



Episode 58: Breaking into AI Product Management

Speaker 3 ([00:02:01](#)):

Hey Polly, so nice to have you and welcome to the Women In Product for the AI product Management podcast series.

Speaker 1 ([00:02:08](#)):

Thanks so much for having me. Excited to be here.

Speaker 3 ([00:02:10](#)):

Yeah, absolutely. We would love to get a lot of your perspectives on the whole AI part of it. We'll kind of peel different layers of it. And to begin with would love to kind of understand from your perspective, there's a lot of talks about AI product management, AI product manager. Is there something called an AI PM and would love to hear as to what additional qualities would you think are really required to be that AI pm?

Speaker 1 ([00:02:44](#)):

Yeah, I completely think there is an emerging specialization in AI product management. We've seen over the last five to 10 years specializations arising in product management that you've seen Growth PMs go-to-market PMs and it makes sense. The systems are becoming more complex. You have special strengths and specializations you need in each area. So AI product management is really that specialization in developing and managing products that leverage AI technology. And of course we're seeing a massive growth right now specific to especially supervised machine learning systems and in particular large language models and generative AI being a huge focus of new products being launched. But the biggest difference there is really that the software is based on patterns found on data. So software behavior is no longer based on computer instructions and rules. So really that familiarity with data quality and being able to dive deep and understand that is one of the key areas that great IPNs need to be able to dive into.

Speaker 1 ([00:03:55](#)):

I do think though, beyond just technical familiarity, a couple of the things I look for and people trying to get into AIPM are that they are data curious, so not necessarily have all the technical certifications, but that their technically and data, yeah, technically and data curious I call it in that they're willing to see, they're wondering always what would this work this way? Would this work that way? And really willing to dive into the details they need to really be quick and voracious learners, right? This energy industry has changed so quickly you can change on a dime. So that continuous learning really is something I've always been passionate is a huge piece of the role. And then that willingness to dive in and get dirty, not let themselves be



intimidated by new technologies and find ways to try things out themselves. That's I think the best way to really become really well beloved of your engineering and data science teams if you can help them see around corners that way.

Speaker 3 ([00:04:58](#)):

Thank you for that. I think it really has resonated with me when you said software that is focused more on the patterns versus the rules and computation that is existing prior to this. ~~So love that.~~ Love the way you differentiated between the two and just there's a lot to peel here and we will do so in the next few minutes. At this point, I think we kind of want to assume, or I want to assume that pretty much every product person or every person has kind of played with the chat GPTs or or board or different large language remodels and things. And given the number of resources that are there around across all different formats, blogs and YouTube videos and whatnot, podcasts and things around this could provide our audience with the different categories of topics that PMs need to be familiar with and the topics that they should really have a good understanding in order to build AI products. I know you touched upon being data curious curiosity around that and being technical around that area. Would you kind of elaborate on the other topics as well? For our audience,

Speaker 1 ([00:06:21](#)):

I see it as there are six different areas that I think are specific to ai PM success and skills that people can develop to be successful. AI PMs of course technical fluency is one of them. I do think it's one that people tend to over index on, right? There are a lot of really great classes, free up classes from Coursera, Andrew s Deep learning.ai has a bunch. And whether you are taking the ones that are meant for everyone and don't involve programming or starting to dabble a little bit into Python, you can go a long way with some of those free online courses and even build your own classifiers and toy models, things like that. That is a great start, but I think people tend to maybe do that too much or see that as too much of a barrier to getting into AI product management.

Speaker 1 ([00:07:12](#)):

When my background was, I came from a technical background and did come into AI product management that way and I realized on the job at Alexa that those weren't the skills that were really helping me succeed the most. So I think some of the other skills that are really key, the first one is strategy and vision. That ability to deliver value by really pushing back when you see a lot of tech driven requests. We're seeing that a lot in this industry right now where there's a lot of just figure out how to use LLMs one way or another, but really understanding the AI capabilities and limitations and being able to map that to your company's strategy and vision. That is such a key skill for PMs. It's particular to product management. If you can uncover and prioritize those use cases, it takes some education about the capabilities.

Speaker 1 ([00:08:07](#)):

It also takes clear eyes about your company's ability to take on any innovation required to get that last mile between what the underlying systems can do and what you really need to do to deliver value for your users. So that ability to take these capabilities and develop a strategy, a vision, a roadmap, that's absolutely a core capability. We touched on data fluency. That's the second one I would mention where really that ability to dive into data files, see the patterns of the data yourself. There's nothing quite like getting deep in the data and understanding the providence of the data, getting curious about how it was derived. That will again really help you see the issues that the data science team may not know if they don't have the same context you do on the user. The biggest one I would say that is probably the biggest challenge for IMS is risk management, risk and uncertainty.

Speaker 1 ([00:09:06](#)):

And there's three categories of risk, I would say one of them is just what is good enough to launch. Even just setting the launch criteria can be really complex because we're dealing with systems that aren't always going to be deterministic, aren't always going to be correct the way rules-based systems are or fixable very quickly if there is a bug, right? So we're deciding instead of how do we make it never be wrong? We're deciding how wrong can it be and still have it deliver value. That's that risk of delivering the wrong thing. Then there's the risk just of bad results because they're not deterministic. Those edge cases and deciding what kind of edge cases are acceptable, not acceptable, how are we going to handle those. And then thirdly, we have responsible ai, all of these ethical and legal considerations, understanding the biases and how they might affect our users, even just how it might affect brand perception at Alexa for example, we were worried of course about answers that were biased against any particular minority or group, but we are also really worried about brand risk around any answers suggesting that Alexa is and listening to you when she's not listening to you or that we're suggesting that Alexa prefers one brand over another without any real reason to say why she would prefer that brand.

Speaker 1 ([00:10:37](#)):

So there's a whole host of risks you're not dealing with in traditional software systems and managing those before, during, and after a project is launched is really key. So that's three out of the five. I said six total and one's technical, but the last two are a little simpler. So that idea of communication is absolutely key. Communicating complex concepts between leadership who understand business metrics and data science teams who are working really with really technical metrics. Being able to build those models, both mental models and just how we communicate that, explain the progress and explain the pitfalls between the different teams. That's absolutely the role of the product manager and kind of the glue, keeping everyone on the same page. And then finally bringing in the engineering and the machine learning operations side of the house. Engineering has a huge role here to support the



development, deployment, measurement, maintenance of AI systems and that's something that people are often blindsided to if they've been focusing on data science courses and now they understand how to build a model. There's that whole side of great, but how do we get it to run at scale reliably measured over time, make sure the performance doesn't drift. So there's a lot of considerations that go way beyond just those technical understanding.

Speaker 3 ([00:12:06](#)):

That's very well said. Agreed that yeah, other than just the technical understanding, there's so much of the infrastructure part of it that sometimes you fail, you overlook or you simplify that where that could be a big barrier basically. Yeah, lots of things to unpack here. So if you are, let's say a product leader, a product management leader across be it B two B or B two C, what aspects can you actually use from your core product management, from your building products, be it zero to one or zero to one to scale that you could actually show that you have the necessary AIPM skills. I know you mentioned about the strategy and vision and the communication which is core irrespective of you being an AIPM or not, but how can someone demonstrate that from your perspective, Polly?

Speaker 1 ([00:13:13](#)):

Yeah, I think the key thing to remember is just like you just touched on Rashmi, that what AI needs right now in their product managers is great product skills first, and that the AI skills are this additional layer to bring in. That's an additional layer of complexity, but at its core, your role is still delivering customer and business value. And I think sometimes that gets lost, especially when I see managers hiring and insisting on that their PMs need a computer science degree. I often think that they're shooting themselves in the foot. You should be looking for, did you know how to create impact business value? What kind of impact have you had? Never fail to highlight that front and center even when you're looking for AI roles. And then I think some of the areas, I mean it really depends if you have some AI projects to lean on already, but what I look for is anywhere that you've done a lot of data-driven decision making examples of have you had a hard time measuring something and needed to derive a proxy measure for that?

Speaker 1 ([00:14:26](#)):

What kind of limitations do proxy measurements and metrics have? How did you communicate that? So you're showcasing both that data-driven data curiosity as well as that ability to communicate about it in a really sophisticated way. You can get some really great examples of that without necessarily having worked in AI before. Cross-functional leadership is another one. If you're doing cross-functional leadership already, often in AI projects you have some additional teams, you'll have an engineering team and a data science team to deal with instead of just software engineering, you may have to have a closer relationship with legal stakeholders or marketing about the messaging about this. So I look for people who can showcase

they've done complicated cross-functional leadership and are ready if you throw a couple extra stakeholders at them, a couple extra people in the mix, any show of real problem solving and continuous learning that's been put into practice with your teams, I think that's really huge too.

Speaker 3 ([00:15:33](#)):

That's awesome. And added to that, that's a really great example I think you gave across the data-driven decisions and how you could possibly show the correlation. And when you talked about risk management, so especially which is key within the AI product management, what kind of examples can someone provide when they have been working on non-AI based products? Any examples that you can think of to translate between the two?

Speaker 1 ([00:16:05](#)):

Yeah, I often ask candidates, tell me about a time where you faced the most ambiguity on a project about launch criteria or even whether it's about launch criteria or an approach. And so often you may have dealt with innovation projects where the actual will this be built on a particular timeline isn't certain, it may take investigation of multiple approaches. Generally that's a lot of what you'll see on AI projects where you'll have the data science team that you need to get to a particular accuracy or a particular engagement metric and you'll be asking them to iterate on a bunch of different approaches and you won't know how long should we try this approach before we say, okay, this isn't working, let's try a different approach. So it doesn't necessarily have to be AI if you've had to deal with that kind of innovation before and dealing with that kind of ambiguity,

Speaker 3 ([00:17:12](#)):

That's an amazing example. I'm sure a lot of people would appreciate, especially when we are trying to translate your qualities between the two and the skill sets between the two. So what kind of avenues do you think or ways that one can use to kind of showcase that they have some of the AI related skills? I know you talked about being a continuous learner and look for some of the courses that people can add from a technical standpoint, but are there any other avenues that you've seen around or you've tabbed with to showcase from that perspective?

Speaker 1 ([00:17:52](#)):

Yeah, so there's showcasing it, whether it's on LinkedIn or your resume, if you don't necessarily have the title of AI PM or this was an AI project, AI company and where I was the pm, one thing I've seen work well is a more functional resume format where you're highlighting like, Hey, here's the different AI skills where I've dealt with ambiguity, where I've communicated complex concepts where I've had to come up to speed on a new technology quickly. And I think that really helps people understand how you could operate in that way. In LinkedIn too, the summary section is a great place to dive into, hey, what is your journey related to AI? Is this something



where a lot of folks have been very interested in AI before chat, GPT and are familiar with AI from before then, which is actually a really an important distinction to make.

Speaker 1 ([00:18:51](#)):

So I think you can really tell the story there of your passion and the things that's driven you to, one thing I see a lot of people doing, and I think it's a mixed approach as far as how successful it is, having projects to highlight. So if you've worked through a course on Coursera deep learning AI and you've created a classifier, you know how to tune a model, having done it once or twice is nice. In general, those are data science team skills though, right? And it's great to show that you have that common language and we'll be able to communicate with them. What I like to see from the PM side is taking that a one step further and say, can you take that project and demonstrate PM skills? Can you think about how you would evaluate whether this is something you would launch?

Speaker 1 ([00:19:41](#)):

Can you get it in front of users and actually get their feedback? And those kinds of considerations are the ones that are going to I think set you apart. If you do decide to pursue a portfolio project or something, you can now with generative AI, do a lot more on your own without a data science or development team to at least get prototypes out and in front of users and collecting metrics and data. And I think that's what I really like to see is a data-driven approach to say evaluation of a project that also really closely ties it to users and user value. Something like that will stand out a lot more than a simple class capstone project where you were able to demonstrate the technical skills of building a model.

Speaker 3 ([00:20:27](#)):

That's awesome. I'm sure you'll now, apart from teaching your course that you're very passionate about, I'm sure you'll have a lot of people knocking on your doors for resume and LinkedIn tips. I think that was a really great tip.

Speaker 1 ([00:20:41](#)):

Oh, great. I should do a session on that. Thanks for the idea.

Speaker 3 ([00:20:45](#)):

Yeah, absolutely. Because a lot of times it's a two part thing. So one is you actually have worked on some of the skills and the other part is actually showcasing that you do have those skills. So that was a really great tip. And in all of this, what do you think is the most difficult aspect of being an AI pmm? I know you touched upon risk management as one of the key aspects, which is very different from your regular PMs, especially given ai, but is there anything else you want to add there?

Speaker 1 ([00:21:19](#)):

Yeah, I think it is specifically managing all the uncertainty along with these emerging technologies. There is often a lot of fear and perceived risk that can come out of the woodwork during a project. So managing the perceived emerging risks from different stakeholder groups all along. I can give an example. So when we were working on Alexa working on generative AI answer, we were trying to summarize news content for our users. So when you're listening to words, we listen very differently than we read and we write very differently for news radio than we would for written stories online. Because of that you can't backtrack with your eyes, et cetera. So very different considerations in the language that you use. So we were trying to take written news and summarize it for short audio announcements on Alexa about different news that was emerging. And of course we were suffering from the same problems LLMs are seeing today with hallucinations where a certain percentage of our news articles were completely wrong and we were trying to decide what is the percentage that's acceptable first us to launch this as a feature on Alexa where it's like a high trust environment.

Speaker 1 ([00:22:41](#)):

We don't want to lose the user's trust. Does it really have to be a hundred percent correct when you start? Is it okay if it gets the sports score wrong by one point and we correct it within two hours? And so finding that line of exactly how correct does this have to be, even in that process of how we make those kinds of decisions. A lot of organizations are new to even thinking about this way or another. They're like, well, a hundred percent right all the time. Of course that often can't be the bar if you want to get some of these innovative features actually out in front of users. I think a lot of organizations are showing that they're willing to take a lot more risk with the success of chat GPT and the adoption of it. And so trying to get all these stakeholders on the same page of how much risk is too much risk, we're not going to take zero risk and how are we going to mitigate these different ones along with someone comes to you halfway through the project and in the middle of the night they had a dream and this horrible thing might that they hadn't thought of and how are we managing these existential risks and making sure that they don't arise to?

Speaker 1 ([00:23:54](#)):

I think that can be one of the hardest pieces, kind of keeping a project on track through all of those anticipated and anticipated risks.

Speaker 3 ([00:24:04](#)):

Yeah, no, that's really insightful. I think you brought up a good point, which leads to my next question. Between working at startups versus working at big companies who are on the frontier, give it Amazon or Google or Microsoft for that matter. What do you think is the difference in the preparation or difference in, or is there a difference for an EIPM who would work in a startup versus a big tech with some of the aspects that you called out which are critical for an EIPM?

Speaker 1 ([00:24:45](#)):

Yeah, I would make a bigger distinction between whether you're looking at a PM role where you're building something consumer facing, whether it's B two B or B two C, something where you're just looking to leverage existing models and capabilities. And a lot of startups, that's generally what they're doing. They might be doing some fine tuning, they might be doing some engineering, creating mostly engineering systems that interact with these models, but generally they're not doing a lot of first principles building foundation models from scratch. And that's very different from if you are doing more deep tech AI PM roles and those often you'll find you're in those roles, your customers are developers or data scientists, a more technical customer. So it's tough because you asked about startups versus larger fang type companies, and I hate to generalize this isn't always true, but largely a lot of the startups are that first one where they're looking more to leverage the technology, whereas a lot of the larger companies are building more platforms and things that are a little more deep tech, not always the case.

Speaker 1 ([00:26:07](#)):

You may definitely find more consumer facing at big companies and there are deep tech startups. So I think in the first case where you're leveraging AI capabilities, keeping on top of what are the capabilities, what are the ways that there's more and more strategic engineering approaches to mitigate those capabilities, what are the legal and responsible AI risks that we are taking on versus the platforms are taking on? For example, Microsoft and OpenAI has said that they'll take on copyright issue risks if you use their platform. So keeping close tabs on what the industry announcements are and how to do a lot of experimentation between weighing the pros and cons of different platforms is more important for those kinds of roles. Whereas for deep tech, I hate to call them more technical because I really don't like that this trend we're seeing of requiring computer science degrees for this role all over the place.

Speaker 1 ([00:27:11](#)):

But I would say that if I'm hiring for that kind of role, I want to see a PM who does have deep empathy, deep understanding of data scientists or engineering users, that's going to be very hard for you to convince me if you've never worked really tightly with data scientists and engineers alongside of them at least, and really understanding well their process, their concerns, what keeps them up at night. So that's where just that familiarity with those teams and what they're doing just a little bit deeper is important. And then again, it's less about understanding that broader industry, who are all the players? What are my different options to leverage and more understanding, hey, what is our key advantage compared to what else is out there? What mode are we building to be able to really accelerate the value we can create that helps the messaging as well as helping give the tech team the guidance they need for understanding where to focus.

Speaker 3 ([00:28:15](#)):

That's amazingly insightful. I think you very clearly called out the distinction and distinction there at the one level higher as such, and any frameworks or tools that you could share for a person to be a more successful AI product manager or a product leader per se. I know a lot of times product management just becomes frameworks. Hopefully there's something that's very near and dear to you that is really helpful versus just yet another framework kind of scenario.

Speaker 1 ([00:28:49](#)):

Totally. So from the strategy perspective, I'd love to share a book. There's a book by Kafu Lee, formerly head of Google China. It's called AI Superpowers. And that book, even though it's from 2017 oldie but a goodie, it is much more big picture. But if you're trying to do strategy and thinking about how do I build moats in this scenario, it does a great job of both giving a nice business facing intro to deep learning machine learning, as well as calling out the difference between how Silicon Valley approaches innovation versus the approach in China. And I do think we'll see a lot of things pivoting towards more of the China approach because we can no longer make this distinction just purely on technology. For a lot of startups, we've got a lot of AI ML startups where the distinction isn't tech, we're all just using some underlying tech.

Speaker 1 ([00:29:54](#)):

You may have a technical technological value add that you've developed, but a lot of the time the value adds are going to be things like developing specialized access to a market or vertical integrations with businesses that interact non digitally and things like that. So I love that book because it called out that in China, the startup ecosystem has been so competitive for so long they'd had to move away from these technical or usability advantages and had to go that route. So it's really inspiring to read that from a perspective of thinking about what are the more human ways I could build an advantage as well as approaching this from the technical side. So it's not a framework, but I do love this book. And then I do have a framework to share. Always got a, it's a product podcast, right? Absolutely.

Speaker 1 ([00:30:49](#)):

One of my favorites, it comes from a book called Weapons of Math Destruction. It's available on Amazon, and she was a data scientist for years and calls up a bunch of different scenarios or unintended effects on biases and systems that were developed specifically to have, let's get all those biased humans out of the decision-making loop and leave it to systems. But at the end of the book, she has a great framework for risk management around identifying all your stakeholders, so like a stakeholder assessment and really looking broadly at not just different user groups, you want to make sure protected, but the developers of the system, the data annotators who are providing evaluation data back to you about how well your model is performing, the



climate and society at large democracy, like each of these things, is there possible positive effects? Are there possible negative effects?

Speaker 1 ([00:31:52](#)):

And from that you can build your first risk register. So I like just having a spreadsheet where I'm tracking, Hey, we identified all of these risks, we did that exercise, we're going to manage the top ones that come above a certain bar. You can't necessarily manage everything that anyone could dream up might happen on a bad day. And the process around having an open risk register that continually is updated and viewed so that stakeholders can keep an eye on, Hey, where are we with this risk? Am I the first one to come up with this risk I had in the middle of the night last night? And it just gives the team a lot of confidence that there's a place to be heard. If they do have risks that are coming up, you have a lot of transparency on how they're being handled. So that idea of a risk register is really one of my favorite things to use.

Speaker 3 ([00:32:45](#)):

Thank you for that. I think, yeah, those two books will be next on my card for the reading.