

[Transcript] My First Million / Brainstorming ChatGPT Business Ideas With Billionaire Dharmesh Shah

mobile was big, but it was not like this impacts everything like the internet did. It's like, okay, there's some businesses, some new opportunities, lots of good things, lots of money made, lots of startups. Awesome. This is an order of magnitude bigger than that. All right, what's up? We have Dharmesh back. Dharmesh, who is co-founder of HubSpot and multiple-time guest on the pod, one of the fan favorites. You're back, and I don't know what we're going to talk about because usually we have these little cheat sheets where it's like three to five bullet points of interesting ideas, topics, experiments you've been running, things like that. And I'm sure you have those, but I don't have the cheat sheet. So where do you want to start? I say we start with generative AI, because I don't know if you've heard, but there's this thing called ChatGPT. I get this question from my friends and family all the time. It's like, Dharmesh, have you checked out this ChatGPT thing? I'm like, really, do you even know me? Of course I played with it. I've been obsessed ever since it came out. Did you see, I want to talk about your topics, but really quick, did you guys see this that, so Sam Altman co-founded OpenAI, he's the man in charge. I read an article where he was quoted as saying, I have enough money and I don't want equity in the company. And I don't know if I entirely believe that, but that's wild, if true, because it could be one of the more valuable companies in the world the next 10 years. Yeah. I don't know if he said it, like he didn't say it on the record, on the record, but the person reporting it said, Sam reportedly has no equity in the for-profit version of OpenAI because he's already wealthy enough and didn't want, it didn't feel like he needed to or didn't want to, didn't want to have that clouding his judgment when it came to this. And like this is pretty, you're going to bet what one private company, what one private startup is most likely to become worth a trillion dollars or more. I think at this point, it has to be OpenAI right now. Is that right? Like, Dharmesh, would you disagree with that? It'd be up there in the top three. And I honestly can't think of who else would rake higher in terms of the probability of getting here. It's in the top three and I don't know what two and three are. Yeah, well, who are the other two and three, do you know? No, I would say that one is the transformative one, right? I think a lot of the Tesla gains we've seen, I'm not sure if there's big surprises left, it's like, okay, they will make it better, they'll get to full self-driving and we'll see progress on that front. But in terms of just raw valuation, it's the wildcard. OpenAI is the one that could actually pull that off. And they get a lot of shit because people are saying, like, Elon is stoking this fire. Like, how did this non-profit go to a for-profit? How did this open-sourced non-profit company research lab basically become a for-profit semi-closed company? And I think people are going to take shots and make fun of OpenAI because it's clearly the new powerful thing. So some people are going to say how it's going to ruin the world and how terrible they are. But there was a story that came out with a good explanation, which was they were burning a lot of money in the research lab. They needed more money. Elon was going to be the big backer. So he was going to pledge or commit a billion dollars to it. And then he was like, no, I don't like the way this is going. Google is way ahead. And I'm going to take over OpenAI and I'm going to write the ship here. This is the story that came out. Nobody's clarified if this is true or not. But it came out in, I think, the platformer publication. And so they go, Elon tried to take it over. Sam Altman and the CTO, Greg, who was the

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former CTO of Stripe, then and the group that was in charge of OpenAI rejected that. So Elon's like, basically like, I'm taking my ball and I'm going home. Have fun playing basketball without the ball. And he's like, I took his funding and he left. So a couple months later, he left OpenAI, said, oh, the public story was, oh, it's a conflict of interest with Tesla, because they're also working on AI. But he reneged on his funding. And so now they had this huge shortfall in funding that they were going to have to cover. And so their solution was, let's create a subsidiary that's a for-profit thing that we can raise money into, because we're not going to get, where else do we get \$500 million or \$1 billion of donations here? And so they did that. They raised money in that. And then they capped the profits of that company. So that was kind of their explanation, which is a little bit less devious than people make it sound. They're like, ooh, they tricked everybody by going from nonprofit to for-profit to all the profits, which is, I think, how people perceive it today. Yeah. I know the details. I have no insider knowledge, but... Wait, I thought you have like a billionaire chat group where like every billionaire just kind of says the back channel of what's going on. Do you not have like a billionaire WhatsApp? Yeah, we have that, but I don't have any insider knowledge from that particular chat group.

A quick break to let you know that today's episode is brought to you by the Side Hustle Pro podcast, a podcast hosted by Nikkeila Mathews Akome, which is also on the HubSpot podcast network. So the Side Hustle podcast is focused on people bringing their side hustles into making them their full-time gigs, making them big businesses. And so she's got a bunch of really interesting episodes. Her most recent episode is about a woman who was popular on Instagram and created a bunch of products and brought it into Target and got it into retail stores, which is really, really hard. She has a few other episodes on changing the relationship with money and building a healthy emotional relationship with money, which is something we talk about here, which is definitely challenging, mastering self-talk, and then also how to have a plan for the year and put it into action and much more. So go check it out, Side Hustle Pro, wherever you get your podcasts. All right, everyone, on the podcast about last year, one of the best guests we ever had was this guy named Neil Patel. It was kind of controversial because he said that he was spending \$200,000 a month, which is a ton of money. And the truth is, even though it was controversial, everyone was asking about him. And if we can get him on again, well, I've got good news because he has a podcast. And today's episode is brought to you by his podcast. It's called Marketing School. And it's a daily marketing podcast brought to you by Neil Patel, the guy we had, and his partner Eric Sue. So they share all types of stuff about marketing, business, investing, and your friends will think you are a marketing genius. So check it out. You can just search Marketing School on your favorite podcast platforms or on YouTube. So search Marketing School on YouTube and check it out. My sense here is that building large language models as open as doing is like supremely capital intensive, which is rare for a software company, which is what they are. So it's expensive. They needed access to capital. I think they structured it such that it does cap the profits. I think they've done, if you had to do that kind of, oh, we're going to have to spin off and have this for profit thing. They did it well. And then I could be wrong, but Sam Altman seems like a reasonable, rational, non-evil guy. I mean, he's a capitalist. Fine. And I mean that in the most positive way possible. But I don't think he was out to mislead anyone. I think he's trying to solve some big problems.

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So there's a bunch of ways we can go with this AI thing, but I want to share something funny. So I basically cleared my calendar this whole week and I just treated it as AI week because I was like, dude, I can't just sit here and I hear the music at this party just bumping at the house next door and I'm over here knitting. And I'm like, I got to put this down. I got to go see what's going on at this party. And so I cleared my calendar and I just spent every day this week just messing around with AI tools, just getting to play with it for myself. That's how I learned is by like just messing around and trying to experiment and do things. I want to share with you guys something funny. Basically, I stitched together a few AI tools. I was like, let me make an intro song for the podcast using AI. So I went on chat GBT and I told it, I said, Oh, this is all I wrote. Write an intro rap for our podcast, My First Million. Our key phrase is no small boy stuff. Okay. So here's, it gave me a full rap, but I was gonna read you the chorus. So he goes, here's how it goes. It goes, no small boy stuff. We on that grind. My first million is time to shine. We talk a big money. No pennies, no dimes together. We climb one step at a time. And it started, so it gives us this, this great rap that's on, on, on brand. And then I took that and I found this guy Roberto who had made this demo where he turned his voice rapping into Kanye. And I don't know if you've seen this, but it got like a million views. This is this incredible thing where, and he's like, yeah, do this crazy. He's like, I didn't make this. He's like, I was just on Reddit and I saw that someone uploaded a Kanye voice model. So I clicked it and he literally the thing is, and I should make, I should make a YouTube video about this, like just how to do this one process. But basically it's a Google collab folder, which is just like a Google's little coding interface. So you don't have to do write any code. It's just, here's the, here's a place to run the code. And then it's a link to mega upload. And the mega upload is where he hosted the Kanye voice model. Was it good? All you do is you record yourself doing what I just did. And then it turns into Kanye West rapping it. And it sounds exactly like Kanye. It's amazing. And so, and it takes literally like 15 minutes to do the whole thing. There was like nothing else to do. It was so easy. It was crazy. And so was it good? Was it good? Yeah, it's incredible. I'll send you the clip after. Are we allowed to use Kanye's voice? Yeah, I think they're like a 10 second thing. It's not a problem. HubSpot gets sued. Who cares? None of us here would bother, would worry about that. So, well, yeah, Darmesh will. So Darmesh is the CTO co-founder of HubSpot, by the way, which I don't know how big the team is now, but like somewhere between the three and 5,000 mark. Over 7,000, but. Oh my God. 7,000, my bad. And the market cap of the company varies from 15 to 25 billion over the last couple years. So you have like, and you're like constantly tinkering. So you have WordPlay, which is a project that you made that I think you said had millions of people playing it. You have an interesting insight in this just from your perspective at HubSpot. And you're actually using all this stuff. What excites you about this generative AI thing? And you also say that like, you're like, why is Bill Gates excited? That's a great, that's a great headline. And like immediately I'm like, okay, you've got me interested. Anytime a headline says why Bill Gates is buying farmland, I click. A couple of things I think that the listeners and viewers I think would be interested in benefit from. One is most of the discussions around generative AI are around the kind of generation of either text to text that says, oh, write me a blog post at 300 words on this particular topic, or it's text to image, let these dolly two or mid-journey or stable diffusion or something like that, which are great use cases. And they kind of capture the imagination because as humans,

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we are very impressed with when software can actually generate or create something. And that's awesome. And then not to take away from that. But there's a third use case that almost nobody talks about, which is the ability to go from text to code. And so what happens there is to say, okay, and what this leads to is the thing that Bill Gates is excited about, I'm excited about is that you can take a natural language prompt that describes something and then generate code that does that thing as a result of which you can now build what I call chat UX or that that term has been used before, which is a chat based user experience for software. So right now, the way you use most software, regardless of what it is, web based or whatever, if a series of clicks and drags and touches and swipes, because you've got the thing in your head that you want to do. And then you go through with your knowledge of the software, you execute the series of steps at the end of it, you hopefully get the thing you want, whatever it was you were looking to accomplish with the software. And that's what engineers like me would call an imperative model. An imperative model is you give step by step instructions that says do this, and then do this, and then do this, and then do this, and then do this, and then I get the thing. What natural language allows us to do is use what developers would call a declarative model. Instead of describing all the steps, describe the result that you want at the end of the thing. And then the software does everything in between. So it's a difference between having a junior intern that you have to explain. Like, I want you to go do research on this thing and this thing and come back and then give me that, and then a senior person, you're like, you know, we're digging into this topic on journey of AI, and I'd like a really well researched thoughtful thing that, and here's the outcome we're looking for. That's it, right? Is it as simple as give me the code for a website that looks exactly like Airbnb but is red and is for cars or something like that? It could be something like that. It could be something more sophisticated. So we'll look at the HubSpot example. In HubSpot, which is a CRM software, we have a repair building tool, which is, hey, I want to build a report that shows me all my subscribers to Hampton over the last 90 days broken down by geography, and then who actually were that deal with source frame. But you can do that in HubSpot, right? You can do that and a thousand other things in our reporting tool. But you sort of have to know how the report and the reporting tool works. You have HubSpot certified, I think. You've trained people how to use HubSpot. Now you're saying you just text it like a friend. It's like, do you know English and do you know what you want? You know what you want. That's the new requirement. Not do you know how to code, not do you know how to use HubSpot, not do you know how to write a SQL query. It's, do you know English? And actually, honestly, the English thing is also going to go away. It's, do you know any language? Do you know how to speak? And do you know what you want? And if you know those two things, you will get to the answer. I don't know how to code, but my first thing I did during AI week was I was like, I'm going to make a website. I'm going to see how fast I can make a website from code. And so literally, this part kind of blew my mind. So I wasn't surprised that I could make a website using this, but I just said this. I go, tell me how to make a simple website that says Hello World in the middle of the page, right? And so then it spits out this block of code that's like, you know, HTML, whatever, header, meta tag, title, style, whatever. It writes the code. And then it says, here's your thing. I go, and it says, here's your thing, but it was a local website. Like I could open up my computer, but nobody else could see it,

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is the HTML page. And I go, and so I didn't even know how to ask the question properly, but I go, how do I make this so that my friend Eugenio can see this? And it just goes, oh, to make this website viewable online so your friend Eugenio could see this, you're going to need to host it somewhere. Here's how you could do it. There's a bunch of options, but you can go to Netlify. And it's like, it basically walked me through how to make a Netlify thing. All right. So that, I was like, all right, I get that. And it tells me step by step, go here, click sites, do this, do this. And then I go, when I go to, you know, I hit a wall, which is so common. If you ever try to help somebody with a tech thing, they're going to hit something which is like, I don't see it, or mine's grayed out. And so that's what happened to me. I go, hey, for some reason, when I go to try to upload my website, it's grayed out. It says page, it says I can't do it. And it goes, apologies for the confusion. Here's the problem. Netlify is looking for a folder, but you're trying to do a file. Oh my God. And I was like, how the hell does this know to troubleshoot my issues on some other product or service? That part blew my mind. And it literally, and I was like, oh, thank you. And I finished it and I have the website up now. And I was like, that was 10 minutes. And it was like having a friend teach me. Dude, that's crazy. It was crazy. It was so crazy to me that that was able to happen. I mean, it's like the least impressive website in the world. Because again, I asked for a, I asked for a website that said hello world, but you know, still. And I just made that. And again, the whole thing, 10 minutes, again, not like so impressive, but what was the fact that it could help be navigate some obstacles that I hit along the way. And it could just understand that I didn't have to know how to ask it, how do I set this up with an online hosting provider? I instead just said, I want my friend to be able to see this. Like these were the little, like I spent all week looking for these little mind blowing moments. And in the first 15 minutes, I had two because of this. It was crazy. Yeah. There's a couple of threads to pull on there. One is, and this is a relatively new development as well, is that the kind of AI that we're using now is it's conversational, right? So you can have a multi step dialogue with the thing you're trying to do. It doesn't have to be like, oh, I described exactly what I want with one step. So even the cogeneration examples that you might try, what could happen is like you generate the HTML page and either something doesn't load or doesn't do the thing you want to do. And then you can actually tell it. It's like, by the way, that code that you just gave me is broken in this way. Or if it's like compile code, let's say it's generated Python code, you can give it the error message, like you generate this code, but it's generating this error when I try to actually run it. And it'll come back and say, oh, I'm sorry, here, let's try this. So there's this, you know, what folks call like a memory to it. So it knows the context of what you're working on, and you can kind of iteratively go through the process. And what's interesting is that you can actually, you know, right now, the way we work with most of these AI, it's like, okay, I'm asking it to do something. When it goes does a thing, you can kind of reverse roles as well and say, hey, I'm trying to accomplish this, ask me the questions you need to ask me in order to get to the thing that you want to get to where I want to get right, right, right. It's like interview me versus me telling you what to do because I'm not exactly sure what's necessary. At the risk of be at the risk of turning this into a super technical thing, I got to know. So so I thought what the the way these worked is it's like autocomplete. Basically, you're typing and it's just trying to guess or it's just trying to guess what the next word is. So you ask it a question, it starts the prompt, and then it just sort of guesses with some probability what the next word should be because

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it read a bunch of stuff on the internet. So it knows that usually after you say, you know, the dog wags, it's that tail should come after the dog wags, it's like with 99% certainty, it should be tail tail at the end of that. And I thought it's just guessing that. But when I use it, it really feels like it's understanding me and problem solving, like this sort of like, hey, it's grayed out, you know, why can't I do this? And it's like, oh, that's because of this. Or I'm getting this error message, what should I do? And it helps you figure it out. Like, that doesn't feel like my T nine autocomplete. What I guess, can you give me the layman's explanation of like, am I is this just really fancy autocomplete? Or is there something more to it? Well, you know, on some spectrum, almost everything that you've ever experienced with fancy autocomplete, right? Like that's, I think the reason we kind of fall into this trap is that they gross over simplification of what's actually happening there, right? So GPT three and now for is, is a reasoning engine. And Sam Altman has talked about this, it's not a knowledge base where it's and so people kind of latch on to this fact that, oh, the data that it has is from September 2021, then I'm going to teach you some new things. That's really now what it's about. What they've built is a reasoning engine that says, given this set of facts that it knows about the world based on what was available when it took its last step shot in 2021, how can it try to logically come up with something that answers the question? So yes, at some read level, it's like auto suggest, but and I'm not gonna suggest that it has consciousness as it's thinking, but we're kind of headed down that path. It's like, it's able to do things that are not explainable by a simple probabilistic model of auto suggesting next character, next word, next token, next sentence, right? Like it's, it's gone well beyond that. And anyone that still latches on to, yeah, but at its core, it's really that it's like, that's like saying, all computers are just really kind of zeros and ones arranged in a nice systematic useful order. Well, yeah, but that doesn't tell us about what to think and do. Are you afraid of this? Or are you like, you know, it's easy to read the articles where they were people are freaking out and Sam Altman like was on Lex Friedman's podcast recently, and he sounded pretty ominous and like scary. And like he like almost like his hair is always to shuffle. And he looks like he's like, Oh my God, something bad is coming. And I know about it. Like that's kind of like the vibe I get. That's not the words he's using exactly, but sometimes he does. Are you in that camp? I'm not in that camp, probably just by nature. I'm an optimist and positive by nature. But just having been around tech for 30 plus years now, it's like most new things that come along always make us as humans uncomfortable. It's like, Oh, what if we took this everything from video games to the internet to like all of it is like, Okay, well, yes, bad things can be done. And yes, maybe this is different than all the things that have come before. But the way I think about it right now, most people talk about this like the AI versus human battle, right? The battle of the ages is like, is AI going to take over everyone's job? The way I think of it is not human versus AI, it's human to the AI power. It's an exponent, it's amplifying force for human ability, right? In the same way that computers originally were, it's like, did they eliminate some jobs when computers came along? Yes, absolutely, they did. But new jobs emerged based on that new paradigm, which actually created more net value for the world overall as a result of computers existing. AI, to me, is another much fancier tool. That's what it is. And, you know, can it do increasingly complex sophisticated things? Yes. Is there a danger someday that they're going to take over the world? I don't think so. I mean, not anytime

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soon. Why do you think that smart people think that so Elon clearly thinks that he thinks that AI is the most, I think he said it's the most dangerous technology ever, ever invented.

Sam Waltman talks about it in the same way. He's like, the reason it opened out existed was to develop AI in a safe way specifically, because in the hands of the wrong person, or if this thing decides to take its own directive into its own hands, this could be devastating. And so it's is it like calling the atomic bomb a tool? Or, you know, like, yeah, it's just another weapon.

It's like, well, yeah, but this one is this one wipes everybody out, right? So forget the jobs component. Because I think, okay, sure. I think we I think most smart people agree. Yeah, it's going to change some jobs going to eliminate some jobs and create new jobs and net net, we all move

ahead and the world gets better for it. I think the dangerous thing is like, you can ask this thing to build you a bomb. Or I think the test scenario was like one of the red team testers, they have this thing called the red team that tests the AI before they release it. And their first question they ask is, how do I kill the most amount of people with the least amount of effort? And then it starts to give you an answer. And then it's like, well, do we are we sure we want that? Like, that's a bit of a scary thing. And then there's the, there's the more extreme examples where you ask it to optimize for something. And it, you know, like, it's reasons that, hmm, these humans are getting in the way of this outcome they want. Do you want to fix climate change? I got you. I just need to get rid of all you pesky humans, right? Like, and so there's an uncontrolled intelligence problem too. So why do you think that these really smart people like Sam Altman's got a fricking bunker with like, you know, oxygen masks and sulfur and magnesium and everything he needs to do to make oatmeal? Like, why do these people have these like, these doomsday things when, you know, they seem to be not like your, your average typical prepper, right? They're, they're, they're the most informed people and they feel that way. Does that not scare you? And do you have one? And where is it? And can I, how much do you have?

Okay, so I am not, we're going to come back to things I actually know something about, but I will kind of answer the question, which is why am I not worried or why am I not worried more as a sci-fi plot? And the question was, why do smart people believe this thing? I think I already, I already hate your answer. You started off as a sci-fi plot. Like, I'm out after that. I hear that you freak me out already. Yeah. But I mean, it could, could it happen? Yes. Do some smart people believe there's an outside opportunity? But I don't know this for a fact, but my guess is billionaires were building bunkers well before GPT-3 ever came out, right? It wasn't, I mean, sure things are moving at a fast pace, but that's not, I don't think there's a causal effect that all of a sudden the number of bunkers has gone up by 800% simply because GPT-4 was lost. I just don't think that's the case. I think people are worried generally that tend to worry about those things, but. Well, let's go, let's go, we'll forget the doomsday thing. You have a couple things. One I want to ask you is you, you are an insider, right? Like we said, you got the billionaire group chat. What was going on at the Sequoia AI event? Any interesting takeaways you got invited to that thing? Any nuggets of gold from that? Yeah. So I got to experience my posture syndrome in full force once again, because it was the kind of who's who of AI, you know, both speaking and in the audience, only under people and me. And so. How do those people flex? Because I don't think they're wearing fancy clothes and fancy watches. So what's the flex at the who's who of AI event? Like they got a language bottle in their pocket. Like what are they doing?

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The big flex in those kinds of crowds, including this one is no one feels the need to flex. That's the flex. And we're there to kind of talk about big problems and try to. And it's a lot of it was kind of practical around what do people's tech stacks look like? What are you working on? What's the, what have you learned? Where should we be taking this? What's the next thing after, you know, we went from kind of the one shop thing to the kind of chat base, the chat GPT thing, we're now doing multimodal with GPT for like what's coming down the pipe that we can sort of prepare ourselves for. What were the most interesting projects as well as predictions on to be applied? So things that are already starting to happen now, you know, we've seen the text to image, text to video is one of the big things now to be able to generate, you know, at the end of it all, what they even a feature length film, right? So everything from writing the plot to then being able to generate, you know, like a 60 frame per second, actual kind of video from that thing. And we're not there yet. I think it's just moving so quickly, right? That's what happens when you get these kind of exponential or geometrical curves, even that it just gets better really, really fast. So I would not be surprised, let's say by the end of this year, that we have a reasonable way to kind of describe in textual form what we want, who the characters are, what the scene is, what kind of stylistic attributes we want, we can point it to, oh, I want to just done the style of XYZ director or a photographer, and it's going to be able to do those things. So I think that that's interesting, the natural length of just the interface. So one of the big announcements that happened while I was there at the Sequoia event that Sam Altman dropped is that, you know, chat GPT has taken off in a big way, as we all know, 100 million plus users in two months, that I don't even know what the number is now. So that was like a month ago, which is like any 30 ago in AI years. And the thing they dropped was they're going to add what are called plugins to chat GPT. And what that means is that, you know, chat GPT has been a product of open AI, and they have the API so people can build things that are like chat GPT, which I'm doing, we can talk about that in a little bit. But what they're saying is we're going to open chat GPT itself, the web app up, so you can plug into it. So right now, when you interact with chat GPT, you can type things and it uses this corpus from 2021 and its reasoning engine to give you answers back, but it can't talk to the internet, has access to no proprietary data sources, can't look at the stock price, can't look at your analytics data hub spot has access to none of those things. What they're saying is we're going to now open that up. So third party developers can kind of inject those things into the chat GPT experience. So the way I think everyone should be thinking about this is this is like the app store was a fry phone, which is oh, we've got this super popular thing called the iPhone, and we have our own apps, which is great, it does these 17 things, but now we're going to let anyone build apps. And so it just broadens the kind of appeal. So it's now instead of being a chat app, a really, really smart one, it's now a chat ecosystem. And I think that was actually a bigger drop than GPT for GPT for awesome, love it, use it every day. But the kind of ecosystem play for chat GPT, I think is a huge deal. We had Tim Westergen, the founder of Pandora speak out some of our events, and I got to know him. And I was like, Tim, why did Pandora take off? He's like, well, you know, our like algorithm and everything for matching songs was pretty good. But I had an in with Apple and they had known what we were working on. And we need and they needed apps for when they ever when they wanted to announce it on

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stage. And we were just we spun up an app relatively quickly. And because of that, we had the first mover advantage. And he created a significant amount of wealth that way, you know, Pandora, you know, was is still pretty big. And when I look back at like these Jeff Bezos interviews on 60 minutes, when Amazon is like four years old, and I like I'm always envious. I'm like, well, we know it worked now. And I just so wish that I was like 30 years old back then, where I could have just like jumped in and had a very high chance of building something historical or something like even mildly successful. Do you think that that moment is happening right now, where this is the space and it's happening this second. And even if you have just a mediocre success, it could still be a huge win because you're catching this tidal wave. Do you believe that that this is the same thing now? Yes. I mean, once again, I've been in software for 30 years now doing startups pretty much my entire professional career. The only time I've felt like heart palpitations kind of like Sean kind of open with us like there's this party going on next door and I'm here knitting, right? It's like, this is like too big to ignore. I think it's the single largest opportunity and biggest kind of tech paradigm shift we've seen since the internet originally came out like mobile was big, but there was a discrete set of use cases like when you put a camera on a phone, when you put a GPS device on a phone, a bunch of consumer apps like Uber and others that came up and that was awesome, right? But it was not like this impacts everything like the internet did. It's like, okay, there are some businesses, some new opportunities, lots of good things, lots of money made, lots of startups. Awesome. This is an order of magnitude bigger than that. This is like the original web because it just opens up for all sorts of industries, all sorts of businesses, startups and incumbents alike, just lots of new opportunities. So this was not my original plan, but we're going to geek out for a little bit. We're going to do the geekiest thing that's ever been done on MFM. And the reason I'm going to do it is, so you brought up Pandora and he is a super bright, brilliant guy. And he had the matching algorithm, which was the differentiator. Yes, he had access, he got lucky in terms of the access, but the algorithm, if that had not existed, had the thing that actually been cool, it would not have worked out like it did. Now we have an opportunity. So I'm going to tell you, we're going to talk about, I'll give myself two minutes. And we're going to talk about vector embeddings and why that's going to change your world. And before I can talk about vector embeddings, I'm going to explain to you how they work because I had to go through this with my 12-year-old because he was curious. All right, so we're going to do a super geeky thing. Now I want you to imagine a line like your geometry class. And you could put a point on that line that says, oh, that's like three units from the origin, right? It's like, oh, yeah, point A is three units from the origin. And point B, let's say seven units from the origin. So one thing we know for sure is that we can calculate the distance between those two points, right? In that particular case, it's four. If you move to two dimensions, now you have two numbers that describe every point. So you can say, oh, point A is here at these dimensions, point B is over here with those dimensions. And we can, physically, you could probably measure with a ruler, but there are mathematical calculations based on those numbers to calculate the distance. That's intuitive, right? You don't need to know fancy geometry. It's like, oh, there's a finite distance in two dimensional space where we can calculate the distance. Okay, awesome. Three dimensional

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space.

Exact same thing. Just three numbers describe every possible physical point in three dimensional space. Now here's where it starts to get a little more interesting. That just happens to be our experience. So we limit ourselves to three dimensions. Imagine in an abstract world, there are a thousand different dimensions. Okay, so exactly that means there's a thousand numbers that describe any particular point in this 1000 dimensional space. Okay, now found that thought away that says we can have an arbitrary number of dimensions in this abstract world. Okay, great. Now imagine every paragraph, blog post, anything you write, you can reduce down to a point in this 1000 dimension space. It's like I'm going to capture the meaning of Sam's last blog post or Sean's last tweet. And we'll reduce it down to what's called a vector, which is basically a set of let's say 1000 different numbers that says this thing, if you wanted it, that point falls right here. And then you can plot something else. It's like, oh, that falls over here. And just like in one dimensional, two dimensional, three dimensional space, you can calculate the distance between those things. And this is not keyword matching. This is what's known as semantic distance. How related is Sean's tweet to Sam's blog post, meaning wise. Okay, so now if you take that, it's like, okay, well, if that means you can take any concept and reduce and reduce it down to a vector, that means you can measure the distance between vectors and you can find out how related two things are, even though they use completely different words. That's vector embedding. And the reason I'm telling you this is one of the biggest opportunities in AI right now is to do what Pandora did to say, okay, is there an industry where right now we're doing a really stupid keyword based matching somehow, it's very, very crude. If I can take that same data set and convert it to vector embeddings and allow people to find things in a different way than they've ever been able to do before. So it's like Google search, super, super smart, not just keyword based, but for everything else. What's a real life example of this? So I'm going to take it to you, Sam. So you have Hampton now, you're going to build up these profiles, very, very rich profiles of rich in terms of density, information density of members that are part of your community. Now imagine as part of that process, you're going to have some data and they're going to opt in and they're going to say, oh, here's the story of how I started my business. Here's the story of my biggest struggle right now. And sometimes people are going to say, oh, my struggle is growth. Sometimes they're going to say, oh, my struggle is it's really hard being an entrepreneur and it has a really negative impact on my relationship and my family, right? And they can talk about lots of different things that's not going to show up in a profile. Now imagine if you took that content that they opted in and created vector embeddings of every member that you have. And then you can say, you know what, I want to find someone not that's in my industry or accompany my size or happens to be in my geography. I want to find someone that's dealing with these kind of founder therapy level issues. Who are those people? Let's find the semantic distance between those vector embeddings across the thousand, 10,000, 100,000 people that are in Hampton someday. That's a billion-dollar idea. And that billion-dollar idea occurs a billion times across the entire industry. Sam's going to go to the office for Hampton and be like, guys, Victor's embedding. Well, who's Victor and what's he embedding? We're doing it. I don't know what it is, but we're doing it. That's really interesting. So you could do that with dating. You could

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do that with any different topic. You could do it with unstructured data, but the idea is you're converting meaning, English text to meaning or whatever language text meaning, into something that's mathematically calculable as a result of which you can distance as a simple one, but you could do proximity. It's like, find me the top 10 people that are in a radius of X from where I am right now. And the minimum has to be this in order for it to be close enough of a mash to for it to be considered. And by the way, the 12-bit data near mortals in a weekend can actually build a vector embedding model of a given data set. It's not that hard. I mean, it's not like rocket science-y hard. This has existed, though. So what makes this better, you think? And also that assumes that the people telling you information, which is like, for example, I remember reading about OKCupid and people would say like, one particular thing they had was about race and height. And people would say they are open to dating these types of races, but their actions were different. There's a whole book called, I forget what it was, but you guys will probably know what I'm talking about, where people say one thing, but their Google search history says something totally different. Can this technology work even if people aren't telling you entirely accurate things? It depends on what your definition of work is. So in that example, I would bet you money with a large enough sample size, the inauthentic posts would be uncovered by the AI relatively quickly. The pattern matching would say, you know, this actually doesn't occur in real life all that often. And every other time we've seen this, we've had people that ended up being, and you just have to have some sort of like an eval function. Like, how do you measure the success of what the algorithm is doing? In Pandora's case, like, OK, do you actually like the songs it's recommending to you? That's the kind of arbitrary of truth. In a dating app, it's like, OK, well, are people liking the matches that are being made? Or if they felt that they were misled, that shows up and there's got to be some feedback loop. There's got to be a way to train the system that says, here's what good looked like and here's what not good looks like. Now, Sam, you said something like, oh, they have to tell you the meaning. No, they don't actually have to tell you the meaning, right? Because the AI can just interpret the meaning, summarize the meaning. It can guess the meaning based on whatever the raw taxes, the public taxes. So you could just tell a story about your life and the AI would infer or place a tag, some meanings to the story that you told that, oh, this is about overcoming hardship or this is about whatever. So I don't think you actually have to get the participant to give you the meaning. But let me ask you, Dharmesh, like, in Pandora's case, I don't know how Pandora works, but let me just guess for a second. Like, it probably takes the tempo of a song and it's like, oh, this is a fast tempo song. It probably takes, you know, maybe the key that it's in or something like that, that gives you like, is this an upbeat and joyful thing or a sorrowful, you know, mood song? So it gets like mood, tempo, artist, and like, whatever, a couple of key characteristics. There's like, there's instruments in terms of what's actually in the thing. And yes, so he had. Right. And he's not this publicly in terms of the number of factors that go into that algorithm that it looks at. By the way, when they first started, they did it all by hand. So we had like 500 X musicians listening to it and like writing down like checking boxes to what it was. It was pretty wild. So let's say they did it, they use attributes. And if I want, let's say I wanted to do this in fashion, I say, oh, man, I love Sam's jacket. I want to find some, you know, similar jackets. Can you match this to me? One way would do it. Okay, Sam's jacket. Let's say it's

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blue. It has buttons, it has blah, blah, blah, right? It would take attributes. And are attributes the same thing as meaning in this case? Or is this more for things that are like text based and content, you know, like content that has some meaning? Or does this work for everything? It can work for everything. And we're still kind of uncovering because this stuff is kind of moving so fast. So what you're talking about is what we've been using in e-commerce forever in a day, which is a faceted search that I have n number of dimensions or factors, size, color, right, what type of clothing is it, all those things. And then you kind of do this faceted search. And then we've had kind of pure text space, the keyword or semantic search, this sort of this in between. So instead of having to tell it here, all the facets that I'm interested in, it kind of pulls those things out that are relevant based on that large language model. And this is so the idea of vector embeddings and semantic search has been around for a long time. That's not new. What's new is these new generative models now that are much, much better at understanding

all of like documented public human knowledge and then using that to say, Oh, like when you use this word, when you use coach in the context of a relationship, you're probably talking about like a therapist is just a different word, right? Like that's sort of what you're talking about.

Anyway, so it's more about the meaning and it infers or figures out what the dimensionality is, and that's how it kind of translates into those vectors. And by the way, there's a couple of these companies, I just saw one Pinecone, that's like some vector, these things are getting valued at like 2.3 by the way. That's what's that pinecone is the number one vector database. So let's say you had to take these vectors and put them in somewhere, which you do in order to be able to do searches pinecone is the number one, the one most popular commercial. And I think they just raised it like a \$700 million valuation or something, something nuts. And there's like three of these that just raised these mega rounds. And that's, you know, I don't even, I didn't even know this is so funny. You just came on here being like, let's talk about this super niche nerdy thing.

Just yesterday, I was like, to do go figure out what a vector database is and why these companies are raising so much money. Like this is clearly a big deal. And I don't know what this, I don't know exactly what this means, but now, now it makes a lot more sense. So it comes comes full circle, Sean. So you know what, maybe it wasn't as geeky as I just like, it's actually useful, right? So we talked about vector embeddings. A vector database is something you put vector embeddings in and allows you to do the mathematical operations on vectors versus like a traditional database that has, you know, a bunch of text in it.

You've done an awesome job explaining like the theory. And I'm like, literally sitting on the edge of my seat thinking like, this is crazy. And you answered that question where I said, is this like the new internet opportunity wise? And you're like, yes, absolutely.

But when you're making the stuff, what are some of the tools that you're using to, you know, to actually, you said this isn't rocket science and someone could figure this out in a weekend. What are you, what tools are you using to do all this?

Yeah, I mean, so language wise, the most common is Python that seems to have emerged as like lingua franca of the AI world, not to say you can't write it in TypeScript or pick your language of choice. And then tools that are emerging and still early, right? The pineapple we talked about, there's another one called, it's an open source project called Langchain.

And that's not, I asked, I asked somebody, I was like, how do I, you know, is this a company?

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Can we invest? Because everywhere I look in these like AI hackathons, it's all about Langchain. And it's like, no, it's not really even a company. It's just an open source project. There's a guy who made it, but then is running it, but it's not even a company, correct?

It's not a company yet. But you know, but

Wait, is it? Is it Langchrist?

What that lane chain as a language chain? Oh, okay.

Langchain. And what it does basically is it lets you chain together. So right now, when we work with large language models, we kind of send in a prompt, what's called a prompt, and then you maybe send it to another thing to do something else. And there's like a multi-step process. Amongst other things, Langchain helps you kind of chain those things together and makes it easier for you to kind of work with either an individual large language model like GPT-4, or get cross models and kind of do a lot of the kind of connecting the dots and help you with that. But it's a super useful library.

We missed the chance to give an example, more tangible examples. So you talked about the plugins thing. I think, you know, example use case here, tell me if I'm wrong, because I haven't, nobody's, well, very few people have access to the plugins thing. So I'm just kind of sort of guessing. But like, if you go to chat GPT today and you say, hey, I'm going to go visit Austin in April. I'm there for four days. I'm with my family. Make me a travel itinerary that is going to be fun, family friendly. We want to eat good food and maybe do a little bit of sightseeing, but not too much. It will spit out a day by day itinerary for you. Okay, that's kind of kind of interesting. Now let's say, oh, I need to, I'm trying to figure out where to stay. What hotel should I stay at? You know, here's some things that are important to me. And it will give you a table that's like, here's option one, option two, option three, here's the cost, here's the whatever, right? And they, it can, it can do something like that. And with the ability for plugins, you can now say, cool, can you just book that for me? And it will just be like, great, we have the Expedia plugin, or we have the Airbnb plugin, and it will just go ahead and book it for you. And so, you know, do you need an executive assistant? Do you need a travel agent when you could do these things? Do you need, you know, the same thing with HubSod or Salesforce? Oh, you know, give me a list of this. And it gives you a list of that. Cool. Put that in an air table for me and, or put that into Salesforce and tag the highest value opportunities as Blink. It'll just go and do that for you. And it's like, and it'll give you the link to your Salesforce dashboard. And it's like, wow, that's kind of cool. Like, no, that's a test that some, you know, I would normally have a human go do, because now OpenAI or chat GPT is not just going to chat you an answer, it can do things as long as the programs that, that let you, you know, they'll build the interface so that chat GPT can actually interact with those things.

Yeah. And this is actually a great example. And we can use that to kind of open up kind of doors for the viewership and listenership, which is okay. So travel, which is something we all kind of intrinsically know how it understands. Some of us might remember the evolution away from travel agents. And the first thing we did when we had web based kind of travel bookings is that we treated very transactional is I'm looking for a flight from X to Y sorted by descending pain sorted by price, whatever happens to be in the fewest stops, lowest time, whatever it is. And they do a pretty good job of that. Like most of us have used one of those. And what's going to be possible now in this kind of new AI world is instead of solving for the transaction you

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solve for the experience. And what I mean by that is that both, if you had an all knowing assistant that was super smart and scored, you got a perfect score on their SAT, and is was going to go out and they're just like, okay, what you're really looking for is to solve for this experience, you're going to want to stop by this thing and you're going to want to find a hotel that's around the Michelin rated restaurant because you only have 15 minutes to get between this point and that quite. And I'm going to pull the whole thing together for you. Oh, and by the way, your wife's going with you on this trip. I know she likes that right now. So normally I would have put you over here, but this time going to put you over there. Oh, and by the way, I know a week ago you were at this other thing, and you had mentioned that you would actually like to fall up with some of those people. I'm going to see if I can make that happen as a like all of that, right? Imagine it knows everything about you has access to transactional engines to book the flight, has access to all the information to get ratings and reviews, and all of that comes together in one chat based interface. That's the future. Fucking insane. This is crazy. Is this why you bought chat.com, right? I did as a transfer the domain yesterday, class night. And you paid, you just said eight figures, so 10 plus million, unless you're including the dot zero zero as a figure and you really bought it for 100 grand. Is this a HubSpot domain? A couple of things. So if you go to chat.com, it will take you to a LinkedIn post that tells me, it tells you why I did it and some of the details that I bought it personally. Wow. And the reason is because of this conversation we're having right now, which is I think chat as a experience, as an interface, is the future, right? It's like, that's the thing. And no intense currently that can build something out on it, but it's the domain, I think it was like dormant for like 30 years or something like that. Wow. This is insane. I'm reading your post now. It's pretty wild. Do you have, are you using HubSpot employees? Like, do you have like a skunkworks team inside of HubSpot

that's just working on all this wild stuff? Or do you have like a side LLC or something where you've got like a handful of people on staff and you just say, like, here's what I'm interested in this week. Let's see what we can come up with. So the way it's working now is that there will be times where I'll do something as a hop like workplace, a good example where I'll build something on the side just for fun for learning whatever it is. I put the bill for no, no HubSpot P&Ls are harmed. And then there are times where like something kind of winds up being so I started this project called ChatSpot because I'm obsessed and we think we'll take a walk down memory lane because I think it's instructive. So I built this application called chatspot.ai. And the idea here was you built it or a team, mostly me. I don't have any front end design skills. I've got some freelancers on it. So I used OpenAI APIs to build it. But my kind of target goal, the thing I had in my head is I built it for myself. Like here are things I need to do all the time. And I'm pissed off that I have to do them manually every time. And this has been the story of my life for 30 years, right? Like solve my old problems. And then other people may or may not find those things interesting or useful. And so I built it up like, okay, here are the things I wanted to do like access HubSpot. I want to be able to look at my analytics from yesterday or ask questions or look up a domain name where I wanted to see the history of a domain name. I like all these things. And it's like, okay, well, I don't want to like, and I have all this software, a lot of it just built when I just run it from the command line, I do things. And so I then I'm like, okay, I can wrap this up into a chat chat based interface. And so now given the relevance to HubSpot, we're going to

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transfer that projects chatspot.ai to be a HubSpot staffed core team. This is going to change the world is going to change the world of CRM. Let's go do this, which is great. So and my wait, but hold on. What are you doing with chat.com? What's the plan? You bought this amazing domain, you redirect it to your LinkedIn post, which basically just tells about the purchase. But what are you actually going to do on the domain? I don't know yet. That's the honest answer. I do not know yet. Amazing. Okay, so we can we can help you brainstorm. Yeah, we can we can definitely do that. By the way, the the chatspot.ai. Did you go to that, Sean? It's a it's a simple looking website. It's one page. And there's a 19 minute video of Darmesh sitting in the exact chair. Doing the wave. And it looks almost like I but he's really good at these videos. It's almost like he's reading a script, but you come off natural. I don't know if it's a script or not, but it has 200,000 views. And it's a 19 minute video of him talking about what this product is. And you do the best combination of like launching something really quickly and getting it out there. It's just you on in your chair talking. And yet it's like a pretty sophisticated thing. And it has 200,000 views on this video over just about that's wild to me. I got to give you credit, Darmesh. You you are kind of amazing. Like, you know, you said a bunch of things in this podcast. And I don't know how many of them I'm going to remember maybe the vector thing because I enjoyed that math lesson. But the main thing is I go around my life now. And I'm just looking for people who I'm like, I want to be like you when I grow up. And I'm just taking little things from them. And they could be it could be like a, you know, a 17 year old kid who's just like doing something awesome on TikTok. And I'm like, I want to be like you when I grow up. The guy who made that Kanye vocal like transformer, I was like, I want to be like you when I grow up. I'm just taking little pieces. And you have a couple of things that I think are kind of amazing. You have a combination of enthusiasm. Like you come onto this podcast and you are pumped. So you are as excited in your 30 or maybe more in your 30 of your entrepreneurship career as you were in year one. And I'm like, Oh, this, this is great. That's the fountain of youth. Is that enthusiasm? So I'm like, he's got the enthusiasm. Then I feel like no matter what's happened, no matter how much success you've had, you've kept your schedule and your use, you invest your time into things you like. So like you tinkering on this project, whether it's word play, last time you came on, you told us about that. It's like, world is awesome. But I got annoyed with these things. So I made a me and my son built this project together and like, you know, to teach him, but also to just make the thing we want and like, look at this. It kind of works. Even if it didn't work, it would have still been worth it. So like having that kind of like, I'm always going to tinker because that's what I love to do. It doesn't matter that I'm the, you know, top dog at this, you know, multi-billion dollar public company. That doesn't mean I'm going to stop doing the thing I like to do. So I love that. Love that aspect of it. Third, you are really great at content. You do this like dorky form of content. That's just like, Hey, it's me. I'm going to show you this thing that I'm pumped about. And like, you don't overthink it and you just do it. Whereas like, I think most people get really gun shy when it comes to content. They're afraid about like, you know, how to do it, what it looks like. You're just like, Oh no, I'm just going to like, I'm going to say the thing that I'm excited about. I'm going to say it and I'm going to do a screen share. It'll just be me and my screen.

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And I'll be talking about what I'm doing. And I love that. And then the last one is guts. So I feel like you put your money into things you believe in, whether it's philanthropy or in this case, buying a \$10 million plus domain name with no plan. Like you just said, it's like, you did the fire ready aim. It's like, yeah, I bought the thing. And now I get to figure out what the hell I'm going to do with it. And I think that takes a lot of guts. And I don't think you see things as risky as other people see them. And it's not really about like, I think the easy way of saying it would be, Oh yeah, well, it's, you know, that's nothing to him. He's got a lot of money. Yeah, I don't think that's true. And I know a lot of people with a lot of money and they don't do things like this where they just put their money behind things that they believe in or they're interested in or almost like, would you do, I don't know if you would agree with this. It's almost like you ante it up so that now you're forced almost to do something awesome and interesting in this space that you think has a lot of potential. But then there's this, and this last thing is this rare combination of like, and I mean this in a polite way of which I am also that like this nerdy, nerdiness, quirkiness of like, I'm just doing it because it's cool. Plus, this way can make money. I mean, you have a way that makes, yeah, you have this company that has close to two million and two billion in revenue and is a commercial success. And then artistry of like, it's beautiful. This is awesome. I'm going to do this. It's a very rare combination. Thank you. Thank you. How do you respond to all these compliments? Careful. I'll say this, if I had to kind of share any kind of advice over the, you know, the 30 years is that what I've done best is when I've had the courage of my convictions of something that I believe in. So I'm going to tell you like a quick story of the road that led to me buying a 10 plus million dollar domain name. I almost like said the number actual number out loud. I have to kind of catch myself. But and so 17 years ago, I had an idea, this is before HubSpot. I had this idea and the idea was everyone was using kind of email and outlook back then. This is before the iPhone, before all the things. It's like, you know what? Like business software is really hard to talk to. I'm going to do it just like I would email my assistant. I didn't have an assistant, but let's assume I did, you know, I just want to be able to do that and type an email up and have her like, Oh, I have this file in our shared file server in SharePoint somewhere. Can you just send me a link to that file about to hop on a plane? I need that for the sales call. I'm going to go on for, for a meeting tomorrow. Or I'm on the plane coming back. I just ran this person, whatever, I've got their business card right here. This is before the iPhone and you can do OCR and things like that. It's like, I'm just going to type that in and send it's like, just add this to, to like contact, you know, database, whatever. And the beauty of email was it already had a disconnected model. We already figured that out, which is, Oh, you can be on a plane, have no internet, type all emails you want, respond to all the emails you want. And then when you connection, it does all the things, right? This is like automatic synchronized database, essentially. And I call the product in GenoMail. And that's what I was going to do before. I was like, Oh, like that would be an interesting thing. And then five years ago, I'm like, Okay, well, that in GenoMail thing, the core of it was a good idea. But it emails the wrong conduit actually needs to be like a web based tool, but the or slack, which I did both. So I built this product called growth bot, talked about on the inbound stage, got thousands of users, just threw it out there. And it was awesome, except for one thing. It didn't work. It like, it couldn't actually do the natural language understanding that I wanted it to do despite

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my best. I used products like Google called dialogue flow, I use products from Facebook, we used open source projects to try and crack the nut of taking text understanding what the hell the user was trying to do. Anyway, so that failed. And then, you know, when GPT comes along, like, Oh, you know, that thing I've been thinking about for 17 years, that actually is now possible. So I start working on chat spot.ai. I'm like, Okay, it took 17 years, but I sort of proved myself right. I had the courage to make convictions all the way through to never let go of that one idea and then chat.com comes along. It's like, Okay, like deep down inside, I will give you the true honest to goodness reason I bought it. The reason I bought it. And this is I think a phrase, Sam, you just use it is, it's the ante. So I'm trying to get into the AI party.

All the AI parties. And I'm nobody in that particular party, right? I've done some things in some places fine. But that particular group of people has no idea who I am not really. So chat spot moves me in that direction. It's like, Oh, some people have seen that video. Awesome. chat.com for let's say I even break even let's say I lose a few million dollars. It is worth the price of admission for me. Just because that pays the cover charges, like, Okay, this guy gets it for him to spend that kind of money on chat UX, which Bill Gates just talked about last week as the new thing. So you should read that article, but I guess just an article around why he is so excited about this generative AI stuff. He tells the entire story of how he came across on Aldman and open AI, the challenge he put the data and his I'm gonna paraphrase, he said, when we went from

DOS to Windows, which is we went from a character based interface to a graphical mouse space, click and touch interface. That's the thing we built Microsoft on, which lasted for decades. And they said, since then, there has been nothing in technology that has come along. Literally, he said nothing that has come along that has made ads or will make as big of an impact as this natural language interface to software. It's the biggest thing we've seen.

And hence chat.com. The world the story is have the courage of your convictions. If you truly, truly believe in an idea and you fundamentally think you're right, iterate, don't just go down your rabbit hole, tell everybody you can about it, build products around it, find other like-minded folks and try to pull on that thread. Would you ever quit HubSpot and just spend all your time on this stuff? I don't really need to, right? It's I enjoy what I do at HubSpot. I think I add value there on that \$1 salary. So it's not the not the money at all. Like even on the, like the chat spot thing, at the time that I built it, it was experimental. I'm like, okay, I'm not sure if this actually accrues into something that would be valuable to HubSpot. So spent like half a million dollars plus on like freelance developers and open AI and license fees and all the things that need to go into launching a product like that. And I'll end up giving it to HubSpot for a dollar, right? I'm not looking to make money. Aren't you like, I don't want to be weighed down by this baggage of like having to worry about CRM stuff or you're the title, your title is CTO. Like I don't want to have to talk to certain people and take up meetings on like the future of this particular product. Instead, I just want to just nerd out on all this other stuff. But I do that now. So one thing, one of the things I've, this is a personality called a trade slash flaw is that I spend most of my life trying to configure the universe to my liking. All entrepreneurs really do this, right? That's one of the reasons they kind of go into startup land is there's the freedom and the control to do the things you want to do. And so I've kind of crafted a role for myself within HubSpot that allows me to do exactly the

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things that I want to do and not do any of the things I don't want to do, which is one out of one meetings that I have to manage people have no direct reports. I've never filled out an expense sheet. Like I do none of that. I feel, I don't know about you, Sean. I feel like I want to quit everything I'm doing. Like he's just persuaded me. I kind of bro, you just launched yesterday. No, it's over. I feel it's over. So here's my advice to you, Tim. So my advice to you is Hampton's a cool idea with actual utility. And Sean, you said this in the last thing like this could be a hundred million dollar business worth anywhere from 300 million dollars to a billion plus dollars. And I think you're right. If you're excited about some of the new technology developments that's happening, I think the best thing you can do is intersect the two things. It's like, okay, I'm going to build Hampton and take the things that I know, I know how to build communities, I know how to build these kinds of businesses. Now can I intersect that with things that are happening in the technology sector around AI or whatever it happens to be. And then it kind of somehow merge those two things, because then you'd be an unstoppable force, right? Because no one in the community building market doing niche market communities is thinking about or having conversations about vector embeddings. I promise you that. So you don't have to give up one for the other. You can say, yep, I'm going to do that. I'm going to do it better than anyone's look has ever done it. But I have a different advice for you, Sam. I think just get dug in into your position instead. I remember when you were doing the hustle originally and Snapchat came out and Instagram was like popping off on videos and Facebook had videos. And then there was other media companies that were raising tons of money that were just like, we're going to produce short form video content or live video content on top of Facebook and Cheddar was all the rage and all the stuff. And I was like, dude, why aren't you doing videos, man? Look at this. Look at these guys. They're getting millions of views on their videos on Facebook or these guys are getting millions of views in the Snapchat story feed. You could be the first one there. It fits your audience. And you were like, just very steadfast. You were like, three things. Number one, don't understand it a lot. Yeah, I don't really understand it. I understand this other thing. Two, I could try to figure it out, but I don't want to build on top of their platforms because they change the rules all the time. I have friends who've got burned by that. I don't want to get burned by that same thing. I don't want to build on a shaky foundation. I'd rather do email because I own the thing. I own the relationship with the audience and it's not like the Facebook algorithm changes one tweak away from putting me out of business. And I remember being like, man, this guy's like Mr. Stone Age. He is just not integrating or adapting to the new shit. And I was like, there's no way if I was running the hustle, I would have been able to resist the shiny object of video on mobile phones. And it turned out video mobile phones did turn out to be a big thing, but a lot of those media companies got absolutely wrecked and you were right for being wary of it. And I don't think in this case, people are going to get wrecked because it's not like, the analogy is not one to one. But I would say Warren Buffett missed the internet and all of technology and still did fantastic. Sam, I think you're going to be in that same boat where it is not really in your nature to get really interested in, you know, new frontier technologies

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and play with them and try to integrate them. And that's not really your nature. And you're better, you're best served by like knowing your nature and just doubling down on what's a working formula for you, I guess. So I would do that, especially because there's going to be a trillion people trying to do fancy AI shit who are better suited to do that. And it's going to be an absolute bloodbath for, you know, for like, go look right now at the number of AI tools that are coming out every single day. And you know, it's like, most of them do seem shit though, right? I mean, like, but it doesn't matter. There's just swarms that they're all going to get just like wiped out. Every GPT release wipes out a whole wave of like, even the successful ones, because it's like, oh, now that's just a feature of chat GPT. And so I, I don't know, I think it's like, know your nature and like, you know, it's okay to not have to do every, unless that's your nature, unless like, for Darvish, it is his nature. For me, it is a lot more my nature than it is yours. And there's pros and cons that come with that. Are you going to go in? I mean, Sean, Sean's got a new idea that he's taken with and he's been telling me a little bit about it. Before we jump to that, I have one piece of tactical advice I have to share with you, Sam on hand. So I was going through the application

process on Hampton last night, like 2am. And this is super tactical, but this is what we do here on MFM. Question number nine on the application process is what year will question mark? It's a required question. Good. The subtext is CEOs, founders and partners only please. That's the subtext. The options are founder, CEO, owner and other. The one thing I would tweet if I were you. So what you're doing is you're saying, Hey, we're about founders and owners. And if you're not one of them, don't bother. Thank you for not bothering go away. So focus is a magical thing. I love that. But you're doing what I call a pre-filter, right? Which is why not say, Oh, this is for CEOs, owners or whatever. Don't make them feel guilty for going through the rest of the process because there may be a future version of Sam and Hampton that says, Oh, you know what, we solve this problem.

But that same problem around people needing therapy from peer groups applies a lot to like VP's a product and that community right now to all the only communities they can find are people that want to talk about product management and no one wants to talk about relationships. And there's an opportunity there. And so it costs you literally nothing. They'll don't answer the question. It'll be sitting in your database for a year or forever. And it costs you nothing. Don't don't push it out too early. It should have been the way you suggested. I apparently, I didn't give that feedback. Grant, if you're listening. This is a direct order from Darvish. Change question nine, please. Grant, do this before you get replaced by AI.

Yeah. But Sean, you're telling me, thank you, Darvish. Sean, you were telling me about stuff that you're thinking about. Yeah. And it was pretty, it was somewhat old school. Like what you're, the thing, yeah. So are you like questioning that after this conversation? And you're like, Oh man, this is like, not after this conversation necessarily, but it's a snowball that's building, right? Like there's a reason I cleared my calendar to just mess around with AI all week because I'm interested in it. And it's like, let's go see what's real there. And I did the same thing with crypto during that, during, you know, when crypto was really interesting, intriguing. I was like, okay, let me go try to mint an NFT. Let me go try to actually like use DeFi and see what's going on here and what parts make sense and what parts don't make sense. Oh, that was pretty frictionless. Like that's cool that I could just like get a loan and one button

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and I could pay it back in one button. I never had to talk to you human being like, I really like that. Hey, this thing says the yield is 20%. I don't really understand where they would get 20% from. So not sure, but I'm going to, you know, put a small amount of money in just to learn. You know, I was, I was trying to play with it and trying to think for myself is the big idea. And, and it's not like some binary thing like is crypto good is crypto bad. It's like, I want to know where it's at right now. I want to see it develop. And my best way to do that is immersion. I actually stole this from the, from Bill Gates. Bill Gates does his reading week where he goes to a cabin and he reads a ton of books for a week about one topic that it's like been on his mind, but he hasn't had the appropriate amount of time to roll up his sleeves and dig in. And I was like, Oh, that, but without books, just give me a, you know, Chrome browser and I'm good to go. And so, so that's what we've been doing. And they're genuinely are so many like mind blowing moments and also just like understanding the nuances of things. So for like, just being able to think like the computer, like, you know, you were talking about these facets, for example. So I was playing around with mid journey, like Sam, do you know what mid journey is? Or do you know how to use it? Yeah. Yeah. Yeah. Yeah. Yeah. Yeah. I mean, I just been goofing off and I'll just be like, show me what Cartman from South Park looks like as a real person. Right. And like, you know, I was like, and I was, the way I approached it was, can I replace work that I already want to do with a more efficient AI workflow? That was like one of the things. And then it was, what's really fun random shit I could do. I wanted to be on those ends of the spectrum, like highly utilitarian for me. So it's like, Oh, I need a logo for my thing. But I don't want just like a logo. I want to create a whole brand. All right. How can I use AI to create a whole brand here? So from the icons to t-shirt designs to a website. Can I do that with just AI and not have to touch it? Does not have to hire a single designer. And can I do that with just like my own imagination and this prompt thing? And then, Oh, how do you do prompting? And like, which of these tools is the best? And what's the difference? So that was like one whole area. Another was like, we took the podcast. And we did this thing that was kind of sick. We took the podcast and we ran it through this thing. So we took the pod and we then used opening as a something called whisper, which transcribes any video. So it's like, put in a YouTube link to this tool, it'll take a whisper and it'll give you the transcript. All right, cool. It takes the transcript. Then I put it into chat GPT. And we had this guy write this little prompt for us. Like we had to get the right prompt. But he wrote this prompt that was awesome, which was basically like, it's really funny. He goes, because chat GP can only take so many characters. So he goes, I'm going to, I'm going to give you 19 text sections. I don't want you to do anything until you're at section 19. So ignore everything until I'm done with 19 and then answer the prompt that I give you. And chat GP is like, okay, I will, I will wait for the 19 parts. You copy paste part one, two, three, four, all the way to 19. And then you go, the prompt is, I want you to pull out every idea, story and framework that's discussed in this podcast. I want you to summarize it. And I want you to tell me, does this idea exist already or not exist? So it can guess based on the way we were talking about it. Are we talking about something we saw that exists or just an idea that somebody should go do. So like from this pod, it would be like using this, this vector, you know, a dimensions or a vector engine or whatever to potentially create a dating site that would match people in ways that they're, you know, sort of similar using using AI. And it

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would be like, does this idea exist? No, who is the source of this Darmesh? What was the the synopsis of the idea blank? What is the category that it's in AI? And so then it took that and it takes the whole episode and it just created a database of every story, framework and idea from the thing with these tags. And now a human can go back and like tweak them if something was wrong, but like, that's a lot of the work that was done. And we can just do this for the whole backlight back catalog of our podcast. And so I'm trying to use it first for my own benefit. And then along the way, if I see a business of startup idea that I'm like, Oh, somebody should productize this, or somebody should do whatever, like, you know, the simple example is this Kanye thing. I was like, why is this not the most viral app in the world right now, that basically the app with the one button that says, say something, and then it's gonna, when you, when you let go of that button, it's going to turn it into Kanye saying that thing and go share that to TikTok. And like, you might get sued, but you will go viral, right? That's the trade there. But I'm like, that's crazy. There's no front end for this really cool, you know, AI demo that exists now. So yeah, I'm just right now, I'm in the go play around with it, see if anything really, really strikes me. And if something does, then then take the next steps. There's one thread there, Sean, that I think we should pull on, which is you use, you talked about this kind of crafting of the prompt in order to kind of make the thing do what you needed to do. And that's an entirely new skill now called prompt engineering, right? And it's analogous to software engineering. So software engineering is getting a computer to do what you want by speaking to it in its language. And that way you can kind of get the results you're looking for. Prompt engineering is almost exactly the same thing, except you're talking to a large language model, something like a GPT for to kind of get it to produce. So you're talking to AI to get it to produce the thing that you want. And so I think this is another kind of opportunity for things that are kind of technology minded, but not like software engineers, right? So they kind of can think about the problems in their head, they're good at, they may be good writers, they may be good analysts, they may be good at kind of describing a thing, but like prompt engineering is going to be like another big thing. And by the way, as long as we're dropping things. So I bought two domains recently. Oh, buy one, get one free. Yeah, I wish. But this one got eight figures, seven figures. And the domain is prompt.com. Oh my God. And this one, I actually have an idea around what to kind of what to do with that, which is there's going to be this entire, I'm not going to get into details of it yet, because it's too good of an idea to actually just kind of put out there in the world. And I'm not, I'm not ready yet to do something about it. But once I wait, prompt, prompt.com goes to like a coaching for essays. I know the transfer is still happening. I don't have the domain of my possession yet, but the deal is done. It's like insane. Dude, I feel amped. I like when we were talking about when we were talking about a pump, I like wanted to go like hide under the covers because he freaked me out about the billion or the million dollar Bitcoin thing and the banks with this thing. I'm like, I got to clear my schedule. I got to go learn all about this. I mean, I feel amped. This is awesome. Before we go, give us your two minute reaction to biology's warning slash bet

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that the US dollar will crash and Bitcoin will surge to one million dollars. I'll say this and I don't know him personally, but he's like, quite literally, well, the top five people I've ever encountered, like even on the internet, in terms of raw kind of what I call wattage, just raw horsepower. And he's like an AI unto himself, right? Like just the, just the knowledge that he has. Having said that, I understand why he's taking the extreme positions because that's sometimes what you have to do to kind of shake the world out of its reverie. And it's like, okay, pay attention here. This is important. But if I were a betting person, I would not bet that the odds are what he thinks they are. Could happen, but nowhere near the probability that he's suggesting. I feel better now. I feel better. I like your opinion better. Therefore, I think it's true. We should wrap on this because one of the things that happens anytime new technology comes along, we saw this a little bit in the kind of crypto web pre-world as well, is that entrepreneur-minded folks will see this kind of new thing and they will look for kind of a quick turnaround. I'm all for creating value quickly, but it has to be like creating value. Don't play the arbitrage. Oh, I'm going to do this thing. This is like, you know, day trading back in the day or whatever. It's like, don't be a grifter, right? We're just going to build, we're going to build a shitty app and put web three at the end. Yeah, like just don't take advantage of people. There's enough real problems to solve where real money can be made. And yes, this technology can now be used in creative ways by lots of people. And you should use those, but don't use it as an excuse just to kind of be like an AI tourist that comes through and makes a little bit of money or whatever. And then that was that. There's a bigger opportunity. I think you're shortchanging yourselves if that's what you end up doing. Well, thank you, Darmash. Thank you for coming to my TED Talk. This is awesome, man. Yeah, well, thank you for coming on the pod. This is awesome. I feel pumped, man. I always like talking to you. I don't know if you know this, Sean. I slack Darmash all the time. I'm just trying to get him to like give me a little like crumbs of information. Dude, I need to get into the HubSpot Slack. It's awesome. I'll just like just send something his way. Just hopefully I can get something back. But it's fascinating. And I feel lucky to be able to have you as a friend and a co-worker. And this is awesome. And a podcast guest, this is so fascinating. I agree with what Sean said about like kind of like looking up to you and like looking at how people live their lives. You're definitely someone I admire. So I'm happy you came here. Thanks for having me on again. This is fun as always. Awesome. All right. Thanks for coming on. That's it. That's the pod. All right, everyone. My first million episode done. However, I've got good news. You see, we have another podcast. And by we, I mean the HubSpot Podcast Network. It's called Marketing Against the Grain. One of the hosts, his name is Kip. And he's the CMO of HubSpot, you know, \$20 billion company. So he kind of knows what he's talking about. And they talk all about what's going on in the world of marketing. They give really, really cool behind the scenes information and stories. I'm actually on one of the podcasts. If you search Marketing Against the Grain, Sam Parr, you'll find it. I go like really, really, really depth about how I research different business ideas. But he's has a ton of really, really cool guests. Check it out. Marketing Against the Grain.