever someone does, they would get yelled at by the plant manager because it would jeopardize the daily production targets. Right? As opposed to in Toyota plants where when you pull the cord the first thing that happens is the manager, the supervisor, thanks you. Right? And so you positively encourage that. And so really, psychological safety is a prerequisite even for manufacturing and is absolutely a prerequisite for knowledge work. Does that resonate with you Mik?

Mik Kersten:
No, absolutely. And I think what's amazing, because I read those studies, Oxygen and Aristotle, I've been trying to do this as my organization has grown, just trying to study this. And it's what's so interesting about it is that this one ideal does extract so much of those results, right? With oxygen, there's some massive studies that Google made across their organization and their style in terms of what were the key factors, what was the one key thing that made for effective teams for engaged individuals and so on. I think this one, it's amazing how it hits on all those chords. And I think the story, I guess my whole concern is just how often I see the failure modes of this in organizations right? What's been really interesting to me, I'll just give you just one really quick story is that, at more senior levels, I think there's enough people who've read this literature, just understand this and deeply care for their staff, I see the understanding of psychological safety, but then lower down what's happened from just, I don't know, legacies of command and control structures or CYA, modes of operating and so on. It's a massive issue and it completely gets in the way of The Third Ideal.

Mik Kersten:
So we were working with this organization and we're measuring their Flow Metrics and so on, and it's going really nicely. Leadership is totally bought in the right mind set, commitment to the ideals, and everything is going swimmingly, but this one product value stream with around a hundred people working on it - and it seems like a great leader, both product and technically are on it - He keeps saying, no, we're not ready to show any of our Flow Metrics. The question is why? I was thinking you've got a great VP and CIO completely committed to this, and it just kept coming up.

Mik Kersten:
We actually just need to get more Agile. We're almost done deploying 100% of the Scaled Agile Framework, but we just need to be 100%. And myself and Carmen, the ARDA, Dominica, the ground is thinking what is going on? You've got someone who's committed to giving you more staff to help you improve. If you can just show them that you, for example, need some more staff to deal with your technical debt, right? They're trying to give you a gift. And it turned out to be, that there was not in this organization the psychological safety for this person to show that they're actually investing time in tech debt reduction, because that was thought of badly previously, right?

Mik Kersten:
That they actually are not... they have some flow inefficiencies. It was just this bizarre disconnect between that direct 11 organization having no psychological safety, because they think they're going to have their head shot off when people see how much work has been done on tech debt, versus the higher level of organization actually wanting to embrace this. And so, Dominica has got us doing this in all these engagements, which is to actually say none of this stuff will work. The Third Ideal stuff, and the stuff above it won't work unless you've got a managerial commitment to psychological safety because people won't share their problems with you. They've been hiding the tech debt worth doing for the last two years or 10 years. Why wouldn't they just keep doing that?

Gene Kim:
Yeah. Like one of the scenes that I got tremendous delight out of, and when I say delight, I mean perverse delight. The first third of the book is how slow everything is, how much processor is, and you would think in a crisis, the need for survival would allow things to go faster. And there was a scene where because of Sarah, the VP of retail operations, right? The crisis actually forces her to put more approval steps in and, now every manager wants to be a part of the communications process, right? And now everything that needs to be communicated, needs to go get approved and it actually chokes the flow of information, and now you have too much information flowing with not enough trust, and everything gets even slower in the middle of a crisis.

Gene Kim:
So instead of going up and over one right up one, over one and down one, now you have to go up two over two down two right? Which it's amazing corrosive effects of psychological safety. And I think this is such a field that I'm just eager to learn so much more about in terms of what can leaders do, because it's so complex. John [inaudible 00:17:22] in his feedback, he said psychological safety is so fragile, right? It's contingent on people's moods and their wounds from the past, and the moods of the individual members on a team. It's more than just the leader, right? It is something far more complex and fragile than that.

Mik Kersten:
It is so easy. I personally find so easy to mess it up, right? This is years ago before I met Eugene, but we had our security incident and I thought we were doing things with psychological safety but we weren't and we completely messed it up, right. We were the opposite of John L Paul's view of blameless postmortem, even though I thought we were doing everything right, and since then just having this organizational commitment to psychological safety through these various ways, like blameless postmortems for instance, I think again is absolute critical. Now like every ideal, if you don't have the organization commitment to each one of these ideals, something is wrong and it has to come from every level of the organization. Let's give ourselves a few more minutes for the last one. This probably is the most important one. It all should start and end with this one. But tell us about The Fifth Ideal of Customer Focus.

Gene Kim:
Ah yes. And so The Fifth Ideal is Customer Focus. It was created a year ago in Detroit with you, me and Chris O'Malley, right? And we saw the most incredible demonstrations of this. And just to relay the story, right? We were walking to the Compuware building and I'm looking at the agenda and I'm like, "Oh my gosh, first agenda item is a data center tour." I remember apologizing to you. I'm like, "I thought this was going to be the most amazing day. I'm so embarrassed. I don't know why we're getting a data center tour. What are we going to learn from seeing their Halon extinguishers? I think I might've just wasted an entire day flying you out." But then we saw it and I think we were both blown away with what we saw because you walked into this data center and it's empty.

Gene Kim:
There are two Z mainframes there. And in the rest of the data center are these outlines like in a murder scene, where the server racks used to be. And in the middle of each spot is a tombstone describing what the business process and application that used to run there, and how much money they saved by getting rid of it. And you get to see this tombstone is far as the eye can see in this large data center, and that's when it sort of popped into focus for me of the notion of core versus context. That was actually in the manuscript, but just really brought it to life - Dr. Geoffrey Moore's notion of core and contests. Core are the core competencies in organizations that customers value that create lasting durable business advantage, versus context, which is everything else. So it may be mission critical, but customers really don't care about it, right?

Gene Kim:
So all the things that Compuware got rid of were things like the payroll systems and the treasury functions, things that customers didn't care about. And the reason they did that was that it allowed them to take $8 million of cost out of GNA, outside of back-office, and allowed them to reinvest that into R&D, which customers did value. And I thought that was such a great example that really popped into focus for me. So the ideal is, leaders in the organization, they prioritize top level business goals, and what customers value over everything else . As opposed to when leaders, but their functional silo goals over everything else. And that Compuware data center thing was just such an aha moment for me. I think the takeaway really is when you can unflinchingly ask ourselves, "Are we doing things that customers value?" And if not, we should be asking, "Should we really be doing it at all?"

Mik Kersten:
Yeah, exactly. You know, this one, it just seems so obvious and it seems like it should go without saying, but it is for every organization, whose purpose is to serve its customers. And those could be external customers, those could even be internal customers. But I think what's been so problematic about the way that IT organizations have evolved is they've not come from this, right? Most IT organizations out there either are or have come from cost centers, right? They're structured and incentivized around internal activities, not delivery to a customer. This is the complete opposite in these high performing organizations that you've been studying, right Gene? Day One thinking at Amazon is just that everything we do is about delivering value to the customer. Of course, Bezos makes the point that as you grow, as you scale, more and more becomes around your internal processes, around those internal silos and handoffs and so on, rather than around delivering value to customers.

Mik Kersten:
And it is just amazing to me how powerful this question is to ask yourself at every point in a transformation in the modernization: Is this going to get us more customer focus? And let's just say you've bought yourself into redoing your enterprise architecture. Is the architecture of your software of your data systems, is it customer focused or is it internally focused? Are your platforms that you're building, built around delivering more customer value faster? What's so shocking is that when organizations don't have this defined, and this is of course my total gripe with project plans around activities, not around customers, right? If you don't define your customer centric products, what those value streams are, and architect and structure and organize everything around that, and budget, and kill products that don't deliver value around that - this is what customer centered organizations are famous for. They know when a product does not deliver enough customer value, whereas no project ever dies, it just goes into maintenance and ends up sapping everyone's energy in the organization.

Mik Kersten:

So, this is one again, I just think constantly ask yourself, is the way that we're approaching this exactly as you put it Gene - is it internally focused or is it delivering customer value?

Gene Kim:
And what I love about the story is how Chris and I talk about how the person who built up that data center over a decade plus, how did it feel for him? And he said it felt terrible, right? He spent 10 plus years building it up, and now he's being asked to take it down, and he said he had to change the incentive so that we celebrate every ton of equipment removed. And therefore that sign that says, 17 tons of equipment removed, all now being recycled and off to a better place.
Right? And now the team takes pride in being able to, the more stuff they can get rid of, the more they can invest in a thing that customers care about. I thought that was just another, just a great little lesson in there about what it takes to be customer focused.

Mik Kersten:
The key point of that lesson, I think, that was so profound to both of us is, it's not easy. You've got people who've been building data centers, who have been building project management structures for their careers. One of the interesting things is, Project to Product for me has been as the people in the PMO, the PMO the leaders who've embraced it, because they've realized those people have already understood and internalized The Fifth Ideal, because they've heard it from the CEOs, they've heard it from the leadership team - if they don't help them as an organization around customer value delivery, none of this will work, right?

Mik Kersten:
So I think just the same mindset that that CIO had to have around tearing down this empire, which was not customer focused - hat could easily be it was actually slowing the organization down - this is going to be a pretty big shift for organizations who again managed IT as a cost center, and build these internal empires that are not actually delivering as much as you would be if you'd simply created an amazing developer productivity environment.

Gene Kim:
And just to maybe put the fine point on this, I'm speculating that you will point to this as one of the causal factors of why $1 trillion spent on digital transformation has resulted in so much waste.

Mik Kersten:
Absolutely. Because it's these, IT for IT transformations, it's transforming for how IT works, not transforming for basically what you're trying to deliver, the digital experiences you're trying to deliver. It creates the wrong architecture, is it creates the wrong incentive structures.

Mik Kersten:
And again, I completely agree with that. Is that it's one of the main causes for the ways that we're seeing that in that McKenzie study. And again it's just this cascade straight back up to the other ideals, right? Is your locality and simplicity defined around customer innovation, around optimizing some internal process or ancient architecture? So Gene, for me the big thing, this is amazing. I've as usual learned a ton in this discussion and now my head is spinning for how we can, again, I think help others internalize these. And I think for me the big thing is, every organization out there who wants to get into this golden age needs an organizational commitment to the five ideals. And of course then the Unicorn project to me is an amazing tool because it allows you to read it in a narrative rather than listening to Gene and I on this podcast, so pick it up right now if you haven't yet. Any other closing words, Gene?

Gene Kim:
Oh no, that's just what a fun adventure this has been. And I feel like this work is important and as relevant to every organization out there. And I think what an amazing opportunity we have right now where every top-level business leader knows that we're in an age of disruption and there's some missing elements needed. And I'm hoping that this is an opportunity for the technology community to really bridge that gap, and help paint a way out, and we'll get a level of cooperation, and appreciation between business and technology that we've never seen before. So I think the future is bright and the best days are ahead of us and certainly not behind us.

Mik Kersten:
Yeah, exactly. I think this is our path to that Golden Age that Carlota predicted. So Gene, where do people find The Unicorn project, find you, and tweet at you so you answer them or feel bad when you don't?

Gene Kim:
Probably the best place to find me is on Twitter. I'm @RealGeneKim. And you can find The Unicorn Project at all fine book retailers of your choice, and you can certainly hit me up on LinkedIn as well, and I'm always at The DevOps Enterprise Summit.

Mik Kersten:
Thank you so much Gene. Amazing discussion and thank you everyone for listening.

Mik Kersten:
What an incredible discussion. Another huge thank you to Gene for taking the time to chat and kick off the podcast series. Don't forget, I have a new episode every two weeks with some great upcoming guests. Please also subscribe to stay updated, and if you enjoyed this episode, please rate and leave a review. You can follow along with me on Twitter @Mik_Kersten or using the #MikPlusOne for the latest podcast updates. To continue the conversation with Gene, you can find him on Twitter @RealGeneKim and to get the book search for Project to Product and remember that all of our proceeds go to supporting women and minorities in technology. Until next time, thank you.