# Stanford eCorner

## Funding Thunder Lizard Entrepreneurs [Entire Talk]

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Stanford Engineering lecturer and FLOODGATE partner Ann Miura-Ko offers insight into the democratization of innovation in the Internet age, and its affect on investment cycles. Additionally, Miura-Ko speaks candidly about the need to test business models, her firm's desire to be an advocate for "thunder lizard" entrepreneurs, and the challenges of achieving true work/life balance.

**Transcript**

And today we're honored to have Ann Miura-Ko of Floodgate Ventures. I've been proud to know Ann for the last couple of years. Her career has been incredibly distinguished and its rapid rise is due to her extraordinary talents which you will see on display today. Ann has an engineering degree from Yale, worked at McKinsey, was an analyst at Charles River Ventures. Went back here to Stanford to get her PhD where I met her as my teaching assistant and then realized that my teaching assistant was unfortunately for me much smarter than I was. And so to get her out of my classroom I actually introduced her to her partner Mike Maples at Floodgate Ventures and thought that would be the end of her. But fortunately for all students here at Stanford Ann is going to be back next year as we teach in the winter quarter a new class on how to actually launch and build companies called V245 for any of you interested. I'll be there but the most interesting person in the room is that's been called "The Most Powerful Woman in Venture Capital" which I actually think is a derogatory term because she's the smartest person in Venture capital that I happen to know. So with that build up Ann, let's see what the next hours going to be. Ann Miura-Ko.

Thanks so much Steve. Hi, it's great to be here this afternoon and it's really wonderful to see so many familiar faces in the audience. I actually had a really amazing set of slides that you guys would have learned tremendously from but as it may happen my hardware all crashed about 20 minutes ago and so now I'm at in a position where I have to wing it and so I'll show you some of my ninja assassin skills today. So there are two elements to my biography that weren't mentioned by Steve that I thought I should bring up. The first is for all the ladies in the room, I'm actually also a mother of two children. I have a rambunctious 4 year old daughter as well as an 18 month old son. And while I was doing PhD and launching this career in venture capital for all of those of you who are thinking about, "Can I do this? Can I have kids? Can I have a family? Can I get married? Can I do any of these things and have a career?" The answer is yes you can, you just have to go and do it. The other part of my career that Steve didn't mention is that I'm actually native Palo Alto. I grew up in Palo Alto, went to high school right across El Camino and Palo Alto High School. So I've been in the seat of innovation for some time now and it's just been a wonderful experience to sort of see Palo Alto actually change over the years.

See it go through the Internet boom and bust cycle and then sort of reemerge with Web 2.0. But even before that I still remember my neighbor who I use to baby sit for going through all these different startup ideas and launching them and making into a career for himself and it was such a memorable part of my childhood recognizing that the spirit of entrepreneurship was truly around me all the time. So my talk today is actually going to be the notion of innovation and how that has actually impacting the investing cycles that we see here in Silicon Valley. And I wanted to take a step back first to talk about the whole notion of innovation and the historical perspective of what innovation can actually do. The first example that I would bring up is the Ford Model T which in 1908 was launched and in this time there were only 200,000 cars in the United States. The really amazing thing about real innovation is that it has a democratizing influence and what the Ford Model T was able to do was it had a democratizing influence in transportation. So went from a world that had 200,000 cars in the United States and five years later Ford was selling 200,000 cars just in that year alone. They would go on to sell millions of these cars. And it went from a world where a car was $2000 and then only 15 years later it was $200. And that kind of influence with a shifted manufacturing can have a tremendous impact on society.

Our culture, our society was shaped by the fact that the working class person could drive a car. Another example of such innovation was in the 1400s when the Gutenberg Printing Press came about. And the interesting story there is that before the Gutenberg press people would actually hand write. The best case scenario you would have 40 pages being printed a day. And so you went from a world where 40 pages a day to one printing press being able to create 3600 pages a day. And as you can imagine the impact of that innovation was huge on knowledge. So this was an impact in terms of the democratization of knowledge and information. And it had a tremendous impact in academia where scientist were now able to debate with one another by publishing their works that lead to the enlightenment a lot of other transformations within society. There is another story to the Gutenberg press which is a little less favorable to investors. Gutenberg was probably one of the first people who ever got venture capital so he had a business partner by the name of Faust and he went out and had this idea around the printing press and he got the equivalent of 5 years worth of peasants pay to get started on his business.

His series b financing came about when he realized he needed a little bit more financing, so this time he asked for little bit more capital from the same guy and the guy gave him the equivalent of 10 peasants stone built houses. So he went along, made a few more mile stones and then had to go back for a series c financing. And then sure enough he was able to get that and it was the same amount; the amount that would basically pay for 10 stone houses for a peasant. And it turns out that the story ends very sadly. He wasn't really able to satisfy his investors. His investors as you may have heard from other stories from entrepreneurs an investor gets very anxious, wants to see more milestones, he isn't sure why this isn't proceeding and eventually sues and he wins and he's able to buyout Gutenberg's portion of the printing store. Gutenberg actually dies a relatively penniless man and most people don't really realize his contributions to the printing press until much, much later. And the history books are then changed to reflect his contributions. Now my story today about investors and entrepreneurs is totally different. I believe actually that this whole relationship between innovators and investors is actually very much switched.

The power has shifted to the entrepreneur. And I want to talk to you a little bit about why that's the case. Now today we sit in Silicon Valley which is very exciting place to be. A lot of you come to Stanford purely because this is the location where entrepreneurship happens. That's why I love teaching here. It's why I was a grad student here. I believe that with the Internet we saw a transformation in innovation that will be written in the history books the same way we've written about the Ford Model T and the Gutenberg press. And the sad part of the story so far is that it's been very much under hyped. Now you may think that people have really recognized the power of the Internet. But I would argue that it hasn't been really recognized.

We still talk about the Internet as social media, Web 2.0, browsers, network devices but that's not really what the power of the Internet is about. Here we see also a democratizing influence. And where has it democratized? Well it's democratized our ability to innovate. And that fundamental belief is a huge idea. Because if we are able to democratize the process of innovation that has impacts not only in startups, it has impacts in large companies, small companies and how we even work with in academia. And because of that, the Internet has a profound impact in the way our history is going to be written. When our kids look at history books in the future we will be reading about the fact that Mark Zuckerberg started Facebook and what kind of influence that eventually had. We'll be talking about Google. We'll be talking about startups that are being created today and that's very exciting because we can be all a part of that process. This democratization of innovation though has really few components to it.

The first component is what I call "The Collapsing Cost of Product Building" Now it's important to note that it's about the collapsing cost of product building and not company building. What are the components of a collapsing cost for product building? Well for one thing its open source software. I remember back in college some of my friends were talking about starting up a company, they were talking about a SQL server license for $10,000. You don't need to do that anymore. Another really interesting trend is "Commoditized Technology" I know people who are in the film industry who've been making films now on really cheap cameras and they get 10 ADP. It's really incredible to see that. Third is "Crowdsourced Infrastructure" Now a lot of you may have heard of Mechanical Turk but were able to actually do things with crowdsourced infrastructure that you couldn't even do with a really complex algorithms. An example is if you want to analyze a piece of video, it's much cheaper to just get a person to take a look at it then to have computers actually analyze it. And that ability to get crowds to actually analyze instead of using computer algorithms is also extraordinarily powerful. The last is "Cloud Computing".

Our ability to have elastic computing power as well as the ability to scale rapidly if something hits is huge. You don't need to buy server infrastructure to be able last your largest inputs. As a result of that, we see a collapsing cost in our ability to build products. You could do it really quickly with very few dollars. And in fact I see my students all the time just taking out their credit card and building a product rapidly prototyping something and seeing if it works. And this is applicable again not only to startups but even with in large companies and its having a profound impact on the way new products are built. The second element of the democratization of innovation is the fact that we could very quickly test business models. And the reason why this is important is because a startup is ultimately about whether or not just an idea or a product works, it's about whether or not you can actually create a business around it. Whether or not the ecosystem will support it, the customers will buy it, if the channels will support it and if the manufacturers will actually create it. Because of that we need to be able to test all of these different facets of our business model and do so quickly.

The beauty of the Internet is that first of all you can have a direct dialogue now with your customer. In one of my classes if I ask my students to test out a web start up they can go out and interview 300 people in a bat of an eye and be able to tell you if that product was attractive to that group of people or not. And it's not unusual for our students to do so. Think of the people who have actual resources to put to bear on that. The second thing is that you could also do demand creation leveraged with social networks and few companies have really proven this out. A simple example is Groupon where they'll come back and have people post on to their Facebook walls the offers that they have and then that spread the word to all of their friends. There are incentives for other to come back in and sign up for those offers. And most of the Groupon traffic actually comes from Facebook. We've also seen this in one of my portfolio companies ModCloth where we put various Facebook fan pages and the women who actually shop on Maude Cloth will also post things to their Facebook wall. As a result we see a lot of traffic coming in from Facebook.

This ability to do crowd generation of customer acquisition is extraordinarily powerful; something that hasn't existed until very recently. The third element of the speed of testing our business model that I've seen most recently is the flexible pricing structures that I see. And one example might be in the idea subscription pricing. The reason why subscription pricing is actually has been really interesting because you can change it. And you can change it for half of your customers and for another half of your customer you can have a totally different pricing structure and you can AB test. This kind of infrastructure has never existed before. And then also the fact that subscription pricing is so low, you can now directly have the user purchase your products instead of going out and having to go through a CIO or an executive to but your products. You could go directly to the people who are interested in using your product. And now even with in an enterprise that user has the power to purchase your products. Because of that the buying cycles have actually been decreased.

Lastly, the Internet as a channel is also extraordinarily powerful because now you don't have to worry about shelf space. So when the Intuit was first started they were really powerful because they got channel relationship with places like Staples and eventually Cosco and because of that they we're able to distribute their product very effectively. But today in upstart, all they have to do is to have a website and you already have a way, a mechanism by which you can distribute to everyone. Anyone can find you if you are on the web. The third pillar of the democratization of innovation comes from the fact that we have now a really nice process because of Steve Blank and Eric Reese for lean startups, right? And this process has been talked about quite a lot over the last couple of years but this notion of customer development and agile programming and how you put it together to create really rapid iteration; the reason why that's really important is that it enables you to experiment effectively and very quickly. And what that meant for the entrepreneur is that if you raised "x" number of dollars that "x" number of dollars goes a little bit further because it's not that you're running out of cash when you're an entrepreneur, you've run out of iterations. And that's a really important point to recognize. You run out of iterations, you don't have any hope anymore. But if you are able to do a few more iterations with the same amount of cash, you've extended your runway without taking additional delusion. You extended your runway without having to take additional cash.

And so these three pillars now have created a huge democratization and the opportunities for entrepreneurs and innovators. And what that mean is that that there's a huge power shift now to the entrepreneurs. So if we go back to the story of Gutenberg where Gutenberg was really beholden to the investor to really be able to bring his product to fruition, we are at a new era where the entrepreneur is no longer beholden necessarily to the investor. And so it used to be that I have this t-shirt that said "Cash is King" and my husband used to hate it when I wear it to the gym because he thought it was embarrassing. Now, that is no longer true. Cash is not king. It's the ideas that are king. It's the entrepreneurs that have the power and I love that. And you see that actually now in their world of venture capital. I get a lot of questions around super angels, Micro Cap investors, angels, incubators, traditional VCs.

Oh my, what is going on here? And I think the fact that there are so many different models reflects confusions on the part of the investors for certain but it's also a really nice thing for the entrepreneurs. Because when you have all these different segments of investors who have different fun sizes, different investing strategies, different outcome expectations, what you're now finding is that an entrepreneur if they're honest about what they believe their outcomes ought to be, what kind of delusion they want to take and how much money they want to take in, you're probably going to be able to find an investor out there where all of your interests are aligned. And so that's a really great thing because I've always believed that the entrepreneur ought to be totally aligned with the investor and the investor should be also totally aligned with the entrepreneur. And so then that begs the question, "What is Floodgate?" A lot of people have said, "Well Floodgate is a super angel, Floodgate is a Micro Cap Fund" I'll tell you sort of what the financial structure is. We are a 75 million dollar fund and that might put us into the Micro Cap category. But as I said even if we make 500 thousand to million dollar bets that is not the definition of who we are as an entrepreneur. If the cash is not's what important, what's important is what we believe we can bring to the entrepreneur. And that's what I want to talk to you today. What are the principles, what is the manifesto for Floodgate? The first is that we believe that we invest in what we call "thunder lizards". Now thunder lizards are inspired by Godzilla and Godzilla is hatched from radioactive atomic eggs which represents the entrepreneur and it represents how their genetic makeup is significantly different from anyone around them.

They're then hatched, they swim across the Pacific Ocean and they emerge in Tokyo harbor with an attitude. And you've seen pictures of Godzilla probably where he has trains kind of hanging out of his mouth and he's chomping on buildings and something's kind of firing out of his mouth, that's Godzilla, that's the thunder lizard taking over our market. That's the thunder lizard ambition that we like to fund. Now a lot of people get confused because we as a firm also talk a lot about customer development, the lean startup methodology. And they say, "Well how is that consistent with lean startups?" The problem is people confuse lean with small. Lean has nothing to do with small. In fact the amount of capital that you've taken has nothing to do with whether or not your ambitions are big or small. And I've seen some of the confusion in the market where in Tech Crunch people are talking about the battle between the super angel and the VCs, the super angel VC smack downs and I fundamentally believe that that just reflects the confusion in that market place because when we go talk to our entrepreneurs about raising the amount of capital that they need we're talking to them about the capital that they need. We will only invest if there are thunder lizard ambitions but that has nothing to do with how much they raised upfront. In fact we've looked historically and many of the largest biggest companies raised only a few million dollars in the front end.

Microsoft, Apple, all of these companies only raised a couple million dollars even eBay the amount that they raised they never used and so the best companies actually end up being extraordinarily capital efficient. And in fact it's the similar analogy to athletes. When you look at Lance Armstrong, he's an extraordinarily lean athlete. You ask him how many calories he eats during the Tour de France, he's eating 8,000 calories a day, right. And so the analogy holds in that sense as well. Lean is not small. Lean is a tactic by which we help our entrepreneurs and the entrepreneurs help themselves in a data driven way figure out how they're going to iterate their product. And then through data and through vision, we also pivot that business model if we believe the business model no longer works. The second thing that I like to talk about is from our manifesto, we believe that we ought to be the entrepreneurs advocate and this is something we can do because we're only working in the early stage. We're completely aligned with the entrepreneur.

What that means is that we fund, again by the entrepreneurs needs not by our own spreadsheets. And I think this is where sometimes we find that investors are not aligned with the entrepreneur. I'll find some entrepreneurs' coming in saying, "Well I've been told that I need to raise 4 million dollars" And I asked them, "Well what are you going to do with 4 million dollars?" and he said, "Well I don't know." If you don't know what you're going to do with the money, you shouldn't be raising that much money. The second thing is we also believe as part of this theme being the entrepreneur's advocate; if you raise less, you'll also be diluted less and this isn't something that's easily recognized. People often times think that valuation is sort of fixed and what we found is that if you raise a lot less then instead of being diluted 40% in your first round of financing you might be diluted 20 maybe even 10% in that first round of financing. Maybe that you've only raised a million dollars in that first round you need to go out and raise 4 million dollars in the next round. The argument is if you hit your milestones, you'll have a nice up round in the next round of financing and as a result you'll be diluted less totally for that 5 million dollars invested. And then the third piece to be an entrepreneurs advocate and I'm going to put this out there is that we should have an entrepreneur friendly process. And that means that I should be getting back to you quickly without a really long due diligence process. Now I realize that there have been cases where I haven't really held my end of the bargain but I believe that by saying so at the very least the entrepreneurs can hold me accountable.

We believe that there shouldn't be huge long lengthy partnership meeting especially if the partnership only consists of two partners. Any time that Mike and I are in a room is a partnership meeting. So we don't have to wait until Monday. The due diligence process to be honest at this kind of an early stage of development can't be that long. There aren't that many customers to call, there aren't that many business ideas--there's not a lot of code you can really delve into and so really at this process you have a very light due diligence process and you're really counting on your gut to make sure that you believe in the idea. Now in the third element that I want to talk to you about, this is sort of the core of our values and really the core, the manifesto for Floodgate. I believe that at this stage of development the seed stage for a company, it's the business model that matters not the business plan. So send me a 50 page business plan, I probably won't read it. But send me a picture of your business model all the hypothesis that you have around your business model and I'll take a really good look. And the reason why that's really important is that business models will enable you to understand exactly what your assumptions are and there are a lot of diagrams that we've put out that show what my version of business model/diagram looks like and Steve has that on his blog.

Alexander Osterwalder also has a book on business model generation and so there are different frameworks now that exist out there where you can use them to figure out what your business model looks like. The business model is then really, really important because what we have our startups do is they'll go through each component of a business model. In my mind those would be your users, your customers, your pricing which also includes your customer lifetime, how you do customer demand creation, your sales channel, and then on the backend if your producing something or if you have inventory your whole supply chain that could include all your components, design, manufacturing, and inventory warehousing. You should have assumptions around your entire business model of how you relate to all these different entities in your ecosystem. How do the customers view you, what's your value proposition to them? What's your value proposition to the manufacturers? What's your value proposition to the sales channel? How do you do demand creation? What's the cost of customer acquisition? These are all questions that you should be constantly thinking about. And if the dollars in are not greater than the dollars out, then you need to rethink your business model right then and there. And if we think about it from this kind of perspective that it's the business model that you're testing at the early stage; you come into a few different conclusions; number one, a nascent startup is not a small version of a scaling business and this is something again that Steve has talked about but it's so true. A small company at its nascent stages, they're trying to test out their business model. They're trying to figure out what are the pricing networks. Only when you figure all of that out can you claim victory and say I have project market fit.

A lot of people have defined product market fit as when a product is liked by the customers set. That's not product market fit in my vocabulary. Product market fit is not only when your customers are buying your product it's when the whole business model is humming. And by injecting a little bit more capital into that business model, you can make it scale two "x", three "x" of what you just put in. And we're focused on getting you to that stage as a firm. The reason why that's important is if we believe that's true hiring is different, right? We don't believe in hiring a whole management team at that stage. I am focused on hiring non founder employees. That's usually a lot of engineers' maybe a couple of marketing folks, make a biz up person or two. We also are investing in the entrepreneur to a great extent. We're looking for people who have the courage to pivot if they have to.

And this notion of pivoting is really important because all the elements that I have just describe in a business model is a fulcrum by which you would pivot. So it might be that your customer set was all wrong. I might be that your product was all wrong. It might be that your manufacturing was wrong and that you need to bring that in house. All of these different elements of your business model are potential points of pivots and if you decide to make a pivot it's not an easy decision to make. This past summer some of the Mayfield fellow students went and saw one of my portfolio companies called Circle of Moms. This is really good example of a pivot because it started out as a company called Circle of Friends and it was a very viral application on Facebook and it was run by two guys who were very good at viral applications. It turns out that Facebook turned off the virality of applications pretty quickly after they got funding. When we back to the data set it turns out that they also had a lot of moms on their network. And so at that point it was decided that they should become circle of moms.

Now it might seem like on the surface a pretty easy decision to make. You don't have a viral application, if you want to continue as a company you need to pivot and this is an example in which they're pivoting with their customers set. The problem was that Mike Greenfield had written thousands of lines of code, right? And he had actually taken a lot of time away from his friends, his family; serve his personal time to really devote himself to creating a company and we're asking him to pivot away from that idea. And to some extent he was bought in, he knew that he had to do so but the actual process of saying from an investor's point of view, you've to pivot and then seeing if from the eyes of the entrepreneur is a completely different story. And it's something that I as an investor whose focused on this sector of investing, I've seen it. I've seen it with Chegg, I've seen it with Circle of Moms, we saw in ng:moco and we've seen it in countless other examples. And from the eyes entrepreneur it is a personal experience and that ability to pivot and have the commitment to do so without even asking for permission on some level is something that we look for in the entrepreneur on day one. It's something that's really hard to recognize but as you start to see it in enough entrepreneurs you start to see patterns around that. The third element around this notion that business models and pivoting are really what the seed stage of investing is about. It comes down to the notion of speed and flexibility and everything about the way we invest has to be around speed and flexibility.

And sometimes that means deploying small amounts of capital a lot of different times to the same company. Sometimes that just means we have to provide support around recruiting and sometimes that just means that we have to dive in and help them think through their product development. And that's been really interesting part of what business models are and pivots are. But ultimately those three components are what we believe the crux of seed stage investing for us. We believe that we hunt thunder lizards. We believe that we are--it's important for us to be an entrepreneur's advocate and it's important for us to understand what business models look like and how you pivot in and out of them. And we believe it's so important that in fact we're teaching a class here at Stanford on that very topic in the winter because that's how critical it is for entrepreneurs and particular engineers to understand the impact of the business model and how you as an entrepreneur can be empowered if you can test all the hypothesis around that. And I had this cartoon in my original slide that is in now my dead hard drive where there's this guy coming in into Washington D.C. and he's saying, "The facts are coming, the facts are coming" and I really think that that's sort of what the seed stage investing is all about, right? We are investing in the belief that you, your hypothesis will actually turn into facts. And it's your job as an entrepreneur to collect as many facts as possible even before you get investment and if you're able to do that then I believe that you'll be able to get investment and not only that you'll be very successful as an entrepreneur.

This area of seed stage investing will continue to evolve over the next few years. It's a very exciting area to be in and it's exciting to be involved with the types of entrepreneurs we get to work with on a daily basis. Eric Koger and Susan Koger from ModCloth are great examples of authentic entrepreneurs. Susan Koger was vintage clothing shopping when she was 13 in South Florida with her grandmother and she is now starting an e-commerce site that has over 40 million dollars maybe in revenues at this point. We've seen companies like ng:moco where Neil Young was an executive coming out of EA and he's been trying to create IPhone apps. That are truly spectacular and we've seen him succeed. He just got acquired by a company in Japan for 400 million dollars and seeing that sort of journey for him was really incredible. And seeing all of the entrepreneurs that we work with were still trying to figure out what that scalable business model is, it's something that I am really am passionate about and I continue to hope to see more engineers doing that in the future. I'll take questions. Thank you Ann and as always incredibly marvelous and articulate.

For those you know the students who attend to Ms&E178 get to see our guest speaker after the class and today is no exception, Ann will join us in the class room next door for Q and A. I'll limit the 178 questions to just two that I thought were very interesting and then turn it open to everyone else and actually one of the questions even came before you had talked about how you balanced life and family. And this came from one of our online students somewhere in the ether who said, "Well, that's interesting for a venture capitalist to be able to balance children, life and family. Would you expect your entrepreneurs to be able to do the same?" What a tough question. They get harder. So all entrepreneurs I recognize have especially at the seed stage where it's sort of life or death and half the time you feel like you're dying, I know that that work, life, balance, it's hard to say its balanced. And a lot of our entrepreneurs actually have families and I think it's a struggle but that's why you also have to be so passionate, you have to believe so much that you think it's worth it in the end. And I think this is true of any job, right? Any job that you have--I tell this to my students all the time, when you leave the door to go to work if you have a family everyday you're making that choice to leave your family to go to work. And if you don't believe that it's worth it you're going to have a crisis of conscious at some point and the beauty is that the entrepreneurs that I'm working with today really believe that they're on to something and I know that some of them are women, they're mothers and some of them are men who are fathers and a lot of them are married with wives and husbands and I think it's always a struggle to balance it. Boy you danced well in this one.

I'll give her an "A" on that one, what do you think? "A-minus" Last question from me and then we'll turn it open to the audience. So being in Silicon Valley and certainly being from Stanford you get to see entrepreneurs come in from only from industry but also right from a university here and other schools that will go nameless. Do you notice a difference in either quality or thinking for good or better the difference between student coming in with a plan versus a experienced whatever and what advice would you give for students who just come in with an idea? I comeback to this notion of the authentic entrepreneur which is -- I've seen Stanford students who shall go nameless who are two guys come in, they have a fashion startup. And I asked them, "Have you really felt passionately about fashion?" Do you read Vogue magazine, do you go try to sneak in to New York fashion week and they said, "We'll No" but this is really cool piece of technology" and they're really enamored with the technology they built. I don't think that necessarily it's a student thing versus an entrepreneur thing. There are some people who are in it to build products and there are some people who for whom the ideas are just sort of a part of them. And we choose to find with the people for whom the ideas just sort of a natural part of whom they are. I believe that students also who are extraordinarily technical will have fundamental technical insights that a lot of other people may not have. And that actually to me is really an interesting part of being a part of this academic culture is that you'll find really fearless students who really have come across the next tectonic shift in data analytics and they aren't looking in the rearview mirror at all these other big companies that are sort of chasing them down potentially if they really go to market with this they just believe in the technology that they built and I love that kind of optimism and I think that optimism can fairly unique to students. Good.

We'll let you turn it over to the audience and so just raise your hand and Ann if you could repeat the questions as they come in. So questions for Ann from anybody. How do you know a thunder lizard when you see one and what process you use to validate that? The question is how do I know a thunder lizard when you I see one and what process I use to validate it. I think first of all the process is we look at market sizing. That's actually something that a lot of times people ignore is how big is this as a market? So you have to have surface area to attack if you're a thunder lizard. You need to have Tokyo to go after, right? And so if that doesn't exist you're sort of a thunder lizard in no where's Ville. The second component is this element of the entrepreneur and that's why I highlight the notion of the thunder lizard is born from radioactive eggs, right? There's something in the genes of the entrepreneur where they're very much fearless, they have a authenticity that I've already talked about. They have a unique insight usually into either the market or into the industry or into the tectonic shifts in a particular technology that's occurring and then so therefore they have a unique viewpoint on the business model that they can create. And those are sort of the fundamental parts that we're looking at the very early stage. As we get involved it becomes more and more obvious how quickly and deceived a particular entrepreneur is and that actually ends up being critical to the success of the entrepreneur as well.

Yes back there? For non technical founders, how critical is it to have a technical co founder and what advice you have to find someone... The question is for non-technical founders how important it is to have a technical co founder? It depends actually on what you're going after. A lot of times what we'll is a business where the person has a fundamental insight into a market. And they've created a website or they've outsourced a website that they know how to create and they're going after that market, they've tested out the business model. I've actually seen people very successful without model because they know how to handle that outsourced capacity and they know how to manage it and they know how to be agile within that kind of context. But for the most part I haven't seen that kind of talent sort of widely available. So usually the non technical co founder doesn't know how to manage and outsource team and so it does become important in my view to have that kind of technical talent involved, usually because at some point the company also needs that IP within its walls. What kind of advice might you give when pricing some of these technologies that might cost nothing on a marginal basis once you actually built it? You're pricing something that it's different from what's out there. Is it more about trying to get a lot of adoption with a cheaper price or...? So the question is, how do you think about pricing? There's actually a lot of debate on this because I've seen different types of business models succeed wildly. A really good example is a company called Spiceworks.

Where they actually created a really great set of IT Asset management tools and the debate was well, "If we have this really cool tool we should charge for it." The decision was made that they would actually give it away for free because they believe that by giving it away for free they could get to scale and then by getting to scale the data would actually be even more valuable. And that's actually been a very successful model for them. I think they've reached over a million small medium businesses and its one of the few companies that had that kind of scale. But that was--it was again kind of like in the pivot model a huge or heart wrenching decision because you're essentially leaving revenue on the table. There are people who are actually willing to pay for it and you're saying, "You don't need to pay for it I'll actually give it to you for free" and that's where I can't say that there's a scientific process by which you determine what the right pricing model is. It ultimately really starts to influence what the whole business model is. What is actually the product that you're selling? If you give it away for free maybe you're monetizing on data, maybe you're monetizing on the users that you got. But on the other hand if you charge for it how much do you charge for it, that's also part of the customer development exercise. Let's say a really great entrepreneur comes in to Floodgate and starts pitching you and you realized that it's a very terrible idea. How do you guys as partners handle this kind of situation and what would you do then? That never happens.

The question was what happens when someone comes in and starts pitching a really terrible idea? Like there's someone who's a really great kind of entrepreneur. But they are really great entrepreneur. How do I know that they're really great entrepreneur if they're pitching me a really bad idea? Let's just say you feel it. So there's something about them that that they're really awesome. I always believe that I shouldn't waste a meeting, right? If I'm there in that moment with someone it should either be a teaching moment or and so hopefully they learn something when they leave the room and as a result we have a relationship at that point. And so I actually really believe in giving my honest opinion. So if I really think that an idea is not that great I'd probably tell you. And I think a lot of my students would agree that I say it pretty bluntly. I do believe that it's in the way in which you tell the entrepreneur it's a bad idea. If you just say it's a bad idea it sort of--in teaching when you say that's a stupid question and you don't answer the question it doesn't get you or your student anywhere.

I think it's the same thing from the investor and an entrepreneur's perspective, we should be telling you why. And we should tell you what you need to do to get there. The part of it that's sometime is painful is that sometimes I feel like it's a rock fetch and that's what I don't want the entrepreneur to feel like. So if I tell you for me to notice a company, you need to tell me a compelling story around x, y and z. It's not just a homework assignment but it is truly the way I think about the business. And so my hope is that if I see a really awesome entrepreneur or potential entrepreneur that's the way I would want to build that relationship. So do you think that the entrepreneurs now have the power, why are you part of the investor? Busted. So the question is if I believe that entrepreneurs have all the power then why am I investing? I actually believe--when I actually joined Floodgate I was on a search for the next big business idea. And so I was in the midst of getting my PhD and this is part of the untold story. I was in the midst of getting my PhD and I asked for advice to a bunch of different people and people kept on pointing me back to Mike Maples.

They said he's a great angel investor, he is great deal flow, and you should go and see what he's doing. So I went and talk to him and I was looking at his deal flow to get a sense whether or not I should start my own company. I was totally on this path for a while, I would go in every week and he would have these what he called "un-partner meetings" and all these angels would come and we'd look at his deals and we tell him what we thought about it. One day as I am driving up to Lake Tahoe with my husband I get a call and it's Mike on the line and he says, "I have this great idea, you should drop out of your PhD program and come join maples investments" and I said well I think that's a terrible idea, I want to be an entrepreneur and what he said to me was "Think of it not as a venture back startup but it's a back venture start up." And I was like," Now this is marketing guy I'm clearly dealing with not an engineer" that made no sense to me but it was so true in a lot of ways. So as Steve mentioned before I came back for my PhD I had worked for two years in venture capital. My second day of work was 9/11 and I was recently meeting with a partner that I work with at Charles River Ventures and he said that his proudest moment in his career had taken place actually when I was there at Charles River Ventures. I spend my first year doing analysis on the venture capital industry and I realized that there was this huge capital overhead. All these people had invested in venture capital firms and all these venture capital firms are totally bloated and all of a sudden the market had come crashing down, there are no exists in sight. And yet you're sitting on a bond that's over a billion dollars, what do you do? The proudest moment for this partner Ted Dintersmith was that they made a decision to return 750 million dollars of their fund now anyone who knows the economics of a venture capital firm that's incredible. You're leaving so much money on the table because you're giving it back proactively to the limited partners; money that's been legally required for them to handover to Charles River Ventures and to their partners.

That was really an impactful moment for me and I will always remember that as sort of a career defining moment watching people really live by their values but it also told me something about the venture capital industry. And when I came back from my PhD I think that was the whole reason I was not going back into venture capital, I was going to do something deeply technical so that I can emerge and be a technical entrepreneur. The call of Floodgate was that it had the capacity to really change and innovate the way we do investing. And I just believe that there was a way in which we could be entrepreneurial in this setting and we're really starting to change things from the moment I walked in we're discussing what the culture of our firm is going to be and it's just the two of us right? What's culture when it's just two people? And yet were talking about what are values are and how we want to work with entrepreneurs and to me that's actually very entrepreneurial. I want to do something that's meaningful and I believe that I could change things by being in this seat. The one piece of advice that I've always followed from my parents, my father in particular was he always said, "Be world class at whatever you do" and I remember this because when I was taking my first job in college I was a photocopy person for the dean of engineering at Yale and I was leaving for my first day of work and my dad said, "Be world class" and I remember walking in and I was like, "How do you be world class at photocopying" Well I photocopy so that there was no errors and i was the fastest photocopier that that dean had ever seen and it actually ended up having a tremendous impact on my career and I've always believed that that's sort of how you make a difference. You try to be with world class people in world class organizations and you build world class organizations and this is an opportunity I couldn't pass up because I believe that that's what we're doing. Okay one more question. Speaking of starting your own company, if you weren't teaching and investing what company would you start tomorrow? Oh Gosh, giving away all my ideas. So the question is if I weren't investing and teaching what company would I be starting? I would actually be starting a company in the e-commerce space and I've been really fascinated by two different models; one is multi level marketing and the other is the QVC model and I've always believed that those can actually move online.

I've talked to a lot of entrepreneurs about it. Talked to a lot of entrepreneurs who are searching for an idea about it and I think there's a lot of ideas in that space. Another area that I've been really interested in is complex data sets. This comes more from my mathematical modeling background. There are data sets out there that are not huge in terms of file size but are very complex in the nature of its structure and there are ways in which I believe you can analyze it that you can't do in traditional ways and I think that there's a huge company to be built on that space. Okay. Ann thank you very much.