



Stanford eCorner

From Stanford to Startup [Entire Talk]

Kevin Systrom, *Instagram*; Mike Krieger, *Instagram*

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Instagram Co-Founders Kevin Systrom and Mike Krieger challenge many of the myths surrounding startups and the lives of entrepreneurs. Both former Mayfield Fellows with the Stanford Technology Ventures Program, Systrom and Krieger share their first-hand experiences of the entrepreneurial process, including identifying good problems to solve and the value in building simple solutions and minimum viable products. Systrom and Krieger also discuss aspects of their co-founder working relationship and their efforts to maintain a balance between work and life.



Transcript

Kevin worked at Google for a couple of years and Mike went on to work at Meebo before they decided to get together and start their company. They do have wonderful things to tell us about their experience, and I won't get in the way and let them start. So welcome back to Stanford. Thank you so much. Thank you, Tina. Thanks so much for having us, Tina, and Stanford. It's great to be back here. I remember... how many years ago now, four or five... sitting in this exact room and watching people stand up and give advice about entrepreneurship and their experience, and it's a little surreal to be standing up and giving back.

But it's a really exciting opportunity because, I think in the past year or so since we started what would become Instagram, we've learned a lot. And today what we want to do is go through a series of myths that we think we had learned along the way, or thought were true along the way. And as we did Instagram and as we went through the process of founding this company, we learned that not all of them were necessarily true. So the big caveat here today is, although we're saying all this stuff, experience is what matters. And going through your own experience in a startup is really what helps you debunk these myths as well. So this is our chance to share some learning with you guys. My background, obviously, I went to Stanford. Mike went to Stanford. I studied MS&E Mike, you studied... SymSys.

... SymSys here. And that was the beginning of our entrepreneurship experience in the Mayfield Fellows program. Like Tina said, we both had really amazing internships then that got us to get interested in entrepreneurship and get excited about doing it when we got out. And both of us after a year or so of working in a larger company decided we wanted to do something. And hopefully today, through that experience, we can shed a little light on what we learned. What we're doing today, Instagram, is kind of interesting because it came out of something we were doing before that didn't quite work. How many people here have actually heard of Instagram/use it? OK. Awesome. Most of the room.

How many people have heard of Burbn/use it? Used it. Yeah, like three people. That's awesome. So that's why we started working on Instagram because that's basically the number of hands that went up in the room when we were working on it. Burbn was this check-in app that lets you check into different places, and while you were doing that allowed you to share pictures or videos of what you were doing. Long story short, we worked on that for a little while and then realized it wasn't really going anywhere. But the thing people loved the most about it was actually sharing images of what they were doing. So today, Instagram has about a little less than four million users all sharing images of what they're doing out in the real world through their iPhones on a daily basis. How many mobile photos do we upload per day about now? It's like... Jesus, six a second, more

or less.

So whatever that times... Yeah, it's a lot. And this is pretty awesome to be in this position only six or seven months after having launched. But the myths we're going to talk about today, I think, really helped us get to the next level and start Instagram by learning that those myths weren't necessarily true. So to start, I think Mike's going to bring you through the first myth. So the first one, when you're just starting out and you're dealing with the bucket of uncertainty that is being an entrepreneur and getting started, you want to latch on to things that you've seen before. We really quickly learned that you just cannot really learn to be an entrepreneur from a book, a blog or a talk, and it turns out that a day on the job was worth a year of experience and what happens is the collection of experiences and knowledge you can get from those sources are super important. And I'm not dismissing them entirely as something that you should just ignore, but that first day when you're starting to make those decisions where the data isn't really there and there hasn't been a blog post posted to Hacker News that was like, 'Deciding what to do on the first day of startup' or 'Making this really tough decision', it turns out a lot of it is very specific to your situation and all you can really learn to do beforehand is try to deal with that uncertainty. So making snap decisions or quick decisions in the face of a lot of uncertainty. We'll hit up on situations early on where we weren't sure if we were going to take Instagram a follow model, for example like Twitter, or more friendship like Facebook.

And there is just no blog, book or talk that we could've ever really seen beforehand that would have taught us to do either of those things, since that was about sitting down and saying, 'Well, what do we know beforehand? What does our gut tell us?' And trusting your gut, I think, is a theme of this talk. And so developing a better gut is the work you can invest in beforehand, and then saying, 'All right, let's invest in this. Let's stay the course for a while and really see it through,' rather than wavering for months at a time being, 'Oh, why don't we build both? Then we'll switch off,' maybe make it a preference like 'worst mistake ever,' give up on making that decision and instead make it a preference, and so and so forth where you're having these micro decisions that in the end sum up to what becomes your product basically. And we really rapidly found that, as tempting as it is to go search off for prior accounts of something similar, that's not decision is what makes a difference. But what you can be doing is doing quick projects, side projects during school, even when you're outside when you're doing a job. And most of what we learned and applied into our startup were things that we were doing on the weekends which, depending on the companies, either something encouraged or discouraged. But usually if you're excited enough about something you will find the time to work in it. The other thing is, once you do start a startup, it's super tempting to get caught up in the meta part of doing a startup, so going to entrepreneurship events and being, 'Yes, I want to talk about being an entrepreneur.' We were incubated at Dogpatch Labs, which was a great experience. We were surrounded by 30 startups, a rotating cast. We were there for probably longer than anybody else.

Too long. Too long. We saw three or four different classes of startups go through that. And the successful ones were the ones that were in it 9 am and left at 10 or 11 pm and were just putting in the work, and not the ones that showed up at 10, hung around, left at 6, who in my opinion were doing a startup as a lifestyle choice because they didn't want a boss. That's not really a good enough reason to do a startup. It should be that you wake up and you're obsessed with this idea and you want to make it happen, and you're not there to hang around in this club or have this fun chat with people. And that distinction wasn't that apparent to me Day 1 because everybody's doing a startup, this should be a thing. And then one month in people were like, "You guys work really hard." We kept hearing that comment at Dogpatch, and we were. We were working the hours that we felt we wanted to throw into the startup. And I guess it's a gut check if you're finding yourself getting drawn into the meta part of the startup of being an entrepreneur, of being really excited about...

Somebody said to us earlier, the phrase was like, "You can't call yourself an entrepreneur. Somebody has to call you an entrepreneur in a way." And it's true. It's very tempting to get caught up in that. And I would encourage you to step back a little bit and find out the only thing that ships products and the only thing ultimately end users care about is the product you deliver to them, not how will they talk about you in TechCrunch or exactly who your investors were or which events you attended. Another myth that we encountered as we started our company... we talked to our friends who were holding back from starting companies... is that startups only come from Computer Science students. Neither Kevin nor I studied Computer Science. And that's something that we're actively proud of, not because Computer Science is a bad degree by any means but because it means you can get the technical chops you need to get things off the ground to get things prototyped and shipped. We built all of the initial version of Instagram ourselves from things we mostly just were self-taught in.

The early Twitter employees, none of them even went to college, and our first engineering hire didn't go to college, either. I think with Twitter, maybe they didn't finish college. Maybe they went to it. But it turns out there's things you can do in school that I think are valuable, and when you're trying to pick courses and figure out where to focus your time, the classes I look back to now and think, 'Wow, these are the ones that helped me deal with that uncertainty day to day' are the ones where Day 1 of the quarter they tell you, 'We don't know what you're going to be doing for the rest of the quarter. You'll get this at the d.school a lot and all of the entrepreneurship classes. It's your job to ask the question, figure out the question that you're going to tackle, and then answer it for the rest of the quarter.' And that's just a very different experience from, well, 'These are the 10 problems that you're going to tackle and then we'll deliver them at the end.' And, of course, going through those motions is really

important as well, but having that ability to ask the question... and Kevin will talk a little bit more about this in the next one... but also just work through the rest of that quarter. And the rest of it is, the engineering we end up doing we call 'Sink or Swim School of Engineering'. So we launched on this little machine server in Los Angeles.

We had no idea what we were doing. We were like, 'Well, maybe some people would sign up.' Within 24 hours, we had so much demand on that one machine that all of a sudden we had to scale out to what we now have, millions of users. None of us had touched Amazon's cloud platform at all before launching; we'd kind of heard of it but shied away from it. And it turns out that there's no motivation stronger than a bunch of people knocking at your door saying, "I want to use your product. Fix your thing." We'd put in a lot of... I don't really remember the first two months of our startup because we didn't sleep, and I think short-term memory goes out of the way. I'm told we put in a lot of late nights that were all about saying, 'What do we need to do to get our products to a place where people can keep using it, get excited about it, scale to the challenge?' And you'll learn those things because you're bright and intelligent, you started a company because you trust yourself. So having that faith and not shying away from a big challenge because you're, 'Well, what if we're successful? We won't know how to scale...' I barely really knew how to use a lot of the Linux Sysadmin stuff and now we know it really well, and if we did it again we'd have a totally different approach. But it's a little bit of zen beginner's mind: you focus on the simple, important stuff first if you're not worried about scaling ahead of time. It's really good to have friends that are Computer Science students.

Absolutely. It's all the building that network. Week 1... I had worked at Meebo beforehand and I was doing mostly frontend development, so I wasn't doing a lot of hardcore scaling stuff... and I remember 8 am in the morning I'd be waking up my friends who led more normal jobs and be like, 'I have no idea what this means. How do I do this?' They'd come in, we'd buy them beer. And you build that network and they'll help you out because they're excited about what you're doing, and it becomes less about feeling like you're the entire source of knowledge for yourself. Right. And I think what I'd add to the original point of going to events or talks is that it turns out what you get from those things aren't necessarily the takeaway is that we're going to put up here on the board, but it's the people sitting next to you, it's the people you meet before the event, after the event. The people that you're sitting next to chatting with them about the stuff that you're doing, they'll end up being the most valuable part of your entrepreneurship experience going down the line.

The fact that I remember being at a party... I think it was maybe sophomore year in college when Facebook had just moved out, and I ran into Adam D'Angelo who was the CTO at that time at this little party. And we kind of kept in touch since. And on the day we went down that first day we launched, we had all these problems. I was like, 'Who's the smartest person I know who I can call up?' And Adam spent 30 minutes on the phone with us just walking us through the basic things we needed to do to get back up. Those little events are the things that matter. So as much as you're paying attention to the stuff on the slides, make sure you spend some time after the talk getting to know the people around you. Absolutely. I think Myth Number 3 that I'd like to talk about, this is something I had no clue about. It was that finding the solution to the problem is the hardest part.

I always thought like, you're faced with these problems that people have, you assume that you know exactly what you're going to tackle, and the hard part is finding that algorithm. The hard part is scaling that solution. It turns out... thank you, Mike... that the hard part is actually finding the problem to solve. Solutions actually come pretty easily for the majority of problems. Not for every problem, but for the majority of problems. And in our case, what we did is when we sat down and we were deciding to work on Instagram, what we did was we wrote down the top five problems people have with mobile photos because we wanted to build a product that solved problems. We didn't want to just build a cool app to look for a problem that people had. We wanted to do it the other way around.

So what we did was we listed out these five problems. And I remember the top three that we circled. Number 1 was that mobile photos don't look so great. We've all had that experience... you're seeing the sunset, you take a snapshot, and it looks washed out, you can barely see the sun, etcetera. And we were like, 'That's the major problem we want to solve.' Number 2 was that uploads on mobile phones take a really long time. So we were like, 'What could we do around that?' Well, maybe if we started the upload way before you're done even editing the photo's caption, and what if we sized down the photo just to fit perfectly on the screen but nothing else? And that's the small little problem and solution that it turns out really delights people because they press 'done' entering their caption, it's already been uploaded. The third problem was that we really wanted to allow you to share out to multiple services at once. We felt like, should you have to make the decision of taking a photo with a Facebook app, the Twitter app, so on and so on, or should you just take it in one place and distribute it to many places at once? Those top three problems allowed us to really hone in on what solution we wanted to build. And that's really what Instagram became.

I also wanted to say that once you have those top problems that you want to solve, you need to verify that they're actually the ones that people have. And really the way to do that is get your product in front of people very quickly and test that hypothesis. I think too many people wait a long time... and I'm going to talk about this a little later. Too many people wait a long time to see whether or not what they're working on is actually the problem people are having. And the last point is that, really, you should not be afraid to have simple solutions to simple problems. Like I said early on, I think too many people believe you

have to solve things in a really complicated way. And at the end of the day, if you delight people even a little bit with a simple solution, it turns out it goes very far. That first day when we had something like 20,000 new users, I was like, 'Clearly there was a need for this that hadn't been done before,' and I'm so glad we tackled those simple problems. There's something about...

in the tech community, you always want to feel like you're working on the hardest problem in the world. It turns out that simple problem becomes very hard at scale. And that's what's really exciting. In a way, we often... in our entrepreneurship classes we hear about the Big Hairy Audacious Goal, like, 'What's the huge chunk you're trying to bite off and tackle?' And one thing that really struck me was that that Big Hairy Audacious Goal could be bringing that simple solution to something delightful to the masses. Yeah. And that, in itself, is a huge challenge. Yeah. And it's something we deal with on a daily basis. Mike has to wake up at 4 am everyday to reset servers and stuff.

I wake up with him, but I don't actually do anything. I just say, "OK, Mike, I'm here with you." Myth Number 4... This is what I was talking about before... working for months to build a robust product in secrecy, and then launch to the world. How many people have heard of stealth startup, started a stealth startup, feel like they would go into entrepreneurship and keep their ideas to themselves? I'm going to assume that everyone's going to raise their hand, because we've all heard of the stealth startup, how cool it sounds. The problem with stealth startups is that you don't get the feedback you need quickly enough. In order to test whether you're working on the right thing or not, you need to put it in front of people. And I think there are certain verticals... I'm really talking about consumer internet here specifically... I think there are certain verticals outside of consumer internet where stealth might make sense if you're doing pharmaceutical or something.

But for us, getting it in front of users was the most eye-opening experience. I remember putting Burbn in front of people we didn't know and they were just, 'What is this thing? What are you doing?' We would be in a busy bar and trying to explain to them on our mobile phones and they just wouldn't get it. And that happened enough in front of people outside of our friend group that it was really clear we had to work on something different. Or at least refine the idea. And I think that's something to keep in mind as you're going about starting a startup. Building the minimum viable product is super useful. Don't build past what you need to build to answer the questions. I think Eric Ries talks about this all the time. He says he was at his job and he was building this 3D chat client... the idea was you could basically link your Yahoo Messenger, your MSN Messenger, all these different messengers to this one 3D client...

and he spent eight weeks doing it. And then they launched it. And no one used it. And he said to himself, 'Couldn't I have just done one of those platforms to prove that no one used it?' So ask yourself, how much work do you need to do to actually prove whether or not this thing's going to sink or swim? The 'Sink or Swim School of Engineering'. We should just write this book, right? It's really true, though. Everything we do at Instagram, we start by saying, what's the V1 of this feature? What's the V1 of this thing that we're going to put out in two days and test whether or not it's going to work? I think that's super important to remember. The last point here is failing early and failing often. It's totally OK to fail in an organization. You need to fail in order to find the right solution. Often, the first thing you start off with is not the thing you end up with.

And you should assume from the start, your first idea is not going to be your last. And your job is to fail your way to success. And I think what's we did in Burbn pretty well. We failed all the time. And finally we woke up one morning and we were like, 'We're failing too much. We need to move a little bit to the right.' And even in Instagram, we failed a bunch with different features and things. But the idea is you're constantly refining this original idea. It's not this 'wake up one morning and have the brilliant idea and go implement it'. You're constantly iterating on it. This one's kind of interesting because I feel like in all the books I read in college, people are like, what you want to do is you want to build this beautiful SlideDeck with graphs going up into the right, and you want to go up and down Sand Hill Road and tell everyone that, 'Yeah, Kleiner's in on the deal.

Are you in on the deal?' You play everyone off of each other. When we were going to raise money, I said to Mike, "I don't want to meet with all these people. What I want to do is I want to seek out"... and if we can actually show the reality... "I want to seek out the people we really want to work with." I think instead of optimizing for things like valuation, you should consider optimizing for people. There are a lot of venture capitalists out there with a lot of knowledge, and I guarantee you, your idea matches really well with a select group of those folks. In a way, you have to think about bringing on venture capital as you're hiring part of your team, and who are the people you want to hire. And I think far too many people you talk to, even at an angel stage, are like, 'We need to optimize for getting some ridiculous evaluation right out of the door.' And then they end up with some VC firm they don't have a lot in common with and they don't get along, and bad things happen. It's all about the people. And I think that's what you have to remember when you're going out to raise money.

Find the people that believe in what you're doing, that are going to give you the capital to achieve your goals. The other point here is you can go off and raise \$40 million in a Series A, but it turns out you don't need a lot of money to get off the ground these days. We spent like 60K to launch our first version of Instagram. Sixty K. We had raised 500 and we were kicking ourselves the second day after... not after we raised, but after things started taking off. We were like, 'We have all this money left over and we got this far.' It turns out you can bootstrap yourself with Amazon Web services. You need two engineers these days to do things well. And it turns out that you can get a lot done on a shoestring budget, especially with all these incubators

and things that are happening these days. It's something to remember.

So the main takeaway here is, optimize for people, don't optimize for valuation. Because if you have a great idea, it's going to get a great valuation, you're going to do well. But those people are what make the difference. The second point on this slide I just want to make very quickly is that bringing a prototype into a pitch meeting is so much more powerful than a bunch of graphs that say you're going to make lots of money in the future. Prototypes are tangible. Prototypes are things that people can sink their teeth into and use and react to and ask questions about. We have yet to create a pitch deck for Instagram. We don't have a pitch deck anywhere. It was always a prototype that we brought in and we showed. I think that while you should probably create a pitch deck, and that's probably not a lesson to learn from us, what's more important is that I think people really attach themselves to prototypes.

So that's how I think about the whole financing of startups. And I think that while you go off to the world to start a startup, just keep these lessons in mind. Another myth is that starting a company is building a product. I remember getting so excited when we were starting Burbn that we had all these feature ideas, we had all these product ideas to work on. But it turns out that starting a company is 50% building your product and 50% a lot of other stuff: bank accounts, insurance, taxes that you didn't know existed, filing for things in the City of San Francisco and forms in the basement of City Hall to make sure that your founder from Brazil can get a job with you. There's all these other stuff that isn't about having brilliant product ideas that takes a lot of work. And I think when people decide on whether or not they're going to go into entrepreneurship, you need to remember that building a product is great, but there is a lot of legwork involved in getting a team off the ground, I think specifically in recruiting a team. Team-building is one of the most important things when you get off the ground. It's not just about having a great idea. It's finding the people to bring in to make that idea happen and supporting them by shielding them from the press and the checking accounts that you have to set up, etcetera...

especially raising capital. That can be a huge time sink. And you don't realize that until you get into the flow of things that building a company is not building a product. At the same time, it's supremely important to know that you have to be good at building a product and that you're going to be willing to do the legwork to do the rest. As we wind down for the last two myths, you might be sitting there going, 'OK, so what's next? When will I know I'm ready? How do I know that it's time to go and start a startup? And what's it going to be like for the next few years?' And it turns out, it's not the idea that's going to hit you while you're walking down the street or in the shower. Like Kev mentioned, I'm from Brazil originally, and I'll do all these interviews back home where entrepreneurship is still like a building process and it's not as much in the culture as it is here in the Valley. And they always ask me, "When did you have your idea?" "What a great idea you guys have? What struck you guys?" There was no one moment where we were like, 'Oh, yeah, photos with filters!' Ideas really are the result of a lot of these iteration steps that we've talked about earlier, and your job is just to explore the solution space until you figure out where in that solution space you fit. And it turns out people are always, 'Well, does my idea need to be the most unique thing in the world?' Nowadays, especially in the social space, ideas are combinatorial. That childhood exercise where you take different parts of the animals and you make a new animal out of it? That's a lot of what startups are like. You're saying like, well, there's things about Twitter we really like, but it frustrates us that we don't have an emotional connection with the content that we're receiving because it's not visual.

And there's things we like about things like Hipstamatic with these cool ways of making your photos look better, but the photos get caught on the phone and you don't really get to connect with your friends through them. So these combinatorial ideas are really where you end up having these 'Aha!' moments later after you've explored the solution space rather than the shower idea that ends up killing them. And as we've mentioned before, in the sharing and discussing process is where those ideas get refined. So getting that consumer validation, going through those bar exams... we call them 'bar exams'. Like you're in the bar, can you explain your idea and show it off to your friend in a way that they're not going to be like... Well, it's really loud and people are drinking and... They have the other 50 things they want to do. And one thing I really want to emphasize is that careers are very much like a series of themes that you go through and explore in your career. If you look at Dennis Crowley at Foursquare, he's been working on that drive, on that idea around location and unlocking your city, for almost 10 years or more.

He's probably been thinking about it... maybe sketching it as a kindergarten, I don't know. And we've made photo... just like kindergarten, right? We've been excited about photography and about communicating the real world for years. And probably whatever we do for the next 30 years, we'll have some hint of that forever. So very much so, your startup and your career is an expression of you and your co-founders in a way that expresses what are the themes that are going to recur throughout your careers. And you'll know when you hit upon that for yourself because you'll wake up every morning and you can't think of anything else. You're in the shower and you're like, 'Oh, we can do this different thing!' And that's when you know you've hit the great idea. It's not necessarily the idea. It's the theme.

It's the drive. It's the problem you want to solve out in the real world. What question are you answering? And the good/bad news is that even once you have that drive is that it's not going to happen overnight. And one of my favorite quotes is from Biz

Stone. He wrote, "Twitter was an overnight success that took five or six or seven years." And it's just absolutely true. Things seem very obvious in retrospect and you're like, 'Well, of course, photos. Why not? That makes total sense.' People are like, 'Oh, that idea was just waiting around forever.' But it's the relationships you've built along the way. It's the fact that Kevin and I knew each other through the Mayfield Fellows program and so we had connected before, and when he was starting to think about a co-founder, it was someone we could connect to. It's the fact that on the weekends back when I was working at Meebo I really wanted to learn iPhone programming, so I took the San Francisco crime database and I made this silly augmented reality like 'crimes around your application'. And then so I had a little bit of iPhone experience.

And the friends I could call at five in the morning when it's like, 'I don't know what this message means. Please help.' And again, it's the themes that you've built up throughout your career and the line that you're weaving throughout your life in a way that informs your startup and makes it happen. And it never gets easier, is what we found. Definitely. And that's OK. And you adjust to that reality after a few months and you stop telling people, 'Oh, when I get less busy.' You're not going to get less busy, and that's OK. And once you accept that and love it, then I think your life is a lot happier as a startup founder. But it is a long slog, and I think that's what people don't realize, and I certainly didn't before. You think these startups happen in the course of a year, but it's a lifetime commitment in some ways. I'm prepared to do this for many, many years going forward because I feel like we're at the tip of the iceberg.

And I can see it. We have four people in our office and we only have four-ish million users. I can see this becoming much, much larger. And what excites me is that challenge. And I think part of entrepreneurship is realizing different things along the way are going to excite you in different ways. And the people that grow best in companies are the people that realize that and get really amped about the different challenges, the different stages of the company. And this metaphor for us, I was talking to my friend who biked from Seattle down here to San Francisco, and he said the biggest difference on that ride versus all his other rides was after the first day and your legs are sore and you can't believe if you got up again the second day is you stop thinking about the destination and you start thinking about the next few hills in the end of the day. And you're saying, "Wow, all of a sudden I don't think, 'One more hill and my legs will give out. I can't go any further.'" You're like, "Well, I know I've got to go to San Francisco because if I stop, I'm in the middle of Oregon and I have a bike. What am I going to do?" Day in and day out.

And that mindset changed. Something clicked. I think for me and for you as well. All of a sudden you're like, 'All right, let's get to the next hill. Let's keep fighting. Let's find other people to bring on our crazy bike ride. And who knows where San Francisco is. It might be 10 years out, and that's fine because biking is awesome.' Absolutely. And I think, really, there's no better time to start than now. Whether you want to join a startup or whether you want to do something yourself, I think the best thing you can do is to start.

I remember... and I'll tell this story just because we're at Stanford and Tina's here. I remember studying abroad and applying for the Mayfield Fellows program. And I was so amped about learning how to make websites that I made this thing called the 'Tree List' which was a terrible knockoff of Craig's List for Stanford. And I was studying abroad in this little room and I was making the website in that room with no internet connectivity. But in order to push code out, I had to go in the snow... it was snowing in Florence at the time... across to the library that just eked out free WiFi out of their window and push the code. And it went up. And I still remember people started using it at Stanford, and I was over there in Italy and there was this awesome connection with people.

And what I realized then was just the hunger to build stuff and put it in front of people is really valuable as you get moving in entrepreneurship. And there's no reason you can't start. If you're studying abroad, there's no reason you can't start. If you know nothing about HTML or CSS or Javascript, there's no reason you can't pick up a book. If you're doing something outside of consumer internet, there's no reason you can't start thinking about the idea and interviewing people and meeting the people that are going to help that happen over time. Because in the end, it is a long slog. And what we've found is the thing that really has helped us along the way are those little skills we picked up by hacking on the side. So, if you're interested in working in Instagram, please do email us: jobs@instagram.com. We're looking for very talented people. Thank you very much, everyone.

That's amazing. I'm so proud of you guys. This is so incredible to have you here. We've got current Mayfield Fellows in the audience and I told them, "Look ahead a few years, you guys are up next." So I want to ask you: can you... I'm going to open this up to the questions from the audience in a second, but I want to start out with, can you tell us a little bit about your working relationship? Who does what? And has it always worked well? Have there been tensions that have come up? Tell us a little bit about how that works. And then I'm going to let you moderate questions. I think, of all the co-founders I know, we probably get along best. I've definitely talked to co-founder pairs that don't get along at all. I think what you need to do in a co-founder relationship is not necessarily decide who is good at what but realize that, like any relationship, your goal is to figure out the other person and figure out your relationship with them. And through the last year or so, we've really gotten into the groove of...

we own different parts of the day-to-day stuff, but at the same time we use each other to bounce ideas off. You do a lot of the iPhone clients stuff, I do a lot of the CEO stuff of accounting, etcetera, and do a lot of the backend coding as well. But what happens is, because we both have our own specialties but also overlap into each other's areas, it really provides for this nice

relationship where you can bounce ideas off of other people or get that person to say, "Are you sure you want to do it that way?" And what has happened is it's that yin-yang relationship that I really think has helped us succeed. And it's hard to screen for ahead of time. We knew each other... We barely knew each other. Yeah, barely knew each other. We figured out that we can work together on a technical level by just getting together over a bunch of weekends and saying, 'Let's build a little simple Facebook game. It's going to take a few hours. Let's build it together,' whatever, and you can get going.

But a lot of it ends up being, what's your gut feel? Do your reference checks. They said nice things about you. Thank you. So let's get going and let's see how it goes. Yeah. It's hard because I think no matter who you work with, you have to figure out... And this is actually more even for employees. Your relationship is going to be a long one, and if you're in the entrepreneurship world, your best ally is sitting next to you, and you need to make sure to cherish that relationship because that's what gets you to the next level. The biggest source of strife I found is when there's a disconnect between expectations as to what you're building and how long you want to be building it for. And it's important to both of us that are like, 'I can't imagine doing anything else in the world.'

I love doing this and I want to be doing this for a really long time. I love what I do. I love coming in.' If people are, oh, six months to a year, then cash out, that's going to be really difficult. Unless you're both feeling that way, then it's a different relationship. But if you're in it for the long haul, make sure that the people you know are in it as well. It's a tough conversation and you might lose a co-founder that way early on, before you start, but it's much better, I think, than going on and then six months later having that really, really worn-down relationship. I'm looking back... by the way, just to finish off the thought. I can't imagine starting a company without a co-founder. I said that to you today, Mike.

Yeah. It's such a hard job to get off the ground. It's such a hard job to recruit people, to deal with... whether it's investors or press. Having someone across the way to be like, "Man, this really bummed me out," or "How do you think about this?" I actually think that's one of the things that has kept us going in 4 am or 5 am when we're fixing the servers or dealing with some issue. It's been fantastic. Absolutely. Any questions from the audience? Yeah, so, how did you find your first engineer, how did you get him? The question was, how did we find our first engineer? Do you want to tell this one? We were really lucky. We were at Dogpatch Labs which is this incubator run by Polaris Ventures up in San Francisco and we happened to be sitting at the same table pod as this guy Shane, who's an engineer but at the time was working with a different startup and doing some freelance stuff. He taught Kevin the initial steps of iPhone coding, so we knew not only that he knew his stuff but also he was very good at communicating information, which is really important.

Our bar for hiring is, can they teach us a bunch of stuff, because we were not trained in Computer Science. We were not by any means totally knowledgeable about everything we were building, so who can build that can teach us. So the fact that he had both of those assets was really important. And it took probably three months after launch and we were eight months into the startup process at that point. Well, we built all of V1 ourselves. You said you had a lot of users 24 hours after launch. How did it happen? Where did they come from? So the question was, we said that 24 hours after we launched we had a lot of users sign up. Where did they come from? How did it happen? We get asked this question a lot. It is not clear that we have the exact answer, but we have some hunches. I think the biggest thing overall was that as we were prototyping and testing the application, we gave it to a few folks that we knew had very large Twitter followings...

and not necessarily very large Twitter followings overall, but very large followings in a certain community, specifically the designer community like the online Web designer community, because we felt photography and the visual element of what we were doing really resonated with those people. And we gave it to those specific people that have lots of following. I remember going down the list of the top followed people and just emailing them, and all of them were like, 'Yeah! We'll try it out!' And because they shared to Twitter, I think it created this tension of, 'When is this thing launching? When do I get to play with it?' And that's the day when we actually launched. I think it had that springboard effect. I don't think that works for every startup, and I'm not sure that I would do it that way if I did another startup. But I think that certainly contributed to part of it. The thing I think that above all else makes products spread is when they're useful and they're usable. It turns out when you make really nice stuff that people love, they will spread it to their friends because they'll rave about it, they'll tell people about it. And that's what I think at the end of the day has allowed us to grow very quickly is that people get really excited about sharing photos and they really get excited about applying filters to them and it's cool to show your friend that you do this thing. That has caused, above all else, I think, us to spread very quickly.

And a big part, we had a lot of really great press on Day 1. And a lot of that came from the fact that we just took all the PR upon ourselves... Kev handled most of it... which was not like going through a PR agency. That becomes important as you scale out and have more targeted things you need to do, but two founders telling their story is a really compelling pitch to a reporter. They were so excited to actually talk to a founder versus some agency. They were like, "Really? You guys worked on this?" And it was this freshness that I think allowed them to get really excited about it. Totally. Yes. In terms of staying lean and hiring and recruiting, how do you balance...

I'm sure you guys get a lot of people who want to work with Instagram, right? How do you balance basically really smart,

really talented people who fit in well with your team and hiring and growing that team versus staying as small as possible? What's the trade-offs there that you think about carefully? Right. So the question is, what are the trade-offs between growing the team and staying as small as possible? I don't think we ever want to stay as small as possible. I think there's a certain stage where... or let me put it another way. As you're growing your company, there's this natural height for something that age. It's just like humans. There's a natural height for a three-year-old, and you can be within a certain range. I think the wrong thing to do is be six-feet-tall as a one-year-old. Hire up 40 people and decide you're going to attack some problem really quickly and you haven't even launched yet. I think, at the same time, when you are six months old and you have two people and you're proving out an idea just to get traction, that's great, because it turns out there's not a lot of disagreement.

We're sitting there, we can look across the table, make split-second decisions, and move very, very quickly. But at a certain point you have to start refining your idea and scaling it out. And at a certain point, the fact that you only have four people becomes the bottleneck. So I think what my answer would be is, don't shoot for one or the other. Shoot for the natural height of your company. Shoot for where you are in the life cycle of your company. Absolutely. Does that make sense? Yeah. I agree with that. Anything else? In the back? Question on how do you guys as entrepreneurs think about work-life balance? These are your best years and you're working all the time.

Yeah. That's a great question. So the question was, how do we think about work-life balance? I think we should have a two-part answer because I bet we think about it similarly but also very differently. We both have girlfriends, which I think naturally means that we cannot work all the time because they get very angry at us if we do that. At the same time, it's great. And I end up deciding that there is a way to work hard. It doesn't mean you need to work long. I think that you can burn yourself out really easily if every single night you're up to 3 am and you sleep three hours. I don't function if I don't sleep for eight hours, which is terrible for an entrepreneur. At the same time, when you do work, not having TechCrunch open on the side, not having IRC channels open on the side.

I make a really concerted effort for when I am working to work on the most important things so that I can go home at the end of the day and spend time with my girlfriend, spend time with my friends on the weekend. And I think that's helped us out, which is that focus of working on the most important stuff means that we create the work-life balance. What happens is when you don't have that balance, things start to go out of your life and I think that that causes you to not work as well at work. I think everyone has, again, their natural height, they have their natural balance. But it's never like a question of when I'm working or when I'm playing. Work is 24/7 for me, but it might be in the form of going to an art gallery and being inspired by seeing some filter on a photo there. It might be having conversations with my friends at a bar and watching them use Instagram in an interesting way. I'd never consider there to be boundaries. It kind of mixes in. But because I love what I'm doing, that's natural.

Yeah. A lot of it resonates with me as well. The first couple of months are particularly difficult especially as you're getting traction and things go a little bit crazy, but as things have settled and you find ways of making your day be something that you're excited about every morning... I live about an 18-minute bike ride from the office, and I make sure to bike to work and back everyday so at least I'm getting some exercise in there and you feel a little energized by the time you get into the office. And it does mean that... I used to read a lot of novels, and I haven't really read a novel in a long time. So there are things you obviously have to give up. But I think there's still a way of doing it, especially around being smart about how you use your weekends. So if you're putting in hours in the weekend, make sure you still have time to go out and meet up with your friends. Or getting together.

There's a place called Coffee Bar in San Francisco, which is this great coffee shop with a lot of open WiFi and seating. And you can have a perfectly nice afternoon enjoying your coffee working on stuff but being social with your friends who maybe are also working on maybe their own side projects, for example. And you find those slots in there. I'd say there's things you need to give up and there's distractions you need to absolutely give up, and you need to make sure that your nine, 10 hours in the office are just straight office. One thing that I've given up in my life is long lunches. I used to have lunch and then sit down and talk for an hour. Now we get lunch and we eat and then we get working. And that's fine, because I know that that means that hour is an hour that's going to pay me back later in that day when I can go home an hour earlier. Right here in the middle? Kevin, I'd like you to tell Mike that, forget what you signed, that you now own 90% of the company and he gets 10. I'd like Mike to respond.

I don't think it's about... It's interesting. The whole equity split always is really interesting to me with startups. I think everyone has a different prescription for how you should split up. I think your friend... I can't remember his name... is like, 'You should never have equal share. That's terrible.' And then I hear, 'You should have equal share.' I think the startup equity split is one of these things that has always befuddled me. I don't quite understand it. I don't quite understand why people split it the way they do.

It turns out that if you work hard, good things happen. And I think that that's really the basis of it. You should just try to be as fair as possible for the stage of the company you're at and the work people have put in before or after, and make sure to treat your employees really well. And when you bring on people and you have a large option pool, make sure to be generous,

because those are the people that are going to stay with you until 4 am. Absolutely. I didn't hear Mike respond. Oh. Please respond. To me, it's all about managing. How much uncertainty are you dealing with with every step? Ninety-ten would be a stretch, but for example, I was still working in a job, Kevin was like, 'I am going to quit my job and raise money and live maybe on savings,' and was ready to get money from his folks back East or something if it fell through.

And that's crazy uncertainty. What I was doing was like, 'We have some money. We have no idea what we're building.' That's crazy uncertainty. After we launched, 'This thing has legs, but we need to work on it for a really long time to make it successful and it could still be hurt by all these different factors.' That's still uncertainty. You're always dealing with that. And I think equity splits should probably be a reflection of those different factors and what kind of uncertainty and what kind of questions you're answering at every level. I do feel, just anecdotally, like there's this weird dynamic where founders at a certain point just get orders of magnitude than the first few employees. And that's really a function of taking money from venture and having an option pool and having to budget for hiring your first, say, 20 people. So the way these days to make lots of money in terms of equity in a startup is to join very early on, and it really is a 'risk or reward' ratio. Or there's a relationship there.

And I'm not sure I'm excited about that relationship. But I think that, as you'll see, people have to raise less and less to get started, and that means early employees are getting better and better deals. I'll add Myth Number 9 based on that also, which is that doing a startup is one of the riskiest things you can do. It really is not. If you're in the Valley, if you're connected to Stanford, if you have good friends, the worst thing that could happen... Sure, there's opportunity costs. You'll be making less money than at a large company. Those things are all true. But Month 1 of experience for me was worth the two years of work experience I'd had before. And you will leave so much richer no matter how badly your startup flops or how well it goes.

I completely agree. I still don't make as much money as I was offered out of school... the job I didn't take... and I've made decisions along the way that have taken less money along the way. Because I love what I'm doing. And hopefully that pays back someday. But I don't care because I do what I love and it doesn't cost a lot to do that. Yeah, green shirt. First of all, you said something about 'themes, not ideas'. With Instagram, there are a number of possible themes and it could be the filters, it could be the sharing, it could be the simplicity.

Just from your mouth, I would be interested to hear what you guys think the themes are, and do they all need to be there to have this successful product? Or was it just an exploration? To me, when I graduated from college, I had two requirements for whatever job or startup, whatever I was going to do. One of them was be a company or a service or something that helped people communicate, because that just excites me. I love seeing those connections. And I think that almost... I would imagine everything I do for the rest of my career has some element of that component. And the other one, which is less relevant to Instagram, which is it would help you teach or learn something. So be educational in some way. In some way, we actually find our power users will create this little following communities where they're like, 'I will show you how to take more interesting photos.' So there is some of that happening on Instagram. That was just a consequence of a larger site. So to me that communication, particularly between people who may not know each other before they even signed up for your service, is a huge part of what I'm interested in and something that gets manifested in Instagram in a serious way.

Photography, it's interesting. I remember sitting down with... and I won't name names... a founder of a pretty successful startup in Palo Alto when I was thinking of leaving my job at Google and saying, "I think I want to start a photography startup." This was way before Burbn. And I still remember him being like, 'Photography? Photos on the internet? Hasn't that been done a million times? That's not interesting. Go do this other thing.' And I remember walking away feeling kind of bummed out that my passion for photos was somehow not going to get married with something I did in the future online. And I feel like, looking back in retrospect, I'm so glad we're doing what we're doing now because that's exactly... If you asked my friends in high school what kind of startup I'd be doing 15 years from then, they would be, 'Oh yeah, he'll be working on a photo thing. For sure.' And I'm glad we came back to that, but I didn't realize it at the time. But now that we're doing it, I'm like, 'Duh, of course we wanted to do something in photos.' So having that passion and following that theme and realizing what the things are that make you really excited, just keeps you up a little later at night, makes you drive through the hard times.

It's not necessary, but it sure does help. How do both of you resolve disagreements? Fist fights. Fist fights. No. So, how do we resolve disagreements? It's interesting. We don't really disagree very much. That's a good question. How do we? Somebody asked me this question the other week and I was like, sometimes we don't disagree. It's not often that... I think we're both hyper-aware that neither...

For example, we were debating a user interface decision yesterday. And we sat down, and I had an opinion and he had an opinion, and we came up with something completely different. I think we're both hyper-aware that whatever we have in our heads is going to get improved the second we start talking to somebody else about it, particularly each other because we have a really good rapport, and then at the end, you say, 'Wow, we actually decided not to build this feature at all. We're building something different and we can agree on that.' In terms of stalemates, I don't know if we've really had... Ask us in a year, I don't know. Ask us in a year. Yeah, exactly. But in all honesty, I think disagreements are interesting because I think often people put their personalities in the way or they get really attached to an idea. But every single thing we talk about is always a discussion.

Like someone asked before, do we get along? It turns out you can get along really well with someone if you just discuss lots of stuff.

Also, it's nice to find a co-founder who shares a lot of the same values you have. And I think we're very aligned on a lot of how we want to build the company, the type of people we want to bring in, the type of work we want to do. It's just helped us a lot. But that's not the case in every single co-founder relationship. And some that I know disagree all the time and get in screaming matches. But they go home and they shake hands and they say, 'Whatever, bygones be bygones,' and they still get along. I think it's about finding your natural relationship with your team, not just your co-founder. Yeah. Yeah. Go for it.

So I'm a founder of a pre-funding startup, and I wanted your perspective on this one. I'm confused. I'm conflicted as to whether I should launch the product and then look for the funding or whether I should try to get the funding first, launch it, because chances are the whole thing might just stay quietly and maybe I may not have the funds to fund that particular growth that might be there. I'm conflicted as to when is the time when I should go and fund a... and get the funding. The question was, when is the right time to go for funding that there's this conflict between wanting to go early so that when you start growing quickly, you can manage that growth, and then on the opposite end, do you wait until you start growing and then go raise money? Honestly, if you're growing as quickly as you say, there are startups that just open credit cards. I'm trying to think of startups that do that. They open credit cards to pay for the week where they're growing quickly. Money will come if you're growing that quickly. Yeah.

There is so much money out there chasing bad ideas that a good idea will get funding. And I think that I wouldn't worry about the best case scenario; I would worry about the average case scenario. I think what I learned was that it was really powerful to get a prototype out there and prove that this was something I wanted to work on more, or that users would use. And that just resonated with a lot of the angels and VCs that we talked to. My advice, and not knowing what you're working on, would be to at least get it in front of many users first. Not necessarily a public, but put it in front of real people and prove out the point. And always be making the relationships that will help you raise the capital to do what you need to do. Yeah. If you have the connections and the introductions to say like, 'I'm not pitching you right now, but here's what I've been working on. I'd love your...' People are busy, so it's not always possible, but to the extent that you can build those relationships...

like that one cocktail party ended up being super pivotal when it came time to actually raise. Right. How many more questions can we take? Just one more. Just one more. OK. The special one. How about you right there in the middle? How do you guys deal with competition part of it? In terms of principle, will you go to sit down and schedule... I don't know if you sit down and schedule your time at all. How much time do you schedule to develop features in anticipation of competition? And how much time do you have more artistic or focus on future development? How do you make that kind of investment into... I think that scenario we both matured in.

I think early on, as you built something, you've put your baby out in the world, and people are using it or criticizing it or loving it, and then every week something pops up that is at least nominally competitive with us. And I think at first, personally, I would look at them and be like, 'Oh, man, they have this one thing that's better than ours! It's going to take off!' You shouldn't be completely oblivious to it, but there was a moment about three or four months in, we looked at each other and we were like, 'The only way we got to where we are today is being ourselves and putting in the work that we want to do and building the product that we want to build.' And then when that clicked, that changed the way we looked at competition. You're not oblivious to it, and it's not good to be just like, 'Oh, I'm in my own world and nothing else is happening out there.' But build the product that you're in love with and I think good things will follow, and ultimately you'll see the extent of your vision versus trying to cobble together. Because what I've found in products that end up borrowing from other things is that you end up with this 'Franken' product where nothing feels sincere. The biggest learning for me was... we were looking at a sign-up form for a particular startup and we were like, 'Well, I wonder why they mail these decisions?' And months later we met their founder and they were like, 'Oh, we did that in an afternoon. It's totally wrong. I can't believe we shipped that.' And so the things that you think are really well-thought-out in other startups might have been off-the-cuff, last-minute thoughts. And same for us. Some people copy things in our app that I'm like, 'Oh, we're probably changing that next week.' But at the same time, I think it's really easy to get caught up in competition early on, especially in the press.

I think I worried a lot about, 'Who's announcing funding and when?' It just doesn't matter. It spends a lot of your cycles worrying about this meta stuff. What matters is building great products and delighting people. And I would just encourage you to focus on building great products. Thank you so much!