

The Embarrassing Truth About Billion-Dollar AI Ideas | a16z Partner Anish Acharya

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SUMMARY

Anish Acharya, a general partner at A16Z, discusses the evolving landscape of startups in the AI era, emphasizing the importance of technical skills, adaptability, and understanding market needs. He highlights the significance of being a technology-forward founder and the need for startups to create meaningful products that resonate with users, rather than merely relying on advanced technology.

- The emotional response to advancements in AI models can indicate a startup's viability; founders should be excited by improvements rather than threatened.*
- Successful startups leverage technical skills as a competitive advantage, but this advantage is shifting towards product and user experience over time.*
- Founders should focus on building a strong product-market fit and be willing to iterate based on user feedback and market demands.*
- The concept of "earned secrets" is crucial; experienced founders often have unique insights that can lead to successful ventures.*
- Network effects remain a powerful moat for startups, yet many founders overlook this potential in their business models.*
- The landscape for startup founders has expanded, with both younger and older entrepreneurs finding success, each bringing different strengths to the table.*
- The future of technology is expected to enhance productivity while fostering deeper human connections, leading to a balance of extreme technology and humanity.*

How would you say you really differentiate between a founder versus something which could be like OpenAI just made an update and now your startup doesn't seem to exist anymore? >> So here's a really simple test which is are you happy or sad when the models get better? And I think that if you're sad when the models get better because you've done some really sophisticated engineering work that leapfrogs you that takes an existing model that has a sort of limit and a capability and you kind of build around those limits. Because what typically happens is you do all this engineering work and then the next big model release comes out and it leapfrogs you.

>> Hi everyone, welcome back to my podcast. Today I'm super excited to sit down with Anish Acharya who's a general partner here at A16Z and I can't be more excited to pick his brain about everything AI everything startups and I'm sure he has a lot of insights around some really cool startups that he's working with. So he's going to tell us about what startups are working on, what does this wave really lead us to in the near future and what should you be looking out for.

>> Thanks for having me >> Anish. I think like I should just get started with the most important thing right like you have seen this entire wave moving from traditional SAS to at one point data science as a service and things just getting layering up one on top of the other and now we are at a point where model as a service or like intelligence as a service is also a thing. >> Mhm. Throughout all of this wave, what would you say is been something consistent? Even though there's like change in technology, there's change in cost and ownership and IP, everything is like layered across differently, but what would you say is a consistent underlying factor?

>> Yeah. >> Of what makes a successful startup 20 years ago and in the AI era? >> Yeah. I mean, this is such an important time in the product cycle. So, we've had all these product cycles over the years as you mentioned, right? Of course, we had, you know, PC, we had internet, we had mobile, we've had these small cycles like fintech and crypto. and now we've got the sort of mother of all cycles with machine intelligence. I think the thing that has been consistent through all those product cycles is that being more technical as a competitive advantage. And I think the first, you know, call it 1 3 5 years of a product cycle, if you think of how the product cycles mature, it's like think of the light bulb. You know, when the light bulb was first invented, it's really hard technology problem. It's like how do you actually even invent make a light bulb? How do we create artificial light?

So, the people who are most technical are the ones who have this competitive advantage because they're the only ones that know the kind of the secret recipe and have explored all the kind of technical edges to be able to create this important invention of the light bulb. And then after some years, the sort of knowledge of how to create the light bulb becomes diffused and most engineers and technologists know how to make a light bulb. Then the leverage kind of moves from engineering and technology to product. It's like what kind of light bulb do you want? How many watts do you want? Would you like a beautiful colored light bulb? So now technology is a commodity. Product actually has leverage over time. Product becomes a commodity. Marketing has leverage and that's how these product cycles tend to mature. So I think the thing that has been consistent over the last three years is that being more technology forward, more technology interested, building better technology intuition has advantaged you as a founder in the AI era.

>> Something that you mentioned is very important which is technical skill set as a mode. >> Mhm. But I feel with all the AI assisted coding, the build part is become really cheap. >> Yeah. >> It's become really fast and it's become really easy for people who have never touched code a day in their life. >> That's right. Yeah. >> So I'm just thinking if that build part can the cycle of building can go from a year long to two weeks or even like hey I built this overnight.

>> Yeah. What are the things that startup founders should be focusing on to build a strong mode for themselves? >> Yeah, I mean there's a few questions in there, but number one, when I say being more technical, I'm not talking about syntax. You know, I think we all agree knowing more syntax was never really a competitive advantage, but it certainly isn't today. I think a lot about technology intuition, which is a combination of sort of curiosity and depth of exploration. It's really important that technologists and engineers use all the different technologies and understand their shapes and their trade-offs. You know, for example, for the last week, I've been obsessed with GLM52. I don't know if you've used it, the new ZI model. It's awesome. it's open weight,

which has all these crazy implications for the ecosystem. And if you use it, it's sort of got the competence of 55, with the personality of 48, which I know is a weird like vibes thing to say, but if you use it, you can kind of feel it. So, I think that is really important. I think the other thing that's important is just going deep on some of these personal projects or some of these professional projects so that you can kind of explore where the limit is. And you know these days it's very hard to find the limit. So I think as a technology founder and as a technologist I certainly wouldn't be despondent and say oh my god I used to have this competitive advantage because only I knew how to program and now essentially the whole world knows how to program.

Like no there's still a lot of sort expressions of technical advantage that aren't about syntax and programming. As for moes, look, I think moes really matter. but I think a moat is something that you kind of discover and earn. I think it's very hard just like coming up with a perfect product idea. I mean, you know this, you're building a company now. It's hard to just go into the lab. This is like a fantasy. You go to the lab, you're like, I'm going to come up with this idea and then you think about it and you go hiking maybe and you have a conversation over a bottle of wine and oh my god, voila, there's the idea and it's the right idea and you build a billion dollar. Like, of course, that's not how it works. you know, you make all these terrible assumptions and you don't know which ones are terrible and great and you discover by execution and shipping and selling. And the same thing is true of moes. So, I think you have to have a moat. But to begin to actually discover a moat, you've just got to start shipping something that people want. And that the shape of failure I more often see is a perfect plan with a terrible starting point >> versus a perfect starting point with no like ability to develop a plan.

>> I absolutely love that. Like it it all comes down to who's more resilient and who's able to get into the uncharted territories to figure out what that mode could be for them. >> Totally. Totally. And look, there are some modes right now that are really not explored. Network effects, you know, network effect is the gold standard of all modes. It's still as good as ever. If you look at Instagram or Tik Tok or any of these products, their moat was never that it was so hard to build Insta, right? It's not self-driving cars. It's Instagram. Yeah.

>> But they have this network effect. So like that is something that's just hiding in plain sight. Why are there not more consumer and AI founders broadly building network effects businesses, marketplace businesses? I don't know. >> Yeah. No, I I absolutely love that. Anish, I'm sure like you're speaking with 100% of the founders today who are using AI in their product. Yes. >> It's either AI powered, AI assisted, AI. It it has to have AI in there.

>> Yeah. So how would you say you really differentiate between a founder who truly is building something which is going to stay long? Yeah. >> Long enough versus something which could be like yeah open AI just made an update and now your startup doesn't seem to exist anymore. >> Doesn't seem to exist. so a few things. So here's a really simple test which is are you happy or sad when the models get better? And I think that if you're sad when the models get better because you've done some really sophisticated engineering work that leapfrogs you that takes an existing model that has a sort of limit and a capability and you kind of build around those limits. I think that's a very challenging place to sit in the ecosystem because what typically happens is you do all this engineering work and then the next big model release comes out and it leapfrogs you and now you not only have a sort of offering problem but you also have this weird cultural problem in your company because

you're like the thing that we worked on and slaved away at and we're very proud of is now irrelevant. It's very hard to just delete all the code and start over.

So I think this question of happy or sad when the model gets better is a good litmus test. My more intellectual framing of this is can you be a point of economic diffusion for model progress into an industry segment? You know, so if you look at an ind industry segment credit unions, >> you know, they're not the most sophisticated technology buyer. They don't have huge engineering teams on staff or really even much of an IT team.

So they actually need the help of industry and application layer companies to price productize package the intelligence primitive such that they can actually use it productively. You know if you went to them 15 years ago and said here's cloud here's AWS. Yeah >> okay now you have cloud go build stuff like of course that's not sufficient. They need a lot of stuff on top of that primitive. So I think in the same way most industries in the world are going to need the primitive to be delivered to them by application layer companies. And if you can be one of those companies and if you can be a very direct proxy, i.e.

model gets twice as good, customer gets twice as much value, you're in the very best position. >> Yeah. That's the harness that you have to build with. >> That's right. I mean, there's a harness in a in a specific and then there's just broadly how can you kind of be a harness for an industry segment. >> Industry segment. Yeah, I absolutely like that. And how how would you say the trend has changed because you're speaking with so many startups who are trying to pitch themselves that hey help us help us like build greater and better.

>> What would you say is like your litmus test to figure out that hey like these are the general patterns of the startups that we want to invest in versus not. And the second part of this question is has this changed has this changed like comparing to 2015 versus 2026. >> How much of that checklist for you has changed? >> That's a great question. I think that most of the things that we have looked for are evergreen. You know who are founders who've got an irrational connection to the problem at hand because as you know often building a startup is an irrational exercise. is you know by the statistics most fail and you know your probably highest expected value of of cash in the next 12 months is going back to Google. So it's a fundamentally irrational activity. So you need a fundamentally irrational connection to the problem at hand as a founder. You know are they deeply technical and I say technical in a broad way. You know you can be technical as a programmer but you can also be technical in your knowledge of the history of financial services and all the mistakes that have been made.

and then three do they kind of have evidence that their assumptions are playing out? And I think that is the part where we hold people to a higher bar than we ever have had before. Because in the old days, I mean, if you look 30 years ago, you needed to buy servers to do anything. If you look 10 years ago, you needed to be technical or have a technical co-founder. And there was just a limit on how much one person could do or a small team could do. But now, there's really no limit. Seeing a team that has no prototype, that isn't almost already shipping before they're even talking to us is usually a red flag. And then the best teams of all are not only shipping a lot, they're sort of I don't know if they're changing their mind, but they're refining their assumptions very very rapidly. Which is why for me it's really important to meet teams twice. Like you know, you meet them once, it's

a data point. You meet them twice, it's a trend.

>> and I think we expect the kind of slope of the line to be sharper than ever. >> That's that's very cool. And I feel like you have a very unique insight into what's going to be the next cursor and what's going to be the next Facebook. You know you know you know that right? >> Yeah >> because you are so deep into the weeds of such early startups >> that I feel even the googles and the open of the world who are building the foundational model or like aka the highest intelligent model >> is still the foundational layer at the end of the day. Businesses are the applications businesses are what end users are going to be using and you have the best insight into what that's going to look like. So, do you want to spill some beans on where are you seeing the trend?

>> What are the good ideas and bad ideas? >> What are some of the good ideas and bad ideas? >> I mean, the the tricky characteristic of the good ideas is they tend to look like bad ideas initially. >> Uhhuh. >> You know, as Chris Dixon famously said, and our job is to find the good ideas that sound like bad ideas, instead of just the bad ideas that sound like bad ideas. And if you think of both Facebook and cursor, those are two interesting ones you mentioned. You know, Facebook was criticized over and over and over again. In fact, DST did a billion-dollar evaluation around in Facebook many years ago and they just like, you know, there was so much ink spilled as they say on how the price made no sense. Facebook had no business model. They would never make money. They were serving broke college kids. It was just it was criticized to the moon.

>> And then they had an IPO that didn't go that well. And of course they've proven themselves now to be a part of the mag seven and one of the most important companies in the world. So Facebook wasn't an obvious idea for a long time and even when it was working it was an obviously good business. You know curser right up until the acquisition was announced was constantly criticized as a rapper a rapper a rapper they're cooked claude code this that.

>> So there's just been so much criticism of a lot of the best companies that I think the most important sort of attribute of a founder is willingness to be embarrassed. And I think, by the way, this is a little more true in consumer than enterprise. Because at least in enterprise, you can explain to people what you do and what's the problem you're solving and why it's important. Consumer just sounds ridiculous to your friends, your family, to your partner, even to yourself sometimes. It's very embarrassing until it works. And then it's the most obvious thing in the world. You know, Snap was a, you know, a sexing photo thing. Why would you ever want your photos to disappear? That's ridiculous. They're so precious. Until it was like, of course we do disappearing photos. That's the most commodity feature idea in the world.

so it's it's a funny emotional journey for founders. So I don't know what the next big idea is, but I do think the most interesting ones are the ones that are a little embarrassing to explore. Also think, by the way, as a young founder, this is a huge competitive advantage against big companies because what are big companies? They're made up of sort of managers and executives and they have a track record of success and that means that they're actually culturally restricted in the types of risks they can take. You know, for example, companion products are so compelling. If you actually wanted to ship, let's say you had Gmail, but it had, you know, an embedded companion who could talk to you and banter with you and maybe flirt with you. Imagine trying to ship that

product at Google. Yeah.

>> A thousand committees and lawyers and absolutely would just never never ship. And even more so at Apple yet, as a startup, if you're like, hey, I'm going to build an inbox that flirts with you. It's like, okay, that sounds weird. It's a little embarrassing to explain to people, but if it's a good product idea, I just think it's harder for incumbents to replicate than you may think. >> This is just my observation. I still feel a lot of the products that I use as a user again like if I just turn off my engineer lens and just like look at that product as a user >> more than the technical novelty I feel I stick to a product just based on the user experience >> it's just like that trivial and I feel that's one of the plays where I have seen some really top quench companies like not taking names >> are so piggybacking on the novelty or like hey this is going to make us look so smart, but they are missing out on the point of like, okay, but can a 20-year-old who has never coded a day in their life, can you can they use this?

Can a 40-year-old use this product? Yeah. >> And that's what's important when it comes to a consumer product because you are not building that product for the smartest people in the world. You are building that product for people in the world. >> Yes. Yes. >> Yeah. And there's there's intelligence, but there's also agency. Yeah. >> You know, Sam and Elon are the two highest agency people in the world. Like to them the blinking cursor of what do you want is actually the optimal user interface because they know exactly what they want. Every part of their lives are sort of prescribed by having a very clear idea of what they want. I think for the average person they don't know what they want. And when you talk to someone like Eugenia who founded Replica and Wabby she'll tell you that most people want to spend time not save time which is that's a profound insight and it's very true. You know most people are sitting there saying hey what do I do with my extra time? And if you think about most consumer experiences that are very popular, they're lean-back experiences. You know, your Tik Toks, your Insta, certainly gaming, they're not sort of lean-in experiences where you're actively engaging.

>> So, I think that you're right, interfaces are super underexplored and, you know, if chat ends up being the kind of final interface, I'll I'll eat my hat. You know, there's no way that that's it. >> No, that's that's a great that's a great insight. Anish, here's a question and maybe like part of my personal interest as well. I am seeing that a lot of the times startup used to be something which was coming out of universities. These young kids who have like high risk taking appetite are the ones who are coming out and like building companies and like taking that leap. But >> in the last 5 years the number of people who are in their 40s and 50s wanting to take that leap has also increased >> totally >> probably because of cost of building is cheaper now, right? So for them to like continue their 9 to5 and start building something on the side is not as daunting or at least not as expensive.

>> Yeah. >> So what would you say is the difference in mindset that people should have if they are building a startup in their early 20s versus somebody who's building their startup in like their late 40s? >> Oo that's a good question. Well one I would say that there's actually a long history of people in their 40s and 50s building great companies. So the WhatsApp founders are probably the best examples. you know, I think they were both over 40 or at least late 30s when they started WhatsApp. And if you think back to the kind of old history, you know, preyc other than some counterex examples like Mark and Dreon, most of the companies were started by people who were experienced business people because you had to trust them with a lot of money, you know, which was of course unsecured and they had to buy servers and they had to do all these things and have business plans and,

you know, know how to throw a suit on. And so there actually has been, I'd say, history has perhaps favored people that have a little bit of experience over the very young college grads. Now, you know, between examples like Mark set with Netscape and of course Y Combinator and now we're seeing even more extreme degree. We met this really capable team a couple of years ago where the founders are 19, 18 and 15. So, we're seeing this generation of very young founders, you know, you'll meet them and they're 15 and they've already exited their first startup and you're like, "Oh my god, what am I doing with my life?"

You know, so >> too late. >> They're so so impressive. but I think the other side of the barbell is really interesting as well because you so much of startups is what we call earned secrets. >> You know, what is something that is a a secret or a non-consensus insight that you know and the way that you develop those non-consensus insights is by experience with the world, you know, and often it's in very obscure domains and those can make the best companies. So, I think the big competitive advantage you have in your 40s and 50s is you possess many of these secrets. Some seem small but maybe the foundation for something big. I think your competitive advantage in your 20s is that you're willing to be embarrassed. You've got nothing to lose.

So I think you end up building different styles of companies. But if I had to pick, I'd say, you know, I think that that the 40 and 50 year olds are maybe underhyped. >> Underhyped. Yeah. >> Yes. Yes. >> Makes me feel slightly better. >> Good. Good. Good. Yes. I I had a parallel question to something that you were mentioning a little bit early on which is around >> how startups are thinking about operationalizing their companies.

>> Yes. >> And I have I have a a personal insight question because I want to learn more about it. >> Okay. >> How much do you feel that companies themselves are AI native? What they're building for the customer is separate but like how much do you think they are themselves AI native? And what do you think about the lean startup mindset? Like how where do you feel that could be successful and where do you feel that no this is where you actually need humans?

>> Yeah. >> And like you need to expand the team and like you need to expand the headcount. >> That's a good question. I don't I can't imagine how you can build a very AI native product without being an AI native team. So because it's all the intuition comes from using the tools. So how can you know what to build if you don't use the tools? So I think you know that's one and the same in my mind. I do think that there are there's more of a fat startup case for fat startups these days because if you're training a model pre-training a model or even post-training a model you need a lot of money.

>> You need GPU capacity and you need to pay these sort of experts who know the dark arts of model training. So I'd say there are more sort of you know well capitalized heavily capitalized seedstage companies than we've ever seen before in history. And then as for when you need a human in the loop, I don't know. It's to me it's some combination of shipping and selling. You know, I think shipping, of course, coding agents are doing the execution, but knowing what to ship. And I think relationships are actually more important than ever.

I think that any headcount you have that's not involved or in shipping or selling, I wonder why you have it. You know, I think it should be minimal to zero. >> I love that. >> Yeah. >> Very tactical advice. Very tactical advice.

So Anish, you have a lot of context now with all your years of experience. Anish today is has way more context than the 20 years. >> Some may have you know left my context window, but yes, I I do have some. Yes, >> let's assume that it's still sitting in your long-term memory. You can fetch it whenever you need.

>> I'll do a tool call if I need to. Yes, >> you can definitely do a tool call to find it. But if you were speaking with a 20-year-old Anish like >> the old self, what would you tell him that hey buddy this is what you need to watch out for? >> I don't know about watch out for but I'll tell you what I would do which is actually the same thing that I tried to do you know and I've been trying to do for my whole career which is the number one most important thing is if you want to be at the edge of an industry and make the highest contribution you have to be in the same place that all the other people with the same intention are. you know, if you want to be in entertainment, you have to be in Los Angeles. If you want to start a hedge fund, like don't start it in Denver, start it in New York. And if you want to be in technology, you just have to be in the Bay Area. And I wish that wasn't true. And I think there's a lot of really cool businesses that get built outside of the Bay Area. But I just think it's a competitive advantage to be here, especially at a moment like this.

So, I'd say either come here or get as close as possible. You know, for me, after graduating, the closest I could get was going to Amazon in 2003, which is far away from friends and family and everything I knew. It was not a high status tech job. They sold books and CDs online. You know, my my parents would sometimes tell people I worked at a bookstore, which was technically true, but ridiculous. But I made my way to the Bay Area and I never left and I never will leave. so that's one really important thing. And I think the second thing is just start shipping because the way you distinguish yourself in our community, as you know, is by shipping.

And that's the most special magical thing about our community. Our whole community is this process of turning outsiders into insiders. And the way that it works is some combination of ambition and execution. So it's actually a very clear path. You just have to be willing to live an SF and have you know not the tier one dating life, not the tier one sort of cultural life, not the, you know, you're going to sacrifice everything else except doing the best work of your career and your life. And if you're up for that, then there's no other choice.

>> Yeah. I can't like more strongly agree with you on that that there is no better place to be in if you're remotely even interested in tech or AI than Bay Area. Yes. >> I I feel a lot of times when I'm having this discussion with people who are in like other cities, their argument is around the cost of living and I'm like >> you need to search up this term called opportunity cost because it's >> the ceiling is just not there. it's like so high that you can't even see the ceiling of what you can achieve in a place like Bay Area and like just being around people.

>> there are like I see like founders so Jimmy >> Yeah, >> I met Jimmy in New York because I had written a blog about Claude Shannon >> and he just came across my blog. >> Cool. >> And he was like, "Hey, would love to meet and discuss like you know what you're doing." And >> the kind of connections that I have made because of my network in B area is just incredible. like I wouldn't have even remotely thought of like getting deep into the weeds of that network. And >> yeah, it's just like the ceiling is so high you can't even see the ceiling in Bay Area. That's that's what I I tell people.

>> I agree with that. And you know, for all the people who are listening that can't be in the Bay Area for whatever reason, you know, there there's I I won't and I can't. And for some people, you just can't. I was born in Canada and you know, the visa situation is very complicated and I know that's true for a lot of people around the world. I think you actually can do more to immerse yourself in Silicon Valley culture than ever before. You know, 20 years ago, there was a very small number of blogs, if any, because it was sort of considered a faux pod or write down what you knew and do marketing as other VCs called it until Mark and Ben changed the game. There's a small number of people like Chris Dixon and Naval that were writing a little bit about these things, but you really had to be here to know 90% of it. And now if you're pretty intentional about X and you're willing to ship things in public and you're willing to sort of tune into a lot of the new media work that people like you are doing, you can actually pick up on a lot of the signal. So it's certainly not hopeless if you're not here. But I think if you can be here, it's a privilege to be here. Like make it happen.

>> 100%. I I absolutely love that. So Anish, I just want to like end with one last thing which is >> all of us have a laundry list of items on what we predict is going to be the future. what the future is going to look like 10 years from now based on whatever data points we have seen so far. It is it is a long shot in many ways. But I have a laundry list of items. I'm sure you have a laundry list of items. Just spill some of those things.

>> What the future is going to be like. I I predict extreme technology and extreme humanity. >> Okay. What does that mean? >> Yeah, let me tell you what I mean by that. So I think that our technology time is going to be more productive, more intentional, and more, you know, it's going to feel like Star Trek or Tron or something like that, you know, where you're going to plug in and have a thousand monitors and be doing a thousand things and running a thousand businesses and, you know, it's it's going to be, you know, approaching infinitely levered, I think. and then you're going to detach from that and go outside and put your feet in the grass and chase your children around and it's going to feel like a 1950s Norman Rockwell painting. So I think that to me that's the most exciting thing. I think this dramatic increase in productivity is going to show up through us being more satisfied and of course having higher impact in our intentional digital lives and then being more unstructured and more fulfilled and more really sort of spiritually matured in our asynchronous offline you know family oriented lives.

>> This is this is my favorite question to ask because you mentioned like there's going to be lot more humanity and like lot more technology. Do you think there would be like parts of our brains or like parts of human intelligence which is going to cease to exist because of that increased technology adoption? >> I don't think so. This argument has been made over and over again. You know, are the kids really thinking there was a moral panic about the calculator?

>> Yeah, I think a lot of it is actually a diffusion of specialized knowledge to generalists. If you think of the number of people who understood special relativity as a concept, you know, right after Einstein wrote the paper, you could count it on one hand. And then over the last, you know, almost hundred years, I think hundred years, thousands, tens of thousands, hundreds of thousands of university students and professors and experts of course have come to understand special relativity, perhaps millions of people. you know that there's a power in that diffusion because now it becomes a tool even if people are just conceptually familiar with it that they can

incorporate in other types of their thinking. So I think actually it's going to advance our intelligence. Now the shape of it may be a little bit more breath and less people focused on the depth but I don't think that either means that we lose the capability for depth nor do I think it's a net negative on the surface area of our intelligence.

>> Yeah. >> Yeah. >> I love to like use the analogy of like you know reinventing the wheel. Like why would you reinvent the wheel? Because now you're like building the Lamborghini on top of the wheel. Yeah. >> That if you still keep want to like keep the skill of building the wheel then you're just like >> wasting that skill. >> Yeah. Yeah. And it's also the wheel to what end actually you know. there's a there's an interesting book that talks about the sort of history of various societies in different countries and they talk about how in South America because they didn't have animals that could be domesticated the only wheels they had were on children's toys because they couldn't have pack animals. Right?

So the wheel didn't have utility in society and therefore it's like what is the point of actually this invention and it didn't get invented. So with a lot of these things I kind of come back to that which is I think there'll be more interest in it when it has more utility and the way for these things to have more utility is for the knowledge of them to be more broadly dispersed which language models are very good at. So I'm I'm very actually optimistic about the kind of the breadth and depth of our you know collective intellectual surface.

Yeah, I absolutely love the thing that you ended with which is the future is going to look more lot more technology and lot more humanity. >> Yes, >> that's I absolutely love that. >> Well, let's build it together. Thanks for having me. >> Thank you. Thanks a lot, Anish. It was a pleasure.