

URL: <https://stvp.stanford.edu/clips/startup-opportunities-in-ai>

Andrew Ng, managing general partner at AI Fund, shares his approach to finding good AI startup opportunities. While some AI products will be fads, he says, emerging technology provides opportunities to build long-term, valuable franchises.



Transcript

Andrew How many of you remember, Lensa? 00:00:04,440 Raise your hand if you do.. Wow.. Almost no one.. That's fascinating.. So, Lensa's revenues took off like that, through last December.. It was this app, that could let you upload a few pictures of yourself and draw a cool picture of you, as an astronaut or a scientist or something.. And it was a really good, really hot product until last December, after which its revenues did that.. And I think that's because Lensa, was one of what will probably turn out to be multiple thin software layers, built on top of someone else's very powerful API.. That was a good idea.. People liked it, but it wasn't a long-term defensible business..

And when I think about generative AI as a developer platform, I'm reminded of when, you know, Steve Jobs gave us this phone, right? And shortly after, someone wrote an app that I paid 1.99 for, to do this, to turn the phone into a flashlight.. And this was also a good idea.. It was a great product, but it just was not a defensible business either because it was a very thin software layer, built on top of someone else's very powerful development platform.. But in the same way, after we got the iPhone, after we got the smartphone, someone else figured out how to build Uber, Airbnb and Tinder, much longer term, defensible, very valuable businesses, that are still standing the test of time.. And I think what those opportunities as well, to build long-term valuable franchises, businesses on top of generative AI.. So, where, where are the opportunities? So, I felt, I, I feel I felt years ago, but even more strongly now, that because of emerging AI technology, there are a lot of projects that are now possible that were not possible.. You know, one or a handful of years ago, and I wound up starting AI Fund, which is a venture studio, that sequentially works of entrepreneurs to start companies.. We actually average about one startup a month now, because I felt, I previously, as Ravi mentioned previously, I had led AI teams in Google and Baidu and even and, and having led AI teams in big tech, I couldn't see how it could possibly operate a team, in a big tech company to pursue the very diverse, very different sets of opportunities that I saw and, and wanted to pursue.. And starting different startups to pursue those valuable projects seem more efficient than having one company, even the big tech company go after such a large set of resources.. But having said that, I think AI and generative AI also offers a lot of opportunities for incumbent companies, which often have a distribution advantage, right? Where exactly are the opportunities? So, this is what I think of as the AI stack..

At the lowest level is the hardware layer, very valuable, but also very capital intensive needs a lot of resources to build and very concentrated.. So, I'm sure there'll be valuable starters built there, but I personally don't play that, because of how capital intensive and how concentrated it is.. There's a cloud infrastructure there, also very capital intensive, very

concentrated, very valuable.. But at least when I built startups, I tend not to play there.. The other layer that's interesting, is the developer tooling layer.. So, what you just saw me do, was use OpenAI as a developer tool.. And I see the space as hyper, hyper competitive, look at all the startups chasing open AI, but there will be some mega winners.. So, whereas incumbents have a startup kind of a distribution advantage, I think for many startups, having a technology advantage may give you a best shot at doing something meaningful there.. So, I personally tend to play it here, only when we think we have a technology advantage.. 'cause that buys us a better chance to be, to become one of the huge winners..

And then, with most ways of technology innovation, lot of media attention, social media, what people tend to talk about is the tooling, the technology layer.. There's one other layer, that I think has gotta be even more valuable, and that's the application layer.. Because in many ways the technology for the infra and tooling layer to be successful, applications need to be built on top of them, that generate even more revenue, so that, they can afford to play, the infrastructure layer.. And what I'm seeing is that, there are a lot of opportunities at the application layer, where the intensity of competition is, is not, frankly, not nearly as high..