Masters of Scale Episode Transcript: Sam Altman

REID HOFFMAN: My friend, Sam Altman, is a bit of a geek. And he's OK with me saying that. I asked.

> **SAM ALTMAN:** ...to talk about my nerdy qualities, I approve of that.
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> **HOFFMAN**: I thought you did. Many people have noted you have an affinity for cargo shorts.
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> **ALTMAN:** Honestly, I don't think they're that ugly, and I find them incredibly convenient. You can like put a lot of stuff… I still read paperback books, I like to carry one around with me. I carry like, computer chargers, cables, they're just like efficient.
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> **HOFFMAN:** It's somewhat your Batman utility belt.
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> **ALTMAN:** Yeah, you just can carry a lot of stuff.

HOFFMAN: People don't often ask Sam directly about his cargo shorts. Or his geekiness, for that matter. Sam's the president of Y Combinator, one of Silicon Valley's most prestigious startup accelerators. He's incredibly respected, and founders everywhere know that he can can make or break their fledgling company.

But if you really want to understand Sam, you've gotta understand what species of geekdom he falls under. Sam is not just your garden variety geek. He's a student of the history of geeks.

> **ALTMAN:** An aspiring student.
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> **HOFFMAN:** Aspiring student, with a fascination for an entire range of tech. So one of the pieces of tech that you ended up getting was a bronze sword.
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> **ALTMAN:** ...I'm not sure exactly which sword you're referring to,

HOFFMAN: Turns out, Sam has a whole collection of swords and battle axes. And this fascination with ancient weaponry has put him in some uncomfortable situations. I asked him about one.

> **HOFFMAN:** One of the things I learned from the New Yorker profile is that you occasionally bring a sword in with you to interview an entrepreneur.
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> **ALTMAN:** No, that's not true.
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> **HOFFMAN:** No?

> **ALTMAN:** Either they wrote that wrong... No, I think I remember what happened.

HOFFMAN: So here's the story as Sam remembers it: A reporter from the New Yorker had been shadowing him for weeks to work on a profile. They're in Sam's home office, sitting through meeting after meeting, and Sam is getting bored.

> **ALTMAN:** It's the 16th meeting of the day and I needed some energy.

HOFFMAN: Suddenly, a package arrives, and Sam gets really excited.

> **ALTMAN:** I had bought this Bronze Age sword.

HOFFMAN: Yes, you heard that right. A Bronze Age sword.

> **ALTMAN:** It had just arrived, and I had been waiting for this thing, you know, like it had flown all the way from Europe and it was in this big crate, and I got it out. It's stunning, perfect. And so I was like so excited.
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> I mean the first thing you do is like pick up and swing it, and see like how it's weighted, how it feels. This particular one it had, like you know, the nicks where it hit people's helmets a couple of thousand years ago. It's a little dark, but…
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> **HOFFMAN:** Or maybe bones, right?
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> **ALTMAN:** Too much of a nick for a bone. Too deep of a nick in the metal.

HOFFMAN: The nicks in the metal might not have been from bones, but he's swinging around this massive weapon from the Bronze Age with a journalist from The New Yorker in the room. And the day isn't over yet.

> **ALTMAN:** I was on the phone, and it was kind of like a not particularly exciting conversation. So I picked it up, and I just started, while I was on the speakerphone, swinging around and fighting this pretend enemy because I was so excited. I just got this. I had been waiting for it for so long. And I didn't realize 'till I put it down at the end that that was probably really dumb, and it was probably going to make it into the profile. Because a reporter was sitting there watching. You kind of just forget after someone's with you for weeks. But I have never swung a sword at someone during an interview process.

HOFFMAN: I'm glad we can finally put that rumor to rest. The Headline "Sam Altman swings swords at young company founders" can officially be put in the category: Fake News.

He’s not just an Ancient History geek, he’s a geek history geek. He collects tech artifacts — from historic computers to jet engines – any object that represents a breakthrough in engineering history. And that’s also essentially what he’s searching for today. A technology that’s so new, so unlike anything that’s come before, it unleashes a geyser of demand. There have been consumers, across all eras, who just had to have the next big thing.

And if the history of geekdom has taught Sam anything, it’s that a product that’s deeply loved by a small group of early users is a product that can scale. I agree. And in fact, I believe it’s more important to have 100 people who LOVE your product than a million who just sort of like it.

[Theme Music]

HOFFMAN: I’m Reid Hoffman, co-founder of LinkedIn, investor at Greylock and your host. And while I’m obviously a big believer in creating things that can scale, I believe it's more important to have 100 people who LOVE your product than one million who just sort of like it.

And this isn’t always obvious. Many entrepreneurs fall into the trap of chasing the illusion of scale - the one million users who show up to use a flash-in-the pan product. What you actually want to do is seek out the true seed of scale, which has much humbler origins. Many great scale stories begin with a tiny kernel of die hard fans, no more than 100 strong — who are almost zealous in their passion for your work. They hang on your every product release. They can’t believe they ever lived without you.

Think of Sam when that sword arrived.

> **ALTMAN:** I was so excited. I just got this. I had been waiting for it for so long.

HOFFMAN: It sounds like that.

And when a user like Sam gets excited, that matters — not only because it drives use and loyalty, but because it will drive him to tell his friends. And if he tells two friends. And they each tell two friends. And they each tell two friends. Well, that story gets pretty big pretty fast.

I wanted to talk to Sam Altman about this, because he has an uncanny eye for these kernels of passionate, early users. Y Combinator has become known as a kingmaker in Silicon Valley. Their alumni include AirBnB, Dropbox, Stripe, Reddit, and more than 40 companies that are valued at 100 million dollars or more after being incubated at Y Combinator— or YC as we call it. But Sam doesn’t look for kings. He looks for startups that show these early signs of love from their users.

And how does he spot them? He pattern-matches with history. Think about his private collection of engineering milestones. He has an insatiable appetite for these objects, and his collection is constantly expanding.

ALTMAN: I like things that were super-important technological milestones in human history, even if they look like not really technology. So I've got a big collection of handaxes, which is the longest-serving by far—like a million-and-a-half years—piece of technology in human history.

HOFFMAN: Is there any particular artifact that you're hunting for?

ALTMAN: I don't know how I'm going to get this one, but I would like an F-1 engine, or at least I would like the bell of an F-1 engine.

You know, Bezos got one by pulling it out of the ocean, and convincing NASA to loan it to him. I mean, that's really a lot of work.

HOFFMAN: Is there another one or two? Because this is actually personally fun.

ALTMAN: Alan Kay gave me an Alto.

VOICE: Alan Kay created the first computer with a graphical interface, called the Alto. It inspired the first Macintosh.

ALTMAN: That's not the very last computer that I think is within my capability to understand everything that's happening in there, but it's getting near the end.

HOFFMAN: This collection is like the whetstone Sam uses to sharpen his instincts. When he's deciding which founder to admit into a Y-Combinator class, he looks for a ground-breaking idea that has the potential to give users something they can't live without. If he doesn't see it, he passes.

But to understand how Sam spots the indispensable startups, you have to know how he arrived at YC himself. He wasn't predestined to become the startup kingmaker. When he graduated from college, it could've gone either way.

ALTMAN: I'm very ashamed to say that I had been planning to go be an intern at Goldman Sachs that summer.

HOFFMAN: "Ashamed" is a pretty strong word. And a distinctly Silicon Valley reaction. After all, it's tougher to get a job at Goldman Sachs than it is to get into Harvard. Only about three percent of applicants get hired. It would make his family proud and his friends envious. He could live comfortably ever after.

Or he could take a far less comfortable path — one better suited to my cargo-short-wearing, bronze-age-sword-wielding friend. It began with a little mobile app Sam and his friends developed while studying at Stanford. It was called Loopt, and it let you share your location with friends.

> **ALTMAN:** It started as just a project that we worked on sort of like after class and at night. We had worked on it during a spring quarter and it was really fun.

HOFFMAN: “Fun” isn’t exactly a sound business plan. And what makes this idea even shakier, is that it’s 2005 — two years before the first iPhone was even invented. The word “app store” had not entered into our vocabulary. So the odds of making money with this mobile app were incredibly low. And remember, the odds of making money at Goldman Sachs are 100 percent. The odds were stacked against Sam and his startup, and everyone could see it.

> **ALTMAN:** If you said you were working on a startup, people sort of laughed at you in a not nice way.

HOFFMAN: But not everyone was laughing. A new community was just forming. One that was deadly serious about startups — and fun. It was called Y Combinator, and it immediately called out to Sam. For starters, its founder was the now legendary computer scientist and entrepreneur Paul Graham.

> **ALTMAN:** We all kind of knew who Paul Graham was. We had followed him online and he posted this thing saying like hey, not excited about your summer job? Come hack on your project and you know make a startup and it seemed like it would be more fun than being an investment banker.

HOFFMAN: Fun actually can make business sense. If you love what you’re doing, and other people do too. And Paul was determined to prove that young innovators with deep passions *could* find success if they were willing to take a gamble.

But this was a controversial idea outside of Y Combinator. Paul Graham was considered a sort of pied piper for young entrepreneurs — leading them down the road to ruin.

He wrote an essay about this, in 2007, which you can find on Masters of Scale.com.

Traditionally, investors would fund a company in stages — show me growth, and I’ll show you the money. Step-by-step you had to show user growth, hypothesize how much they’d spend on your product and lay out in painfully minute detail how much money you’ll need and how much money you’ll make. It’s classic Business 101 thinking. And it can be exasperating for a founder.

I experienced it myself when I was raising a series A round for LinkedIn. Right around the time Sam was a college student, I was looking for investors.

At the time, potential Series A investors wanted to see a business model that showed how LinkedIn would get to profitability. I told potential investors that we weren't going to generate revenue until after the next round of funding, and that therefore it shouldn't matter to them. They insisted anyway, so the team and I generated a financial model that included revenue sources. I don't even remember what we put in it! Rather than wasting weeks on it, we simply set aside a single evening, drank a couple of glasses of wine, and put together the model. I might have been a little miffed at even having to waste the single evening, but it was pretty good wine, so it wasn't a total waste.

Contrast that with an investor like Paul Graham. He says, "Forget the spreadsheets. Quit speculating. Just start building on a shoestring budget — and build something a tiny cohort of users will love. Love is all you need."

Some of you might be rolling your eyes at this idea that *love is all you need*. So I want to share a story that might soften your cynicism. It comes from Dominique Ansel, the famed New York chef who invented a pastry that became a global sensation. You may have heard of it. It's called... The cronut. It's part donut, and part croissant.

Ever since the cronut became the hottest thing since sliced bread, people have been mistaking Dominique for a master of publicity. A sort of PT Barnum of the baking world. So our producers visited Dominique's Manhattan bakery, and asked how he engineers these publicity coups. Dominique's answer: He doesn't.

> **DOMINIQUE ANSEL:** There was no marketing. There was a team of literally four employees and myself and when people approach me and ask me what my marketing strategy was and what was my budget to launch a company like this, I'm "You guys don't understand. It didn't happen this way." We're a small, small bakery. A tiny bakery. A neighborhood bakery on a street of Soho and it happened naturally, organically.

HOFFMAN: Here's Dominique's memory of how the cronut scaled, naturally. Every day, he bakes a fresh batch of croissants, and studies them like a scientist.

> **ANSEL:** I actually look at it every day. I cut it in half and I look at what we call the honeycomb which is the structure created by the fermentation of the dough. All this little air pockets that are inside. The fermentation, you have to smell it. It's a different type of fermentation. The crust, the volume, the flakiness, everything is so, so important. It's alive.

HOFFMAN: This obsession with the fermentation, the flakiness, the technical details — reminds me of all the great product designers I know. Dominique was singular in his focus in getting his croissants right. Then one day, Dominique's staff challenged him to make a donut instead.

ANSEL: I don't do donuts. I told them that I have no recipe for donuts since I'm French, but I most definitely can come up with something new, something special.

HOFFMAN: 100 taste tests later, the cronut was born. A food blogger, Hugh Merwan, arrives, snaps a photo, and shared the invention with his fans on GrubStreet. The massive response stunned even the blogger.

ANSEL: He called me the same afternoon letting me know that he had an increase of traffic of 300% on his website and over 140,000 link and he told me to be ready to be busy tomorrow.

I had no idea what he was talking about. I was happy for him. I told him "I'm happy for you. I need to go to sleep."

HOFFMAN: Dominique and his staff were facing a situation I'm all too familiar with: It's the inevitable fallout on the morning after the overnight success.

ANSEL: And the next day we had over 100 people outside. By the third day, we had over 150 people waiting outside. It was just overwhelming for everyone and it was very sudden and this doesn't happen, but it happened to us. It was just overwhelming for everyone. The staff all wanted to quit. It was too much.

HOFFMAN: The rest is pastry history. And if Dominique's staff initially wanted to quit, they soon learned to cultivate the unexpected outpouring of love. His staff treats the loyal customers lined up outside like invited guests, serving them hot chocolate before the bakery opened each day.

ANSEL: I think it's important for any chef to be in touch with the guest, the customers. To see them and listen to them. Especially for the holidays to be there for them. To wish them a happy holidays and thank them for keep on coming to our shop. I think it's important we have a lot of very loyal customers. A lot of people from the neighborhood and at the end of the day, a bakery is a local business. It is a neighborhood business and it's not life without the people in the neighborhood.

HOFFMAN: If you've never waited in line to enter a popular New York store — like Supreme, for example — you may not realize just how radical these small acts of kindness are. And I suspect it had no small impact on the Cronut's success.

But if you think Dominique now sits around trying to concoct the next novelty goodie, think again.

ANSEL: I don't think there's a need or a desire for me to try to recreate something like the cronut. I don't think I can and I don't think I want. I aim to create pastries that talk to people and of course I want them to be popular. Of course I want them to be successful.

Of course I want people to appreciate it, but I'm not trying to be gimmicky or trying do something that doesn't mean anything to me. I'm still trying to translate my ideas through pastries. You cannot force it. Even with all the money in the world, you cannot recreate the cronut. Even if you can hire the biggest team, the smartest people, you cannot recreate something like the cronut.

HOFFMAN: You could apply the same argument to just about any globally successful product. All the money and all of the marketing savvy in the word cannot sustain its growth in the long-run. You need more than your customer's attention. You need their unflagging devotion. And this poses an almost Zen-like riddle for entrepreneurs: The first step to scale is to renounce your desire to scale. Focus on those happy few.

This is a concept that every artisanal maker of small-batch goods grasps instinctively. Scale entrepreneurs? Not so much. But Paul Graham was determined to prove that the same fundamental truths applied to entrepreneurs with global ambitions.

And to prove his point, he offered a laughably small sum of seed money to those early Y Combinator entrepreneurs, like Sam: Each one got $6,000, plus free dinners. That's it. Off you go. Sam was intrigued.

ALTMAN: So we applied to YC and flew out and interviewed and got funded. We're actually the first company ever funded by YC and then it just kept going.

HOFFMAN: So Sam entered what's known as the first class of entrepreneurs to get accepted into Y Combinator. And they were essentially the guinea pigs who were meant to validate Paul Graham's theory of scale. And Sam offered quite the validation.

After graduating from YC, his company Loopt struck deals with Sprint, Verizon, Blackberry, and AT&T. With the advent of the iPhone, they were positioned for growth, and became one of the first offerings in the iPhone App store. Here's Sam, sharing the stage with Steve Jobs in 2008:

ALTMAN [Recording]: We are incredibly psyched about Loopt on the iPhone. Location, plus a contact list, and information about cool places means you never have to eat lunch alone again, or at a bad place. And we think that's really cool, we really do. You can use Loopt with your friends on most other carriers...

HOFFMAN: In 2012, Loopt was acquired by Green Dot Corporation for more than 43 million dollars.

ALTMAN: We got acquired and I was trying to figure out what I wanted to do next.

HOFFMAN: Sam was 26 years old.

> **ALTMAN**: And I decided I was going to partly take a like a sort of mid-career sabbatical race cars, fly airplanes, travel the world, all that kind of stuff.

HOFFMAN: When he wasn't on the race track or in the air, Sam tried his hand at the venture capital game. He had an eye for it, investing early in companies with real potential. But it just wasn't his idea of fun.

> **ALTMAN:** I liked running a company I did not like being on the sidelines and I didn't get the adrenaline rush I get out of being in the trenches of running a company, which I think is something that a lot of founders miss when they start investing.

HOFFMAN: Sam missed being in the trenches. He felt adrift. And Paul Graham, Sam's mentor, could see it.

> **ALTMAN:** And I was thinking about things I wanted to do and Paul Graham sort of jokingly said a number of times over the years that I'm going to retire and you should take over YC.

HOFFMAN: Turns out Paul Graham was only half joking. In 2014, he asked Sam, in all seriousness, to take over Y Combinator. Sam accepted the offer, and became President of Y Combinator at the age of 28.

Despite his youth, he was the perfect fit. YC isn't just an investment firm. It's an incubator for founders who want to reshape the future. Think of Y Combinator as an extension of his bronze age sword collection — only this time he's collecting the people who can make the swords that will change the world.

So where does he begin? He begins with a simple mantra. He repeats it to every founder that comes through YC's doors: Love is better than like.

I asked him why it bears repeating.

> **HOFFMAN:** So love is much better than like. Why this central mantra within YC, and all of the startups that are coming through?
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> **ALTMAN:** Well, I think there's a few different reasons for that. One is it objectively seems to be true. If you look at the companies that have gone to become super important and valuable, and shaped the world in a big way, they tend to have fairly fanatical early users. If you think about how you first came across Facebook or Google, it's very likely because a friend told you how great it was.

HOFFMAN: It is indeed objectively true that these hit products spread by word of mouth. On the other hand, I can point to a whole graveyard of startups that started out with passionate users.

And then the passion faded. The startup withered away and died of loneliness. It’s heartbreaking.

So passion is a great early indicator of success, but it leads to a vital question that every founder must ask a user: How deep is your love?

Sam has a clever way to plumb the depths of their affection. When the first iPhone came to market, everyone was agog at its new features — a touch screen! Apps! Music on your phone! But Sam wasn’t just studying the features. He was studying iPhone users. Intently.

> **ALTMAN:** So one of the things that was obvious when people got iPhones even though you know only a few million of the first iPhones sold, most people who had them used them every day and loved them and it became like their most precious item.
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> I remember shortly after the iPhone came out I was in a developing world country it was really quite poor and people had nothing except they all had a smartphone. And once they had one like you know you read these statistics and people need to do some lightweight journalism about, “Would you rather give up your smartphone or X” and it doesn't really matter what X is, they’re gonna keep the smartphone.
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> And so I think you could have predicted with a lot of certainty, and many people did, that this was going to be a large market.

HOFFMAN: This is a rather extreme case of attachment to a product. The odds that you’ll create a product that is so addictive, your fans would give up all their other worldly possessions for it — are pretty much slim to none. But the extremity of that thought experiment is clarifying.

You want to make your product as indispensable as humanly possible. That’s your primary objective — before you shore up your business plan, or plan your PR campaign, or any other steps along the road to world domination. Your first step must be, make yourself indispensable. But the truth is, you’re unlikely to build a product that makes a user say “I’d give up my left arm to use this.” So short of that ideal, Sam sets a more modest objective for founders. Focus on love, not likes. Sam can’t stress this enough.

> **ALTMAN:** And that's really important, because the startups, once they get big enough, can only grow by word of mouth. All of the growth hacking eventually stops working. If you're going to keep growing exponentially at some point, it is probably going to be because people tell you, "You've got to use this product with me," or, "You've got to try this, it's so great."

HOFFMAN: “You’ve gotta try this.” There’s a hidden power to that simple phrase — which Y Combinator has elevated to an almost mythic status. It’s like “open sesame.” Once invoked, Y Combinator graduates react as if a wall has opened up before their eyes, and the secret pathway to scale is laid out at their feet. They know that if they keep hearing the words "You've gotta try this," it will propel them into the far-off future, the years that their valuation is based on.

> **ALTMAN:** And that seems to be really important, because the startups—so much of the value is in the far-out years.
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> And in those years, it depends on continuing to grow at these fantastic rates.

HOFFMAN: By fantastic rates, he means "exponential" rates — the sort of viral growth that can only occur when that first cohort of users says "You've gotta try this" to two friends each, and they say "You've gotta try this" to two friends. And so on and so on. This can scale to millions of users in a matter of months.

But make no mistake, it's exceedingly difficult to kick off this chain reaction, unless you're willing to hone in on a tiny cohort of users. You should almost have a willful blindness to growth, and a monomaniacal focus on making just a few people happy.

> **AUBRIE PAGANO**: You win people over one person at a time.

HOFFMAN: That's Aubrie Pagano, co-founder and CEO of Bow & Drape, a fashion line that lets customers personalize the design and fit of any piece of clothing. And she had to fight for that early cult following.

> **PAGANO:** It's hand to hand combat, and especially when you're under resourced, even when you are well resourced actually, it doesn't matter.
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> There's no cutting corners around that. You can't throw enough money at that problem, you can't trick people into loving your brand. You just have to win that over. That's how we grew the brand. We grew the brand through word of mouth. We didn't even start marketing until last year.

HOFFMAN: Mind you, they've been in business for five years - and by their third year, Bow & Drape had grown revenue by over 300 percent from their first.

> **PAGANO:** It was all word of mouth. And I really do think that that is such an important part to early success.

HOFFMAN: And if your users really can't stop raving about your product, you can defer marketing indefinitely. Even if that product is...underwear. No matter what kind you wear, no matter what gender you are, I'm going to bet that you've heard of them. Spanx has been the name in undergarments since it launched in 2000. Sara Blakely, the founding CEO, has come a long way since she was shipping packages from her home in Atlanta. One thing she never updated? Her marketing plan.

BLAKELY: I ran Spanx out of my apartment for two and a half years with a handful of people before we moved out of my apartment. You know, it's been like that. I mean I had $5000 and I've been self-funded from the start. So I didn't ever raise a bunch of money, I didn't even know how to do that or that that was even really an option. And you know Spanx has never advertised until this year and we're 16 years old. So this has been a word of mouth brand.

HOFFMAN: And Sara didn’t spread the word about Spanx on her own—she recruited an all-volunteer sales force. She found a way to enlist department store clerks to her cause — by setting up booths in quiet store corners. Sara’s enthusiasm was infectious—not just to shoppers, but to anyone within earshot.

BLAKELY: So for the next two years I stood in department stores for literally eight hours a day and in the entrance of Neiman's or where cosmetics were were there were so much more foot traffic.

I set up a little table and I had my own display table and I brought my own television with a VCR in it and put the Oprah tape in there and some other news clips that had happened to me and I was like a one woman show. What I was doing is I was creating this very loyal sales force that wasn't on my payroll because I would win over all of the associates at every Neiman Saks Nordstrom that sold the product by being there and explaining it and giving away free product to them. I would do morning rallies for the store before the store opened.

HOFFMAN: So Sara targeted users who would bring in more users. She honed in on heavy hitters: people who already had the platform to do her marketing for her. The power of word of mouth is multiplied exponentially if you can recruit anyone that comes with a megaphone—whether it’s a salesperson in a department store or Oprah Winfrey. But what comes next? After you have gathered new users around, how do you know they’ll stick around?

At a certain point, as you’re zipping up a growth curve, you may think those users are here to stay. Retention is strong. Growth is ticking upward. And the only thing standing between you and global domination is a slick sales and marketing campaign. You’ll try to hack your way to growth through targeted ad campaigns and promotional offers. And you’ll have all of the appearances of growth. But Sam has a warning for you. Scaling falls into two categories — the easy kind and the hard kind. And you may not know you’re doing the hard kind of scaling until it’s too late.

ALTMAN: The hard kind of blitz scaling is where you try to start scaling up before the product is really great. And then most of your effort in scaling is to generate demand. So I think the number one most important insight about how to blitz scale is that the good kind of blitz scale is when you are not having to generate demand as you go but that you first got the product right.

HOFFMAN: So the easy kind of scaling is when you first got the product right. When you've created something users LOVE, and instinctively want to share. This kind of scaling happens organically, as users bring in other users. The hard kind of scaling is when you only get the product half-right. When you've created something users KIND of like, and which they'll use. But not something so good that they stick with it, and certainly not so good that they'd think to share it.

ALTMAN: And that's something we see, again and again. People don't stick with products that they don't love. And so it is easy to get a lot of people to try something with a clever growth hack.

The value of those users is often very low. They use it for a little while, you engage them with some trick, and they don't stick around. And that is not how you build these enduring, valuable companies. You need things that people want to come back to and use a lot, and I think it's much easier to figure that out early, when you can still make a lot of changes to the product. Everyone's like, "Well, I'm just going to get a lot of people to like me, and then I'll figure out how to make them love it later."

In practice, that's really rare. I would challenge you to think of an example.

HOFFMAN: Challenge accepted. I actually founded one of these companies: LinkedIn. One rather striking exception to Sam's rule.

We had a passionate set of early users, but these were not the users that helped us get to scale. We were grateful, we appreciated their support, but what they ultimately wanted from us wasn't something that we could deliver. I explained this to Sam in our interview.

HOFFMAN: And so LinkedIn, for example, is one, because of our early users who loved us, called "open networkers," they put it in their headline—called "LIONS"—"LinkedIn Open Networkers." They loved us because they wanted us to be something different than what we were. They wanted the whole world to say, "Everyone should be able to connect to Bill Gates, and have him connect back."

And it's unrealistic about Bill's time and commitments, and things he needs to be doing. And so we are not an open network. And it took us to get to scale, when other people started loving us, the kind of people that we were targeting.

Because the thing that I completely agree with is, well, if you don't have millions of people loving you, you don't have a fundamental company. But the question is, the initial people we had loving us at LinkedIn were not the people that we wanted to love us when we were hundreds of millions.

ALTMAN: We've seen a version of this pattern a bunch of times, which is, if you have a network-effect consumer business, you have this cold start problem.

HOFFMAN: Exactly. If scaling your product is ultimately dependent on having a large group of users, then you have a chicken and egg dilemma. The truly magical features we envisioned, simply couldn't come to fruition until we had a dense network of users. We wanted to create such a vast reservoir of talent that a recruiter could say, "I'm looking for an accountant based in Biloxi, Mississippi who has a humanities degree plus 10 years of work experience and the capabilities to lead team-building events." And I wouldn't be surprised if you could find that dream candidate in just one click.

But it took years of clever hacks and grunt work to enable that sort of high-definition headhunting. And those valuable users just weren't going to LOVE us straight out of the gate. So how do you get there? You work in batches, adding one narrow group of users at a time. Sam explains.

ALTMAN: You've got to find someone or some set of people that are going to use you a lot in the early days. And that may be a small, narrow-but-deep wedge, and then you expand it later.

And this is fine. We see this all the time with companies, where they start with some group of users that is not a particularly lucrative market—maybe not be the long-term users they want, but people, for whatever reason, can use the product a lot and get a lot of value out of it, and you use that as a bootstrap to create value for everybody else.

HOFFMAN: Another example is Facebook. When Facebook first launched, it was only for the students of a few colleges. It slowly expanded from Harvard to Columbia to Stanford, and beyond. But the ultimate way to scale was to go far beyond college students. Sam explains.

ALTMAN: In fact, Facebook—it turns out that their most profitable market is not students at the 10 most elite colleges. But those are people with a lot of time on their hands, they really cared about their social lives, they all had Internet access at a time when not everybody at that age did. And so it turned out to be a really good primer.

HOFFMAN: That's right. Sometimes you can't get to the millions of people who love you until you're actually at a critical mass. Just like Facebook, LinkedIn had to find its initial users from somewhere.

The next generation of truly lovable ideas will look nothing like the previous generation. If you take a backward glance at Y Combinator's most stellar graduates — Airbnb, Dropbox, Stripe

— you'll think they've mastered the app economy. And the assumption is that Y Combinator should stick to what they know.

Sam begs to differ.

> **ALTMAN:** YC was mostly funding software companies but I had a lot of conviction that we could apply the same thing that made YC work so well for software companies to companies in a lot of the areas that I cared about: AI, synthetic biology, energy.

HOFFMAN: This may sound like a radical leap outside of Sam's area of expertise. After all, you can't build a supersonic jet on a shoestring budget. You can't ask a user to hop into an experimental self-driving car and hope they come back in one piece to give you their feedback.

And when you think about the differences between apps and what is often called "hard tech", you might be tempted to ask Sam, "What on earth are you doing?" In fact, Sam hears this a lot.

> **ALTMAN:** But at the time it was like this is a really dumb thing. One of the things that is funny as a side note and just as a note to anyone that tries to do anything. Where you take a company in a different direction or scale it is that it is always funny to sort of like read the articles from the same journalists that when you say you're going to do this thing say like, Sam is crazy, completely unqualified and not going to work, YC is going to die, going after hard tech companies is so stupid.

HOFFMAN: But to Sam, this leap into the unknown is completely consistent with Y Combinator's mantra: Focus on love, not like.

To him, if a company is inventing something unheard of, you can ensure users will love it right from the proof of concept. Who wouldn't love the invention of a supersonic jet? Or a self-driving car to battle through rush hour, while you flip through a magazine? Or a cold fusion energy plants that simultaneously make energy cheap and solve climate change?

> **ALTMAN:** One company that you and I were talking about recently is this company called Boom; they're making a supersonic airplane. And they really have lit up people's imagination, and people really want it. People really love the idea of going to Japan in a few hours instead of 10 hours from San Francisco.

HOFFMAN: Boom Technology, the supersonic jet company, graduated from Y Combinator in 2016. One year later they raised $51 million in venture capital.

Here's the magic of tackling the seemingly insoluble engineering problems. People fall in love with your idea alone. Take, for instance, Boom.

ALTMAN: It is harder for sure to make a Mach 2.2 airplane than a Mach 0.95 airplane, but it is easier in the sense that people care. People want to be part of it, people are excited. People pay attention. The CEOs of large airlines decide to come visit you. And that's what we see, again and again.

HOFFMAN: That so-called “hard tech?” Sam says it’s easy.

ALTMAN: This is why I tell people that, in many ways, it is easier to start a hard company than an easy company.

HOFFMAN: So ironically, it may be harder to start an easy company. And easier to start a hard company. They’re just so lovable.

And now Sam notes with wry amusement that in a span of 14 months, press coverage flipped from scornful to glowing.

ALTMAN: Like, “Sam is a genius, it is like predestined, he was going to take over YC.”

I think you have to ignore all that and just say like I have a high level conviction and we're going to try this thing. And most people will tell you it's not going to work. If it's something new. Most people are afraid of things that are new and you just do it. It's probably not that risky. Probably won't kill the company and probably undervalue if everyone else says its stupid. So we were able to do that. And the first thing was expand YC into all these different directions. I think the greatest companies are created on kind of the bleeding edge of what people are working on.

HOFFMAN: And when you think about it, this brings Sam one step closer to expanding his collection of engineering milestones.

It’s only at the bleeding edge of innovation that you can discover a product that makes you say:

ALTMAN: It's stunning, perfect. And so I was like so excited. I had just got this, I’d been waiting for it for so long.

HOFFMAN: I’m Reid Hoffman. Thank you for listening.