URL: https://ecorner.stanford.edu/clips/deep-tech-startup-pitfalls/

Michelle Lee, CEO of Medra, observes that robotics and deep tech startups that fail tend to build technology without knowing the problem they're trying to solve, or tech that can't be scaled up or generalized.

Transcript

- I wanna go through some of the pitfalls 00:00:05,100 with doing a deep tech startup and get your responses or advice.. Before we talked about how the way that you got to conviction on your time was with customer validation as one point, that a customer signed a contract just with the pain point and the vision without even the product being built.. Many robotics companies start that way, but then they end that way too.. They end as just consulting businesses where you basically find one customer or a few customers that really need the product and because the margins are so low, it becomes a services business that doesn't scale.. Can you speak to that? Is that a valid concern? And if so, can you speak to your thoughts on that? - Yeah, so I think there are two pitfalls I see 00:00:51,930 in a lot of robotics and deep tech companies.. The first is what you said, which is how do you actually avoid becoming just another basically venture-subsidized consulting firm with really, really smart people? And really what I did was I looked at a lot of robotics companies, some that have succeeded, some that have failed and really worked backwards, how did they fail and why did they fail? And the key thing of why robotics companies have failed is because they don't have a technology that can generalize.. They can't actually scale up their technology.. If they want more people to use the system, they basically have to hire more people to kind of do that consulting service.. And so, when I was thinking about what can I build at Medra, the first thing I thought is, "Is this gonna be scalable and generalizable?" And scalability and generalizability is not something you can get day one.. It's something that you have to build technology towards..

But as a team and a company, we have that in mind of how can we actually scale up into something that is going to be able to help, if we have new customers, it's going to take a very minimal amount of time to help them get set up with a new system.. But I think a second pitfall I actually see from deep tech companies and robotics company is not starting out with wanting to just build the technology without knowing what problem you're actually trying to solve.. And maybe even building technology for the sake of building technology.. Like, "Wow, wouldn't it be so cool if we have a robot that can do dot, dot, dot," rather than saying, "Is this actually going to solve a problem that's out there?" So for me, finding that customer to say, "Hey, I actually really want this." And using that as a north star of like, "Hey, we could build this product that the customers actually really want and really help them solve their problems." That has really guided us to be able to be able to actually build the right thing for our customers...