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Ali Ghodsi is the CEO and co-founder of Databricks, a leader in data and AI. He pioneered the data intelligence platform built on a lakehouse architecture, revolutionizing analytics and AI for global organizations. Prior to becoming CEO, he served as the VP of engineering and product management. In this conversation with Stanford adjunct lecturer Ravi Belani, Ghodsi Shares lessons he's learned from being one of seven co-founders at Databricks and leading a company that began with open-source software.



Transcript

(upbeat music) - Welcome everybody to 00:00:16,165 the Entrepreneurial Thought Leader Seminar at Stanford University, the Stanford seminar for aspiring entrepreneurs.. ETL is presented by STVP, the Stanford Engineering Entrepreneurship Center, and BASIS, the Business Association of Stanford Entrepreneurial Students.. I'm Ravi Belani, a lecturer in the Management Science and Engineering department at Stanford, and the director of Alchemist, an accelerator for enterprise startups.. And today, I have the pleasure of welcoming Ali Ghodsi to ETL.. Ali is an adjunct professor in computer science at UC Berkeley, and the CEO and co-founder of Databricks, a leader in data and AI.. How many people are familiar with Databricks in general? Okay, fantastic.. So, Ali was born in Iran during the country's revolution, and later, his family, who were part of the opposition, fled to Sweden to escape persecution during the Iran-Iraq War.. He learned to code as a kid just as a hobby, on a Commodore 64.. And then, he went on to study and got an MBA and a master's in computer engineering from Mid Sweden University in Sweden, and then a PhD in three years in computer science from KTH, the Royal Institute of Technology, with a focus on complete, decentralized.... What was that gesture? Complete decentralized computer systems..

We then got him over to California when he came out on a postdoc at UC Berkeley.. And while at Berkeley, he was part of a small team that created the open source project, Apache Spark, which was a groundbreaking tool for crunching big sets of data for analysis and transformation.. He's described himself in a previous article, and the small team that he was with when they created Spark, as "a bunch of Berkeley hippies "who just wanted to change the world "and give the product away for free." But in 2013, he jumped into commercial ventures and entrepreneurship when he and six co-founders jumped in and launched Databricks, which was a company that would commercialize Spark.. He started as the VP of engineering and product management, but then transitioned to the CEO of the company three years after its founding, Databricks is now valued at over \$43 billion.. It has over 8,000 employees.. And according to Forbes, by Ben Horowitz's own admission, Ali is the best CEO in Andreessen Horowitz's portfolio.. So to learn about how this hippie became a true maverick in venture-backed entrepreneurship, please welcome Ali.. (audience applauding) - Awesome.. 00:02:42,820 By the way, Ben also said that the pitch deck was "the worst I have ever witnessed "in my whole career." We walked out saying, this is the worst pitch deck we've ever seen.. - Well, and so that's a testament 00:02:51,933 to these innate skills you have to change and improve..

And so, I really want to unpack that because I think this is such inspiration.. Everybody here in this room is in academia by

virtue of being in this class, everybody in this room is interested in entrepreneurship by virtue of being in this class.. You went deep into academia, you were a PhD, and now you're an associate.... An adjunct professor, and then you went deep into succeeding in entrepreneurship too.. And so, there's some innate skills that you possess inside that we want to unlock.. So there's.... We're limited on time.. The interest is gonna far exceed the time that we have, so let's jump in.. - All right.. 00:03:28,038 The first of which is that you had seven co-founders....

- Yeah.. 00:03:33,988 that's gotten to the size that you guys have with seven co-founders.. And so, I want to first click on that and understand advice for aspiring founders on how they should think about co-founders.. First of all, are all seven co-founders still at the company? - Kind of, more or less.. 00:03:46,716 We're kind of best friends, but I would say two are not really act.... Super active.. But we're great.. I mean, the seven of us are super tight knit.. - And so, can you share any advice 00:03:57,215 for aspiring founders on how they should think about co-founders? Who's the right person that makes a co-founder? How do you preserve good co-founder relationships? I don't know if you can talk about aligning incentives with your co-founders.. Can you share? - Yeah, I mean, this is....

00:04:12,196 We could just discuss this the rest of the time and we'll run out of time.. A lot of building companies ends up being.... I mean, initially, it's like about the product-market fit, and what you're building, and all that kind of stuff.. But a lot of it is also, how do you work with other human beings? And as you scale the business, it's gonna be even more, how do you work with other humans? And one thing that's really, really important that's not emphasized, I think, in business books and whatnot, is that it actually boils down to trust.. Do you trust another human being, right? So it's like just.... It's that, that's it.. So do you trust your co-founders? Do they trust you? It's as simple as that.. And it has nothing to do with business or anything like that.. Do you trust that human being? Are they gonna stab you in the back? Are they gonna do the right thing? Do you trust that they can do the right thing? Do you trust that they're just gonna be able to handle that if you just delegate that to them? All those kind of things.. So it all comes back to human trust..

So if you can.... If you can do that well, I think it's amazing to have seven co-founders because we're sort of like best friends.. We trust each other in a way that we can't trust any other human being on the planet.. We've been through.... I feel like we've been through war together and survived it.. But also seven co-founders could mean.... And we had some of this also in the early days of Databricks, could mean constant infighting.. And "why should I have that.... "You have that title, "why don't I have that title?" "I mean, you're the CEO, "so I'm not CEO, "whatever, what's going on." It could be a lot of stuff like that and there's a lot of drama, you find out.. So you see a lot of companies where there's a lot of drama in the founding team, and it's very, very usual that one of the founders bombs out, leaves, start their own competing endeavor..

There's a lot of these stories out there as well.. And it all kinds of comes down to "can you build trust?" - I love that heuristic.. 00:05:50,663 And that's different than the bar for an employee.. - Yeah.. 00:05:56,398 - Yes.. 00:05:57,831 - And then can you talk about equity? 00:05:58,816 Did you just split the equity evenly across all seven? Was that an issue on deciding? - I think we should have, 00:06:03,695 but we didn't.. - You think it should have been equal, 00:06:05,959 but it wasn't? - Yeah.. 00:06:08,213 I think it ends up being a lot of like, "Oh, but then I did this "and how much have you done?" And "But I did a little bit more here," and so on, ignoring that, "Look, "why are we doing this together? "We are doing this together "because we think we're gonna create "something amazing in front of us." And when we create that amazing thing in front of us, 99% of the effort is in front of us, not behind us, but we're focused on this one percent that we did already, or haven't even done, or I don't.... Whatever you're looking at.. How famous are you, or they know you, or you're older, or you have like....

Or you put in a little bit more capital, but all that's gonna matter is what do we do over the next 10 years together? So it's complicated.. You could.... We obviously are an example of a company that didn't do.... Let's split it-- You didn't do it equally.. 00:06:48,559 It was based on-- - We didn't do it equally, 00:06:49,392 and it ends up being this super weird heuristical negotiation that people do.. And you see founding teams bombing out and not starting their endeavor, or splitting off just because of these kind of conversations that they have.. I've seen many, many.... I've advised many, many people that are like, "Oh, that's unacceptable.. "I can't believe that "he's gonna have five percent than me." And then it doesn't work out.. But usually, those discussions of "How much should you get? "How much should I get?" They end up being completely wrong because they're all gonna be, "What are we gonna do together "the next five, 10 years?" And that's unpredictable..

We don't know what's gonna happen.. And I also think people waste time and they end up on a bad footing together.. It's like, "I have bad feeling.... "Okay, we'll do this together, "but I'm really pissed off "that you got more than me," you know? So that's lingering always in the back of our head, and it's gonna pop up when we get into conflicts.. Like, "Oh, is this.... "Are you saying that now because "you have more shares than me?" And so on.. So I prefer not to have that, you know.. - Okay, so you're a fan 00:07:43,754 of equality across.. - Yeah.. 00:07:48,929 - Okay, fair enough..

00:07:49,781 We had Huggy Rao, who's a professor in the business school, advocating for the opposite.. - All right.. 00:07:54,921 - Well, I mean, he's right 00:07:55,754 in the sense that Databricks did it the way he said, and-- - And you guys-- 00:08:01,432 So.... - Okay.. 00:08:03,572 And it wasn't earned equity based on performance, it was just pre-negotiated different amounts? - Yeah.. 00:08:07,918 It ends up being a super ad hoc thing, right? Based on the past, which is not indicative of how things are gonna pan out in the future, I promise you.. - We'll move forward.. 00:08:15,930 I know there's so many topics to cover.. And gang, I will give you guys a chance also for questions, so start thinking about them and we'll start

to have the team teed up in about 20 minutes to solicit audience questions.. But we are at Stanford..

You guys are an amazing poster child for an academics who've become.... As you sort of pointed out at the very beginning, Ben Horowitz said it was the worst pitch he's ever seen and now you're the best CEO, according to him, in Andreessen's portfolio.. So I want you to share, if you can accelerate the development of all of our aspiring academics-turned-entrepreneurs, can you share pitfalls that they should avoid that would've accelerated your development if you had learned those earlier? - Yeah, I mean, 00:08:53,102 first of all, when you start a technical company, you focused a lot on.... All that matters is the people that knows the technical thing that you're inventing and the product-market fit, and you don't respect anything else.. And I think that was a mistake.. I remember at some point, we were hiring an office manager, just in the office, and we're like, "Well, he or she better know "how to program, right?" And I'm like, "Well, maybe they don't need "to know programming.. "I mean, does the office manager "really need to know programming?" "Well they should at least know HTML," which was one of the co-founders said.. And then, everybody was like, "Yeah, definitely HTML." I think that's.... Over time, you learn that, "Hey, there's so many other skills "that are so important.. "There's so much else that "you're gonna need in the company." So we started super insular like that, of like, "Okay, all that matters is "the technical acumen on "this particular thing." And this is, again, why it goes back to, I think, those....

When you split the equities, you're just gonna be focused on this narrow thing.. You don't see how things will evolve in the future.. You have to broaden your perspectives.. I think having team members that have other backgrounds, and by this I mean usually when you say "founding teams," it's a founding team.. They all are exactly looking the same.. I don't mean they look the same, they have the same gender or they have the same ethnicity, but they're all like PhDs in computer science, in the same narrow field even, and they're publishing the same papers, or they have like same.... Or sometimes, you meet business people and they're all McKinsey people together starting a company, and they're like, "Oh, we're looking "for some people that know "how to do programming." And so, if you can have a little bit of.... So that you can have more of a well-founded team.. - So it's not just trust 00:10:18,446 on the founding team, there's also diversity.. - If you can get diversity 00:10:21,144 so that you can cover more so that you're not....

You're kind of redundant, you know? There's five of you, but you're actually the same people.. And you trust each other so much, you're literally just one person just split into five bodies.. And then-- - Okay.. 00:10:33,469 - Yeah, so I think if you can.... 00:10:35,395 But again, it's hard to find people that you trust, but if you can get people that understand the business aspects, that know how to do partnerships, that understand go-to-market, that understand product management and so on, that's gonna be super, super important, and those are gonna be some of your most important hires in the next six months or 12 months of your company.. It's gonna determine the outcome in the future for your company.. - And I just wanna make sure 00:10:55,410 that people get this point because I think oftentimes, in academia, we're rewarded for actually understanding everything, and is it true, or was your experience, that that was an asset or a liability when you were foraying into these other areas outside of your areas of expertise? - It's an asset and it's a liability.. 00:11:10,692 It depends on how you use it.. It often is a liability.. I see a lot of the....

I have a lot of folks that I've seen that come from academia that fail, and then obviously it's a liability.. The reason they fail is that especially if you have.... If you've done research and so on, you're very detail oriented, you have a certain deductive mindset.. It's sort of.... You come from this kind of background where you reason through everything and you work with these people that are super smart, so you expect everybody around you to be that way.. So then when you hire someone in marketing, you apply the same kind of judgment on them and you question what they're doing, and they're like, "Oh, we're gonna do "a campaign that looks like this." And then you apply exactly the bar you would apply in academia.. Like, "Okay, walk me through "from first principles "why you're thinking through this." And they're not.... They usually don't have the backgrounds we have.. They don't think like us, they don't speak like us.. And we're like, "Okay, this doesn't even hold water..

"This person is.... "What are they even doing here? "Like no, I'm an absolute no.. "By the way, I'm gonna micromanage "and do it right myself." So now, I'm suddenly a marketing expert here in five minutes, and I'm gonna, "I think we should do it this way." That's the failure mode of academics.. - And then, what's the right mode? 00:12:15,676 What.... This is so good.. And then, what does the right mode look like, actually? What's the counterintuitive but correct thing to do? - Yeah, I mean, they speak 00:12:21,566 a different language than you.. - Yeah.. 00:12:27,472 and you find the perfect marketer, and salesperson and corp dev, and so on, and.... Okay, but usually, they come from a different background.. The people that do sales are a little bit different from the people that do engineering..

The people that do marketing are a little bit different.. So I think you should turn off that part of your brain.. You should value experience 'cause it matters.. These fields have been built over the last 40, 50 years in business, and they know how to do sales.. There is an art to doing marketing, there's a art to doing product management.. There is art to do that.. So just 'cause they don't speak, and look, and can't articulate it the way you would like to, you shouldn't just dismiss them.. So actually, as a founder, I kind of like.... I kind of turned off.. And sometimes, I would go and talk to my co-founders and they're like, "Oh my God, "how can you even stand this person?" And I'd be like, "Give 'em a chance..

"I agree with you that it didn't add up, "and yes, that part of "the argument didn't make sense.. "And yeah, it's like they're "a little bit funny like that, "but maybe they're right.. "Maybe they're right about how they're doing it." And that way you can broaden the diversity of talent in your company.. So that's the way to do it right.. And the way to fail is to just look to hire all

people that look exactly like you.. Not physically, or gender wise, or ethnicity, but they're wired like you.. They have the same background.. When you look at the CV, it's like the same CV as you.. - Yeah.. 00:13:45,175 Okay, I wanna move into moments that....

The inflection moments in Databricks' story.. So moments that unlocked phase shifts and growth.. And I wanna start by talking about how Databricks' growth accelerated because after starting the company, it didn't happen right away.. - Yeah.. 00:14:00,747 - So can you talk to us through that? 00:14:01,651 What was the catalyst for product-market fit and growth? And if you can package any timeless lessons for the aspiring founders that you learned, it's welcomed.. - Yeah, I mean, look, 00:14:11,874 what we went through might not apply to every startup, or to your startup.. But we were based.... We had an open source project, Apache Spark.. The Apache Spark did not have.... It was not the market leader..

It didn't have.... It was something called Hadoop back then, which you don't even remember, probably, hopefully, that had.... That was like nobody got fired for using that, not our thing.. So stage one of the company was "How do we beat that thing?" And it just.... It was very, very hard.. So this was really mostly a marketing and an open source fight that we fought from 2009, '10, '11, '12, '13.. '14, suddenly something shifted in the market, and suddenly we became the hottest thing in the market.. It's like the coolest thing ever.. And everybody wanted to embrace our-- - Six years later.. 00:14:54,859 Was that six years? - Six years, yeah..

00:14:57,554 - Yeah, it was a long time.. 00:14:58,387 And many people, after that, they knew us with Spark, and they were like, "Oh, you obviously had this "very successful thing." No, we like.... It sucked for six years.. And you really need.... So I think marketing's really, really important.. I think we underestimate marketing, especially technical people with my background underestimate it.. But something happened in 2014.. In particular, there's a lot of FUD in the market.. These vendors that was.... That were hearing about our open source project, they were sort of saying, "Hey, oh yeah, I heard of "these Berkeley guys and Spark..

"It's only good if you have a lot "of memory in your machines.. "For a very narrow use case, "it works well.. "If you don't have enough memory, "the whole thing just falls apart." And it was not true.. And we kept telling people, but it just.... Every reporter, every article kept repeating this.. Every conference kept.... We were like, "Where is this FUD coming from?" This fear, uncertainty, and doubt that was being sold by the existing vendors.. Or "you can use Spark "for machine learning and AI," which at the time was not hot.. So it was bad.. And it was like, "You can use them for AI "and machine learning, "but you can't use them "for anything else." And we were like, "Oh my God, "if we're gonna be in that "tiny, narrow market, we're dead," right? So what happened is, basically, in 2014, me and my co-founders, we were up whole week and we got a bunch of machines..

These machines had less than a petabyte of memory in aggregate, but we sorted a dataset that was more than a petabyte, which means we proved that we can process a lot of data without having enough memory.. So we basically dispelling this myth that you need enough memory to use our product.. And we set the world record in sorting a petabyte on machines at the time, and we sorted the petabyte in 22 minutes or something.. And it was the world.... Like, Alibaba had the world record before us, I think, at 60 minutes or 70 minutes.. And for some reason.... And we worked with reporters, and the reporters really picked this up and it really went viral, and that dispelled the main myth.. And I think that was an inflection point where, suddenly, all of our competitors that hated us and so on suddenly said, "Oh, we love Spark.. "Spark is the greatest thing "since Apple pie." Every day we would see articles popping up.. In the beginning, you have one article talking about your company, you're super excited..

In a year, you have one article, you're like, "Amazing." Now, we were getting like an article a week, an article almost every day, or four or five articles like per day.. It was unreal.. We were like, "Oh my God, "this thing has gone viral." It was the most amazing thing.. So this was 2014/15.. And our vision was.... At that point, we were like, "Hey, we're gonna be..." Product-led growth.. We have this viral open source thing, so PLG, and the product will just sell itself, right? Make slick website, you slide.... Slide your credit card.. We don't need to hire salespeople.. We don't like salespeople, we don't wanna hire salespeople, we only want people like ourselves, right? So we wouldn't like those guys..

And that was the thinking and it'll be awesome.. And revenue just was super, super slow.. It just wasn't growing.. And then, 2015, we're like, "Hey, we need to double down on this." We called it Zero Touch.. "No more salespeople, "no more talking to customers.. "Let's just make the experience so awesome, "this thing goes viral "and people buy our product." And when we doubled down on this PLG, product-led growth, revenue just stagnated completely.. So it was like two quarters, Q2 and Q3 of 2015, it was literally a flat line.. It was like, "Oh my God, nothing is happening." So there was a crisis moment.. We ended that year at one and a half million revenue, and it was sort of like, yeah, the.... Basically, most of us....

At least, me, lemme speak for myself.. I was kinda like, "Hey, we're great academics.. "We had great success with open source, "but this business thing is not for us.. "And we just dunno how to make money.. "We're not good business..." Business people have business sense, and they do these MBAs and all this kind of, we don't have that.. - And this is.... 00:18:47,175 How much cash do you have in the bank? I mean, months of cash.. Are you going low? - We probably have quite a bit, 00:18:51,606 but we've hired so many people.. We are valued, I think, 50 to 50.... We're, I think, valued half a billion, or maybe 250 million..

- And you're doing-- 00:19:06,100 The multiple is very rich even by today's crazy standards.. And we keep pointing all the investors to downloads.. Like, "We have so many downloads "on our open source project.. "There's like a million downloads here." And they're like, "Stop showing us the download charts.. "We need to see revenue." Like, you know, so.... So that's, I would say, the second inflection point happened that year, where we went through multiple pivots.. - And what was the unlock there? 00:19:31,551 Because just everybody.... Right now, I don't know what the numbers are, but it's over a billion in revenue.. We're like eight years later from that point, right? And so you went from a million to a billion, you've grown 1,000X.. What was the unlock? Because product-led growth is still the gospel from above that a lot of entrepreneurs swear by..

So if PLG wasn't giving you the dividends that you needed, what changed? Was it sales? Was it just higher sales team? - Yeah, first of all, I'll say 00:19:54,854 I'm not a big fan of PLG personally.. It's very few people can crack the code on PLG.. If you do, kudos to you.. But it's like if your kid comes and says to you, "Hey, I wanna be NBA world champion "when I grow up.. "That's gonna be my career choice." It's like, "Ah, very few people.... "You're this tall, you're not gonna.... "You're probably not gonna get get there." So what we really did, we did two things, two pivots.. Pivot number one was we doubled down on enterprise sales, so the opposite of PLG.. Get salespeople, every salesperson needs to sell it.. You need to hire a lot of sales..

So very.... People that we said we don't like, go hire like the most enterprise-y sales type of those people.. So that's pivot number one we did.. Pivot number two we did is that we can't.... It turned out that we were open sourcing this technology but people didn't want to.... They could just get that open source technology from Amazon, they could get that from the other cloud vendors.. Those guys had much bigger distribution channel.. Why would you come to Databricks? I had this funny joke.. I think we were in a restaurant, in Amber India in SF, and having Indian food, and it was like a bunch of people came up to us, like, "Oh, are you guys Spark guys?" We're like, "Yeah, we're the Spark guys." They're like, "Can we get a selfie with you?" And we're like, "Oh yeah, of course, yeah." I kinda feel like I'm famous, and then took selfies.. And then, the same people, we met them the next day, 'cause they were also a customer, and we're like, "Hey, can we do this deal? "Can you pay us \$100,000?" They're like, "Why would I pay you \$100,000?" Same person who took selfie the day before..

And we're like, "Well, "'cause our software is awesome." He's like, "Yeah, but I don't wanna pay "you \$100,000 for that.. "I can get that for free almost on Amazon.. "Why should I pay you that?" So then, it was like that's when we started realizing, "Okay, "so yeah, it's cool that "we open sourced this thing "and you can download it for free, "you're not gonna pay us a dime, are you?" So then pivot number two was how do you figure out a way to make money on open source which anyone can download for free and people that are much bigger than you are gonna offer it for free? So those were two pivots that we had to really nail over the next.... Took almost two years to nail the next two ones.. - And can you give us 00:21:56,125 the quick cliff notes answer to number two? How do you monetize open source? - Yeah, so open source is 00:22:01,508 very, very hard to monetize.. I don't recommend that either, just like PLG.. If you're gonna start an open source company.... How many are interested in doing an open source company here? Maybe no one.. One, two, three-- - No, they're just too shy.. 00:22:11,965 Raise your hand, be proud..

- okay, come on.. 00:22:13,459 - Be open sourced.. 00:22:15,939 Come on, raise your hands.. Be proud, yes.. You're making the world a better place, right? And hopefully making money.. The problem with open source is that the perfect formula for succeeding with open source looks as follows: It requires two home runs that happen consecutively, okay? And each home run is kind of a product-market fit 10X value, what Peter Thiel calls zero-to-one 10X value, right? So home run number one, you better have an open source project that goes viral and the whole world downloads and adopts.. If you can't do that, then it was a real big mistake for you to start an open source company because you've given away your IP, and you've given away your IP to anyone who'd like to beat you and compete with you, and you got nothing back for it.. Nobody's downloading it, no one cares about it.. So that was a big mistake.. So you better have your first home run..

Of course, business, entrepreneurship comes with risks.. You should take those risks.. And if you fail, you can try again.. But let's say you succeed and now this thing is going kind of viral.. Lots of people are downloading it, lots of people are using it.. That's stage number one.. Stage number two, you need another 10X value.. Just like Peter Thiel says you need 10X to really change the market, you need another 10X on top of it.. And you layer that on top of the existing one.. That one you keep proprietary and that one they have to pay you..

And it's very hard to do one home run, let alone two home runs consecutively, keeping one.... Using one for open source, using the second one for proprietary value and selling.. If you succeed doing both, you have an amazing formula and you're gonna crush everybody 'cause you're gonna get.... The amount of marketing you're gonna get out of the first home run and the worldwide sort of.... Is unprecedented.. It's almost.... Right? 'Cause it's free and the whole world will know about you.. And then with home run number two, you use that demand that came in and you convert it into revenue, and it's amazing.. But it's hard.. - So what's the takeaway? 00:24:14,311 Because the fastest growing companies on the enterprise space that have monetized are all open source..

- Are they? 00:24:20,469 - Yeah, I think the top three of.... 00:24:21,827 At least three of the top four.. - Hmm.. 00:24:23,986 - I can get the data-- 00:24:25,190 (speaking over each other) - Yeah, yeah, I think it was like-- 00:24:28,241 - I think we are the largest company 00:24:30,124 that, per developer, is open sourcing.. Lines open source per developer.... Google has more engineers than us, they have more open source projects.. But if you look at.... If you normalize for the number of engineers, I don't think anyone is open sourcing more than we are per engineer.. So I think we would be the

largest successful one right now.. Before us, it was Red Hat..

I think open source is hard.. - Okay.. 00:24:50,203 - All I'm saying is it's hard.. 00:24:52,179 If you can pull it off, it's awesome.. But you better think about both of those two acts.. - So what was your.... 00:24:56,624 Oh sorry.. - Yeah, think about both acts 00:24:58,789 and nail both of them.. Try to think it through.. The way we did it was not optimal..

We were Berkeley hippies and we just gave it all away, and we didn't think about the second act.. So when we had to think about the second act, we had to kinda like, "Oh my God, "I can't believe we open sourced "this part of it.. "That's so stupid.. "I wish we had not open sourced this portion." So try to think that through in advance.. - And so, you had to actually go 00:25:18,628 through two zero-to-ones.. Is that what you're saying? - Yes, correct, correct.. 00:25:21,479 - So you did zero-to-one, 00:25:23,686 which was the 10X improvement with Spark, and then you did another zero-to-one with closed-- - Let me explain it, yeah.. 00:25:28,873 Let me explain the second zero-to-one.. The second zero to one was we built this engine that was leveraging modern hardware, parallel instructions, blah blah blah, and we wrote really low level code, and we basically made Spark 10X faster.. So you can just....

If you're using Spark open source, we have an engine that you can plug in.. It'll be completely compatible to whatever.... If you're using Spark, it just works with what you have.. It just like is a turbo pack that makes it 10X faster, okay.. And 10X faster, when you're processing big amounts of data, that means you can use 10X less machines.. Using 10 x less machines means you get a 10X improvement in price.. So then, we split the difference with you and we say, "Hey, you pay us a little bit for that "and you get some savings on the infrastructure," and it's 100% compatible with Spark.. And most people, initially, their reaction's like, "Wait a minute, I thought you guys are "the awesome open source people.. "You're telling me there's "this other proprietary thing?" Like, "Well, do you want it or not?" And they're like, "Well, "is it really 10X faster or not?" And we're like, "Okay, let's do an eval." And then they're like, "Okay fine." And say thanks, so let's split the difference.. - Okay, so if open source is not 00:26:29,528 the path to go, what-- - No, I think it's....

00:26:31,605 I mean, look, again-- - Or it's nuanced.. 00:26:32,712 You're just saying that you have to understand.... You have to be sober about it.. - Yeah, I feel bad 'cause 00:26:36,145 I'm here contradicting all the things we did.. I'm like, "Ah, split the equity equally "but we didn't do it," "don't do open source "but we were open source." But it's harder.. If you can do a company that does.... I mean, one of our competitors at Databricks is Snowflake.... Is a company called Snowflake.. It's completely proprietary.. Everything was proprietary..

And I think it's easier for them because they didn't have to worry about "Which part do I open source?" "Which part do I not open source?" All that kind of stuff.. - Okay.. 00:27:02,880 I could spend so much more time on this but I know there's so much to cover and I only have five or 10 more minutes.. So gang, get your questions ready.. But I want to go to another unlock now, which is scaling.. - Yeah.. 00:27:32,098 I can ask you something more specific.. - Well, there's like, 00:27:33,927 "How do you do scaling well?" Then there is like "How do you have awesome culture?" - Yeah.. 00:27:43,099 And then, there's a Dunbar's number, 150, right? Above which everything gets harder and below which.... There's a phase shift that happens above 150 employees, and there's a....

Below that, things are different.. Which one.... Where do you wanna take this? - Let's do the unique insights 00:27:54,169 to creating a great culture that nobody talks about.. - Okay.. 00:27:58,392 I have very controversial opinions here.. I think when you start your company, the culture of your company is more or less the personality of the CEO and that's it.. Nothing else, okay? And as a result of that.... By extension of that, that means also, recursively, if you have a leader that runs this whole department, the culture of that department is that leader.. And it's kind of recursive all the way down, right? So.... And just to prove that, 'cause that might seem really controversial to people..

Like, "Oh, I thought its the culture principles" or like "I read about these like "in a Netflix deck" or something like that.. But if you look at it, what I'm saying is that Bill Gates' Microsoft is a very different culture from Steve Ballmer Microsoft, which is a very different culture from Satya Nadella Microsoft, right? So it's literally the personality.. And if you can get along with Satya now and you operate the way he likes to operate, you're gonna be successful with him.. And if you operate probably the way you would do with Steve Ballmer, it's not gonna work great, and then it's turtles all the way down.. So.... And so, my key thing is this, "Can you formalize that?" So make culture principles out of that.. Then you're giving people the cheat sheet of how they can succeed in your company, okay? So culture is just, "Can you write down what those are?" Those things that make the CEO.. By the way, I believe at Amazon, this is how they came up with their 11, and then now 13, leadership principles.. I think, initially, they just wanted.... Jeff Bezos just wanted one, which is "Leaders are right." And then, eventually they studied how he does things, and they tried to replicate his personality, and that became the leadership principles, I believe..

But so, if you codify them, you're giving the cheat sheet to the employees to know, "Hey, here's how it is working with me," so you're making their life easier, okay? When you're codifying those principles, you can lie to yourself and pretend you're someone you're not.. That's not gonna go well, you're misleading the employees.. So Ben Horowitz has a great book.. I think.... I always screw up the title.. I think it's "You Are What You Do," or something like that, which means it's what you do, that's who you are.. Not what you say or what you think you should be.. So write down properly who you really are.. Introspect that, write down those as a culture principle, okay? Second, after you've done that, make sure that you are

promoting people and making them successful in the company if they follow the culture principles.. Third, hire people according to the culture principles..

Fourth, manage people out according to culture principles.. If you do these, you will have a consistent culture.. - And these principles are your values 00:30:24,576 because before, there was also the takeaway of diversity.. - Yeah.. 00:30:45,278 They're not gonna be able to work well together.. So there's certain values you need to have in common to work.. This is what all these business books call, "Is the person a culture fit or not?" - But I just wanna make sure that 00:30:56,354 the takeaway is clear.. So there's certain values that are sacred that every.... That are through lines for the whole organization, but then you want diversity for skills or-- - Yeah, I mean, lemme tell you 00:31:04,102 what the culture principle at Databricks is so you get a sense.. But really, they're like, we came from research..

We're research personality, the seven people that started the company.. It's really those values that all of us kind of had.. We work from first principles, we added that.. Yes, I know earlier that we should broaden it, but it's still.... If you look at Databricks, it's gonna be a company that largely works from first principles.. We're very picky about who we hire.. So we have a culture principle called "Raise the bar, "don't settle on hiring." Because we saw a lot of people coming.... Successful leaders coming from other companies, and we were completely constantly fighting each other.. We couldn't get along.. We were like, "That person is no good." And "They're like, no, they're amazing." And so, that's a culture principle for us..

We.... We're truth seeking, which comes from the research background.. We're very like tell-it-as-it-is, be honest about it.. We don't like.... That's not common in the industry.. A lot of execs in the industry, they like to present a nice executive presence, nice rosy picture of how things are going.. Those people don't work out at Databricks.. But it's really like my personality and my co-founders personality that we've codified.. - And, so can we walk through 00:32:02,812 how these principles might inform a hard decision? So I don't know if you wanna talk about this or not, but I presume there's a lot of pressure on Databricks to go public.. - Yeah..

00:32:10,724 And I'm.... And Stripe and other companies have had a lot of pressure to create liquidity for their employees, to give their employees wealth.. And so, they've done this thing where they created a mechanism for the employees to get paid out.. Is that something that you.... Is that an issue that you are thinking about? And if so, what questions are you wrestling with that maybe people don't think about or.... To make that decision? - Yeah, look, it's.... 00:32:33,993 Of course, the employees want liquidity and you wanna provide them opportunities to have liquidity, and we have provided lots and lots of those over the years, and we're gonna keep continuing doing that.. Being public, that's one of the main advantages, is that your investors and your employees get liquidity.. Some people would also argue that it makes you operate.... It provides certain rigor and certain accountability, and so on..

I think in Databricks' case, we already have that in spades.. That could be.... I think we already operate like a public company, but what do I know? Maybe I'll change my view once we go public.. I think there's a downside in that markets force you to be very quarterly focused, with earning reports every 90 days.. And I think you wanna run a successful company, and when you IPO for your first time, you want be successful in your IPO.. You don't wanna just go out there and miss numbers and say, "I don't care.. "I have a 10 year vision.. "Who cares that the stock "just tanked to zero?" And your employees are gonna care.. So I think it's gonna affect how you make decisions.. And I think being private lets you make asymmetric moves to win in the market that being public that doesn't let you..

It just ties your arms.. And we have very, very successfully, I think, used techniques like that, like price cuts, like acquisitions, like deploying lots of people in certain countries that other people are not gonna deploy 'cause the ROI right now is not high in that country when the markets are crashing and they need to drive our ROI.. So it was just.... For us, it was a way to raise huge amounts of money into.... Our belief in 2021 was that there's gonna be massive inflation in the future.. By the way, inflation was not existent in 2021.. Interest rates were zero.. Our hypothesis was there's gonna be a huge correction, interest rates are gonna go up.. Grab as much money as you can humanly do.. So I think we raised two-and-a-half billion in that year..

And then, the idea was, "Let's not go public like everybody else is, "and let's use this strategically "while everybody else..." We thought that there's gonna be a market correction, we couldn't nail the time, but.... And it didn't really happen.. It's been like a-- - It's a soft landing.. 00:34:45,199 "and utilize the fact "that we're private," and we did that.. I think Databricks will be public.. I'm not gonna give you exact date, but I think it served us well.. - There's so many more questions 00:34:57,354 I wanna ask but we're out of time.. I wanna ask one final question, then I'm gonna open it up, which is are there any.... You are this genius who's been able to move from academia to industry and become a phenomenally successful CEO, and you also have a childhood history of moving cultures, moving from Iran to Sweden, then to the United States.. Are there any practices that can be shared to develop skills that you think are very valuable, that you realize now are really valuable for you as an entrepreneur? - Yeah, I mean, I do think that....

00:35:25,661 This is what I always tell my wife, which is if the kids go through rough times or change schools, and so on, I think it's good for them.. It sets them up for.... It's.... So it's just.... They're just gonna learn more.. They're gonna kind of get out of their shell.. Each challenge they go through when they're having a hard time in school and so on, it's a challenge.... Later in life, they might see something similar as well.. So I think it's great.. The advice I would give is just try to broaden and

challenge yourself, and work with people that you otherwise might not wanna work with, or you don't like, or you think they're different, and so on, broaden your perspectives, because in running a company at like....

Like, Databricks today, I have to deal with salespeople that are super extroverted and super optimistic, right? And if you had to.... If you have to generalize.... There are of course many different types of salespeople, but they're the kind of.... If you had to generalize them, and they're not all like this, they're kind of the jocks from high school, okay? And you have the engineers, more pessimistic, more conservative, more sort of risk averse, very detail-oriented, you gotta work with them.. If the marketing people, who are more storytellers and more artistic, and they're very different.. They're on emotional versus rational, left side of the brain, right side of the brain, all these people are very, very different.. You need to be able to get the best out of all of them.. And each of these department end up being very important in your success.. So you wanna be able to work well with all these different people, get the best out of them, and make them do something that puts your company ahead of the other companies out there.. So challenge yourself to work with these different types of personalities..

You see them already in your life, in society.. - And is that a skill that you built? 00:36:58,482 I mean, I can feel how multivalent you are, how you can go on different levels just by talking to you.. Were you born with that or is that something you actually have built by proactively doing these exercises? - No, I think you learn.. 00:37:07,994 I think you can learn a lot of this stuff.. Dealing with people and so on, you learn.. I mean, you make mistakes also.. You learn to (indistinct) mistakes.. But I think the key thing I would say then, maybe last thing I would say, is as much as possible try to put yourself in people's shoes and walk backwards from how they're thinking about things, how they're perceiving the things you're saying, how they're thinking about the world.. If you always do that with your employees, "How's the HR department gonna understand "this that I just said? "How's the engineers gonna feel about this? "How are my customers gonna feel about this?" If you can do that really, really well, you can get the best out of them, you can get them energized, and you can get them to sympathize with you.. So the more you can do that, the better..

And it's hard to do 'cause we all like to see the world from our own lens, like just from my own personal perspectives and I think everybody thinks exactly like me, but they don't.. They're in a different spot and they see things differently.. - Awesome, thank you.. 00:38:02,751 We're gonna do questions, gang.. Raise your hands.. We're very limited on time so try to keep your questions succinct.. Audience Member Thank you.. 00:38:08,696 Amazing interview.. My question is, what's the biggest challenge that you have encountered for the company stage from zero-to-one versus from one-to-10? - For both of them 00:38:21,222 or just zero-to-one only? Audience Member Yeah, zero-to-one versus one-to-10, 00:38:25,514 what's the biggest challenge from one to 10? - I mean, it's.... 00:38:28,030 Look, zero-to-one is just a constant challenge of product-market fit..

How do we build something that people want to use just once? And then how do we build something that they use it.... Because you know.... And then, finally, you crack the code and they're using it once, but then they throw it away.. So when they're in front of you, they're like, "Oh, this is super cool, "I love it." But then you go, and you look at the numbers, and they stopped using it after one day.. "Why are they not using it again?" So then you go and you try to get them to use it again and again and again, and that's the whole journey of understanding.. And that's when you realize, okay, you built a vitamin, you know? We all take the vitamin, we're excited when we buy it, but then the next day we forget to take the vitamin, and the next day we forget to take the vitamin.. So you have a vitamin, you don't have a painkiller that's necessary.. Then once you crack the code on that and you have the painkiller, and they're taking it all the time when they have a headache, then the challenge is now you want to charge for it.. And then, a whole bunch of people are like, "Oh, if you're gonna.... "If I have to pay for this, "then I don't want to have it at all." You're like, "What? "You were using it every day." "Yeah, yeah, but it's not that valuable." So then you have to figure out how do I actually price it? And how do we monetize it? And how do we change the product to make it more valuable? Each were distinct product-market fit before we had really revenue and things were working, those were very, very challenging steps that we had to really nail..

But they didn't have anything to do with scaling.. The one-to-N, the challenge is scaling.. And there, the challenge is you can no longer.... Also, you typically have a certain size, so you're probably now beyond 150 employees.. The game changes from "I understand everything everyone is doing.. "I have it all in my head.. "I was there from day one.. "I can micromanage everything.. "I know exactly what everybody should be working on," to like, "Okay, there's a big team "of 100 people in Japan." Databricks today has a big team in Japan.. Many of them don't speak English actually at all, right? There's a big team in Brazil, there's a team in India, there's a team in China, there's a team in Europe, Germany, France, blah blah blah, you name it, right? So now it becomes like what are the processes? How do we scale this machine with processes that enforce our culture and things going right without me even knowing? I can't even talk to them, right? So there's a different challenge..

And so, it becomes much more process-oriented in scaling, and doing that in different markets with also their own culture.. So we talk about culture, but Databricks' culture in Japan is probably a little bit different from Databricks' culture in Italy.. Audience Member Awesome.. 00:40:36,305 - Great answer.. 00:40:37,472 Next question.. Audience Member Thank you so much.. 00:40:41,696 I have a question.. I read an article about (indistinct) talk about at the beginning, the goal is to sell the company for \$100-200 million, and now it's like much bigger, so I bet.... During the time you got multiple offer, but how do you make decision, like whether I sell the company or not? And for yourself, how do you make decision on your own career? Why do you want to become a CEO or you want to start your own company? So that's my question.. - Yeah, I mean, I didn't wanna start a company, 00:41:13,599 and I was the reluctant....

I was the least in of the co-founders.. But for selling or not, I mean, advice number one, don't tell your co-founders if you have an offer, okay? Because there's gonna be a lot of politics and they're gonna have a lot of opinions, and you don't wanna hear their opinions.. It's really your decision.. - Don't.... 00:41:30,649 If you get an acquisition offer as a CEO and you have co-founders, don't tell them? - Again, in this lecture, 00:41:35,522 I'm just gonna contradict everything I did and tell you do the opposite.. I told my co-founders, it's a terrible idea.. Don't do that.. They have a lot of opinions, okay? - Even though you trusted.... 00:41:44,660 You trust them.. - I trust them 00:41:45,639 - But you don't trust them 00:41:46,971 enough to tell them? - Literally, I was like, 00:41:47,945 since I trust them and we have this tight-knit group, and we're so....

I have to tell them this.. - Okay.. 00:41:54,438 what they were saying, okay.. So in my opinion, be very careful.. If you end up not wanting to sell or if you're not selling, be very, very careful.. Because what if they're like, "No, no, no, you're destroying the company.. "This is our only chance to sell.. "You have to sell it now." And you're like, "No, I don't want it." That's a very tough spot to be in.. Be very careful with that.. - Can you talk about....

00:42:12,296 How do co-founders have fights in that situation? Is it just might is right, the CEO makes the decision? - No, it's siblings, right? 00:42:18,306 And it is like.... It's very hard.. It's not.... That's why I'm saying don't do it.. - Okay, okay.. 00:42:28,136 You're gonna get me into trouble soon.. I'm gonna lose my co-founder.. But.... So that's what I would say.. I think that most....

I think a rational way of thinking about selling.... There's many ways, I'm not gonna give you all the answers, but pretty rational way is to say, look at your growth rate and see how it's going, and if you just compound that for three years, where will you be in three years? You can do a best case, medium case, poor case scenario.. And the acquisition offer better definitely beat the worst case scenario, right? Probably also the middle case scenario as well.. Then you can decide what you wanna do with your life.. Do you wanna do another one or not? But.... So this is a lesson for people who wanna buy companies, that I think most people who buy companies don't understand this.. The founder is not gonna sell it for the value it has today.. They can just sit on their butts for one year and the growth rate will be this much, and with this multiple will be this much.. So you have to pay a significant premium.. There are two types of acquisitions..

There are.... In my opinion.. Their acquisitions of companies that are kind of.... It's not really working, and there are acquisitions of companies that are doing well.. What I'm talking about is companies that are doing well.. It's going well, it's growing.. And there's companies that you have to close doors and it is over.. You have to.... Then that's a different equation.. Then you only have this much time and you have to find the best offer..

- We have time for one 00:43:43,190 more quick question.. - I think he had 00:43:44,095 his hand up first, so from fairness perspective here.. Audience Member Thank you so much for coming by.. 00:43:48,899 I really resonated with what you said at the start of the talk about having a large team because I also worked in a venture recently that split up because we had concerns about too many founders and also overlapping fields of interest.. And so, I'm wondering for you, when you founded the team, how did you go about protecting your position given the existing overlapping in expertise with your co-founders, and how you've protected it when you brought in additional folks with potentially more expertise or specialized expertise? - This is a great question.. 00:44:37,490 'cause what's best for me doesn't necessarily match what's best for the company.. But if you want to succeed in your venture, you have to make sure that that's the guiding principles.. And then, the difficult decisions will have to be made from there, which some people are gonna be unhappy.. - And is it hard to hire people 00:44:52,657 when you have so many co-founders and give them leadership responsibilities, and feel like they have control when you have seven co-founders? - As I said, we have to do 00:44:59,771 what's best for the company, okay? So if we have to do what's best for the company, then if the new person is above you or below.... If you're a co-founder of mine, if I layer you, if that's the best thing for the company, you and I have to agree now that that's the right thing to do..

You might not like that, and you might wanna quit, but we agree that from the beginning that we were gonna do the best thing, and that also applies to me.. Maybe I'm not the best CEO.. We should also.... We should just at all times do the best thing.. We don't have time for any other thing.. It's hard enough as it is.. - And on that mission-driven principle, 00:45:24,075 let's give Ali a round of applause for sharing so generously.. (audience applauding) Thank you, Ali, for sharing your experience and insights.. Gang, next week we're gonna be joined by David Allemann, who's the co-founder and executive co-chair of On, the fastest growing shoe company.. It's not open sourced..

You can find that event and future events in this ETL series on our Stanford eCorner YouTube channel.. And you'll find even more of the videos, podcasts, and articles about entrepreneurship innovation at Stanford eCorner.. That's ecorner.stanford.edu.. Thank you, everybody.. - Awesome, thank you.. 00:45:58,305 (audience applauding) (bright music)..