



## Stanford eCorner

### Non-Linear Path to Leadership [Entire Talk]

Kyle Forster, *Big Switch Networks*

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Kyle Forster, co-founder of Big Switch Networks, discusses pivotal moments from his career in Silicon Valley when expertise in early stage technologies propelled him into leadership roles. Forster also shares insights from several of his favorite books and the powerful lessons all aspiring entrepreneurs should heed.



#### Transcript

So first before we start, Cathy, a big thank you and a thank you to Matt for creating this opportunity. A big thank you to Chad and Akaash for helping me think through a few things to say and I also want to say a big thank you to everybody here in the auditorium today. For me coming back as alum, you are the embodiment of the Stanford community and I feel like I owe such an incredible debt to this community that I appreciate you giving me this opportunity. If you look at - I had this fun conversation with Akaash as I was trying to figure out what topics to hit on. He said so, tell me a little bit about why stay in school. Well, let me give you a couple of reasons, two of my board members right now at Big Switch are actually professors at Stanford. Our lead VC now just started teaching classes at Stanford. Out of the first 20 people in the company about a third had been TAs at Stanford in the CS department, while doing their graduate work and I met my wife as a grad student, when we were both grad students here at Stanford. So I hope those are at least a few good reasons to stay in classes here. I've been very lucky over the last 15 years to have - I've started one division of a medium-sized company, I've started two products in the context of a larger company and most recently started a company myself.

They are not as different as they sound on paper and in fact the experience has been pretty similar. And over that period I've recruited I counted at one point, somewhere around 300 people to join these different entrepreneurial adventures. Now one really, really common theme if you find yourself in this position, I am guessing a fair number of people in this room will, if you hire well, you wind up recruiting a lot of people that are more experienced than you do and you're faced with this challenge of how do you get all these people with more experience than you have and very often very different experience on the same page. So there is this technique that I really like a lot of giving people books, I found it helps. Please copy it, and I was hoping to really talk most today about the books that I give away. We'll talk about these each in a little bit but before we go in there, since most of the stories that I have to tell today are about my company, about Big Switch, let me just do a little bit of background on Big Switch so you've got some context. We started the company in 2010, this was a friend of mine was a - he was an assistant professor at the CS department at the time. We had actually been friends from BASES 10 years before. We started this thing really - it was really to commercialize his research and when we started in 2010 this stuff was - it was really arcane. Over the next two years we became kind of the darling of the networking industry, of an aging industry that was desperate for innovation and so we had all these articles like this one, it was wonderful high-flying times but the product wasn't actually done yet.

You've probably heard this story before. We were just coming up on our V1.0 when our most important technology partner acquired our only competitor. We were suddenly left in this funny situation, we were critically dependent on a series of legacy networking vendors that compete against CISCO for parts of our technology stack and over the course of nine months, one by one, every single member of this coalition we put together designed us out. We put together a plan that we put in front of the board in early 2013. It was a kind of a sort of a double down plan. It said, hey, instead of working with all these partners for

switch software, we're going to go ahead and build the full technology stack by ourselves and instead of going to market through them; we're going to go all the way to market directly. It was a bold plan; everybody in the company was really excited about it. We go into this big board presentation and we got laughed out of the room. I very specifically remember one of our board members saying, guys this plan is awful but you have my money and the board meetings almost over so go on ahead and do it, that's how the thing started. We scrambled out an entry-level product in late 2013 and by 2014 we began to have some revenue coming in, so revenue was starting to trickle in and frankly the growth path wasn't too bad.

Now summer 2014 I forget exactly who it was, but somebody in one of the management team meetings said, you know this intro product we've got, we've never lost and that was kind of a surprise to everybody involved. The other thing is the beta for our flagship product was going well and like really well. I mean people are loving the early beta code that we had together. So by the second half of the year things were - there was a sort of electricity in the air, this kind of something good is happening here and we can't quite put our finger on what it is but we know something is happening. I want you to keep your eye on this chart. So this is I call it the Zen pipeline chart, it's the total sales pipeline snapshot every month and if you are in enterprise tech, you kind of, you spend a lot of time living with this chart and I want you to look very, very closely because here's what happened next. That's what you really want to see. This was a really, really good time for the company. This is sort of the eye of the tornado that we're in right now and as this started happening, more and more people started seeing and touching and feeling and loving the product. We suddenly had this raft of awards, we're now finalist for the Best of Interop awards to be announced next month.

This has just been an absolutely phenomenal ride. The start-ups any of these, whether it's in a big company or your own company, it's not a linear process that we go through here. It takes a ton of luck but certainly one thing that I've found is the harder I work at these and the longer I stay in it the luckier I've gotten and we'll come back to that in a bit. Let's rewind a little bit because -- when I was an undergrad, I don't know how you sort of picture the next couple of years rolling out for you but for me I had this vision of being a very general business leader, it's really what I wanted to do, but I started my career as a Java developer, it was the best job that I could get. And when I think about my early career breakout moments, they weren't from being a general business leader, they were actually from being an expert in some possibly very arcane corner of technology. My first company, there were five of us that had this kind of semi-professional hobby of doing mobile development and you see (10:46) this was like way before mobile development was cool. We had enough customer demand within the company that the management team decided to formalize a practice around this and I wound up leading my practice and it wasn't because I was in any way qualified, in fact I was very unqualified for it, I wound up managing a team of 50 engineers frankly because I was one of only five people that knew a lot about this technology and of the five there were really two of us who - we kind of went all in, this was something which talked about to all of our colleagues who were very excited about, really showed a lot of passion around and we were just a few months ahead in terms of our expertise and in terms of our experimentation than everybody else. So, on your kind of path from where you sit today whether you're going into an internship this summer or whether you've got a job lined up for the fall, or you're kind of thinking about anywhere in between. I'd really encourage you to spend a little bit of time thinking about not a linear path into a leadership role, but think about an area of expertise that you can develop, where you can be your organization's most valued expert or ideally the industry's because there are opportunities there for exponential leadership growth and those are special. So you are on this path, right, from the seats here today or some big leadership opportunity.

There is a really easy way to screw it up. The thing that I look for in, certainly in great interns that have come to work for our company, great new college hires, great grad college hires, great experienced hires, great members of management team, great board members, very simple is do people do what they say they're going to do. It's not - this isn't a big metaphysical thing, this is like, hey, I'll get you that this afternoon, does it happen that afternoon or does it not. Hey I owe you this tomorrow, can I kind of expect it tomorrow or not. I'm still, still very embarrassed, I told you that I'd get you to sort of bullet points to talk about on Monday, it didn't show up till Tuesday morning, I'm still actually a little mortified about that. The reason doesn't matter, it's do you do what you say you're going to do? I had the unfortunate situation, a couple of years ago I had to fire the highest paid person at Big Switch, certainly one of the smartest and absolutely one of the most qualified. Frankly, he just wouldn't do what he said he was going to do. There's this really tactical thing that I'd urge you to practice in a - whether it's in an internship or in the next job and it sounds really simple, at the end of a meeting, you just say, reiterate, here are the things that I said I was going to do to make sure everybody is clear and if it's not - it's kind of socially awkward and sometimes it is. Write an email sometime that afternoon or evening that says, hey everybody, here is my understanding of what I said I was going to do, I guarantee it impresses people and it builds trust and the really vicious thing about this is if you don't do it, it erodes the kind of trust that nobody will ever tell you. You'll never get feedback about this until it's way too late.

It will never show up on a performance review, it will never show up from a friendly colleague, it just doesn't show up until way, way, way past the point when it matters. Beyond just doing it for yourself, I worked for some high performance organizations and frankly I've worked in some pretty low performance organizations and the high-performance organizations over and over, they're staffed with a lot of people who just do what they said they're going to do and at the team level it shows up too, high performance organization, the marketing team tends to do what they say they're going to do. Sales team does it,

engineering team does it and in the lower performing ones, in my experience you wind up with well, maybe marketing will deliver this but maybe they won't, so let's have a plan B. Maybe engineering will do this, but maybe they won't, so let's have a plan B or plan C. Maybe sales will deliver this but maybe they won't, so let's have a plan A, B, C and D and by the time you get to the end of it, stuff just doesn't make sense anymore. You're managing a meeting where everybody's got three, four, five contingency plans and you waste so much time and energy, just trying to get something simple done. So, on your path from where you sit today at a big leadership position, just keep this in mind. Yes, so whether it's a formal or an informal leadership spot and whether it's some big presentation or whether it's a tricky one on one conversation, the brutal fact is that in your first few tries you'll probably mess it up. Now the hope is that if you think about the Stockdale Paradox you'll either not mess it up very often or you'll recover quickly enough that you get to keep this leadership position you've worked so hard to get. Good to Great, it's an interesting book, it's a good read but specifically the section of it that I think is really, really important, Admiral Stockdale has his own very interesting back story but for this purpose the Stockdale Paradox is this essence of when you are communicating in a leadership situation balance the brutal facts with the preservation of hope and I just hope that everybody remembers this, balance the brutal facts with the preservation of hope.

In - we had a company meeting and I think this was back in early 2012, we had a brutal run, two months of everybody in the office, every weekend, a ton of 20 hours days to get into our first, this was a really, really big customer trial we were going into and the customer kicked us out and this wasn't like, hey, we'd had many trials and this was the first one we got kicked out of -- this was our first trial and we got kicked out and so the company's there for the all-hands meeting on Friday and I was actually the one kind of to talk everybody through it. I'd read this great article about Coach K at Duke, he's got this neat style saying hey look, it's not about winning or losing, it's about whether or not you gave it 100%. Had this in my head, I was really inspired and if it worked for him it's sure going to work for me. I think I kind of got the brutal facts part but over the course of the hour I kind of missed the preservation of hope bit. It was really bad, that afternoon four people almost quit the company and I had five people over the weekend, five people I really like and trust tell me, Kyle, that was the worst leadership talk I have ever seen. So, the brutal facts are the first couple of times, probably going to screw this up but the hope is if you think about the Stockdale paradox when you are in one of these situations, you'll do a better job than I do. So say things are growing for you and they are going really well, I don't know how many people, from my chats with Chad and Akaash, I am guessing it's a fair number of people in this room where you want to go into some kind of tech whether it's a new tech product, new tech category or something if your choice is an enterprise technology and you're kind of looking at a new product category type of thing, this should be on your desk, please read it, and please read it and give it away to other people because I've found just as a common vocabulary, this has matched my last five years exactly. So I actually personally signed our first \$2 million customers and I was a big part of sourcing our first multi-million-dollar partnership and one of the - we can talk about the chasm but I think one of Moore's really interesting perspectives is that you have this group of people called the visionaries and now the visionaries are a little quirky to work with, they've no budget, they are very demanding, but when you find visionaries the people who love new technology and they're willing to take new technology for new technology's sake. And sitting somewhere near them as an early adopter and you think of the early adopter as a generally an upwardly mobile professional, very, very practical, incredibly busy and they have a budget and they're looking for some kind of change agent in the organization and they're interested in using technology to do it. I think the point that Moore makes is that you can't skip a step here, you kind of have to win the first group to get to the second group and they are the gatekeepers for you for the mass market.

You can't really go to the early adopters because they're using a visionary, some friend of theirs, somebody in the organization to serve almost as a pre-filter and so once you win the hearts and minds of the visionaries then you kind of get the right to get on the calendar for the early adopter. This matches so closely to what we've been through and I can say on an individual level, at a company and a team level, it is so close and it really changes the way that you think about who are - do you always go for the person the organization has the budget, well the answer is, when you have a new product category, no, not really. If you're thinking about kind of ever in your life doing a disruptive new product category play, something really -- world has never seen before, there is no budget line item for it, really read this and I highly encourage you to spend some time actually giving this book to the people around you, it matches my experience exactly. This was - I almost actually didn't put this slide in, has anybody in this room actually read this book. Yes, it's a brutally candid, and it's critics say, too candid, I'd say perspective on human nature and it's pretty ugly. I actually first read it in grad school and it didn't really resonate with me at all, so if you read it soon it might not make a whole lot of sense. But I read it again at different points in my career, read it again last year and I want to motivate this by telling you a story. We had this big strategy debate early in the company about the fate of an early generation of the product, content of the debate doesn't matter much but I was spending my days flying all over the country just working with our customers and partners to desperately try to make sure that our trials were going well. I was doing my day job and I thought that I was doing incredibly well at it, I was.

On the strategy debate, I felt very, very passionately about one side of the debate. The guy on the other side was spending his time meeting with different members of the management team, often promising them things that in my mind had nothing to do with the strategy debate at hand, was calling into board members and spending time with members of our board, talking about his side of this debate. I had this conversation that I'll never forget with one of our board members that I trust very, very deeply. I'm like halfway through laying out what I think are very well prepared arguments for this thing, and he stops me and

says, Kyle you're probably right and it doesn't matter. He said, you're very worried about getting the right strategy and the person sitting on the other side is very concerned about winning the debate and let me be brutally honest with you, I want to be on the winning side. I don't care that you're right, I am voting the other way. Like it or not and I always have a hard time with this, this is part of the fabric getting things done in an organization of any size. I highly recommend you read this book and if you really don't like it, read it twice. This one's a much happier one, that's like the heavy bit and this isn't a book actually but I didn't want to change the title slide, this is just a YouTube video, it's like 20 minutes, but Simon Sinek is an interesting philosopher and writer and he's got this perspective. He says, if you want to inspire people to action instead of talking about what you do, then how you do it, then why you do it, lead with why you do it.

He uses Apple as a great example. They think different. We design beautiful products that people like to use, computers and phones. He uses the Wright Brothers as a really interesting example. The Wright Brothers had - their team had this mission of building the best airplane that they possibly could. Samuel Pierpont Langley's team or kind of the competitor's team had them outfunded 10 to 1, had these incredible luminary thinkers on the team but their mission in the void of any articulation of it was we want to be famous and we want the fortune that's going to come with building the first airplane. And when the Wright Brothers through a quirk of luck and fate and a lot of blood, sweat and tears got the first airplane up and running, the Langley team completely disintegrated and the Wright Brothers team actually just kept on going, they had plenty more inventions after that. I spent about a little over a year as the VP of Marketing for Big Switch and when I kind of first started it our self-described mission was something along the lines of, we build software-defined networking style operating systems for bare metal switch hardware to power next generation (26:38) switching fabric. That's means a lot to people in our industry but it took us about 100 drafts to come up with something a little bit different, that something was we believe that the network advances that have been made by Google, Amazon, Facebook and Microsoft should be within reach of a much broader audience. It was funny to see as we kind of converged on this, the external messaging is, that kind of is what it is, that part worked very, very well but the interesting thing to me was the internal alignment.

I got to tell you, people just seem more excited about coming to work. So it takes a ton of drafts to find one of these leadership statements, that's not so high level and vague that it's meaningless. There's like a food bank, like 10 blocks from my house, it says like, our mission is to feed the world's hungry, food bank in San Francisco, like it's a little bit of a mismatch and then it's really hard to come up with something that's not so detailed that it doesn't really resonate, so getting the right level in there is something that takes drafts and if you find yourself in a leadership spot and you're trying to articulate your own why and you are trying to articulate your organization's why. I urge you to have patience, take the time that it's going to require to do 100 drafts. And the end result of all this work - it's probably very, very short. So I love this Ted talk. This is the second to last one, Seth Godin is another interesting writer, philosopher. The concept of this book is that many of us spend just enough time in our respective fields to get to a certain level of competence but we crowd our plates very, very full. We don't quit other things and as a result we don't have the time or the energy or the emotional bandwidth that it takes to become one of the best in our field. And the demand for the best in the field is 10x it is for those of us in the middle of the field.

I really love the - Godin uses examples from professional athletes, a lot of world-class musicians and it's neat to see him lay out the whole argument but it resonated to me when I spent most of my career at CISCO, in between CISCO and Big Switch I left for TV over the Internet start up, this was before the - and after three years of like I was just absolutely working my tail off and trying to soak up as much as I possibly could about AB testing, consumer Internet behavior and I was at a product management design so I got to spend a ton of time working with design science. At the end of that I was like pretty good at two things, but I wasn't really great at either. And so I quit, I went back to networking and now I can look back on it and it hasn't even been that long but you can see the benefits of just sticking with it, start to accrue exponentially, you'd be amazed like, this is a - networking is like a \$50 billion industry but the number of people who drive it is very, very small on both like vendor side and the customer side at this point for me it's like the same names just keep on coming up over and over again. And more and more often it's, oh, yes, yes, I almost recruited him a couple of years ago, oh, I almost went to work for her back in the day, yes, we've done business together, different business cards but the idea that unfortunately you have to quit a lot of things and you have to quit a lot them early in order to find one thing that you want to stick with and be one of the tops in your field. This to me is something that I think about more and more because you really want to think about what you need to give up in order to that and the hard decisions for me were not, hey, what do you want to be great at, the really hard decisions were what do you want to give up along the way. That's actually what kind of took the real thinking time. We've kind of talked this whole time about career stuff, sort of I assume what everybody for the most part here is for. You can have a good month and you can have a bad year and you can have a bad two years and you can have a bad five years, it doesn't always work out. Even with these books that I recommend, I've recommended them to a lot of people and sometimes they work for some people, sometimes they don't. Sometimes they work for me at sometimes in my life and sometimes they haven't.

My biggest recommendation is, find a hobby that you love. I love cooking. I think at this point I'm pretty good at it and unlike any of the other books that I've brought up here this one is guaranteed to work. So why don't I leave it there and we can go to questions. What was your biggest challenge at Big Switch Network and how did you overcome it? Sure. It was like the first couple of years, we didn't have - I don't think the challenges were so significant. We did incredibly well out of the gates after the

acquisition of our competitor and partner, it was the what do we do next. And it wasn't figuring it out, everybody had an idea, an actually very strongly held opinion. Let's say you got a group of people who really, truly believe and understand, it's not their jobs that are on line, the jobs don't matter, right, it's that their reputations are on the line and that matters a lot. And so getting this group of people, each of whom had a strongly held belief about what the plan needs to be and an increasingly escalating amount of commitment on what this means for my reputation, that's really, really, really, hard.

That was the toughest challenge to overcome at Big Switch. How do you balance becoming an expert at something with getting the breadth which you need to sort of know what you want to be an expert in? I am going to be a terrible person to answer this question because I spend a lot of my time kind of dabbling in other areas. For me at least, and this was very personal, the hard thing has not been what I want to be an expert in, that's kind of evolved very organically, I mean if you'd asked me 10 years ago, I was going to be an expert in starting networking companies. The day to day decision is what do you decide to quit along the way and that at least for me, that actually winds up being much more top of mind and sort of forces you to have less and less, I mean I'm sure everyone knows you have less and less and less time. What are the little things you decide to give up, that for me has been the hard part. Do you agree that the majority of quintessential leadership qualities are all about making the uncommon common-sense common? Making the uncommon common-sense common. Yes, making the uncommon common-sense common. Yes. I would buy that. A ton of it's just getting people on the same page and I think that's exactly what you - I think that's a corollary of exactly what you just said and some of that's sharing vocabulary, some of that's understanding that you're on a very different page from somebody else from a risk profile.

That takes kind of a long time and a lot of conversations to figure out. So yes, I would agree with that statement. More serious one. Crossing the Chasm, is that title indicative of the content? There are two useful parts to that book, the one that I wound up using a lot is it actually gives names and labels to these different segments, the visionary, the early adopter, the early majority, the late majority and the laggard. That's the part of the book that for me becomes important because it's a vocabulary. Hey, why are you spending a ton of time and money and energy talking to this particular person, oh, because they are a visionary. Okay, everybody knows what that means, they have no budget, oh yes, but they are visionary. Okay, I get it. Hey, this person is an early adopter, what we really want to change exactly how we're dressing them. Okay, wait, this person is early majority, all they care about is benchmarking, so it gives a really, really useful vocabulary to discuss the people outside the company that you're talking to and also for me as a retrospect, to recognize where you sit in that spectrum and to recognize there are people who share very different value systems to the left and to the right of you.

The book makes a huge point, the name really comes from there is a big chasm between the early adopters and the early majority and that's a very useful concept too and it has all kinds of ideas on how to cross that chasm. It's extraordinarily useful. I found that to be more of a practical, that's a very practical concept. The vocabulary is the reason that I give the book to other people. You talked a lot about (37:17) can you expand on why do you say (37:23). So I don't think it's marginally better, I think it's - and I am not this, I am not saying I am but I think it's been recognized as one of the best in the field. I mean I think of when we've gone out to hire members of the management team, when we've gone out to hire really critical members of the engineering staff, when we've gone out to hire really critical members of our sales staff, of our marketing staff, our business development staff, we have this exercise that I really like doing of, hey, let's get a group of people in the room, let's list across all of our experience who we believe the top 10 individuals are in the industry and let's throw an incredible amount of love to them to see if they'll come over to this to work for us. And that's a great exercise, we've had some phenomenal people come to work at Big Switch doing exactly that. I advise other startups and I kind of usually start with that, you also wind up seeing that group of people, they have a ton of job options, they are incredible hard to recruit because the world is sort of their oyster because there are so many conference rooms filled with white boards where somebody is listing 10 names. So I don't think it's about being marginally better, I am not saying I am one of them but for different functions I've been a big part of putting those 10 names up on a white board and part of that process of trying to recruit those people and I see the other options they have and they're amazing and I see how much we pay and it's amazing.

So it's - I do think it's something that's worth thinking about as part of your - it's not like part of your career plan but it's kind of part of the picking what to quit and when to quit it. From the time you started and now, how much has the industry changed and how did you respond? Completely. I don't want to spend too much time on the networking industry because my guess is that's of interest to like seven or eight of us but this industry went from - let me give you a good example, I think one of the really good journalists in our space had this really great article saying that datacenter networking, has seen more innovation in the last two years than in the last 20. And I like to think that this whole SDN movement has been a big, big part of that. This in an industry that the fundamental basis of competition was speeds and feeds for 20 years and the end result is that the products are impossible to use, completely impossible and arcane to use. And when you see something like SDN come in and fundamentally change the basis of competition, you see everybody scramble to try to figure out and the industry is in a completely different place. I am actually very proud of the industry in general. There is much more focus on the human, it sounds funny to say, instead of the throughput. Two questions. One is inside your own organization you talked a little bit about the previous organization decisions always weren't the optimal, they might have been a power play.

What are you doing inside your own organization to get more optimal decisions? Yes, I think there are two things, recognizing what's a hard decisions that's worth spending a lot of time on and recognizing what's kind of something you've got to just do and move on. That's - to me that's the number one hardest thing. The other thing that we do and I give a ton of credit to the other members of the management team for this that I work with very closely day to day, there is a lot of talk about, okay, how should a decision like this be made, who is going to make decisions like this, how are we going to make this particular decision and is it going to be a little different from how in general we're going to make this type of decision, so there is this sort of - they call it a meta-conversation about the decision to be had and the real (41:43) skip that step. Now the trick is, at the very beginning, can you recognize, hey, this is a hard one, it's worth having the meta-conversation versus this meta-conversation is going to take us, one, two, three meetings maybe and we need a decision by the end of the day. My second question was around your strategy when you went from an OEM kind of customer to a direct. Could you talk a little about that because it's a big transition, was that out of desperation or intent? Or just pure crazy. A little bit of both. I think the first when we started the company since I had worked in CISCO I was desperately scared of the CISCO sales force, like petrified of ever having to go up against them as a start up. And as the company evolved and partially I think in some of our betas the product did really, really, really well, we just got emboldened to say, hey, have a 16,000 person sales force can we really go up against that. Well when you have the opportunity to be product led and your primary sales motion is, hey, can I put you on the phone with somebody who is using it and suddenly it kind of feels like it's not a crazy fight to pick.

Talk about any near-death experiences that you had earlier in the startup and maybe in particular on funding. On the physical sense or on the career sense? So there were a few - very early on I think one of the things that we did they created a - you usually hear about these near death experiences in the first year or two. When we started the company, the third week of the company, we had a \$375,000 government contract, so we were like profitable at three weeks and that was this incredible forcing function because you could say, hey, both for recruiting and to hold the team together and instead of the near death experience, you had this kind of nice like, hey, we signed this \$375,000 and now we actually like really have to deliver it and that's going to take like a year. So I think that for us - for me it's a best practice of starting a start up, can you start with a contract. It creates a cohesiveness around the team and it buffers you from this - the incredible rollercoaster of the - of what could otherwise be a rough first 12 months. Our near death experiences have been much more later, when we had to suddenly instead of being a component in the technology stack having to be the entire technology stack and there were less near death experiences because frankly we had raised a ton of money. So while a number of the - my friends who have started companies and some of the startups where I playing advisory role, that near death experience is something that kind of happens a lot. We got lucky it just didn't happen to us in anywhere near a severe form as it happened to others. Having worked at CISCO and now competing against them, what's it like fighting an incumbent? Hard. I think you respect the company more when you are outside of it competing against it than when you are inside of it and I found this -- we've hired a bunch of people not only from CISCO but from a whole series of different networking incumbents, from VMware, from a whole bunch, and when you are inside the bowls of a big company I think very often people, you lose sight of all the things that company does well.

There are very few people out there who work for a big company and say the company they work for is well managed, I just never see that. And then they get outside of it and they're compete against it and wow, that place is actually pretty well run. With CISCO specifically I had the luxury of - I spent a fair amount of my time at CISCO wanting to do a start up and pattern matching against the start ups that I felt were doing a really good job of competing against CISCO, so I kind of left the company with a little bit of a seen this playbook work twice, have seen this playbook work three times, I have seen this playbook never work. It's very industry specific but if you want to compete with an incumbent, I would actually recommend trying to go work there even if it's for a year. You develop an awful lot of opinions about what works and what doesn't work. (46:32) It's a really good and very practical question because... Can you repeat the question please? Oh sure. Correct me if I paraphrase it - if I paraphrase a little off. Who is your sounding board when it comes to unconscious incompetence? Who do you go to for advice, who do you run ideas past? The first version of this presentation was a lot wonkier so thanks to my wife, you got to see a much cleaned up version. My wife always winds up being my first sounding board and that's just the type of marriage that we have.

Certainly other members of the management team on different topics I think it's really, really important to just say beyond everybody's functional experience and I shouldn't say management team, actually very much the broader team, like beyond the kind of functional day to day are you cultivating relationships with the people that you work with to have the one-on-one really private conversation to say look this idea is unformed, it's maybe going to be a little far off. It maybe sounds - it sounds good to me in my head but let's try it out in the real world. There's a danger I don't see it in my current but I've been in organizations where I've been in this position, I've seen other people in this position in the past, if you always wind up - if you're in a leadership spot and you wind up always going to the same one or two people, it creates its own weird dynamic, so the healthier dynamics that I've seen is kind of a - sort of a lonely spot at times is that hey for conversations like this, for topics like this, here's the go to person, for topics like this, here's my sounding board person, for topics like this, here's my third. Management team is incredibly useful. Independent board members are people who you grow to rely on very, very deeply and spend a lot of time thinking about who you want on your independent board. Our first independent board member was one of my teachers here in the E273 class; it's actually how we first met. The independent board member is a key, different members of the team are incredible key, family is incredibly key. I have had at times an executive coach, you'd be amazed how many people do

have that, that's been extraordinarily useful, and that's usually my set. The failure mode, I think that I'd point out is, when it's like you're in a leadership role or somebody in the company is in a leadership role and they always have one or two go to people, those one or two go to people wind up having so much inside information they get outsized power and it can be really tricky to manage when - there are a lot of different ways where that can go wrong and it makes everybody else feel very left out. Big corporations they keep growing and growing and they become like an aging empire, it's like a disease, how do you reverse this bureaucratic culture, official imbecility, bureaucratic elephantiasis whatnot.

My company, we're not there yet. I'd love to tell you when we get there. Let me give you - it's a good question, it deserves a good example. I was working in a sort of a strategy group at CISCO when John Chambers put out the sort of this vision as target. He is really good at this stuff. And when you actually kind of did the back of the envelope on the targets, to achieve the target the company would have to add a Fortune 500 sized company every year for the next five years. That's like a - and they did it. It was one of these wild things of seeing a leader at a company of that size and scale who could still have a vision that was so big that it was a real challenge in the company, I think more people would have thought it was crazy if you did not have such a long track record of doing exactly this. To me it's something that's incredibly inspiring. I remember sitting in a room with a bunch of people working on market sizing and spread sheets and how can we take existing product lines and acquisitions in this whole business and it was incredibly inspiring to see - at Amazon like sometimes I've heard them call it the 2x and the 10x vision and see even at that scale having a 10x vision when it's so easy to have a 2x vision, the bigger companies that I think at least in industries that I have competed in and I haven't worked at others but they seem to have spent much more time on the 2x and even - and at scale they lose the sense of what a 10x vision could really be.

Thank you, Kyle.