



## Stanford eCorner

### Building an Entrepreneurial Career [Entire Talk]

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Kauffman Foundation Senior Fellow Ted Zoller challenges Stanford students to engage in entrepreneurship as a practice of action. Based on his research into dealmaker density and network development, Zoller details the power of seizing opportunities and the pathways to developing an entrepreneurial career.



#### Transcript

Let's welcome Ted Zoller to Stanford. Thank you, Tom. Thanks a lot. So my job today is, I think, primarily to entertain, right. If I'm boring you in this lecture, I'm doing the wrong thing. I'm aware of that. The other thing is I would fully expect with this kind of brain power in this room that you would just interrupt me, right. So I fully expect you all to challenge some of my thinking, maybe bring up your own ideas. Throw me off balance everyone once in a while. I will hope that you'd be willing to do that.

I'm very privileged to be here, as you could expect. But I know you're very privileged to be here as well. This is one of the finest institutions. If not the finest institution of higher education and I'm going to prove it today. Today I actually have empirical data that shows Stanford's place in the sun and why you should be very proud to be here. So this is what I'm planning to do. I wanted to share with you just a few ideas on whether or not you think that you're fully networked. I think it's somewhat appropriate that today Facebook IPO, right. Facebook announced that they were going to go for an IPO, right. So this is a pretty important day.

But you should be asking yourself whether or not you're networked in the way to fuel your entrepreneurial future? And I will show you a few ideas that you should start to think about as you're putting together your professional path. So I'm prepared to answer five questions today. The five questions start with, what are the ingredients ultimately of a high impact entrepreneur? Ultimately, why is Silicon Valley the very best place in the world to be an entrepreneur? Thirdly, how do I take fullest advantage of my time at this institution to gain an advantage. I think it's important for all of you. This is a precious four years of your life, if you are an undergraduate. Two or three years, if you're a graduate student. And if you're a PhD student, you're probably going to be indentured for the next 20 years. That's my full expectation. Then what path will likely lead to my success while I'm here? Taking full advantage of that. And then lastly, I will prove to you why is it - why is that Stanford bill completely worth it? That's probably more of a question that your parents would like to have the answer for, right? So there you go.

So starting with the first one, what are the ingredients of high performance entrepreneurship? You know it occurs to me in the work that I've had - I've had the privilege of working with entrepreneurs all my life, I was an entrepreneur earlier in my life and I now have worked now with hundreds of entrepreneurs. I've had a lot of great success in working and enjoying their stories and one of the reasons why I love Silicon Valley is, it's a place of real attitude. Starts out with maybe the character of a Steve Jobs, the attitude of a Vinod Khosla, right. Here is Hewlett Packard, in front of the iconic garage, right. How many of you think about garage entrepreneurship, that all started here. And that is the garage that's on the actual list of historic places as a matter of fact. Andy Grove, he is the model of persistence, right. And then of course the Google guys. We're talking about the cool factor. And of course why I love Silicon Valley is Stanford University, can we all say, absolutely right? But the truth is - the secrets of entrepreneurship is literally everywhere.

It's everywhere where you are, everywhere worldwide. I know that this is being broadcast all over the world now and everyone who is watching this podcast is surrounded by entrepreneurs. Just want to tell a few stories. There is a person Amit Singh, he is one of my heroes. Amit was in my class four years ago and now has a company that's in the top three fastest growing companies in the North - in the Southeast of the United States. He started literally as a programmer in a cube, now has 700 employees over three continents and literally has all the equity of the company. He never had to raise money to build that company. Now that's an entrepreneur. Here is Ryan Stone. Ryan Stone came to me about seven years ago and said, Ted, you know what I want to do? I want to start a new airline.

My first reaction was oh, my god. Holy shit. This is not what you want to be starting, this is the worst possible - he said hold on, hold on. I have a really great business model. I want to link with high growth companies that see aviation as a strategic advantage and now he is flying a fleet of 10 of the fastest aircraft. He hadn't had to spend a dollar on building that network. And as a matter of fact, now he is running that airline and it's extraordinarily powerful. Again, a great entrepreneur, who's build a great business model. Here is Monica Tomasso. Monica is also my hero.

She was really interested in trying to change the nature of nutrition in the K-12 environment. We are feeding our kids garbage and she wanted to change that. She has been shipping over 2,500 lunches to K-12 students in the mid-Atlantic and uses it as for passion to drive this message home. These three guys, have you ever seen the movie Office Space? Right. You know that movie, remember that scene with - when they take out the printer or with bat and they just hammer that printer with the bat. That was the mantra of these three gentlemen. They were all sitting in cubes at Cisco System. They decided they wanted to change their lives, they started a microbrewery. That microbrewery has been widely successful, a company called Lonerider. That is still their mantra, they're having more fun today.

Again, they all through in \$25,000 a piece and now are free cash flow. These two fellows who I'm very, very proud of, Tom Fischer on the right is one of the foremost scientists in blood sciences. He has come up with lyophilized platelets. You know platelets? We usually donate it like you would donate your blood, when they last for a few days because they spoil. He has come up with a way to freeze dry platelets. But what's interesting about this story is the guy in the left, Stan Eskridge, great entrepreneur. Doesn't know anything about science, he'd be the first one to admit, I'm the farthest you can get from being a scientist. He said, you know it would make a lot of sense if we could actually put those platelets and embed them in a textile. And they came up with a field dressing that could actually be mounted in front of a person who has large hemorrhagic wounds. And guess what that product is being used in the front lines in Afghanistan to help our soldiers.

So those are my heroes, right. We can talk about the great athlete with the great speed. But these are entrepreneurs who are all around us. These are entrepreneurs that are in this room, right now. These are the entrepreneurs that inspire me. So, Dr. Byers has probably hammered this into your head. Where does great entrepreneurship start? Usually with innovation, right. It starts here. It doesn't end here.

Let me just explain what I'm talking about. How many of you have at least one idea, that you could act on in your lifetime. You have one idea that you want to turn into a start-up company. How many? Raise your hand. Keep them high, don't put your hands down, okay. How many of you have three ideas? If you don't, drop your hands. How many of you have five ideas? Alright. How many of you have 10 ideas. Now these are really sick people. We need to study these people.

These people are - keep your hands high, you should be proud of that. Now we need to understand these people because these are the people who can - please put your hands down, but we're going to celebrate you all. Because these are the people that fuel the future. But we have to unlock their potential. They come up with great transformative ideas everyday. But as you know entrepreneurship is about taking action on those ideas, making those ideas visible, rendering them available. So it's not enough to start with the idea, you have to start with the idea, but you have to act on the idea. And how many of you, just for curiosity's sake, how many of you can act on more than one idea at one time. Okay, raise your hands? Okay, how many of you are working with three ideas at one time? Anybody, how you're doing it? I know how you're doing it. Please, yeah.

Yeah, I have three companies at the moment and switching between them. Right. And is your role different in those companies, are you the founder of all three, or are you the CEO of all three. Two of them. Two of them. And the last one is partnership. Okay. The third one is a partnership. So you're getting leverage. You're making ideas available and all these ideas are now taking root, right.

These ideas are making it happen. So it's very common for entrepreneurs to find different ways to find leverage. You don't have to found the company necessarily to have impact. Your ideas need to be put into motion. That's what entrepreneurship is all about. So, if I updated that picture, I guess it would look like this. You all can do better than that, can't you? Let's do better than that. Oh, my God, so that's the best we can do. So, this is one of oldest ideas known to man, since Plato, right: necessity is the mother of invention. I'm really extremely bullish about the future of our world because we have gigantic challenges and we have your generation who is serious about solving those challenges.

I'm really excited about the future of entrepreneurship because I honestly think that's one of the key answers to society's greatest problems, but it started with Plato. So, in many cases you start with the innovation, but it's not enough, you have to build something on top of that and that typically is the insight. That insight is how that innovation actually takes root, how it has impact, why it's meaningful. And I'd argue the type of entrepreneur that starts with the innovation usually is what I call an "innovation-based entrepreneur". But there is another typology of entrepreneurship, as a matter of fact that starts in a very different way. How many of you would start this way, start with the idea and then start to find a market for it? And maybe, okay, a lot of you are raising your hands. I think that's a typical modality, right? Ideas are inherently valuable, but ideas that are applied are invaluable. I would suggest that ideas that are left on your list that are not acted on are valueless. These are ideas that need to be released, make them available to society, don't leave them behind. I can't tell you and I bet some of you have been in that situation where some of the best ideas you've had, you see someone else implement, you've had that experience, right? You just let the world just pass you on by because you hadn't had the time to make it happen.

Think about that leverage, the individuals who are doing two, three, four ideas at a time or working with teams of people to actually make these concepts available. You know, emulate them. Make that happen. The second piece is a game-changing solution. This is an ingredient that's really critical to high-performance entrepreneurship. What do I mean by that? Ultimately, as you look and this is a great illustration of all the things that are happening in the software and the web environment here, in the social media environment, and that it occurs to me that it's almost a daunting set of solutions, right? Which solutions are going to actually make their way through? You know, many of these started with, just like you started, an idea, but many of these solutions need to find their impact in the market. Only a few will make it through, right? There are certain applications, for instance, certain concepts that end up becoming platforms and then becoming kind of central to our lifestyles, right? It occurs to me when you look at your smartphone, for instance, how many of you have over 100 applications on your - apps on your iPhone now? Can I ask? More than 100 apps? Pretty common. How many do you use on a typical day? One, two, three, right, am I right? How many of you are developing apps, I'm just curious? How many of you are developing apps as we speak? Okay. What's it going to take to make yours a game-changing app? Think about it. What is it going to take to become a game-changer? That is what it's going to take.

You've got to dial-in the notion of need, how ultimately is that need being satisfied, how is that pain ultimately being mitigated? I would argue that the intersection of opportunity and need is where the entrepreneur needs to live. Opportunity is the most exciting type of platform an entrepreneur lives in their life, but need ultimately crystallizes it. That's the acid test. I would argue that there's a class of entrepreneurs, you might be surprised by this, they don't start with an idea at all, they start maybe with the market try to understand what the problems are that we all face. As they're reading the blogs or as they're going through the web or as they're reading the newspaper, believe it or not, in the morning, they actually see compelling need. And on top of that, they define a real customer in their mind. They see a customer, I call that the beachhead. That need is critical. And I would argue that kind of entrepreneur is a marketplace entrepreneur. They don't start with the innovation, they start with the problem and then they acquire innovation to solve the problem.

These are conjoined and they match. So, the market is my wisest teacher. Honestly, the market will tell you whether or not your idea is going to gain relevance because people will walk with their feet. The market is a beautiful crystallizing test, launch and learns where it's better than learn and launch, you know, I saw that Steve Blank was here, for instance, absolutely true, they're bringing the market into the equation much earlier. Will help you test your ideas to see if they actually will make their way through. Okay, so let's bring these two concepts together; the market, the innovation. On top of the market, you have the beachhead and top of the innovation, you have the insight. What do you suppose is at that intersection point? We all said this word, right? It's a value-prop. That value-prop is the driver. It is ultimately how you are going to make the decisions you're going to make, as to how you use your time.

Now, I see that as a function of expert entrepreneurship. So, for those of you who start with the innovation; balance it by looking at the market and the need. For those of you who start and don't have original ideas, and I'm guessing not many of you are like that, but can I ask you, are there any folks in here that have never had an original idea in their entire life? Seriously? Is there anybody in here? There's got to be one brave soul, let's say, you know, to be honest with you, I'm in the middle of all these brilliant people and I don't know, squat, you know, but I know how to help people who have ideas. There is no one in this room? Fascinating. Fascinating, I guess it's not surprising. Are you that guy? Okay, alright, thank you, Tom. Thank you for helping me out. Alright, the third part of the strategy here is that that you have to be able to execute and execution is critical. Execution is the function of actually putting your ideas in motion. When you have something so complicated that people don't understand it, you're doing the wrong thing.

The best business models are usually the most simple business models. The ones you can communicate, the ones you can actually evangelize. These are the ones that actually can bring people to follow you, right? So, avoid complexity? Your left brain kind of function, I'm this kind of person, I love to get underneath it - I love to get underneath the - to look underneath the hood, I want to tinker with the engine, right? Engineers love to tinker with the engine, am I right? You're the operating guy. You want to figure out how it works. You want to take a part and make it better usually, right? But there is another kind of

entrepreneur, believe it or not, and most of them are sitting over the business school right now, right? And I would call them right-brain entrepreneurs. These are the people that will say, Ted, you know, seriously, you're spending all your time trying to figure this thing out, and you're just wasting your time, this isn't worth doing it, you don't do it. Why would you do that? I tend to enjoy this and I always disdain the term vulture capital because it suggests that money is evil. Money is your tool; you should embrace that concept in order to make your ideas available, right? Make your ideas available. So, don't be afraid of money because money is ultimately the tool. Somebody wrote a piece in the Huffington Post and someone wrote a post responding to it and they said, you know, money is like manure, just spread it around, make things grow faster.

Yeah, that is the point, you know, I can understand that. But I want you to just challenge yourself when you look at that and I find this with engineers a lot. When you look at that glass, how many of you see a glass half-empty? You see the potential of it, but you need - you see it half-empty. Can you raise your hand? How many of you see it half-empty? How many of you see half-full? You're optimistic, right? I would argue that when are you when you're building a great venture; you want to take advantage of the people who are both optimists and pessimists, individuals who can ask all the right questions. So, the people that raised their hands, saying I see it as a glass half-empty, they are the ones that are well of knowledge of what are the barriers you need to overcome to make it successful. You want a game-changing solution, find that opportunity. So, discovering that business model will allow you to soar over some of the key challenges, some of the key barriers and vet that opportunity. Okay. So you bring your business model together, you balance it with your financial model. On top of your business model, your strategy, you attract leadership, the people that you would implement with your business model.

The financial model you bring; the tools and implementation, all the assets you need to build your venture, right? Guess what else that intersection? Think you can guess? It's a value-prop, right? That's a function of execution. These are the things you do after you are in motion, after innovation the market comes together. So, let's try to understand this as a system. It also occurs to me that entrepreneurs don't think, as we've learned from Sarasvati, strategically. They are very opportunistic. They start with an insight, they add to it an understanding of a customer, they try to understand how you can bring other people into the equation by assembling people around the idea with leadership, and they see all the assets and bring it together, again, informed by the value-prop, right? That's how the entrepreneur usually starts. They don't think top-down, they think bottom-up. So, let's bring it all together. The market, innovation and top of the market, the beachhead and top of the innovation, the insight, you have the business model, financial model, add to it leadership, add to the financial model your implementation, all structured around the guiding principle of the value-prop. Again back up in the 1980s - back in the 1980s, I used to have a shirt looks just like that, I'm surprised I am not wearing it still today.

But that's the way I look at entrepreneurship. In many ways that this model actually captures many of the ways people approach entrepreneurship and that you have to integrate these elements into your thinking. Not everyone on your team, by the way, has everything on this picture. You have to build a team that fills out the full equation. Alright, what's the next piece? Let's look for a leapfrog strategy. You know not one of your entrepreneurial efforts will be successful if it incrementally improves the market opportunity. Very difficult to build the business on an incremental improvement, you really need a leapfrog strategy and it occurs to me many of you probably admire these two guys, right? I admit. I'm a geek. I'm a trekkie. Unfortunately, my trekkie was this, right.

These two guys, you know, little old school realize that. A lot of ways, you know, the generational gap is starting to really show up in my life, you know, every day. But it occurs to me, I remember when I was watching these two fellows and, Spock was in the cabin and he was playing three-level chess. And I just remember this, it scored in my mind. So I was thinking to myself, a great entrepreneur doesn't play checkers, they don't play chess, they play chess on three levels. You think about what Steve Jobs did, for instance. You know, everyone talking about Steve Jobs, but this is the person who had something locked and loaded, ready to go while he was implementing the thing that was already rocking our world, right? He was playing three levels as opposed to his competitors who are barely playing checkers, if not emulating the possibility of playing chess at his level. So that three level chess game is something you have to be thinking about. And honestly, a leapfrog strategy is thinking how the world adapts, how it evolves and what's going to happen in the future when you make educated hunches how to make that happen. That results in not an incremental improvement but a leapfrog, or league improvement.

And by the way that's my Captain Kirk. It's kind of sad, isn't it? I love William Shatner, but boy that ages me, ouch, right? The next piece is serendipity. And I can't really teach you this, but serendipity plays a huge role, and you now I disdain the idea that entrepreneurs are lucky and it's all about luck. I don't think that's true at all. Entrepreneurs take advantage of serendipity. Let me explain what I mean. I know so many entrepreneurs who are like the Forrest Gump's, you know, remember the scene when he was meeting John F. Kennedy and he'd already met, and I guess President Johnson or vice versa. He said; I have to go to the White House again, right? So, you know, this idea of serendipity is so interesting to me because entrepreneurs put themselves in a position to be lucky. They put themselves in a position to be fortunate.

Why? To prepare their minds to take full advantage of that opportunity when it presents itself. So, here's Louis Pasteur, chance favors the prepared mind, right? Have you ever thought to yourself for a moment? Have you prepared yourself to be

fortunate? Have you prepared your thought pattern, your action agenda so that when that opportunity presents itself, you're ready to grab it? Have you prepared yourself for that moment? And it occurs to me that when we talk about luck, we eat Google fortune right now, you know what shows up first on Google, when you Google fortune? That picture. That's sad. Vanna White is their idea of fortune, right? And many of us think about the roulette wheel. I was going through an airport. I was at Heathrow Airport as a matter of fact. And this young lady was watching all the bags go through the x-ray machine. And they turned - she turned to one of our colleagues and said Black 7 is my future. Black 7 is my future. And I was listening and while she was talking all the bags were flying by and she wasn't even looking at them and like, oh, my god.

That's my future, but I don't want to listen in. She said I am going to go this weekend and blow all of my weeks' pay, play at the casino on Black 7. And I thought to myself, oh, man, this is a young lady who really hasn't learned what fortune is all about, right? Let me share with you what I think it is, and by the way I don't think Harvard has got it right either. Harvard Business School has this concept of the cash wheel, the profit wheel and the ROE wheel. They don't get it. The ideas of fortune really come from the ages. As a matter of fact, I would argue the Eastern traditions and philosophy probably have retained and captured those ideas better than the West. We've lost these ideas. The best way I can explain it, would be to use Niccolo Machiavelli. He wrote a great book called The Discourses.

Has anyone here who read The Discourses? Right. How many people have read, The Prince? Right. Go back and read The Discourses and I saw one person raise their hand, you raised it again proudly, right. The Discourses was a great book. And this was written when he was in prison, de' Medici had put him in prison. It was an angry, angry book. He talked about fortune as a set of wheels. And those wheels were turning in different directions, in different velocities. And a fortunate person is the person who jumps from wheel to wheel to wheel to wheel at the right moment and makes progress in their life. How many of you are sitting on that wheel right now, when the opportunity presents itself and you're just going to stay on it, right? An entrepreneur makes the move.

One thing I had to learn as an entrepreneur, frankly, was to make the move. I wasn't prepared. I had to think everything through. I had to plan everything. Before I know, my competitors are already four steps down the road testing it out, trying it, making it happen, while I'm still thinking about it, right? So just hear me out. The seventh element, durable sustained profit, right? We talk a lot about profitability. But profit is a real key piece, because ultimately we're talking about the resources that allow you to reinvest in your own opportunity. And I love particularly recurring revenues. You know why I love recurring revenues? Because ultimately that's a durable business. I'm looking not only for the one-time revenue opportunity where am able to sell something and they always say, the dog eats the dog food.

I hate that term, but boy it's absolutely true. But the dog continues eating, right? This is a business that's going to continue to be sustainable. It'll allow you to be successful, right? So we've talked a lot about the lifecycle of a business, every one of the concepts you have when you're building it into a business has an investment period, right? That J-curve we all talk about. Well the truth is; the J-curve is not one event, its multiple events. You have to break that big investment period down into smaller bite size units and then align capital ultimately will make you successful. We talk a lot about the business model but in many cases some of the key cognitive barriers that you put up in front of yourself actually become the reason you're not successful. Try to find the business model ultimately that's going to allow you to optimize the opportunity in the market. Don't try to find something so complicated you can't ultimately get it to work. It occurs to me that, Ronald Coase, great Nobel prize Laureate. Noble Laureate in economics, came up with transaction cost economics, right? Some of his insights, I think actually bear a lot of interest in terms of finding the right business model.

He talked about optimizing on three levels; search, contracting and coordination, the cost of finding things, the cost of acquiring things and the cost of managing things. We're looking at optimizing on all three levels. Try to think about business models who allow you to optimize on all three of those levels. It occurs to me that you all face opportunities in your lifetimes that your parents and grandparents could not have conceived of. Largely because, you have business models available to you that your parents never experienced, right? So this becomes a tremendous opportunity for you all. I'm just giving you a lot to think about. And I'm just going to pause here for a moment. Anyone who want to challenge me? Anybody who want to raise a question or make a point? Please. You mentioned preparing yourself to sort of be ready for an opportunity when it comes. Did you have any particular types of preparation in mind? So, that's difficult.

So you want to find out what degree to go get, you need to go to Harvard Business School and figure it out. As a matter of fact, I honestly think that, I am falling in love with apprenticeships, falling in love with following people who think entrepreneurially. I think it's a mindset, but I also think it's a pattern of action. And when you're preparing yourself, I think you prepare yourself intellectually like you are going to school now. But you prepare yourself for digging into the details of building a great business. And in many cases, really look to emulate the patterns of people who do it successfully. I am really thrilled that Tom is bringing in tremendous entrepreneurs who you get exposed to, because these are your teachers. You have two teachers, the people that you could understudy with, and I've had mentors my entire life that I've admired, but the market also brings a lot of clarity. Does that answer your question? Any other questions, please. You mentioned several friends at the

beginning of your presentation.

What was that airline called, that you're... Jetpool. Jetpool, it's based in Charlotte, North Carolina. He got very lucky. Very fortunate guy, Ryan Stone. Ryan had this idea in his mind that companies really needed aviation as a strategic tool and you know who partnered with him first? Have you ever heard of the company Nucor? It's a steel company. It uses a series of micro-mills. Why do they need aviation? They have these mills on all these small locations that are served by municipal airports, and a Citation X can land on a short runway. And all of their plant managers move around in this network of micro-mills. So this company; one of the most successful steel companies in the United States, leverages Jetpool as its tool of advantage.

The day that the GM executives all landed to work with Congress, that was a good day for Jetpool. Let me tell you, because everyone wanted to get rid of their aviation departments, right? Alright. Please. How does globalization both help and hurt us? That's a difficult question. Globalization, we've all agree that globalization is now something we've embraced. This is now an integrated economy and people have to learn to see the world now, not just as a local market, not just as a regional market, not as a national market but as an international or global market. There will be changes that will naturally have to happen because this is a tremendous transformation we're going through economically. People will win, people will lose. It will make us sharper, honestly. Did you see the thing Steve Ballmer put out, I think a Bloomberg, the last issue of Bloomberg Businessweek.

He talked about how when Microsoft was always in the lead, he didn't have to try very hard but now that they are lagging in several industries; they are now becoming entrepreneurial again. It's something that really gave me a lot of faith because as you are challenged further, I think you become greater at acting entrepreneurially. Any other questions, please. You indicated that a lot of the opportunities are a function of meeting a need in the marketplace. In the next four years, it's estimated that 80% of the growth and wealth in the world will happen outside of the United States and Western Europe and where the average income is roughly \$3,000 a year. I suspect the problems they're trying to solve are something that we have no knowledge of. So how do we participate? This is one of the best opportunities I think we face because it challenges us to think through paradigms that we operate within the West. For instance, does healthcare have to be expensive. I've been really inspired by some of the healthcare leaders that are saying, look we are going to act forcefully to serve other people. I think we are going to change fundamentally some of the ways that we operate and the years of haves and have-nots, I think is going to break down.

I honestly think that we're changing fundamentally our economic paradigm right now. How do we get knowledge about what needs are - that what we know how to do might be able to fulfill, if we don't in fact have an experience with that need. Right. It's not part of our - the thing we've ever dealt with in our lives. So I think you're speaking to the converted already. How many of you have visited Africa? Raise your hand. How many of you have been to the Middle East? How many of you have been to either China, India or somewhere in the South Pacific? We're solving the problem because people are learning about these challenges. And we have to take it very seriously. How many of you are actually doing projects in areas outside of the U.S.? That's the pattern I want to see. It's not tourism, it's not about the Peace Corps going for six months, it's about doing something.

Right? And that's why I am in the entrepreneurship business because entrepreneurship is about doing something. Hey, good to see. Any other questions? Let me move on, feel free to throw it out. So align exit goals. There is a big piece of this - to build to sell or build to last. You have to find the partners that are going to allow you to do what you want to do. Some of you are looking to build durable opportunities that are actually going to solve world problems and be persistent and actually - and that's the built to last kind of thing. Isn't it kind of ironic that they are two books out there, Built to Sell and Built to Last. Jim Collins is the one that everyone knows and then John Warrillow on the - went on the Built to Sell side. These are different mentalities.

You have to think through how do you align the strategies to get done what you want to have accomplished. Right? I am not so concerned about the exit as I am about the sustainability, the opportunity and meeting the need long-term. Stay persistent to meet that need. And then lastly, I am going to spend the balance of my time with you all today on this concept of deal makers, the syndicate and it starts kind of with this idea. You've seen LinkSV here in Silicon Valley for instance and all the big influencers of venture capital industry and how that operates with all the companies that they've helped to support here and now has become I think a global phenomena. It's very interesting time to be in the entrepreneurship business and this is the world's epicenter. It occurs to me you all have to think through how do you bring these people in your life? How do you actually find them? How do you bring them into your vision? And how do you leverage them to take full advantage of the potential that you see. We can spend a lot of time there. So let me summarize the first part of this. So here's the big formula.

Right? Starts with the idea, then you add the need, then you add understanding of a leapfrog strategy, add to that a business model that's graceful. You have recurring durable revenue model. You align exit opportunities. You fuse that with a killer syndicable dealmaker network. That's going to add up to a whole bunch of money. Right? You won't find this in any Stanford textbook, I don't believe but I honestly think that those are some of the key elements that you should be thinking about. I am going to spend a little time here. And how I'm doing in time, Tom? Am I over? No. Okay. Thank you.

So we are going to spend some time on networking. I wanted to share with you a few ideas. Question two, what makes Silicon Valley the best place on earth to be an entrepreneur. So you are very fortunate and if you think about all the various ways the Silicon Valley plays a role. Why is Silicon Valley so successful? Obviously, there is a set of theories, it's about innovation. Right? There's even concepts of spillovers. There is so much innovation that spills over into entrepreneurial ventures that kind of catch them like vessels. Right? I'm not so sure but that's one theory. Second reason is there's piles of cash here. A lot of venture capital money.

Right? People are thinking all those two ingredients kind of come together. Mix ideas, put them with a bunch of money, things happen. Well, we know better. Usually it boils down to PO and VCs aren't heroes, ultimately, but they are going to be an important key to this ecosystem. Then you think about and a lot of my friends who are entrepreneurs think about that Ocean's Eleven kind of management team, the killer entrepreneurs, a combination of teams that are really going to make it happen. That's an important ingredient, right. And it occurs to me, again, the generation kind of thing happens for me. This is the Ocean's Eleven of the old days. Always wondered why - why is there twelve of these guys and this guy I think was sneaking in, I am not sure who that guy is, but it's fascinating to me. That Ocean's Eleven piece is there, but when I was on that plane going to Europe, I ran out of juice in my battery and I ran across the only thing that there was to read.

I couldn't sleep, I came across the airline magazine and in the airline magazine there is maybe one piece of information you want in that thing. There was a very interesting article about mapping the Internet, right. You've seen all this before. You realize that's the first drawing of the predecessor of the Internet, it's called the ARPANET. So, array of four computers that were done originally for military. Well, then they showed the Internet2 mapping project and you've seen this map before. And these are all the computers that are arrayed in the international networks that are available on the Internet. When I looked at that picture, I didn't see information intensity; I saw a business model opportunity. I saw an opportunity for you all to conceive of ventures that truly do embrace a global solution. Getting back to the question that you had; we can use this tool to reach the whole world, right, and that we are in many ways.

We were talking about Moore's Law 15 years ago and now we are living it. You know, think about it. It occurs to me though when I get to the end of that magazine, I was flying on some airline, Continental or something, these are the five airlines that fly in the U.S. and then here is the global picture, right. Oops - and look at the nodes here, look at the nodes. It occurred to me, we're just as physically connected as we are connected through digital source, right. So this has huge implications on you as you think about your careers and your futures. You are now world citizens. You are now world entrepreneurs. This whole idea of global entrepreneurship is taking a lot of - getting a lot of attention now, absolutely true.

Curious, how many of you are doing ventures right now? How many of you have a venture you are working on right now? Extraordinary. How many of you started your venture not in the United States? I love that, super. Okay, entrepreneurship is a global phenomenon, by the way, I think you already know that. So I've done a little work on looking at dealmakers and I wanted to understand kind of the nature of networking and the new frontiers that I think are coming between applying network theory and understanding the structure of social capital and understanding innovation from the standpoint of how firms ultimately take route. And I did little work on this and it occurred to me in the academic literature there was a real clear distinction between entrepreneurs and investors. Never understood that distinction because the successful entrepreneurs I knew were investors, right. There is no clear bright line between those two. So I always wondered there was these other people up there that kind of fuse those two concepts and they tended to be the people that made more and more things happen. You might have started as an entrepreneur, might have started as an investor but you become something else. I don't know, for the lack of a better word, I am looking for a better word for those of you trying to think about this.

The dealmakers, the people that actually make things happen. And I tried to understand that. They broker resources, they shape your networks and they syndicate and interconnect, right. It occurs to me that there are these people in the center that activate the rest of the network, when it works, right. And these are the people that I was starting to get interested in. I remember about five years ago when the economy was starting to climb to a halt, it was grinding to a halt, I wanted to get something going. And I was thinking to myself who do we need. We need the people who have done it repeatedly. We might call them serial entrepreneurs, you might call them the people who ultimately broker deals or what have you. These are the individuals that are going to help us make it happen.

For some reason, they're frozen. They are not doing it anymore. Why is that? They're living in kind of a fear. So I said, let's figure out something, so I developed this algorithm, I guess, it's for lack of - it's a vaunted term to call it an algorithm. The truth of the matter is, I'm looking for people who have multiple positions in entrepreneurial firms, I'm actually stacking them up, and then I relate them socially to try to understand how they're connected to one another. Because I want you as young entrepreneurs to be able to access them, right, because that's how you're going to be successful. So finding out who the who is. The way I do that is I try to understand the entrepreneurs and investors and generally there are distinctions between those two types of people. But as they move up in their career, they have two equity positions, three equity positions, four equity positions in firms, they become more and more important in seeing the network kind of come to life, right. So I'm looking at

actors within firms, within regions using interlocks, very interested in this.

It occurred to me, I looked at all the tech hotspots and back in the '80s we actually had a whole set of theories where if we brought all the technologies together, entrepreneurship would happen, right. And this is a chart that shows the number of firms born and it was fascinating to me that when I looked at it, Silicon Valley created almost 5,000 firms over a 20 year period whereas Boston created about half that even though in most cases you're equating Silicon Valley and Boston as equal parties in entrepreneurship. All these other technology regions including my region, Research Triangle Park, created less than 1,000, right. Ironically where I come from Research Triangle Park has the highest density of PhDs over total employees of anywhere in the world. Yet, they're not creating that many companies. So I was trying to figure that out. When I looked at these patterns, these are the number of equity positions held and you see the numbers on the left, 1 all the way to 30, these are the equity positions by each of these regions. And I noticed there was a big fat base wherever there was nice economies, where Silicon Valley was performing so well in creating great companies, had a lot of entrepreneurs and investors engaged in it. Okay, we already kind of knew that, but the other pattern I saw on the data that I thought was really interesting was there was a really nice fat long tail. There were a lot of people who did a lot of things, right.

Whereas these other regions you never saw those people, right. So I started to look at the relationship of dealmakers to the performance of regions by way of creating new companies. And I founded as a matter of fact, statistically the presence of dealmakers was actually more correlated to firm birth than the frequency of the availability of entrepreneurs and investors. So what does it tell you? It occurs to me, that these people are usually in the elite, the top 2.7%, these are people who have three or more equity positions in entrepreneurial firms. And in places like the Bay Area, it's 4.5% of the population, whereas places like Austin, Texas or Denver, it's around 1%, right. So something is in the water here, right. It occurs to me, these are the people. Well I wanted to map the networks and these are the networks of these 12 technology hotspots, as a matter of fact they're organized by population, so the most populous is Boston, the least populous is Austin, the lower right hand side. If it varied by population, you would expect to see the most dense to the least dense, correct? What do you see in the pattern of this data? You see the most dense or the most intense entrepreneurial network in Silicon Valley. The third greatest - largest metropolitan area up here Phoenix has the weakest entrepreneurial network.

I was talking to Michael Crow, the Chancellor of Arizona State University, shown this data, and he said Zoller, how many people are up there? And I said about 150 and he said, I'll just have them over the house. I want to talk to these guys. Well, in places like RTP or Austin or places like that, they hang in there even though they're small places. Please, question? Okay, the data comes ultimately from private transaction data. It comes from public databases, like Standard & Poor's. And I came up with the software to actually put all the data together and then socially relate it. Well, what was fascinating is, this is the aggregate network of entrepreneurs in each of these regions. What does that tell you? What two regions other than Silicon Valley and Boston would you say are starting to look like hot entrepreneurial networks? San Diego. San Diego and Seattle, right. Now I'm leaving out some obvious cities because these are technology hotspots, right? Leaving out some of the key metropolitan areas like Los Angeles or New York or Chicago, starting to study those.

What's ironic is many of those cities because they're financial headquarters tend not to be entrepreneurial. But you know the stories that are evolving. The Groupon founders are really driving an entrepreneurial revolution in Chicago. Have you all noticed what's happening in New York lately, across the bridge in Brooklyn? It's unbelievable, there's an entrepreneurial revolution going on there. But the aggregate networks are just one story. I want to know where the dealmakers are? Well, check this out. When you screen the aggregate network for three or more equity positions, this is the picture you get. Silicon Valley, you would still need the Stanford Football Stadium to have everybody there, right. Boston, you could probably fit them in the Stanford Basketball Arena. Whereas in Austin, you could probably get them in this room, right.

In Phoenix, you could probably get them in the classroom we're going next, right. When you go to four plus dealmakers look at this. You would still need the basketball stadium here in time for Silicon Valley, whereas in Boston you could probably get them in this room. And the people in Phoenix, you could probably get them in the front row, pretty interesting, isn't it? Things aren't all equal when we are looking at the performance of regions. So... Excuse me. Yes? Did you do anything overseas or is this just relative to U.S.? I just finished a project with the OECD in Europe. We are looking at all the European headquarters, all the headquarter cities. And we are using this as a way to measure kind of the performance of networks. But I want to do it in Southeast Asia and I just met with a group here in Stanford because many of the leaders who came up with these methodologies, I studied under more or less, so the assets are here.

Okay. So what does this mean to you? How do I take fullest advantage of my time in Stanford to gain an edge, and I want to use the last 12 minutes with you guys to kind of answer that question. Recognize in Silicon Valley you've got an extraordinary situation. This is Research Triangle Park, their entrepreneurial network. All the colors represent the various industries. Red is biotech, blue is software and IT, green is industrials, orange is energy. The circles are the investors. The triangles are the entrepreneurs, they're all connected. It looks like a really rich entrepreneurial network in Research Triangle Park. Let me show you the equivalent in Silicon Valley.



That's the equivalent. That's ridiculous, I mean truly ridiculous. Okay. Now let's start screening that big hairball. Let's go to 2-plus. This is what you got with 2-plus. All these people are serial investors and entrepreneurs. Let's go to 3-plus. Look what it's starting to look like, you can start to see it. That's 10-plus, I am sorry, it's ridiculous.

Let's go to 15, right? Now you're starting to see something, lot of patterns. What color is dominant? Blue - all internet, IT, software; fascinating. There's some biotech. The circles are the big investors, the triangles are the big entrepreneurs, right? And I'll track back at their history, look at their operating history. Let's go to 20-plus; these are the dealmakers now. And do you see any other color, but blue? Fascinating, isn't it? These are all the mega dealmakers here. There are 44 mega dealmaker investors with over 20 equity positions in entrepreneurial companies, 16 mega entrepreneurs. And honestly working between investors and entrepreneurs at this level is very interesting and these are the types of people that you read about, right? You can touch these people. How do you touch these people? These people are not on your Facebook, right? Some of them are. Not all of them.

You know, we have to think about that. Many of you are connected socially, right? A lot of you feel like you're really connected socially, you're doing well. How many of you have over 200 contacts, or connections in either Facebook or LinkedIn or whatever you're using? 200, 300, 400, 500, 600, 700, 800, 900, 1,000, over 1,500, over 2,000, okay? Interesting, isn't it? You have to connect to the right people. And let me tell you, your life is going to be defined by five key connections in your life. Five key connections are going to make the difference between you being successful or not. So, be aware that, you know, Facebook might be the new world order. But you have to connect to the people who are doing this work. And honestly, this problem is a big challenge, right? We've got a big problem because there's the Facebook generation and those like me, who are not. Don't leave us behind because guess what? We still have the keys, you know? Don't you want to take the car out? So, be aware of that challenge and make sure that you work with us, right? Because oldsters are still relevant and we don't get it, you know? It's important for us to think about. Turn this into your advantage, make this possible, okay? What path will lead to my success, I'm going to do this very quickly.

I did analysis of all the dealmaker pathways, and there were bunch of different pathways and I'm going to just interpret this, this is the hand waving portion. I thought for sure most of the people who're really successful will start out in investment banking, go to business school, go to the investment banking world and come back to - get their MBA and then get into private equity or get into venture capital and become mega financial guys. Those are the guys, that's the pathway in the top. Then I thought the other pathway would be, the person who starts a company, then who he starts the second company, who starts the third company, serial entrepreneur, that's the pathway at the bottom. Then I saw all these other pathways when I was studying their backgrounds and it was like, who are these people? These are the guys who go to corporations, they start working for large companies and then they, ironically, as they get senior in their career start working for smaller and smaller companies, private equity-backed companies or high growth companies, they left IBM to go work for some of the companies you all admire in Silicon Valley, while ironically there was a set of profiles that came about by looking at this work. And I did this really clever kind of pathway analysis and based on that I looked at the centrality of the pathway, and sure enough going and becoming a financial engineer will lead you to become a dealmaker, but not most likely. Being a serial entrepreneur will lead you to be a dealmaker, but not most likely. What's the most likely path? Getting to the C-suite of a large company and then backing into a private company. So what we've been saying is, go start a company. It's not a bad idea to go work for a company and then go fuel a company's growth.

Is that interesting? Please. Okay. Can you cut out years by doing management consulting? Well, I think consulting - as a matter of fact, consulting is one of these pathways and there's - it's actually a very common path. This one right here is consulting and services company, so yes. The answer is yes. I wish it was definitive, but it was an interesting pattern, I didn't - that surprised me. So don't leave the idea of working for enterprises out. I'm not saying go work for the big huge corporations necessarily, but learn something that you can leverage ultimately in the building of your of entrepreneurial career. Okay, I'm going to finish up. Please.

What is the average timeframe you're looking at in the... This is typically a 12-year path. 12-year. We're going to finish up real quick and then I'll open up to questions. Why is the Stanford tuition bill worth it? You can pass this on to your parents. I did an analysis of all the dealmakers in all these 12 hotspots. And those four lines represent four universities. I'm sorry, I used red, crimson for Harvard, I apologize for that. I used green for Stanford, I apologize because you have a tree, that's my thinking. Blue is the University of Pennsylvania and grey is MIT.

And in each of these regions, the top universities that yellow bar are usually the local universities. In Boston, it's Harvard; the Bay Area, it's Stanford; in Phoenix, it's Arizona State; in Seattle, it's University of Washington; Minneapolis, it's University of Minnesota; in Denver, it's University of Colorado Boulder; in Orange County, California and it's Harvard, sorry about that. In San Diego, it's Harvard, you got to fix that, you got something else. And in Portland, it's Stanford; in Salt Lake City, it's Brigham Young; in Raleigh, it's University of North Carolina at Chapel Hill - go Tar Heels - and Austin, it's University of Texas at Austin. However, in every single one of these regions, those four universities are present among the dealmaker community. That's the

old social network. Do you think you can use that as an advantage in your future? And let me tell you where Stanford shows up, in Boston number four, behind Northeastern, which is a local school, in the Bay Area number one, in Phoenix number three, behind Harvard, sorry, in Seattle number three, behind Harvard again, Minneapolis, it's number four behind Harvard again; Denver, it's number two ahead of Harvard, alright, Denver, Orange County right below Harvard, San Diego right below Harvard, Portland number one, above Harvard, Salt Lake City number four, behind Harvard, Raleigh behind NC State University, sorry, guys. You need to come up to see us a little bit. In Austin number three, right below Harvard, let me tell you, you're just below Harvard as being the most prominent university. And I'll tell you another thing that this is skewed towards financial engineering.

So if we took an entrepreneurial slice at this, Stanford is going to be number one. So, you could tell your parents that you're making this happen. We make a living by what we get. We make a life by what we give. I think Winston Churchill said it right, right? So, I'm going to leave the balance of the time open for questions. How is that? This is you by the way, this is the way I see you all, right? So, what questions are out there? Please. So, your analysis about dealmakers, are you looking at just people who have equity stakes, or are you doing some kind of score carding against people who have investment stakes in successful entrepreneurs? Right. So the question is when I do the dealmaker analysis, am I just looking at equity positions or am I qualifying those equity positions by determining the degree of success? And the answer is it's the former. And would it be better if I did the latter? Absolutely. And I'm looking at those nuances as we speak.

Have you looked at clusters, for example, the PayPal Mafia or the Association? The syndication patterns, this kind of group, there is no question that they exist and you see that pattern continuously when you break down the model. I think that that's the next thing. They actually operate as a band. In many cases, those networks remain as they go to the second deal or third deal or fourth deal. When LinkedIn IPO'ed, everyone was following the folks who were made into multimillionaires, there is logic behind that because they actually will bring things to life again. Could you extrapolate from your data sort of how do you create those 10% in the first place in emerging clusters? Yeah. So, the question is, is there a way that we could actually extrapolate based on what we're seeing in the data to show how we could create greater performance in those networks and how do we make clusters better or how do you induce new clusters? I think that's a science - well, it's the art I think that's now unfolding. We're trying to figure that out as matter of fact. The Kauffman Foundation, as a matter of fact, in four weeks, we're going to pick a city, guess where Kauffman Foundation is located? Kansas City, Missouri. We've mapped all the dealmakers, we're bringing them in for one meeting, they're all going to meet each other and we're going to actually start understanding the roles and try to figure out how we can actually build Kansas City into an entrepreneurial hotspot.

That will be one hell of an experiment, don't you think? Yeah. Questions? You talked a lot about the importance of expanding your network. I think for a lot of us there's a tension between doing that and being creative, which often happens alone and without distraction. I'm curious what advice you give to folks who struggle with that. No, I think even the creative process, and the question was - as a creative or someone who is innovative, sometimes that's something you do independently, you do alone, you don't necessarily have to do it in a network type of phenomena. But I would argue that once you've created, it's nice to get the insight from others and make those insights available, adapt your thinking. I fall in love with these open source models where people are starting to crowdsource solutions, but I honestly do think that people who create typically create based on independent ingenuity. So, I think you're absolutely right, that's a critical tension. The real question was should you err in one direction or the other? I tend to think that people on the West Coast tend to network and not independently create, but honestly, you should create space. You know I find that ultimately being involved in trying to answer my e-mails every day, it takes every bit of creative energy out of me, honestly, to the extent that I just want to say, I'm e-mail bankrupt, and give it up.

I'd rather do what I do, which is I like to create. So, I understand - feel your pain. I think that... Yep, yep, yep. Please give a round of applause. Thank you very much.