

The Process Palooza Podcast

Episode 8: Lean Six Sigma vs. AI: The Ultimate Webinar Showdown

[00:00:00] Hello and welcome to the Process Palooza podcast. Incremental Exploration of Continuous Improvement, one episode at a time. This is episode two of our second season leading up to the 2025 edition that's coming to you. Via uc, San Diego on August 6th through seventh. So look@processpalooza.ucsd.edu to find out how you can register.

And join a number of fellow professionals in the enthusiastic exploration of how continuous improvement can help you to improve the processes at your own business or [00:01:00] school or anything you're doing. Really. I'm really excited because today we are going to highlight. An offering that is being done right here at uc, San Diego via a department called OSI or our Office of Strategic Initiatives.

Now we here at San uc, San Diego have a homegrown generative AI platform called Triton, GPT. The name comes from, of course, our lovely mascot. King Triton. We are the Tritons and Triton. GPT has been available to certain members of our community for about a year now, and OSI has been tasked with helping to roll that out, including how it can best be used, best practices, trainings, and so forth.

And one [00:02:00] of the things that OSI has started doing. Is a series of webinars, how to best improve our own processes, how to best embed AI into those initiatives and other business cultural mindsets that improve the day for everyone involved. Now, one of the things that is great about the upcoming webinar is that.

People outside of the university are able to join in and learn. That's right. It's being made available to the public. If you email ossi@ucsd.edu and you'll be provided with a link to join the Zoom webinar. The title of the series is AI Essentials at UCSD, and this particular upcoming webinar is called Lean six Sigma versus Artificial Intelligence.

Yes, it is a SmackDown [00:03:00] who will win Lean Six Sigma or artificial intelligence. You may be surprised. Maybe at the answer we will see, but it should be a really fun webinar. It's happening next Thursday, April 24th,

starting at 11:00 AM Pacific Standard time. And again, if you want to join, that's osi@ucsd.edu.

Just send them an email and they can make it happen. Uh, if you don't. Make the webinar as it happens, it will be recorded for posterity, so you'll be able to check it out then. It's still gonna be a great learning experience for really anybody interested in continuous improvement or AI or some combination thereof.

So without further ado, I will be joined by Laura Dela Pena, who is going to run the next webinar. Hi Laura, how are you? I'm good. Thank you. How are you? I, I am [00:04:00] excited to talk about your webinar coming up in a couple of weeks here. Yeah, me too. I just wanna open up this conversation with a little bit about you and your connection to the topic.

What drew you personally to this intersection of process improvement and artificial intelligence? So I am part of OSI at UCSD, operational strategic Initiatives, and we focus on process improvement at the university. Uh, one of our other charters is to support AI advancement in terms of organizational change management with Trenton GPT, and so.

We are usually partnering the two together, and that's why we thought this webinar would be a really interesting debate about Lean Six Sigma versus ai, which is the better tool to use.

I think that artificial intelligence, it's there to support us and help us advance [00:05:00] so we can, you know, focus on the important things in life and maybe leave some of the monotonous things to, to the machines. Uh, I'm a advocate of AI and technology and it's important that people understand how the tool works and how we can leverage these tools.

So. They too can, you know, make their lives a little bit easier. Okay. How do you see Lean Six Sigma? Lean Six Sigma is a methodology. Mm-hmm. So it's, as you probably know, born from Toyota and Motorola has been around for 50 years, focuses on optimizing processes, uh, waste reduction, data-driven decision making, things like that.

So it's, it's something that we use. To be more efficient, kind of like the gold standard for, you know, streamlining operations. And, uh, how would you see AI as challenging or enhancing that? [00:06:00] So AI has also evolved rapidly over the years. Enabling automation and insights, analytics, et cetera, can process lots of data.

So think of speed, whereas Lean Six Sigma is more about optimizing the process. There is like a really good analogy. Lean Six Sigma is like the chef who is perfecting their recipe, and then artificial intelligence is like the sous chef that can cut. Vegetables and foods as fast as possible. So they both work to help improve the process, but in different ways.

I'm sorry, I'm, I'm, I'm eating that analogy. Pun intended, right? Yeah, no, definitely pun intended. I like that. Yeah. Cutting at the speed of lights. And then there's this, there's the Lean six Sigma chef who is creating the perfect [00:07:00] recipe. And making it so the end product is exactly what the customer wants.

Okay. Because technology by itself needs the guidance of a human to determine where it goes. And right now, I think we're, well, eventually we will. I. Have self thinking machines, but right now we have to guide it into giving us something that we want. And we do that in the form of prompting. Right. And since you brought up prompting, AI obviously can generate answers to a prompt very quickly, but if we use that same mindset process improvement.

Could often be about asking better questions or better prompting, if you will. And so how do we keep that balance between the human element of, I guess, balancing fast versus smarter, if that makes sense. What does improvement mean in the AI driven world? Yeah, no, it really is a, a [00:08:00] partnership and even though, you know, we're exploring which approach is better, I think I've termed it as methodology versus machine, but, um, it, they, they really are partners.

So Lean Six Sigma is best for like process optimization and waste reduction, whereas AI is good for pattern recognition and automation and. Lean Six Sigma relies on human analysis and so it's a little bit slower. Uh, but AI lacks structured methodology and so there are these weaknesses and strengths that they kind of can partner together towards and, and make up so you have a more robust process.

The human element is very important, but the human element can also be. One of the weak links. So yeah, example of that is AI can lead to a, uh, deteriorating of critical thinking. [00:09:00] Um, what would be a way to maintain using that muscle, the human brain muscle, when using AI in these types of projects? That is definitely a concern these days, especially when you have seven year olds putting in their math homework, you know, five plus nine and two plus two, and trying to get the answers to cheat on their homework.

That's purely anecdotal, and I think I read that one and it was probably blown out of proportion, but I think it. Deterioration of critical thinking is, is definitely a risk. We do talk about this, and I think we have in one of our previous webinars, but it really is about AI literacy and understanding the risks around ai.

So I. If you know that you are using these tools, you always have to double check your work, read through it. I think if it's a process that you own [00:10:00] or if it's a piece of work or a task that you're in charge of, you probably don't want to just give it to AI and get the response and then use whatever they have.

Like you probably want to add your own flavor, your own creativity. I mean, we as humans. Excel at creativity, hopefully. I'm sure there are some exceptions out there, but, uh, this is our unique selling point. Um, you know, AI is good at learning from data sets and they can be creative as well, but it's not so good at coming up with.

Things that someone has not already thought of. So, you know, when they talk about dreams and they're like, you know, in your dreams, they're always based off of something that, you know, you'll never be able to dream something when you're unconscious. Something that you haven't seen or something that reminds you of something else.

Mm-hmm. But you know, when you're awake, we as humans, we can imagine things that we haven't thought about before and AI is just not really good at that right now. Right. It's still a [00:11:00] sleeping beast. Yes. Yeah. Base is probably a really accurate term for it. Yeah. In the webinar coming up, do you give example like real world examples of a process improvement project being augmented by AI in any way?

Yeah, we will at the end, so. I, I don't know how much of a spoiler. I mean, this is a spoiler, but Yeah. No, no. You don't have to spoil. I'm just wondering. No, no, no. I mean, I think everyone kind of knows where this is going, but you know, we have this setup where it's like AI versus Lean Six Sigma and who's better, and at the end it's really about how they work together and they support each other's weaknesses and bolster each other's strengths, et cetera.

We do go over an example. Things that, projects that we've done here at UCSD, uh, in higher education. We have some case studies with, we haven't decided on which one we're gonna do yet. Mm-hmm. Or I haven't decided which one we're gonna [00:12:00] do yet, but, so it might be around admissions, finance, hr, something around there though.

I know it's mostly probably gonna be attended by people from uc, San Diego. It's like a hundred percent right now. Right? I think there's like one 60 that I've signed up so far, which is great. Oh, that is huge. There is, yeah, it is. It's, I don't dunno how many people are gonna show up. I, I, I'm hoping that a good number of those will, it is open to external, uh.

Folks outside. Mm-hmm. I think you just get sent a separate link, but I don't know if we do a lot of marketing outside of like we have our internal newsletters and I think we have a LinkedIn, which might get some external, well, this will be some external marketing. Oh, well, great. Yeah. Whether or not it drives.

People from another university or even the private sector, I'm not sure, but if it does, what would you say an [00:13:00] external participant would get from this webinar? I'd say that this webinar is for everyone and anyone who's looking to understand lean and AI a little bit better, so you don't have to be in higher ed.

Education industry is okay. Public service is okay. I think we can all stand to get more efficient, especially in today's economic climate, although that's probably a overused term these days. Um, I mean, part of the premise of this webinar is, you know, in today's world, organizations are facing a lot of pressure to.

Improve efficiency, reduce costs, adapt to evolving tech. And then these two approaches, lean Six Sigma and AI are two of many approaches that can help us do that. So that's why we're doing a review of these two, lean Six Sigma and ai and then looking to answer the question, what's better methodology or machine?

And then ultimately they [00:14:00] work together. And then, you know, while the case study and. You can take some learnings from this case study and hopefully be able to apply it to your own role, wherever that is. So it's generally pretty broad and, and has application all over the place. Yeah, I mean, I will mention Triton, GPT because I feel like this is part of our, our Triton G-P-T-O-C-M efforts.

Mm-hmm. Um, but you know, I think. At the heart of it, we're really just trying to spark conversations that move our culture forward, whether at UCSD or external, um, you know, towards smarter and adaptive ways of working. Um, here at UCSD, we always talk about doing less with less. AI supports this and we're.

At this point, we're hoping to not just like demystify it and get people excited about it. I think last year was generating excitement [00:15:00] and this year it's more about, well, what can we do with it? What are we doing with it right now? Yeah. And just for anyone listening, Triton, GPT is a homegrown, uh, generative AI platform that is.

Not only internal to uc, San Diego, but is one that is growing every day. And I suspect that when you talk about it, someone could apply some of the ideas to any kind of generative AI if they're outside of, yeah. Yeah, absolutely. Um, you mentioned doing less with less. Can you talk about the philosophy a little bit?

I think that's a mantra from our chancellor. It's a change from doing more with less. So I think during the covid years, people were feeling very burnt out and they just didn't have any more to give. We had this big awareness around mental health, you know, understandably, and it's that that is really important as well, but.

It's important to do [00:16:00] less with us. So, you know, as we look at this upcoming fiscal year, maybe our budgets aren't as big anymore. So you know, what can we do with less but maintain our cooperations? And so this process efficiency approach really enables us to do with less. With less. So we are able to continue with our core operations.

Do the things that we need to do in order to get the job done, um, and then still have time for everything else that's important and essential in our lives, like career development and doing these extra projects that we're passionate about. And, you know, here at UCSD or at just in higher education, I'm, we're all, you know, in this sector probably because we're a little bit more passionate about, you know, giving back and the student experience and all that good stuff.

Absolutely. But I asked about that because, uh, clearly I have a lack of understanding and I work at uc, San Diego. No, I mean, I think because people [00:17:00] had heard this phrase do less with less, and they're like, well, what does it mean? And it really is, you know, um. Being a little bit better, like, you know, cutting out, uh, extra steps in our processes that don't need to be there.

Mm-hmm. It's kind of like how you have a process somewhere and it's always been done that way, but no one has really looked at it. And when you try and change it, they're like, oh, but we've always done that forever, but, well, if you change this one small part, you, you know, free up 20 minutes a day for other things.

Hopefully not emails, but other things that you can be productive with your time. Earlier mentioned working for OSI, which is, uh, the Office of Strategic Initiatives at uc, San Diego. And my experience with your department, of course, is with the, uh, training for Lean Six Sigma that I've been through and that, uh, I work for ITS.

So, um, everybody's really been through at least the yellow belt. Yeah. [00:18:00] And so I know that there's a lot of work and thought that has gone into that massive initiative, uh, at our institution when the artificial intelligence, um, kind of generative AI boom happened a couple of years ago. I'm just curious how that started when it was becoming embedded.

Into the kind of thought processes and trainings and everything that, uh, that were the offerings of OSI. Yeah, I can, I can talk a little bit about that.

OSI, we have a mission to help teams operate with clear direction and simple processes. And our vision is to, uh, have a university where people can do their best work. Uh, the four things, the four big categories of things that we do are continuous improvements. So you mentioned the Lean Six Sigma trainings.

We do projects and facilitations, uh, the Lean Six Sigma [00:19:00] scholarships, coaching and mentorship, but we also do. Things around operational effectiveness, strategy, development, and campus initiatives. So this tri and GPT effort really stem from. A campus initiative, uh, where we were asked to support Triton GPT during its development.

So, as you probably know, Triton, GPT was developed in June, 2023. It has gone through several different changes. Uh, there was a pilot launch it also in 2023, and then they began the phase rollouts in early 2024. I think at that time we were supporting with these trainings. So we have the AI modules, uh, we started thinking about doing these webinars.

We have the everyday I AI series on YouTube. Uh, we have an upcoming newsletter. Uh, what else did we do? Uh, we do these trainings, so we go around to the different departments that ask for training on trained [00:20:00] GPT or just AI and we'll, we'll do an overview of the tool or just AI in general. We do that internally.

We do that externally, so. We were asked to partner with ITS on this because we are the go-between for the business and ITS, where sometimes things get lost in translation when ITS is super techie and the business is like, oh, I just

care about the bottom line. And so we kind of, you know. Make relations between those two groups a little bit easier.

That leads me to ask the question, the teaching and learning part of our university mission. You've got Business Bottom, you mentioned Business, bottom Line, and Techie ITS. What is the vision when it comes to students, faculty, researchers, and that lot? That's a good question. So right now, Triton, GPT is for faculty, staff, and student employees, right?

There might be. Um, maybe like 40,000 users. I, I'm guesstimating. Um, and then the health side [00:21:00] doesn't have access. If you have a, at U CSD or sorry, if you have a, at Health UCSD email, I think there are, they have Microsoft copilot and there are some additional privacy concerns like HIPAA and all that good stuff.

They are looking to roll out Triton, GPT to students. It's something that they're still talking about. I think they just wanna make sure that there's a good plan in place. So as. We have been around since the beginning of this Triton GPT initiative. We've had some learnings, so we've gotten better at understanding what works and what doesn't work in terms of training different teams on Triton, GPT.

And so I think with students, while they're a whole other stakeholder group that you know, will have their unique challenges, we can take some of the learnings that we have had with, uh, staff and faculty and student employees, and then kind of apply those to. Be a little bit better at targeting and making sure that people understand the usage and the [00:22:00] privacy concerns.

Mm-hmm. But less so on that, because as you know, um, trend GBT is secure and private and built in-house. Mm-hmm. Posted OnPrem at the San Diego Supercomputer Center, so it's very secure, but more privacy as like. Don't enter in your social security number and best practices around prompting and, and things like that.

How often do you use it for your day to day? Every day? I have to say that

I use it quite frequently, so I just did a training physician scientists, I think P-P-S-T-D-I-I, I can't remember. But when before I went there, they asked me to provide an overview of Triton, g Bt, and then I was told that the guy that runs the place, he is a big chat GBT fan, and he uses, he pays for [00:23:00] the.

The subscription and he uses chat GBT all the time. And so can I try and convert him to being a Triton GBT user? And so I took on that challenge and put together some training content around how Triton GBT is just like chat GBT. Now what in terms of for the things that you're going to ask it to do or use it for, it can pretty much do everything that touch BT can do now.

Uh, one of the latest releases for TRI GPT has a model selector. So I think before it would, you could only use the LAMA 3.3 model, right? And now there's a option to use GPT-4 0.0 when using TRI GPT, so you can get a little bit different response or, you know, use the model that's best tailored to whatever you're using the tool for.

Um, we're still stressing privacy, security, relevance, and chat. GPT is less secure, you know, being a cloud [00:24:00] platform. Um, don't really know where our data is going. And so there was someone that was at the training and they're like, if you could choose between who has your data, if you could choose. Between uc, San Diego and China, who would you want to have your data?

And that kind of makes it clear for some people. Yes. Yes. That's a great question. I think that's fair to ask that question at any of these trainings. All right, so for the final one, we're right up on time here. I just wanted you to talk a little bit about the benefit you see of these webinars. Why to make them available publicly and.

Where people can find this particular, yeah, so OSI webinars were launched to support the role out of Triton, GPT, but they really are for everyone. These sessions aren't just informational or for knowledge sharing. They're meant to influence how institutions think about change, [00:25:00] uh, rethink their norms and create a culture of continuous IM improvement that's empowered by ai.

This is either the fifth or the fourth one, and then I'm gonna be doing either the fifth or the sixth one, the next one too. So stay tuned for that one. And those are saved for posterity if people miss them. Yeah. Yeah. Very cool. It makes us a leader in the information getting out there. I think so. Well, Laura, thank you so much for chatting with me about this.

I, I, I know I get a little philosophical about these things, but it's been a lot of fun. Yeah. I appreciate all the questions. Thank you, Miguel. I, I look forward to the webinar too. I'll be there. Oh, thanks. Have a good one. When I finish it, it'll be, uh, it'll be good and ready. Hopefully it will be awesome.

Appreciate the vote of competence. Oh, yes. I have no, no doubt.

I hope you enjoyed my conversation with Laura Dela Pena again. [00:26:00]
She will be leading that webinar next Thursday, April 24th, lean Six Sigma versus artificial intelligence. If you email oi@ucsd.edu, you will be sent a link where you can join in or look for the recording that will be made afterwards.

And also remember to register for Process Palooza coming to uc, San Diego campus. August, sixth through seventh, and you will be able to take part in all of the panels, talks, plenary talks, and just have fun. I will be there so you can say hi to me and get to know everything that is going on in regards to process improvement, continuous improvement, and the lens of artificial intelligence.

I will see you there and be ready for next month where I'll be coming to your ears with episode [00:27:00] three of this second season. I can't wait to find out what it's gonna be about 'cause I don't know yet. See you next month.