



Stanford eCorner

Putting Startup Success in Perspective [Entire Talk]

John Collison, *Stripe*

February 18, 2015

Video URL: <http://ecorner.stanford.edu/videos/3469/Putting-Startup-Success-in-Perspective-Entire-Talk>

John Collison, co-founder and president of the online payment system Stripe, explains how even the most celebrated startups repeatedly encountered uncertainty and failures along the way. In conversation with Stanford Professor of the Practice Tina Seelig, Collison shares his thoughts on how a venture's path can evolve after its early days, even as the vision holds constant.



Transcript

I'm going to be using my iPad for notes. I promise I'm not on Yik Yak most of the time. So I'm a huge nerd for start-up history. I spent a fairly considerable fraction of my leisure time over the past year reading histories of Oracle and Microsoft and Facebook. It was really exciting. But there is this phenomenon where if you're interested in start-ups or if you're thinking in start - if you're thinking of starting a company, you don't quite get the full picture, because companies want to put the best face forward. They want to whitewash things a little bit. And so, you would end - you don't end up seeing the really interesting detail and the uncertainty from the early days of a company. And so what I'm going to try to do over the course of talking to you today is give you a little bit of insight into that uncertainty, into what it's like in the early days. And if I don't do a good job with that, in this part I will be going in to questions maybe half an hour in and you can ask the tricky questions.

So maybe we should start off with what is Stripe. And this is not maybe as easy a question as it sounds. So one answer is that Stripe is a really easy way to accept payments online. This is why we started it back in 2009 when we had been developing Web products, we had been developing apps. The two options you really had if you wanted to turn your product into a business were one you could send your user's offsite to PayPal, that experience kind of sucked. Or two you could sign up for a merchant account and go through the weeks of work and building out your own payments infrastructure that that entailed. Neither option is really good. And so, one way to look at Stripe is that, a better way that came along to accept payments. But if you zoom out a little bit you can look at it as a platform for running your online business. So we've seen thanks to the Internet an explosion of not just new businesses, but new kinds of businesses, new business models you look at software that previously was sold on a license basis is now delivered via the cloud as Software-as-a-Service.

It's all subscription services or you see that services that were previously kind of off-line delivered on an ad hoc basis are being delivered by market places that can help with discovery and liquidity and trust and safety. I'm talking about Airbnb for travel or Lyft and Uber in the transport segment and it goes, into every vertical like home cleaning or errands. And so as all these new business models emerge, to actually to run the business, if you are a subscription business, to keep track of how much everyone is paying you and actually bill them or if you're a marketplace, to run the pretty complex operations and move all the money around in a variety of different companies to make that happen this was hugely challenging for people and they were all building it themselves. And so what Stripe really does is gives them a platform so that they can use Stripe for all that and not have to build it themselves. So maybe that's another definition. But if you zoom out even further, maybe Stripe is just better economic infrastructure for the Internet. Thanks to the way the Internet has emerged. We have this global system that lets anyone share information, but money definitely doesn't work that way. In the U.S we have credit cards and we think of them as pretty global, but they are not. In Kenya, everyone uses a mobile money system called M-Pesa which is on feature phones, it's really far advanced.

43% of Kenyan GDP flows through M-Pesa and no one really uses a credit card or in China everyone uses Alipay, the payment arm of Alibaba. And so we've erected this kind of Tower of Babel when it comes to money on the Internet where we have a bunch of different systems none of which interoperates. And our idea with Stripe is that by using a Stripe you should just not be able to have a system for processing credit cards, but a way to accept money from anyone, anywhere. And so, neither one of these answers is more correct than the other; they are just all different answers at a variety of zoom levels. And one phenomenon I think is really interesting about start-ups is they tend over time to get higher and higher up in how they describe themselves. And that's okay, and that makes sense. But the sneaky thing they do is they pretend that that's how they viewed themselves all along and so you have this great Silicon Valley phenomenon of the founding myth that we set out to revolutionize app discovery. I mean what does that even mean? And one of my favorite examples of this is I saw an interview with Elon Musk, I mean Elon Musk is clearly an incredible entrepreneur and he's someone I respect a lot. But he was giving this interview and the interviewer was asking him payments, electric cars, space travel, what connects these, and Elon kind of looked very thoughtful and he was like well, when I was in college I thought the three biggest opportunities for mankind were the Internet, inter-planetary space travel, and clean energy. He was like, really? That visionary? And so what that means is as you're trying to think, is this a valid start-up idea, maybe you've identified a problem, but it seems very tactical, you don't know what the broader vision is.

One stark contrary example here is really enjoyed Travis Kalanick in describing Uber recently, Uber's latest tagline is transportation as reliable as running water available to everyone. But Travis, I remember in a while ago described in an interview someone asked him why he started Uber? And he said it was a lifestyle thing, me and my co-founder and our hundred friends could roll around San Francisco like ballers in Mercedes S classes. So that's maybe a little before the transportation as reliable as running water. So I guess the point I'm trying to make here is that you don't always know in the early days what the largest thing is. For me and Patrick, when we started Stripe, the market research we did was, we knew this was something we really wanted as developers and we had one or two friends who wanted it and that seems like an addressable market right there. And over time we have come to realize that this is in fact a really large and meaty problem that we can be tackling. The other challenge in the early days of start-ups, well that sounds kind of trite; there are lot of challenges. Let's talk about another challenge. One of my favorite media tropes is the multi-year overnight success, people talking about how quickly start-ups get to scale. I mean even in Stripe's case I've seen lot of newspaper articles that literally describe it as an overnight success.

It is like, hey you weren't there. In our case we spent a really long time in the early days building out the product and trying to figure out would it work and what the right thing was. And so to give you a sense of scale here we started working on Stripe in the fall of 2009 and we launched Stripe in September 2011, which was roundabout two years later. And I remember right at the beginning when we were starting it, I said to Patrick, yes, let's do it. How hard can it be which gives you a sense for our mindset? And then, the answer was two years of difficulty. We had not predicted that. And when we launched two years later, does anyone want to take a guess how many users Stripe had? Close, 50. So we had spent two years building out the early product and acquiring those 50 users. And you know when you're spending two years getting 50 users; it doesn't feel like a whole lot of progress, like it feels like things are going pretty slow. And this is the challenge if you have - if you're working on a start-up that's a bad idea, it's going to feel like slow going, but also if you're working on a start-up that's a good idea, it may feel like slow going too.

I think the thing that really allowed us to take off in the subsequent years was the fact that since we were spending so much time on each one of those users, since we were hyper focused on building out a great product and since we weren't dealing with problems of scale yet, that allowed us to really build the product that we wanted. One of the cultures that set in really early on was taking almost abnormally good care of those early users. And so, I think someone wrote a blog post about this, but we set up the Stripe API to e-mail us any time someone ran into a bug. So when you run into bug on any site and it shows the error message or something, in that case on Stripe, it would e-mail us and occasionally phone call us. Because we figured when you're there as a developer integrating this product that you expect to be reliable, running into that bug is a terrible experience and we wanted to fix it. And so it would alert us, we would often, I mean we weren't doing anything else at the time we would often open our laptop and start fixing it and send the user a friendly e-mail of hey that bug you discovered just there it's now fixed and people's minds were blown by this. Sometimes they even found it a little bit creepy. We set up a Campfire room that any of our customers could come into, at really any hour of the day or night. We even - if people were based in the Bay Area, we'd let them come by the office and we would just sit over their shoulder and help them integrate Stripe. We had in the bottom right of the Stripe dashboard a little prompt that would change on every page load.

It would say, the thing you guys should improve here or a feature I really want is or the worst thing about that - this page is and people would fill it out and hit enter. And again, because there were so few users, we would reply within 10 minutes and people found it a little odd. What this meant was that even though the user growth was happening quite slowly in the early days, it actually had a really surprising viral affect where people had a really good experience, they told their friends about it and we were able to spread entirely through word of mouth even to this day. We actually baked viral mechanics into the product and so for the longest time it was available in invite only beta mode. And I guess you don't really think of payment

processing as a really viral social thing, but the only way for the longest time to get access to Stripe was to get invited by someone who knew it and so again you had this phenomenon where people were not only signing up for Stripe, but being recommended to it by someone who was already using it, who knew how to use it and it really helped not just with user growth, but user engagement. The other challenge you'll face as you go through that early-stage with those early customers is really figuring out what is core to the product and what is not. Maybe another way to phrase this is what is - what should be part of your vision and what will need to change as you hit obstacles with customers, you can even probably define vision as the things that you're not willing to change. There tends to be a lot of debate over the lean start-up methodology where you should have a product, show it to some customers rapidly iterate based on their usage and their feedback versus the very vision driven product of I know what this is and I know where it should go. And to me that's not really a trade off at all in that you need some small set of things, the vision that you're not really willing to compromise on and then with the remainder I mean if the market is telling you that you're wrong, you really need to listen to that data. In Stripe's case, I think we were really focused on an instant on-boarding experience, building a developer friendly tool as our path to market and I think that was stuff we were really willing to compromise on.

If that wasn't a valid way to build this company, I'm not sure we would have been able to pivot out of that. But in every other area we explored the market; we just kept running into feedback from customers that ended up being really critical to allowing the product to succeed. So it's not a vision versus iteration trade-off. It's a selection of the things that you really believe in and then being willing to contort yourself to make it work around that. And related to that in the vision category is that there will be things in the early days of a start-up that makes sense in the early days that don't scale later on and so it's not just a question of - it's more of a continuum, there aren't just things that you should not change and things like you should be willing to change on a regular basis. It's - there will be things that you should not change for the first two years and then gradually need to be unwound as you grow. And so in the early days of a company, it's probably really critical that they focus on the U.S market, trying to win all markets is a distraction, but clearly over the long-term focusing solely on the U.S market is wasteful and they should go international or Facebook for the longest time they had the mantra of move fast and break things. And this really made sense for them, they were trying to have a really fast product cadence. But at a certain size you get so big and so interconnected that moving fast and breaking things probably isn't your model and so they - I mean they recently explicitly acknowledged, that they were moving past this. Start-ups end up having a really powerful path dependence where it's not just a question of arriving at the final answer and if you had found that final answer earlier, you could have gotten there much quicker, it's a question of building a set of assumptions, following those and continually revisiting them.

You're not just trying to arrive at the final form for your product; you're trying to get all the intermediate forms in the chemical reaction that gets you there. A good example of this is Microsoft. They started out in the hobbyist markets building basic compilers; they couldn't have stayed there, and could never become the company they are today as a result of building compilers. They had to move up stream and they are now basically an enterprise company. But at the same time, they couldn't have started as an enterprise company, because no one would have bought from them - these like two random college kids. And so again there's this path dependence to Microsoft's growth where they had to become each one of their stages to allow them to jump to the next level. Maybe another example of this is going back to Uber. If they had just started out with the Uber X model today, doing ride sharing, they probably would have been shut down pretty quickly. It required them to - to succeed, they needed to start with the limo business, get to such a scale that it was a well-known and well liked service and then they could start doing ride sharing in some cities and prove that it was a popular model. The last thing I briefly wanted to touch on this topic is that of start-up opportunities.

People often ask this question of where do I find the idea for a start-up. And I think in Stripe's case it was - in hindsight it makes a lot of sense. Building an online business was really, really hard pre-Stripe and starting a service to make it easier, would seem to make a lot of sense. And that goes for a lot of other companies as well. Anyone who had ever taken a cab in San Francisco should have had the idea for Uber or in the case of Slack; we internally were struggling with the problem of TeamChat. And not only that everyone we knew was struggling with the problem of TeamChat and so the idea to build a company to tackle that seems obvious in hindsight. But that obviousness in hindsight doesn't really help you, right? Because if you only realize these opportunities after they have come along and someone has shown you the path, that doesn't really help you get anywhere. I don't know if any of you guys have read David Foster Wallace's commencement speech, called This Is Water. It's really, really good and you should check it out, if you haven't read it. But in it, he uses the story of a big fish passing two little fish and the big fish says to the little fish hey guys, how is the water? And they swim along and pass and one turns to the other and it's like what the hell is water? And he used this anecdote as to then go on and explain about being mindful in the day-to-day lives that we live.

And they're sort of the little bit like that in as you think about opportunities on a day-to-day basis. We live in a world that's completely broken in lots and lots of small or big ways and we have come to just work around them, we have come to take them for granted, and so to spot opportunities requires you to jump out of that mode briefly and question how things work and be unreasonable in suggesting that it's not valid for them to work this way. It should be interesting to note that the companies that are often successful in changing an industry are often not started by insiders, because insiders know too much about that

industry they've been swimming in that water for too long. Certainly it was the case in Stripe's case as we came to learn more about how the payments industry worked. We could see the reasons why everything worked the way it did. Before Stripe to get set up with payments online, generally took a few weeks and it was a whole bunch of paper work. As you get more into the banking industry and people say, well, we need to collect that information to run our underwriting checks and fulfill our KYC BSA requirements, you are like yes, yes. And it requires you to stand back and say, no, no wait a second. This is not how the Internet works. And so I think there is a certain practice you get - you have to get into in how you look at the world to stop accepting everything is reasonable in how it works.

We are all swimming in opportunity, but it's often really, really hard to see it. And with that, I think we might take a break there and move to questions. Great. Perfect. So, this way it's going to work. I'm going to ask the first couple of questions, but I'm going to open it up to you, so you can be noodling on the type of questions that you want to ask John. You mentioned several times starting this with your brother. Is that a good idea? Tell us about, I mean, obviously it's been very successful, but tell us about what it's like and what the opportunities and the challenges of starting a business with a family member? Yes. So I get this question all the time often from reporters or whatever. And generally my response is to say that yes, we got all our disagreements out of the way when we were five and then try to move the conversation along.

But now that I've told you that, so that wouldn't work here. I think starting a company with someone is, I mean, one just on the face of it, it's hard, it's often seven hours - seven-day weeks and 14 hour days again and again and again and going through a lot of uncertainty, a lot of setbacks, but also in the actual work you're doing and the working style, you're probably the group of people starting the company are learning a huge amount as they go along, that they are wrong a lot and discovering they're wrong a lot, and all this adds up to you need to have a really good working connection, if you already know the person, you need to have a really good working connection with them and if you don't know the person, you need to develop that really fast. And so I think we were lucky in that, Patrick and I, I mean, not only had we grown up together, but we had worked on a startup before, we had worked on projects before, and so all the meta issues of working style and how we worked together were out of the way and we could focus squarely on the task in hand. And I think if you look at a lot of successful teams, generally they had a history of working together, you often see people who have worked together for a long time at previous jobs starting a company together. I'm not saying that's a necessary requirement, but I think if you actually look at the data you have this phenomenon where it requires you to either get lucky in finding someone that you work really well with or pick someone where know that's the case. Did you have a very clear division of labor from the beginning or is that something that's evolved? It was totally unclear in the beginning in that there was this huge amount of work and we both just tackled it. Great. And you chose to go to Y Combinator. Can you tell us a little bit about that experience and how it influenced the evolution of the company? Yes. I think YC is really valuable, especially for people like us where we were fairly new to the Valley and we were working in a business that required us to understand how the Valley operated and worked.

It would have been very useful to have a network for hiring, for our business development, for raising money things like this and we didn't and most investors will say on their homepage that they don't accept cold pitches. You have to be in that network already to be able to participate in this system. And so YC is quite cool and unusual in the way that there is a standard application form on the site and that's actually the only way that they accept pitches is you - anyone from anywhere in the world can fill that out and get a spot. And so, I think what was valuable for us was the fact that we were pretty new to this; it helped us get into this world. And you know to give you a concrete example, in the early days of Stripe, it was I mean, it was a lot of work convincing people to use it. It was this new unproven tool that you're going to build your whole business on. I mean, that's kind of a scary undertaking. And so, it was - a lot of our early customers were YC companies who we knew through that, they knew we weren't going to disappear in the morning and they were willing to integrate Stripe. Fabulous. So anyone in the room want to start out with the first question? Yes.

Okay. What I want to know is your childhood related with entrepreneur. Childhood? Childhood. Yes your days of childhood related with entrepreneur. Was the question asking about his childhood as an entrepreneur? Yes. Childhood as an entrepreneur. Okay. Okay. Grew up in the middle of nowhere in Ireland in a small town in County Tipperary and read a lot of books, used the internet a lot, I mean, childhood pre-Internet and post-Internet do seem to be very different in that pre-Internet you're mostly limited to a very local circle and post-Internet you're making friends with people all over the world and learning new things. I first coded when I was 14.

I built a website that Patrick subsequently - Patrick is my brother, subsequently comprehensively hacked, which I guess was a good lesson in never try anything. I'm not still bitter about that one. But yes, I think 20 years ago, would it have been as easy for me to come out here from - to come out here from there and do something like Stripe, it seems unlikely. So clearly you are someone who has a lot of ideas, right? Starting at a very young age, you were building things, how did you pick this as the thing that you set I know I'm going to put all my energy behind this problem to solve? Because this was a huge problem for a lot of us, right. It can be an interesting dinner table conversation or hanging out with the friends saying, this is a problem; someone should solve this, which is the one you say this one I'm going to solve? Yes. I think that's a really hard problem. It sort of comes back to the bad ideas take a long time and never quite achieve escape velocity, but good ideas often take a really

long time to achieve escape velocity too. In the case of Stripe, it was actually - for the first few months we were also working on the series of iPhone apps, it was one of the projects we were working on, but we were also in college at the time so we were juggling kind of class and these iPhone apps and Stripe, and so it was definitely not our exclusive focus. I think the thing that really convinced us in the early days was and this might be specific to more developer or business focused companies rather than consumer, which can get to scale really quickly, but I think in the - in our case what really convinced us was the fact that the users we had were so passionate. This was not just for them, something marginally better, but they thought that it was life changing and revolutionary and they wanted to tell all their friends and they wanted us to build a way for them to invite their friends to it, that seemed to really get - that got our attention.

And so I guess, most of the metrics that people talk about day-to-day like revenue or user numbers, those are all lagging metrics and you as the person actually working on the product, you have access to leading metrics. And so apparently with Snapchat, one of the earliest - one of the most compelling metrics in the early days was the number of times per day each person used it in that even if this wasn't really big yet, it was growing very quickly and it seemed to have a really deep connection with each of its users and similarly for us I think the passion that the early users had about the product was that leading metric that, that indicated to us that something was there. But I think in each case that leading metric is going to be different, but you want to find what that leading metric is to be able to judge whether this is going to take off or not. So this is a space that has become very, very busy with lots of other companies, how do you think about your competition? Is this something that you think of it is a cat and mouse game, with features, do you say I don't pay attention to them; we have got our own path? Talk a little bit about competitors. Yes, it's sort of funny in the early days when we started Stripe, people would say to us like really, payments? Why would you start a payments company and then in 2012 there were like all these payments companies and people would say to us, man payments, that's like a super hot space, that was a great idea you guys starting that and you're just like - the whole time we were like nonplussed by all these reactions. I think there's - it's important to be really clear in your own mind and as time goes on, be good at communicating what is unique about what you're doing. And so in the early days, people would always ask us they were like so, payments and like with a design focus and it starts with S, so it's like sort of like square, right? And actually when you think about it, they are two entirely different businesses in that Stripe is a technology product, using it more or less always involves code, we are interested in what you can build using this toolkit we've developed for you in a really leveraged way online, whereas Square is entirely offline, almost entirely aimed at the small business segment and offer face-to-face transactions. And I think similarly with lots of competitors, people who only have a surface level understanding of your business, will tend to want to lump you into some category and it's very important that you be able to get across what it is that's not just happens to be different today in the feature set, but what's different about where you're going and in the asymptotes of these two companies where they end up. And I think that's not only important to be able to explain it, but it's important in an existential sense in that hopefully you're doing something different. So speaking of doing something different, I understand you now deal in Bitcoin as well.

That's obviously something that's very interesting and a little bit controversial. Maybe can talk about what you see is the future of alternative currencies like Bitcoin? Yep. So I mentioned earlier the Tower of Babel effect where online we have all these different payment systems that are completely non-interoperable. And so we in the West happily use our credit cards, people in Africa use a variety of mobile money systems, same in various parts of Asia, people in China use their Alipay accounts, you have this perfectly connected online world and then this perfectly balkanized economic landscape. And it's really harmful because it means then the products we use are artificially limited by you have the U.S Internet, and you have the Chinese Internet as a result. And so I think Bitcoin is - what is most exciting for me about Bitcoin is that global aspect. It's the fact that everyone's Bitcoins are the same, everyone's Bitcoins work together with each other and that no one has to come along and enable the coin for a certain currency, there's new committee that decides that Bitcoin is going to South Africa in 2018. It's just there, that's how it works. And so, we recently added Bitcoin to Stripe and it's one of the instruments you can accept. And from a product point of view, one of the things that we have always thought is really important is moving beyond this, I render a credit card form on my site that works for a very small set of people to being that universal connector for people that you just say I want to accept money and Stripe let's you accept money from anyone no matter what they're doing be it Bitcoin or whatever.

The other thing I will say about Bitcoin is I think with that original Bitcoin paper that is phenomenally prescient in retrospect like it is a truly great standalone paper that appeared out of nowhere and still people aren't quite sure who even wrote it and what that's done is: one, it's kicked off a Bitcoin movement, but two it's kicked off a whole crypto currency movement that has got people thinking about this space in a way they weren't before and so people are arguing about what is the perfect consensus algorithm and what are the right constants in the hashing functions, if you are going to use hashing or proof of work or whatever and you have people arguing about every detail and you have some people, bemoaning the fracturing that's happening where you have all these altcoins like Litecoin and Zerocoin and things like this. But to me that's really exciting in that people are not only saying, this is a really cool technology, but this is a really cool technology space and we should explore all the possibilities that are in it. Stripe funded a nonprofit called Stellar, which is developing a crypto currency, it's very interesting it lets you trade not just with Bitcoin, the currency is Bitcoin whereas with Stellar you can actually trade dollars or euros or pounds, things denominated in the actual currency and it doesn't have - it doesn't use hashing for consensus or proof

of work it uses kind of a more CA like model. And so I think crypto currencies are totally in line with this general mission we believe in, which is the Internet economy should not be the U.S., it should be the world and we need to fight really hard to make that happen. Terrific. Who has a question? Yes. So you spoke at how to start a start-up course last quarter and that went into everything that's relevant to startups to a great extent. We have this amazing amount of information now available in the Valley about what we should do. But it seems like some of the best founders out there, the ones who have been most successful didn't have this information at all. So how do you attribute this ability to find out what's the right thing to do in terms of culture and hiring when no one has really told you about it? So I'm going to repeat the question.

I'm going to see if I've got it, is that listen, there is all this how to start a company information out there, you didn't have access to it. What's the difference between those people who read all the books, watch all the videos, are listening right now and the people like you who did it by the seat of your pants. Well, I think it's maybe giving us a little bit too much credit to say that we succeeded entirely of our own accord and had no one helping us. There is the old quip about libertarians being mostly rich people and believing in the power of the free market to get them to where they are. But I think in our case we were very lucky to have a lot of advice from people who had done it before, be it people via the YC network, Peter Thiel was a very early investor in Stripe. That was a fun one. He was actually our first significant investor, going into the office of Peter Thiel and saying online payments are totally broken, who caused this mess. But he knows an awful lot about building companies, not just through PayPal, but being the first outside investor in Facebook, a co-founder of Palantir and these other successful companies same with Sequioa, things like this or studying what various companies that emerged in the '70s, '80s, '90s did and trying to draw out the conclusions of what made them successful like I said, if you - if any of you guys want to join my fun startup history reading club, you're welcome too. But I don't think we were on our own at all. There has always been a pretty good source of advice and going back to the point of whitewashing and the corporate history is always tending to be a bit more of an official history.

For me the best advice has always been someone who was there first hand, who in a one on one context is willing to tell you not only the official sanitized version, but and here is the time we nearly lost everyone's data, which actually happened for a major consumer Internet company. Great. Yes? What worries you most about Stripe and what challenges is the company trying to overcome today? So the question is what worries you the most right now and what challenges are you trying to overcome? Probably two things and I think the things we worry about and the challenges are sort of the same, so I will answer them together. I think one is that product strategy, product prioritization, product planning, whatever you want to call it, is always going to be really hard. And I think people think it's going to be hard if things aren't going well, but it's even hard if things are going well, because you're trying to model the future and see the knock on effects of doing things with huge amounts of uncertainty. And so in our case we have a very successful subscription product that we really believe in and we're expanding and we're also expanding internationally. And there is only a finite amount that we can work on and so, you're at a certain point faced with a choice, should we be investing in subscriptions or expanding internationally? The answer is both and you have to always be making these calls and constantly revisiting your calls when it comes to what you should be working on and it's so, so hard to predict up front what actually ends up being kind of a major part of your business. So I just want to build on this, how often do you revisit your strategy? Because you can't do it every day, it's sort of like digging up the seed everyday to see if it's sprouted, okay? But you also can't do it until it's an oak and you go oh my gosh, I really wanted a cherry. Yes. I think the strategy you revisit all the time, I think what companies have to get good at is being willing to let things take the time to - being willing to give them a chance to actually go somewhere or not, because especially as the company grows you have all this pressure and not just externally, but the pressure you all set on yourselves internally and one of the tougher things is saying, look I know that the needle hasn't moved in on this yet, but we said initially that we believe this is going to be really important going forward and we still believe that and it's just going to take time.

I think - say Bitcoin is a perfect example. I think if you look at - if you go ask anyone who is accepting Bitcoin is it a significant fraction of their transaction volume, the answer will be no, because the consumer demand isn't there yet and so you're in this chicken and egg situation and so is it irrational for these people to have Bitcoin on their sites? I mean, no. It's just that they want to give it that time and so they are probably constantly revisiting their strategy of should we be investing in Bitcoin, but the secret sauce is in the patience to know when you should be giving things time and that's an art, that's like really an art. So you can be patient when it's your company and there aren't investors, but you now have a lot of investors who probably have a strong opinion. So you've got a board and you meet with them, can you tell us a little bit about your relationship with your board and how - maybe how you manage the board, how the board manages you? You've got to find patient investors. I think the good investors get that this is how this works. And they - the good investors have also seen it some amount before and so in Facebook's case does anyone remember that Facebook in the very early days used to have banner ads? They were just going to sell ad space on Facebook that you could buy the banner at the top of the page. But it took them a few iterations before they found a really good revenue model that's now doing well. And so I think again in that collective amnesia that we all have where there's - we only really remember the successful stuff and it's easy to view it as why can't you just be like Facebook and quickly arrive at the correct answer and it's important that the investors you find be able to understand that part of the creative process. Great.

Question, yes. Can you speak to the personal transition you've had going from when you were just an engineer or working in the early days to now being CEO, like do you enjoy being CEO or I don't actually know you're the CEO, but like cofounder like do you enjoy that role more? Do you miss coding? Do you still code sometimes? Yes, I'm not the CEO, I'm the President, but I will take the suggestion to the board. And I agree for what it's worth, no I'm kidding. I mean, you definitely do operate in a different way at every - at every stage of the company, in the early days when it's just two of you, we actually spent the - we spent the very early days in Stripe, the first few weeks working on it from Buenos Aires, it was January break in college and we didn't want to work in the U.S, because we didn't have - we had student visas and not work visas, we didn't want to go home to Ireland, because it'd be super distracting or whatever. So we did the logical thing and we went to Buenos Aires and it was awesome that is like a city that works on a hacker schedule, everything is open till 5 AM and has Wi-Fi and it's great. That's a slightly different experience to a 200 person company now. And I think what you - you need to not get - you hear these stories of people who want to stay coding to the detriment of other things, at a certain point you have to acknowledge that the productive thing for me is not going to be directly doing this myself or directly coding, but working on something different. And you have to get out ahead of that. I think the other thing that you have to get good at is pretty quickly learning new skills, because you're going to be doing things like recruiting or running a board meeting or running a staff meeting or running an all-hands or all this kind of stuff that you probably haven't done before and I think it takes a - it requires you to be willing to be not good at things in front of a large group of people and be pretty open to feedback to actually get good at those things. So on that note, when you look back, imagine you're starting all over again, it's a few years ago, because it's really only a few years, are there any very specific things that you'd go wow, I wish I had really done something differently that would have been really meaningful? I mean, help us understand so that everyone here can learn from that? Yes.

I think the reassuring thing and one pattern in lot of the - if you read these histories of companies is just how much stuff they screwed up and that should be a really heartening lesson, it's - you can still screw up that much stuff and get away with it. There is this - they talk about in the early days of Google how they had this one machine I think it was the script that Sergey wrote doing all the indexing of the entire web and at a certain point they just like couldn't keep up with the growth of the web and everything was slowing down, search results took multiple seconds to actually respond and this was when Google was getting reasonably large and they fixed it and it's now - they are now hyper focused on speed, but it really was quite broken there along the way and the same with Facebook who stumbled through lots of different revenue models before arriving at the one they wanted and things like this. And so, the reassuring thing is that you can screw up a lot of stuff. I think the ... But you didn't right? No, no, no, we were - luckily we got everything right. I think the two things you really can't screw up are product direction where I mean if you go down the wrong road, that's really hard to pull back from and the other thing is hiring, just because a bad mistake when it comes to hiring is so demotivating, it can spread so badly to the rest of the company that you really have to get a lot of hires right. I think the other thing is as you grow, the correct way to view hiring is not I'm filling someone to do this role and fill this slot. It's - the correct way to view hiring is branches of a tree that when you hire this person you're not only bringing them, but you're bringing their effect on the culture and all the other people they're going to bring in with them and the norms and the working style they have that will spread throughout the company and as time goes on, those hires have - you have less and less influence on the company and all the new people you're bringing in have more, and so hiring you can't really screw up. Great. Yes.

Can you talk a little bit about how you're going to scale that kind of hiring you're doing now, so you and Patrick still interview everyone sometimes, if people go through projects before you decided to work with them. How do you do that as the company goes from 200 to 500 to 1000? So the question is how do you scale the hiring process to know you've got the right person as you get so big? That's a very relevant question. It's a discussion we are having internally right now. I think a lot of it is as you go from - speaking of these questions of scaling, let's be clear, Stripe is 200 people right now. We are in the process of growing a lot, we will probably grow - we'll add a significant number of people this year. But if we've messed it all up, you won't see the results until a few years down the road and so to take all my advice on scaling with a pinch of salt, but with scaling in particular, I think it's moving from things being at a gut level, this doesn't feel right, I'm not so sure about this, to making things very explicit. And so, in the early days, I think companies spend a lot of time talking about culture fit and hopefully the various people at the company know what that means and know what set of traits that they believe are important in hires, but as the company grows you have to make that explicit and you have to say this is the set of things we believe makes someone succeed at Stripe, this is the set of traits we believe are important, this is the set of skills we think someone needs to come in that role and that feels kind of weirdly artificial in the early days and it's inefficient in the early days because if you're being so explicit about everything in a fast moving environment, you will get weighed down. But as the company grows, it will end up in this complete game of telephone unless you're really explicit about with something like hiring - what is important in a hire? So clearly every single person contributes to the culture, and that's - but that's one of the variables that affects culture. Do you think about the culture of the company and what other things do - levers do you pull to influence the culture at the organization? Yes. So everyone does and I think, some people pitch that as a thing to be kept in check or restrained or whatever, people often ask the question like how do you keep the culture from changing and I guess to me that question suggests a huge amount of hubris in that to suggest that initial kernel of culture that you had is the perfect culture that any company could have and does not deserve any improving, yes, something seems off there.

And so, the correct question is not how do you keep the culture from changing? It's what culture do you want to have and how do you get there? And sometimes you will believe that you have that culture already and you want to - you want to teach new hires that. But I think often times it will - if you are being really thoughtful about it is about recognizing a deficiency in your culture and how do we inculcate that. And I think I can identify various points throughout the history of Stripe where the culture actually improved from someone coming in and them bringing in some new culture with them, as an example of this, I think in the early days start-ups tend to be very fly by night, shoot from the hip, not at all metrics driven and maybe that's necessary in that maybe you need to have a clear idea of where you're going and ignore the data to some degree. But it's really important as they grow to become more metrics-oriented and actually look at usage, look at how people are using the products and bake that into future product development. And we've definitely started off, not very metrics driven and we've become much more metrics driven over time. And I think that that was a good example of a concrete place I can identify the culture as having improved. There are other factors that always come into play like the physical space, different rewards, incentives, do you think about that as part of the culture as well? It is though, it's a bit more I think the - hopefully the physical space is a manifestation of something different - sorry a manifestation of something larger rather than the culture itself and that, if your culture is we have foosball, it's a bit like - cool. Okay, great. But if your culture is - at Stripe for example, we serve meals at the company and rather than having cafe style seating with the round table, there will be long dining room tables kind of Hogwart's style and we think that's really valuable because it means that in a fast growing team, people get the chance to meet each other that they don't - that they might not otherwise and we very much don't want Stripe to become these silos where you have the finance people and the marketing people, and the engineers and they're all in their kind of cliques. We want it to be the case that people at Stripe have a lot of empathy for how different parts of the company work and are pretty well rounded and so that's an example I point at as where the space is hopefully an indication of some larger cultural thing rather than a foosball table.

Great. That's exactly what I meant. Great. Yes. Please stand up and speak really loud. What would be your advice for working or not with a person or a team? Can you repeat it? Yes. What would be your advice for working or not with a person or a team? What would be your advice for working or not working with a person or a team? You mean as a co-founder or when it comes to hiring? Both. Okay. I guess the two things to think about are one, I think the quality and tenor of your personal interactions actually matters a lot. There are some things that are absolutely table stakes like honesty and integrity and if you see any bad signs there, you should run away at 100 miles an hour.

But then there is deeper things about your interaction, and your working style, I think one interesting question that you should really think about is how much should you argue with someone you're working closely with, because it's not obvious that you want to be in - you clearly just don't want to be the two of the same people that's kind of wasteful, you hopefully have some conflict and some diversity of opinion, such that you're both bringing different perspectives to the table, but at the same time, you probably don't want to be too far, too diverse in opinions where Max Levchin describes how when they merged x.com and PayPal, PayPal were all Unix people and Windows - and x.com were all Windows Server people and they kind of smushed them together and it was bedlam because you had these two people who had - red team, blue team, two completely different ways of doing things and it's unclear whether one was better than the other in that context, but they certainly didn't work together. And so if it's productive disagreement that's - that let you know, that results in a better product then that's great. If it's kind of stylistic disagreement that you can't get past and you do just have two different approaches for doing something, then that's maybe a sign that you're not going to be able to work that well together. I'm sure that you would agree this was absolutely fascinating. Please join me in thanking John Collison.