

Stanford eCorner

Challenges and Joys of Hardware

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Alexandra Zatarain, co-founder and VP of brand and marketing at Eight Sleep, describes how Eight Sleep approaches developing new products as a hardware-focused company. She observes that it is harder to raise money for hardware, but building something people can hold is a thrill.



Transcript

Speaker Hi Alexandra.. 00:00:04,170 I have a question on the release cycles.. I think you mentioned that they were 12 to 18 months, and at first I thought that was really long, but then I remembered it's a physical product and that's really fast.. So I was wondering, can you walk us through the stages of those 12 to 18 months? What's usually happening along the way? - Yes, it's a great question.. 00:00:26,730 We just released something a couple of weeks ago, which is the Pod 4 and Pod 4 Ultra.. It's the first time that we launched two products at the same time and what that looks like, so I think that one was around like, 15 months.. And where we start is what is the problem we're trying to solve? So as a mission-driven company, we measure our success and our ability to help people sleep better.. So then we think, okay, what is the next problem that we can solve for sleep? And sometimes that means that we just want to make our current product better because maybe there's something about our current product that is not hitting the mark.. For example, it's not quiet enough and it's really important for the product to be silent because noise disrupts your sleep.. Okay, let's solve that, great..

That's something we wanna tackle with the next product iteration between Pod 3 and Pod 4.. Sometimes it's like hey, what if we actually solved snoring, which was a new feature that we just released, right? And so we basically have these conversations at the executive level, where we have the representation of Head of R & D and Head of Hardware and Software and myself and CEO and Ops, right? And so like there's like, basically every area of the business represented and we brainstorm about all these ideas.. A lot of times comes from Matteo.. And I do think it's a big part of the role of the CEO, of like, being the person who's like, spending their time thinking about that vision and the potential and all that.. And then he like, throws these ideas and then we're all like, reacting and like, figuring out what's doable and all that.. And each person brings their perspective, right? So it's important to say R & D says, here's what's possible.. Can we actually detect snoring with a certain level of accuracy with the sensors that we have, which are non-wearables? Can we actually mitigate snoring with an adjustable base? And how do we validate that? And me, I'm thinking, well, what is going to be an interesting story to position to the market to make money off of these products? And that kicks off then the journey of what usually starts through hardware.. So hardware takes the longest time.. So we have our hardware team based in San Francisco and then we have our team in China that manages also all of our vendors and suppliers for manufacturing.. And so then that's like, sort of our larger hardware team that kicks off the work..

Like, they're the first ones to get to action because their timelines are really long.. And what happens is that they first

build initial prototypes.. So once the team has concepted an idea of like, here's what the potential solutions could be, right? They all, like, all the engineers get together and say like, here's how we could solve snoring and here's how we could make the product more silent and more comfortable and whatnot.. They get to work and they start building prototypes.. And what actually takes long in this process is the part where you're building a prototype, testing it, and then finding things to work on and then building the next one.. And so that is one of the things that at Eight Sleep we've gotten really good at, compared to most companies, is that we do a lot of those iterations really quickly.. And it's probably because we just maintain this approach as a startup of just, just keep iterating, just keep going.. And we're very, very nimble and just like, very agile in how we make those iterations, where we're not looking for perfection in every one of those.. We're looking to validate key points about the product.. And so, you know, the normal development cycle of hardware, then you'll have the different milestones that are the big ones..

Like you have, you know, your prototype that looks like it, your product type that works like it, your prototype that both looks and works, and then you have your prototype that's actually manufacturable.. And so you go through those typical milestones and then at some point you also kick off of course, all of the firmware development and then all of this part around software and then all the part around what the user will see in the interaction with the app.. - Alexandra, thank you for that.. 00:04:07,020 And can I just ask a follow up question, which is that many VC's tell founders to stay away from hardware because of the distribution challenges, the lowered margins, the higher capital intensity.. What's your view? Would you do a hardware company again, if you could choose between a hardware or a pure software alternative? - I love hardware.. 00:04:31,100 I love it because I think there's such a thrill from building something that people receive at home and a box and touch and put in their room and get to use every day.. Like, I think that's the biggest gift that this whole journey has given me, even because as a founder, you get to define so many aspects of this product, right? So if any of you has a pod at home like that, that color and the design and whether you like it or not and that packaging, you can, you can blame me, right? Like, it's so amazing to have that influence and so I really love it.. Now do I wish the investor community was much more open to supporting it? Because it is definitely harder to raise money in hardware.. There's fewer VCs and investors willing to back it because few of them understand it or have been through it.. So that is the difficult part, but I also think that you have to go into that journey with that understanding that it's gonna be harder..

So figuring out your unit economics earlier is pretty key, compared to a business, you know, in FinTech or now in AI, where they're going to be throwing money more easily than you are.. So that's always been a harder challenge for us, even though we've raised a lot of money, it's definitely been much more difficult than if we were just a software company...