

Stanford eCorner

Focus on Users to Solve Problems [Entire Talk]

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Throughout life, Steve Vassallo has advanced his career through design thinking, from the slick flyer he created on his parents' computer to get him more work as a boy, to his five years at IDEO, and now as a startup investor at Foundation Capital. Vassallo explains how strategies like user observation and asking the right questions will get you to the heart of any problem that needs solving.



Transcript

- [Announcer] Who you are defines how you build... You know, ETL was actually a favorite of mine, when I came to Stanford, almost 25 years ago.. And in fact, even when I was at the Business School almost 10 years later, I used to sneak over here because you guys always have these great, great talks, and speakers.. When Tina asked me, actually, to give this talk, I have to say, it was with some amount of trepidation, because I was thinking about the fact that 25 times a year you all get to hear from these sort of fully formed, successful Silicon Valley executives and leaders, dropping wisdom on sort of you all, from their sort of decades of experience.. And I kinda was thinking about, well, this feels sometimes like these massive live oak trees, that are all over campus, and they're just like beautiful, and large, and strong.. But we sometimes forget that they were little seedlings at one time, and there are all these experiences that sort of add another ring, or a branch to each of that sort of greater whole.. As Tina said, I've had lot of different experiences and roles, in my career here.. Starting out as a Product Designer, then as an Entrepreneur, and now as an investor.. So I thought it would be fun to actually deconstruct a few of the lessons that I have kept learning over, and over again, from these many experiences, or as I sometimes think about them now, as from Steve's jobs.. (laughing) Now the first job I ever had, was actually when I was a kid..

So I grew up in Worcester, Massachusetts.. And if you know Worcester, a couple of you, it's a working class city, about an hour west of Boston.. And Worcester's known for three things.. It was actually a booming industrial center, in the last century.. It was the home to the Robert Goddard, one of the founding fathers of modern rocketry.. But the thing that I remember most, were the crazy Nor'easter snow storms, that would literally bury the city one to two times a year, with like one to two feet of snow.. Let me tell you about the motivation behind my first job.. I was actually the ninth child, in a family of 10 kids.. The majority of the things that I grew up with were actually hand-me-downs from my eight older siblings.. And there were actually 10 years and four sisters between me and my next older brother..

So pretty much, all the stuff that was handed down to me was either out of style, or all together out of gender.. But when I was eight, my Dad came home with this lime green go-cart, from the Auburn Sears and Roebuck.. And he had picked this up at a deep discount, because it had actually been sent to the wrong store.. Now I was immediately hooked, and I used to take that go-cart out, rain or shine, whenever I could, and zoom around the neighborhood, sometimes sneaking over to the school.. And in fact, all I wanted to do now, was make this thing go faster.. And when my Dad would look the other way, I would lean out the carburetor, so I could kind of eek out an extra mile or two per hour.. And this little four horsepower go-cart, really was the beginning of my obsession for cars, and all things that go fast.. When I turned 13, I saw a review in one of my favorite motorsports magazines, for this crazy, cool dune buggy, that Honda had just launched.. It had a 350cc two-stroke engine, a fully working suspension and very importantly, a roll cage, so that I could rationalize to my parents that it was actually safer than the go-cart that I had been racing around in.. But in order to underwrite this passion, I was gonna need to get a job, other than the Sunday morning paper route I had at the time..

Now I didn't actually want to bag groceries at Forton's, which is where my older brothers had worked, and I had just figured out how to run the snowblower, that I had been using to clear the driveway and the sidewalks, from those crazy Nor'easter snowstorms.. And that's when the light bulb went off in my internal combustion addicted middle school mind.. I would sell my services, snowblowing services to all of my neighbors.. I had a decent snowblower, it wasn't a great one, but it was good enough to get started.. The next think I needed was an identity, business cards, of course.. I convinced the head of the seventh grade print shop, to let me bail on the, basically, the mock book cover project, and instead, I built my first

business cards in print shop class. This was now Steve's Snowblowing Services.. So I actually still carry one of these things in my wallet today, it's a great reminder.. And from this little business, I learned the first version of three really important lessons.. Number one, learn how to sell..

So I had a snowblower, and I had business cards, and now all I needed, was customers.. Total dread.. I mean, this idea of going to my neighbors, and selling my services was just completely paralyzing to me, to the point where I can still remember walking up their steps, standing on their front porch and staring at the door knocker, with just abject fear.. And then, I would kind of muster everything I had, knock on the door, and deliver my pitch.. And the first few times just totally sucked.. And then, I landed my first customer, Mrs.. Paynton.. She had a long driveway, and a lot of steps, which was the very manual part, so she was worth \$40 a storm.. And then, I locked down the Tinsleys, and then the Rices, two doors down from them.. And pretty soon, I was beginning to kind of push past the confines of my street, which is literally still stained with this very ironic Dead End sign on the corner..

And now, I was seeing, okay, more sort of top step doorbell dread, more butterflies, but more customers.. And pretty soon, I had to upgrade to a much more powerful eight horsepower snowblower.. And I also upgraded my print shop business cards, to these much fancier flyers, that I painstakingly designed on the IBM 8086 computer that we had in our basement.. And this was the second lesson that I learned: design matters.. I must have made 30 different versions of these business cards, with 50 different fonts, and spacings, and alignment.. And I'm convinced, that my customers took me more seriously and I could probably charge them more, because it was clear that I actually cared.. And that dovetails to the third lesson, that I learned: take out the garbage.. My Dad used to say, no matter what it is you choose to do in life, just do it with excellence.. If you wanna be a garbage collector, just be the best darned garbage collector there is.. Be ready, and willing, to take on the unglamorous tasks..

Changing the oil, and greasing the bearings of that snowblower, in between every snowstorm, was a total drag, but guess what, it never broke down during one of those big storms.. And by the time that I had turned 14, I was making \$400 per storm, because I had committed myself to this little business, in these ways.. I came to this realization, that we're all natural born entrepreneurs.. I got that dune buggy.. In fact, I still have that dune buggy.. No joke! Eventually, I went off to school, to WPI, where I studied Engineering and Robotics.. I built this, this was the lightest SAE Formula Race Car of it's time, from scratch, along with half a dozen classmates of mine.. I studied abroad, in Germany, and then Switzerland, thinking that I wanted to be an Automotive Engineer, and then figured out, that this industry was way to conservative, and slow moving, for my tastes.. So I came here to Stanford, to get a Masters in Engineering.. Now this was a really good decision, because I met my wife in ME218..

Thank you, Ed Carrier.. And I also met David Kelley, during my first Friday here on campus, when he opened my eyes to the world of product design.. A few months later, after seeing my final ME101 project, I was a Grad student at the time, David came up to me and said, as you guys have heard him, probably, in his plaintive whine say, "You gotta work at IDEO this summer".. And that summer was a total blast.. In the beginning of five amazing years at IDEO, which is an incredibly special place, I started out as an individual contributor, building skills, pulling all-nighters, and putting into practice, a lot of the things that you all learn here at Stanford.. Things like user observations, and need finding, and rapid prototyping, and the actually totally overlooked, but hugely important role, of storytelling.. I worked on everything from toys, to furniture, anesthesia delivery devices, Nike's first sunglasses, a rapid bun toaster for McDonalds.. I actually went to Hamburger University, no joke.. And through the prism of these different experiences, and projects, I learned that, yes, design does matter, but design is a lot more than tuning the pixels on that snowblowing flyer.. Design was actually about the what..

It was about asking the right questions, and solving problems of all manner, and level of importance.. It was actually not necessarily about giving users, or clients at IDEO, what they had asked for.. But oftentimes, giving them something that when they saw it, was what they wanted all along.. So I did this a few times over, at IDEO, and about four years in, I got asked to lead a very high stakes project, to develop a family of Voice Over IP phones, for Cisco.. Why was this such a big deal? My initial proposal for this project, was three million dollars, which was four times larger than the largest project I had every led at IDEO, and the largest project at IDEO at the time.. Cisco was actually one of the Silicon Valley darlings, and it was closing in on a market cap of half a trillion dollars, and it was clear that if we were successful on this project, there would be a lot more work to come.. And then, for me, this was a bit of a magnum opus project.. I would be working with the best people in each of the disciplines at IDEO, including Bill Moggridge who was literally the founding father of the field of Interaction Design.. Oh, and Cisco, they had never designed a product with an actual user interface.. Never mind a phone, that would touch your face 50 times a day, like that's a product you gotta get right..

So high stakes on many fronts.. But I thought I had this.. And then, we have our kick-off meeting, and all these big wheels join, from Cisco: Mario Mazzola, Luca Cafiero.. These are the Cisco Mafia, as they were affectionately known.. And they had these super strong opinions, about what we were supposed to build.. And I immediately realized, that this is gonna be like one very spicy meatball, to manage this team.. And then, they introduced me to my counterpart, who's name is also Steve, and who literally just joined the company two weeks prior to the kick-off meeting.. So he had actually not been involved in the whole proposal process, but he wasted no time in telling me about his 20-year career in Telecom, at this very prominent company at the time.. And how he knows better than me, about what the market and the users really want, and about all these things we have to get done.. And then he hands me, with an almost satanic smile, this 100-page Product Requirements

Document, the infamous PRD..

And this thing is just loaded with features, and functions, and telephony jargon, that I had never seen before.. And as he's walking me through this thing, he makes this point that still sticks with me, which was that, business phones, enterprise phones at the time, had this sort of secret, symbolic sort of meaning around how much power you had in the company.. So more features meant more buttons, meant more power.. So like the CEO had one of those giant phones, with lots, and lots of buttons, so they could call anybody directly.. So here's this guy, who's brand new to this high-profile project, has just started, but a super strong conviction, about what we're supposed to build.. He has no interest in user-experience, doesn't give a lick about design, and he's gonna be the guy who I have to interact with, literally, a couple times a week, and build a team around.. Whew!! So I definitely had my work cut out for me.. But here I was, back to square one, back to doing the hard work of user observations, and ethnography, and need-finding, and building prototypes.. Back to the hard work of being a user-centered designer.. So instead of just accepting that PRD at face value, I setup visits, to go meet with a bunch of users who live on desk phones all the time..

We went to a call center in the East Bay, a trading floor.. So these were people who literally worked every day on their phones.. And by doing this, I learned which features they understood, and used all the time, and which ones made no sense.. In fact, I still remember seeing this phone that had Sharpie markings all over it, because the user had no idea what the Flash button actually meant.. I'm not sure I still know what I means, either.. And these were some of the priceless, on-the-ground insights that we absorbed, that helped us build a much deeper, more informed, more intuitive sense for what a great desk phone could, and should, be.. And that's when we began the hard work of synthesizing, putting all this stuff together.. So we went back through that insane list of features, and functions, and we graphed each one of them, in terms of their frequency, and their immediacy.. So on this graph, from left to right, low-immediacy to high-immediacy, and then top to bottom, low-frequency to high-frequency.. So those features that were high-frequency and high-immediacy, so things like dialing a number, or hanging up on someone quickly, or changing the volume on your handset, you had to access those with a hard key, you had to get those right away..

But then, there were all these features that had context associated with them, so joining two calls, or transferring a call.. Those were kinds of features that you could, you could surface that functionality, only when you needed it.. And then, there were all these features, which were in the low-frequency, low-immediacy quadrant, things like changing your ringtone.. You might do it once.. You need it, but it is such a low-frequency thing, that we could actually have it buried deep down in the interface.. Instead of our phone having hundreds of buttons, and looking like the cockpit of a 747, we developed and launched, the world's first truly dynamic display-based phone interface.. So features and apps that you use all the time, would be right there on the top of user interface hierarchy, kind of like today, having those four apps at the bottom of your home screen, on our iPhone.. And functions that were more contextual could be surfaced only when you needed them.. I realize, you all use smartphones today, and this seems like a really obvious insight, from like a million years ago, but at the time, breaking that dogma of more features, means more buttons, was actually a pretty big deal, that actually ushered in the era of phones, that would enable, interfaces that would enable an infinite number of apps, and an infinite number of features, and functionality, without having to have an infinite number of buttons.. And that was a pretty big deal..

In fact, I mean, my iPhone has this wonderful ITO coated, chemically reinforced glass, but it only has three buttons on it, right? Maybe four, if you count the slide switch.. Now, not only were these phones transformed, but this entire industry was turned upside down.. Companies like Nortel, and Nokia, which used to have close to 50% market share, and didn't make this shift, they literally are gone.. And Cicso, and Apple, which hadn't made a phone, are now, basically, owning these categories.. Guess what happened to other Steve? My Cisco counterpart, the guy who was the keeper of the PRD, and who used to berate me on the phone, every time he would get one of my monthly invoices.. We made him look like a genius.. Now I haven't seen him in a long time.. But a few years after we launched the product, Cisco had already shipped 100 million units of that phone.. Our phone was everywhere, including on the desk of the President.. I was pretty jazzed, when I saw that..

And he stopped needling me about those monthly invoices.. And for me, I left this project with much deeper respect for the hard work of user-centered design.. But even more importantly, I left this project, which was my last one at IDEO, with a confidence that I could design anything.. I'll take a drink of water here.. I went on to join my first startup, where I developed some cool haptic technologies, these are touch technologies, that all of you with a smartphone, or a smartwatch, use every time you scroll up and down, or push a button to select, that little tactile feedbacky feel.. That's something that I worked on a long time ago.. And we licensed those technologies, actually, to many companies, which actually unlocked a goal that I had had, when I'd left IDEO as a consultant, which was, how can I make money while I sleep? I was feeling pretty jazzed about that.. We took the company public, in fact, Immersion is still a public company today.. But I was actually itching to start my own company, and so, I decided to head back to Stanford, to come to the GSB, so I could actually get smart on that third circle, that business needs circle.. This was actually from my Business School Application, back in 2001, of this, what is now, sort of a ubiquitous Venn diagram, you guys see all over campus..

And I spent my two years at the GSB, experimenting with lots, and lots of ideas.. And in the Summer of 2004, I got a meeting with Mark Andreessen , as a perspective angel investor for this project that I was working on at the time, this mobile messaging idea.. Instead of me getting Mark's \$100,000 check, I learned in this first meeting, that Mark and Gina Bianchini, his co-founder, who was actually a classmate, and friend of my wife's, had actually just founded a new company, under the

stealth name of 24HL.. Twenty-four hour laundry, was what we joked it meant.. Now Mark and Gina wouldn't share much, in the way of details of what they were working on, but this idea had sprung from Mark's passion for platforms.. He's a platform guy.. But also, a deep conviction that the next generation of consumer internet apps, would be social, this was 2004, that they'd be powered by user-generated content, and that they should be made from common parts, that wouldn't require you to know how to code.. I was pretty fired up about my mobile messaging concept, and actually had built a few prototypes and mockups.. They gave me the confidence, this was a decent idea.. But here's this chance, to go join Mark Andreessen, the guy who started the first browser, and go and work on this really big idea together..

So Mark and Gina extend me an offer, to join them, as a Product Manager.. I wasn't Founder, I was actually a Product Manager.. And I'm like, come on guys.. I have all this great product design experience, but I'm not just a designer.. I just graduated from Stanford GSB, I was an Arjay Miller Scholar, for God sakes! And you're giving me a Product Manager role.. I could have gone back to Immersion, as a V.P.. of Engineering, this was a public company at the time.. But I was really taken by Mark's ambition.. So I accept the job, and a pretty modest equity package, though it feels like I'm starting all over again, taking out the garbage.. Fortunately, within six weeks or so, they promote me to V.P., and I show up at my first meeting with Mark and Gina..

Now these were always over breakfast, at the Palo Alto Creamery, where Mark was a favorite customer, he was there almost every day.. Not anymore, in case you're looking for him.. And Mark hands me this tear sheet, with no less than 100 features, that are gonna be in the V1 product.. So this thing's gonna have a local guide, and groups, and photo sharing, and discussion forums, and tagging, and ratings, and reviews, and like 90 other things.. I'm like, Wow! This feels like a lot.. But, let me go do some work.. And I go off, and I prototype a bunch of mockup apps, sort of demonstration apps, including a version of Stanford's beloved, it's kind of an online version of the Stanford Guide to the Good Life.. I have no idea, if this this exists anymore, but it was one of my favorite things, it was filled with coupons.. And then I build this clone of Yahoo Groups, and then I build this cool discussion forum for Ford Mustang fanatics.. And I come back to our next breakfast meeting, and I share these mockups, and Mark and Gina are like, "Whoa, that's really cool! "But can you add?"..

Then Mark hands me a new tear sheet, with like another 50 features, we would have to integrate.. And this time, it's gotta have classifieds, and restaurant reviews, and an integration with Google Maps.. So I go off, and I build another set of prototype, mockups, including Yelp, and Craig's List clones, for all these geography of cities, that weren't large enough to actually have these services on their own.. So places like Juno, Alaska, I literally built a clone of Craig's List, for Juno.. I come back, another Creamery breakfast, another 50 features.. Now it's gonna have betting, and dating, and a rumor board.. Oh, and it's an election year, so it was also gonna have one of these election markets, sort of like the Iowa Electronics Markets, that help prediction markets.. Oh, and it also had to be easy enough for non-technical users to use it, but also, powerful, and flexible enough, that hardcore programmers could actually really get use out of it.. And so, I go off, and I build more prototype apps, and I begin working on the app building interface, which we affectionately called the playground.. And as this repeat loop, breakfast meeting dynamic continues I begin to become very uncomfortable, with this everything to everyone platform strategy..

And in the midst of all this, Tim O'Reilly launches the first Web 2.0 Conference, MySpace is on fire, Friendster's falling over.. Facebook is still closed to just universities and colleges, but it's clear, that it's growing like an angry weed.. And YouTube blows up on the back of Andy Sandberg's Lazy Sunday.. Have many of you seen this? Some of you.. Mark, of course, sees all this stuff happening, as well.. You can probably imagine, what happened at the next Creamery breakfast.. Now our service was gonna have.... This is actually it, guys.. It was gonna have every feature, from every Web 2.0 startup.. I kind of joked at the time, we we're gonna build a mobile, social network, video podcasting, with a tag-navigatable Wiki, like put it all together..

Or as Chevy Chase once said, it's a dessert topping, and a floor wax. And this is when I decided to tag out.. So I'm like.... That's Groundhog Day, for those of you who don't know it.. So unlike in the case of the Cisco phone, I was simply unable to manage that Cambrian explosion of ideas and features.. What I ultimately realized, was that platforms and viral expansion loops, as they were called at the time, are a great place to end up, but you're never gonna get there, if you don't focus on a single, unforgettable, minimally awesome product.. How many of you have heard of Ning? Five, six, seven of you.. But you've all heard of YouTube, and Tumblr, and Facebook.. Ning, the one ring, meant to rule them all, was sold to Glam, for parts.. Now, I'm still proud of the amazing team that we built, and some of those distributed architecture concepts that we pioneered, still live on, actually, in the data centers of companies like Facebook, and LinkedIn, and others..

But this story, should serve as a very important reminder, that infinite ambition, is actually not a goal.. I was actually chastened by this experience, which in so many ways, was like a photo negative of everything I had learned, about bringing great products into the world.. Trying to be everything, to everyone, ends in being nothing to anyone.. And it's only ruthless focus, and delivering real value, to real customers, to real people, is the only way to win.. About six months later, I joined Foundation Capital, as an Entrepreneur in Residence.. I was actually working on a few interesting concepts.. And about six weeks in, one of the partners pulls me aside, and he says, "Hey, you keep bringing "these cool entrepreneurs in, "why don't you think about investing?".. And I was like, "I don't wanna think about investing, "I'm working on this great idea".. But I kept introducing people into the firm, and cool startups.. And a few more months went by, and I realized, I'm having as much fun as I've ever had..

So I thought I'd give it a go, and I transitioned to a Principle, in the Fall of 2007.. So here I was, a Product Designer turned Entrepreneur, turned Investor, excited to take on this very interesting new challenge, but also feeling like I'm starting all over again.. So I spend the next several months, going deep in a few interesting areas.. In fact, in many ways, I actually thought about early-stage investing, the same way I had thought about product design challenges.. Observe, understand, synthesize hypotheses, test and iterate on those ideas, with the smartest people that you know in those areas.. This was how you built deep points of view.. And as an EIR, I had spent some time in this very obscure area known as solar finance.. Now, solar panels had been around for decades.. But they were simply too expensive for anyone, but the dark green, rich consumer.. It was actually simply diseconomic to go solar..

But in 2005, George W.. Bush signed into law the Solar Investment Tax Credit, which enabled businesses to capture a 30% tax credit, on the cost of the solar systems, that they had installed.. And with this credit, solar could actually be cheaper than incumbent electricity.. Now a company called SunEdison, blew open this market opportunity, it was called Solar as a Service, but focused on the commercial market.. So for companies like Marriott Hotels, Walmart, and lots of others.. And when I saw SunEdison's business model, I was immediately taken.. It was as simple, and beautiful, as some of my favorite products.. And it didn't take me long, to ask, why isn't this same Solar as a Service business model, also available to home owners, to residential markets? So I decided to reach out to David Buzby, who was the Founder of SunEdison, and he told me why.. The transaction costs were simply too high, and the idea of managing hundreds of thousands, or maybe even if you were successful, millions of small solar systems, on rooftops, as compared to building dozens, or hundreds of very large scale systems out in fields, was just too much brain damage.. And they had no interest in taking this on, which actually made me even more interested in learning more..

So I went, and figured out the four things that you had to get right, in order to build this company.. You had to have the capital structure, to be able to buy millions of systems.. The operating shops, to actually manage them.. You had to be able to navigate the gnarly regulatory landscape.. And then, you had to be able to offer a single, simple offering to end consumers.. And then, through one of my Stanford Business School classmates, I got a warm introduction to Lynn Jurich and Ed Fenster, they were two Stanford GSB students, a few years behind me, and they had just started a residential Solar as a Service company.. So I invited Lynn and Ed down, to present on a Friday afternoon.. They walked me through their pitch, and it was as if I had been hit over the head, with a hammer.. Between the two of them, they had figured out all the things you had to get right, in order to blow this market opportunity open.. Lynn was a brilliant force of nature, Ed a strategist, a financial savant..

I mean, you literally could not genetically engineer a better founding duo, to take on this opportunity.. So I brought Ed and Lynn back in, the following business day literally, the next partner meeting, on Monday, to present to our full partners.. My partners were very impressed, actually, in spite of, this was literally the deck, this is the cover sheet of the deck.. They were the fastest growing, and fifth largest residential solar company in California.. So they needed some work to do on marketing.. Lynn really hates it, when I show this slide.. My partners were impressed, but they had a few big questions.. This was a business model innovation, not a technological one.. And it wasn't clear at all to them, my partners, that this couldn't be copied in a minute.. That solar investment tax credit, I talked about earlier, it was actually set to expire later that year..

And while there was some congressional momentum, that it was going to get extended, this wasn't a given, at all.. And finally, there was a question about me.. If this project was so great, could I actually win it.. Would they take me on their Board.. I mean, I was seven months into my stint as an Investor.. I was just a Principle, not a Partner.. My only prior investment, was a \$10,000 check behind Tristan Harris.. He's a good guy, and he's spoken here.. And here I am, suggesting that we write a single-handed eight million dollar investment, behind two first-time entrepreneurs, working on a financial arbitrage opportunity in renewable energy.. And area we didn't really know a lot about..

So what am I gonna do? I just dig in, with all I've got.. And for most startups, it's actually pretty easy, to tear down their unit economics and understand their operating plans, and financial models.. But this business, was like nothing else that we had seen before.. It had a crazy, complicated capital structure, with equity, and tax equity, and debt, and construction loans.. So I went, and I built my own detailed financial model, to prove to myself, and to my partners, that this was not gonna be easy to copy, if we figured it out.. But more importantly, that if they were successful, this model would actually scale, not just with the investment tax credit, but much, much further along.. And then, there was that risk, that regulatory risk around the solar investment tax credit.. This could literally go away, with the stroke of a pen.. We've seen this, by the way, in the last couple of years.. Now these aren't the things, that a typical Silicon Valley software startup has to worry about..

But in this case, I had to reach out to regulators, and lobbyists, people in Washington, D.C., and Sacramento, and cities that I had never been to before.. And these were not people who were in the Rolodexes of a typical venture capitalist, at the time.. But I needed them, to help understand whether this solar investment tax credit was actually gonna get extended.. Even having done all of this work, it wasn't gonna be easy to win this project.. I couldn't do it on my own.. At the end of the day, I've learned something about venture capital, and that it is a team sport to win these investments.. So I rallied my partners at Foundation Capital, and we wrapped our arms around Lynn and Ed.. We showed them, that we really understood their business, and what it would take to win.. And remember David Buzby, the Founder of SunEdison, and my sounding board.. With Ed and Lynn's permission, I was able to loop him in to my due diligence..

And when he began to tear it down, and see what I saw, he asked if he could join us, alongside in the investment round..

So within two weeks of that fateful Friday meeting, we had signed a term sheet, to buy 30% of the company.. I just made my first investment.. You kind of sit back, and wait for the money to roll in, right? That's what this job looks like.. I know you all think that.. But there was this other remaining thing, that we had to figure out.. And that was, we had to raise another 50 million dollars of tax equity.. So this was the capital that we would use, to actually buy the systems.. Not the eight million dollars to fund the operating company.. And the original plan, was to do this by the end of June 2008, it was about a month after we had invested in the company..

The end of June comes, and goes.. Then July, it's still not done.. August, not done.. Then comes September 2008.. Lehman went bust, at midnight on September 15th.. And then, seemingly, everyday for the rest of the month, another legendary financial institution blows up.. The bottom literally fell out of the financial markets.. So here I am, three months into my first investment, as a VC, and the world is literally teetering on collapse.. But the team powered through, and they signed a term sheet, on September 26th, it was a Friday, with U.S.. Bank for 40 million dollars of tax equity..

There's this little ray of hope, we might make it through.. And then, the following business day, the House of Representatives votes down a 700 billion dollar financial bailout plan, and the Dow drops 778 points in a single day, largest slide ever.. We had a term sheet, that's great! But it's just a piece of paper, and when the world ends all bets are off.. So we pushed everyone, the team, U.S.. Bank and all the lawyers, who I don't think have forgiven us still, as hard as we could, to close the deal.. Which we did, barely, in the nick of time.. Within a few weeks, the capital markets had completely frozen over.. And as Ed described it at the time, we had just flown the last helicopter out of Saigon.. Now Sunrun experienced many more white knuckle moments, over the next handful of years.. They all do..

In 2012, the U.S.. Treasury, so the Government literally sued the company, along with all of our competitors, everyone in the market. And then, there was this time, when one of the investors, who the company had turned down for one of the rounds of investment, was so upset that the company had passed on their investment, that they went and funded the founder, the original owner or registrant of sex.com, to create a copycat of our business. Now this didn't work out so well, as you might imagine. But the team and I had a long enough focal length, to kind of weather these near-term ups and downs. And today, Sunrun has more than 180,000 customers in just 15 of the 50 states, and there are 30 million more homes to go.. So we took the company public, in August of 2015, at a market cap just north of 1.3 billion dollars. Lynn, in the center there, Co-Founder and CEO, and brand new mom, she had her three-month old with her, got to ring the bell. And I got that unicorn.. I've made another 20 or so investments, over the last 10 years, at Foundation Capital..

And each one of them serves as kind of another canvas, for another startup story.. But let me just wrap it up, with the three lessons that I have learned over, and over again, in my career.. Learn how to sell.. For Steve's Snowblowing, this meant knocking on the door, and asking for the order.. At IDEO, this was about advocating for end users and the design process itself.. And at Foundation, this has meant cultivating authentic relationships with entrepreneurs, and figuring out how to help them achieve their goals.. Whatever this means for you, with the business that you want to go build, just swallow your fears, and do it.. Two, design matters.. Not just the aesthetics, or the pixels on the snowblowing flyer, but design as the what.. What problem are you going to solve? What opportunity are you gonna go after? What positive impact do you wanna have, in the world? As I learned to do at IDEO, and failed to do at Ning, focus on meeting real needs, and wants..

Find simplicity, on the other side of complexity.. Now, let me do a shameless plug here.. If you wanna learn more about this, check out, as Tina mentioned, The Way to Design, which is a book that I launched last year, and an audio book, if you're more into audio books, I released just a couple of weeks ago.. You can find that over on thewaytodesign.com.. But back to the third lesson.. Take out the garbage.. Roll up your sleeves, and rush to pound down those unglamorous tasks.. I'm struck, by how many young Stanford alums I meet, and have worked with, and only their third month on the job, are already asking, "Hey, when do I get to be the CEO?".. I really admire the ambition, but remember, you're in the building mode of your careers.. So be willing to sublimate your ego, but don't subordinate your values..

And one more thing, you all are so fortunate, to be here at Stanford.. It's literally ground zero, for entrepreneurial thought leaders.. You all have a lot going for you.. But as you all also know, success is not guaranteed.. So when you do find it, savor it! Have fun, and enjoy the ride! And that's all I got.. (laughs) (applause) (applause) Cool.. (mumbled words from audience) Yeah, Tina.. - [Female in Audience] So, I was just, everyone else's math test was free.. So here you are, a designer, and a (garbled/mumbled words).. How do you change the way you're partners think about design? How has your presence there, influenced the culture and the way that they look at opportunities that come in? Do you know? - Yeah, I think it's a great question, and it's one where, what I've observed, as Venture Capital has gone smarter on design, and the role of design, the reflective instinct is actually to bring in what is often called, is a Designer in Residence..

And I think, the firms are doing this mostly as a service to their portfolio companies, so you can help them out with some of their kind of critical go-to-market, and product challenges.. Which is a great service to have, in some cases, although, most companies need their own designers, interaction designers, or human factors people.. I think what's different about our approach, at Foundation, is that we're not doing design as a service bolt-on.. We think about design, kind of in a more functional and sort of core way, so not as the aesthetics, if you will, but more so, what question are you asking? And so, for example, as I began to, as I worked on the book, one of the things I was very fortunate to do, is to talk to 50 amazing designer founders, entrepreneurs, design historians, and scholars.. And through the course of those interviews, 200 pages of notes, I

saw some patterns.. And in those patterns, I think what emerged, what was clear was, you needed to kind of reframe design from that little D, from that sort of tweaking and tuning instinct, from the drapes and the drop shadows, if you will, to sort of this question of design as the reframing of what problem are you trying to solve? And so, whereas, when I first started to talk about design, my partners were like, "Hey, bring in Steve, "he's the guy with the cool shoes".. No, it's not about that.. Design is about what questions you're asking.. And so, I think they all now have been trained.. But I also think it's really important, that when you do engage with a venture firm, if you do care about design, design as a bolt-on very rarely works..

It's for the same reason why, many of those consultancies, design consultancies that get, you know, scooped up by IMB, or McKinsey, or General Electric, often times that stuff actually doesn't work.. So, not a bolt-on, think about it as core.. Yeah? - [Male in Audience] Is there something in your portfolio, that you missed it, but that they missed the deadlines and milestones a lot, you didn't want to be missed the next round.. But you still inside, want another VC Team missed? - You know, I think that.... Yeah, sorry, the question was, and correct me if I don't get it completely.. Are there companies where we invest, and then, they don't hit their milestones, and then, we don't want to invest any longer? (mumbled words from audience) But we want someone else to invest.. That doesn't usually work.. (laughs) I mean, I think.... I think what's challenging about those kinds of situations, and they happen in every venture firm, is company's milestones slide to the right, just like they did at Sunrun.. But what that ends up doing, is it calls into question, are you too early, for example? Or, maybe the product really doesn't deserve to exist, maybe this thing is kind of a neat idea, a whiz-bang thing, but there's no market for it..

And so, what we typically do, is if we've invested a material amount of capital, and something's not working, we actually kind of build a sub-team around that company, and we figure out whether we still believe.. In other words, whether, whether if this company were able to kind of continue forward, is there still an interesting market for it? And if we believe that that's true, then we will actually reinvest in that company, sometimes it requires sort of restructuring the company.. And that restructuring can attract other investors in, so if they think, oh, this is actually a really good team, maybe they're two years to early, but we'd be willing to actually join you on that.. So it happens occasionally.. But keep in mind, every startup.. So we were early investors in Netflix.. Netflix, as a public company, almost ran out of money five times.. It went public at a 350 million dollar market cap.. By the way, Blockbuster was a three billion dollar company at the time.. Any of you use Blockbuster anymore? One, you do? (laughs) So they all hit, they all hit their snags, even the most successful ones..

Yeah? - [Male in Audience] (garbled/mumbled words) prices, and (garbled/mumbled words) has this they put the (garbled/mumbled words)... - They did... - [Male in Audience] So what was your feeling, you said, in the future, what's your (garbled/mumbled words) (garbled/mumbled words) now.. (garbled/mumbled words)... - I've learned that I can't predict these things, if anything.. I think, you just gotta roll with the punches, and figure out how to manage those.. But those docs are helpful, from time to time, but most folks are actually doing all that stuff, without having to circulate a presentation.. Yeah.. Yeah? - [Male in Audience] Even starting over twice in your career, did it worry you at any time, that? - Absolutely.. (laughs) I'm sorry, the question, sorry, I didn't repeat the last question, either...

I restarted, I started over three times in my career.. What was that like? It sounds kind of crazy, and scary.. I did, absolutely.. And it was really scary.. And I also love it! I still run a business, silly kind of product business on the side, it keeps my creative juices flowing.. I'm sort of a person who loves to learn new things.. And so, I was fired up by those challenges.. But I was also aware of the fact, that I wasn't always, necessarily, the right person, as I was in those early kind of building mode.. Hence, the sort of, learn when you need you gotta go back to taking out the garbage.. Yeah..

Yup? - [Male in Audience] When someone tells you I want X, but you think actually, I think what you need is Y.. How do you determine when you're actually correct, and when you understand their needs better than they do, versus trusting that they actually understand their needs? How do you differentiate? - The answer absolutely depends, because if I'm talking to someone, who's spent thousands of hours, focused on some market opportunity, and they have evidence, to prove that their point of view is the right one, then I respect that.. But, in general, I think, I'm very practical about these things.. I would love to sort of most cases, again, turn these things into design challenges.. That's my instinct, that's what, like if you said, sort of, what is this thing you always go back to, across all three times of changing careers? I was imprinted like a baby duck, here at Stanford, on these design, sort of design challenges.. And so, I go back to prototyping, hypothesizing, sharing those ideas with the best and smartest people that I know.. And I gather as much data as I can.. But that's all I know how to do, really.. That's the skill under it all.. Yeah, in the back? - [Female in Audience] When you're looking into investing in the company, what are you (sound interruption) with specific venture dollars..

- When we invest in a company, what are the things that we look for, is that? - [Female in Audience] Yeah, what do you index more on, like is there a team, or market, or-- Yeah, that's a great question.. So do we index on one thing, over another? You know, when I started in the career, or in venture capital, I remember one of my partners, Mike Schuh, you know, reminded me of the five things, and it was market, team, technology, or product, the business model itself.. And then, of course, one thing that has nothing to do with the company, but more to do with us, which was the expected return on the dollar invested.. So those were the five things.. But I have learned, in my experience, that the team is the one thing that can, for example, adjust the product or technology, or can find the new market, when the first one doesn't work out.. So I over index, probably, and some times perhaps, too much so, on the team.. And I think, that also is informed by the further along you get in your career, you realize, it's how you spend your time, that becomes very, very important, and I want to work with people that I can imagine working with, like Lynn, who I've been working with now, literally, for 10 years.. So team is a really,

really important thing for me (applause) (applause) (techno music) (techno music) (techno music)	