ERIC KLEIN: All right. I'm going to go ahead and get started. Intimate setting. Kinda like this. And as I kick this off-- so this session-- I'm Eric Klein. This is Funding Your Hardware Startup. A thing I'll say before we get started is, especially with this group, as we're going through this, if you have questions, feel free to stop me. This is a highly interactive session. So without further ado, let's get going.

So your backgrounds. You all have started companies or are thinking about starting them? Interested in the venture side of it? Give me a little bit of your backgrounds.

AUDIENCE: Currently involved in [INAUDIBLE] at my day job [INAUDIBLE] consulting endeavors. Startups.

AUDIENCE: [INAUDIBLE] designer [INAUDIBLE] lots of ideas [INAUDIBLE]

ERIC KLEIN: Awesome. Good. OK, so I'm going to cover all different kinds of funding and really the work you have to do before then. But I'll start off with a very simple question, which is, is this a good business? It's a very simple description. You've got a team of less than eight employees. You're only making maybe $5, $8 million a year in annual revenue. Your net margins are 21%. And your NPS score-- which is net promoter score-- your net promoter score is a 76.

If I could offer you this business, this would be the business that you would take-- this is your new company. This is the biggest it's going to get. Would you take this business? Is this a good business to have? What do you think? Good business?

AUDIENCE: It doesn't seem terrible.

ERIC KLEIN: It doesn't seem terrible? Gotcha.

AUDIENCE: But you just said that this is the max [INAUDIBLE]

ERIC KLEIN: This is the max size this company is going to go. Would you take this business if you could do it?

AUDIENCE: And it'll never, ever, ever get bigger.

AUDIENCE: Doesn't get bigger than this.

AUDIENCE: I would not.

ERIC KLEIN: So there's no wrong answer of course, but if you look at this business carefully, your team of eight employees-- if you only have eight employees, and you're generating $5 to $8 million of revenue, you're actually managing your expenses incredibly well as a business owner. You're constantly delivering more than $1 million a year in annual revenue per employee. You're 21.4% net margins, that's Apple's 12 month net percentage on their MacBook line. And that NPS score of 76-- if you know anything about NPS, it's a 0 to 100 scale. That 76 is what Apple's laptops in 2013 generated.

So the funny thing about this business is it's a tiny version of Apple. It's a great business to have, but it's just one size of business. And that's the key point I'm trying to make here is that when you think about starting a business and going to get funding for it, it's not that you're necessarily optimizing for one size or another. What you have to do is determine how big the business can be, and then optimize its expenses, everything for the size it will become.

So you may have five or six great ideas. Some of them are bespoke businesses. They're great businesses as long as they're managed to that size. At the same time, you may think you have the next idea for a billion dollar company, and you just have to understand these things.

So we're going to dive into funding your hardware startup. I'm Eric at Lemos Labs. We're an early stage hardware venture fund. We're one of the best in the business. We've been around for about five years. I funded everything from consumer to applied robotics, advanced manufacturing, aerospace, industrial IOT. I've done the things, oftentimes, that aren't consumer related. I'll do those. I've done everything from low earth orbit satellites to a commercial tea making machine, hamburger making robot that literally a restaurant is being built around, and some hugely successful companies. And the funny thing that we've learned is, again, there is no one size that fits what a great company is or how it's going to get funded.

So there's a fairy tale around building a hardware startup, and it's one that is very much perpetuated by our industry. And at the end of the day, I'm a venture capitalist. I came from the hardware side. I worked for Apple in the late 80s and early 90s. I built a tremendous amount of hardware. I started as an engineer, and over time, my engineers started asking me for money, and I became a venture capitalist.

But over time, there's this great sort of fairy tale that sort of been perpetuated about building a startup, which is one morning, each of you wake up with some amazing idea. You wake up in the shower-- we wake up, you get in the shower, you're like, holy cow, last night I was out with

a group of Autodesk folks, and we were talking about how fast you could heat water and how fast you could cool water down and what an interesting business is around it. There's some therapeutics or some interesting things going around it.

No matter what, at some point, you have this game changing idea. You're going to turn around. You're going to build a quick duct tape prototype of that. You're going to show that duct tape prototype. People are going to like, ah, this is really cool. You're going to go off to Kickstarter. You're going to have a massive, massive crowdfunding campaign. You're going to be like the cooler of 2017. $13, $14 million. Then the VCs are going to be like, whoa, this is huge. It's going to be great. They're going to come in. They're going to pile tens of millions of dollars on top of you. And then, because of all of that, of course, you're going to be in every Best Buy in America six months later. And at the end, you get a big castle. You're the king of the world. You're the next Bit Bitch. You're the next Arrow. You're all those great things.

And that's the myth. That's the formula we teach everybody. If you're going to build a company as a start up, and you're going to have hardware in it, this is your path. This is the path that's documented. This is the one that's in Techcrunch. It's the one we love. We like to put the people at the end. Everyone wants to be the CEO of that company.

The challenge is that, honestly, it's way harder than that. And in this fairy tale, there isn't a whole lot of truth to it. Not to scare you away, it's just not the way it goes. Which is to say, as you move along-- the game changing idea, by the way, you got a good one. We're going to talk about that in a little bit. How to figure out what size opportunity you have on your hands. And of course, you've got to be prototyping. You've got to build this thing.

But massive crowd funding, it's one of the first things. I'm going to take this to Kickstarter. Everyone's going to love this thing. Challenge is is that most venture capitalists invest in the great hardware startups before they ever crowdfund. A lot of times, I'll tell my teams not to use crowdfunding. Crowdfunding is not a one-size perfect fit for everything you're going to do. There are cases where it's an excellent way to judge customer demand, build interest, build a community, and potentially capture pre-sales. But in some cases, it doesn't make sense.

But more importantly, only 30% of campaigns that did over $1 million were ever funded by venture capital. And by the way, a $1 million Kickstarter campaign is huge. It's great. It's phenomenal. Depending on, again, the size of your business, it's a great thing to have happen. But it doesn't automatically guarantee venture capital comes in right behind it.

VCs-- and we're going to go into more of the detail on this-- VCs are really interested in funding opportunities where the revenue per year is measured in hundreds of millions of dollars. And I'm going to put the scale of that up in a little bit, and hopefully convince you that not every business either will get there nor needs to get there for it to be successful. But again, everyone loves to focus on venture capital. Venture capital is the way to grow your business. What I'm telling you is in many cases, depending on your business, it will never have the opportunity to raise traditional venture capital, and it doesn't matter, because that's not the only way to fund a business.

And then at the end, going out to retail. The trick is retail drives over 80% of consumer electronic sales. If any of your ideas have to do with consumer electronics, some day you end up in big box retail hopefully. Challenge is they stock very few SKUs. Most of the shelves at Best Buy are owned by large corporations that pay for those shelves. And for you to get in, you've got to have something absolutely amazing that they believe will drive thousands and thousands and thousands of units of sale per month.

So this path, which we love to highlight and say this is the path of success, is actually both incredibly challenging and not necessarily the path you have to take to be successful. There are really many right sizes to a business. For those of you who came in a little bit later, I highlighted a very simple business. Sub $8 million of revenue, five to eight employees, 21% net margins, 76 NPS score. If I just said a whole bunch of things to you and you're like, what the hell is he talking about? I can dive into them, but those are the metrics you start to learn about when you become the CEO of a hardware company.

But that business is a phenomenal business. It has many of the same metrics as Apple does. It's just tiny. And there are many right sizes to businesses. Sub $5 million businesses. It's a very niche business, by the way. You've got to keep your employee count down. You've got to keep your expenses down. But is this a good business? Sure. You can find things, or you're making little things. This is literally-- it's like Etsy. I've seen businesses scale up three, four, five million dollars just inside the Etsy framework.

Then you have another group of businesses that's sort of five to $30 million in annual revenue. And you're like, oh, that's a good number. It's a bigger number. Venture capital, for the most part, doesn't want to touch that either. On the other hand, the customer base has gotten bigger. The number of employees, I'm starting to relax that a little bit to support that business. I have more customers, and the more customers I have, maybe the more products I have, the

more I need to scale up. And we'll talk about how to generate revenue and figure out that opportunity in a little bit.

And then at the far end of it is those companies that everybody loves to talk about. The greater than $100 million a year in annual revenue, large customer bases, and they scale quickly in the number of employees. Each of these quadrants are great businesses. You just have to manage for them. And one question you're probably asking yourself is from that game changing idea, what size is it? How do I know? How would I know right away? How do I know if I have a $100 million opportunity? How do I know if I have a $5 million opportunity? And then if I know that, now I can build the right business around it. That's what we're going to talk about.

So venture capital funds-- in the drawing here-- funds anvils. They fund big companies. And so if you go to them with a small idea, they'll listen, but at the end of the day, they can't fund it. And a lot of entrepreneurs take it personally. They're like, oh god, they just didn't like my idea. He's sort of a schmuck. He didn't get my cool idea. No, it's actually simple math.

So as an example, if you raised a $200 million fund-- you're a venture capitalist. You're on the hook to return to your investors three to five x, a.k.a. $1 billion. They give you $200 million. You need to give them $1 billion back. That's the way it works in venture capital. So if I invest in your $15 million dollar company, and then someone buys it for $30 million, you've done well. Other people have done well. But 30 over 1 billion doesn't reduce well. I would have to invest in hundreds and hundreds of $30 million returns to get my 1 billion back.

So the funny thing about venture capital is it's a scale problem. So it's not that your idea isn't a great idea potentially, it's just too small. This is just math. They like you. They'll say it's really cool, but your idea has to be really big for venture to be your funding mechanism. So all I'm highlighting here is that venture-- you have to, before you approach it, you have to understand what it needs. And there are many other great ways to fund the company. But from venture's perspective, you've got to have big returns.

So the funny thing is even if you think you have a $100 million opportunity, you've got to convince somebody that you do. And so what people love to do-- I get hundreds of pitches a year. And they come to me, and they say, you know what? I'm working on a product for the automobile industry, which is a $2.7 trillion a year business globally. And I'm like, that's great, but how much of the 2.7 do you actually get to capture? It's what they call TAM, total addressable market. Cars have a huge TAM, but you're not going to get $2.7 trillion in annual

revenue. You have to be able to describe how much service addressable or what small chunk of that value system you're going to get. And we're going to talk about how to measure that coming up.

But VCs talk about things like COGS, CAC, ARR, CFP. And if you don't know these things-- and sometimes when I meet entrepreneurs, they're x engineers, they're engineers. You have to exercise both parts of your brain when you become an entrepreneur. You have to be a great engineer with a great game changing idea and help build it, but you have to run the business and understand cost of goods sold, customer acquisition cost, annual re-occurring revenue, and cash flow positive, and all of these terms. We have [INAUDIBLE] on the financial side. We have our own set of TLAs, three letter acronyms.

So when you become an entrepreneur, you get to get the engineering acronyms, and you pick up the business ones. And that's the world you're going to get ready to move into. So again, VCs like businesses, but they're focused on larger returns.

So I want to point out really quickly-- you've all heard the term or maybe some of you have heard this term, the unicorns, companies worth over a billion dollars. It's an interesting term. But what is a billion dollars? Like if you said, you know what? This idea is so good, it's going to be a billion dollar company some day. A billion dollars in annual revenue. Let's just quickly put a billion dollars into perspective so that we as entrepreneurs can talk about what the heck we're really thinking about.

So if you only wanted to make one product and have it be worth a billion dollars as an entrepreneur, guess what you're making? You're making an aircraft carrier. You're building a building, and a skyscraper to boot. You're building a power plant. So when you say at quantity 1, I'm only going to make one thing, and it's going to be worth a billion dollars, that's your scale. Let's slide down. Well, what's a $100 million product? You just built the SpaceX Falcon 9. Every one of those right now is $100 million to build.

Now let's say I'm going to make something that's only $10 million a unit to get to my billion. I'm going to have to sell a hundred of them. Those are small buildings. I'm going to come way down here. Tesla, at $100,000 a pop, they've got to make 10,000 Tesla's to make a billion dollars. That's a lot of cars you've got to make.

Now we're going to slide down into stuff that may be more of many of you are thinking about making. Maybe it's something a little less expensive. Let's say you wanted to make a Fitbit. It's

only going to be $100. You're going to change the wearables industry. To be a billion dollar company, you've got to sell 10 million Fitbits to get there. And by the way, Fitbit is $2.4 billion in annual revenue, so they've done it. But that's the scale. You're talking about literally 10 million units to be a billion dollar company.

So when you walk in-- I have so many folks who walk in and go, this is a billion dollar opportunity. And I'm like, highly unlikely. Funny thing is you didn't need to impress me with a ginormous number. Doesn't have to-- remember, I talked about hundreds of millions of dollars in annual revenue potentially and over many years. But when you come in with these big numbers, and you think you have that idea, you've got to remember, for Coca-Cola to make a billion dollars, how many cans of Coke do they have to sell? 1 billion. So it's an interesting thing these big numbers we talk about.

So one of the things you're doing-- you've got this great idea. Many of you mentioned who came in a little earlier and you were talking to me. You were like, well, I've got some interesting ideas I'm working on. So a lot of folks I meet come over here on the product side. And what they do is they focus on building the thing. And they're like, oh Eric, this is the coolest thing. I've done it. And I'm like, man, this is really interesting. But it's like getting into a fight with a boxer who's only trained with one arm.

They come in with their technology, and they build it, they get prototype feedback, they're really working through this. But when I come over and I ask them, well, how big is your business going to be? How are you going to bring it to market? Who's your customer? And they're like, we can figure that out, can't we? Again, they got a really strong right arm with their engineering prowess, but they got nothing on the left side.

And so the first thing I would tell you is if you're thinking about starting a business is you gotta actually balance this out. You do have to focus on building a great product, getting prototype feedback, proving to me that you can build this technology. But you've got to come over on the business side of things simultaneously and research your target customer interest. You've got to know whether that customer-- there's a customer for what you want to do.

By the way, you may have five or six ideas. You can test each of them using this process we're going to talk about and find out which one is the strongest, because you only have so much time everyday as an entrepreneur. So you better pick the best idea. Now, the best idea-- of course, best is an interesting term. It has multiple dimensions. But you should study before

you jump off the cliff. You've got to validate your customer interest. You've got to measure price sensitivity. And you've got to build a first past business model. And if you have those things and a great prototype, and the numbers pile up the right way, there are many different ways you can get funded. But when you go to talk to anybody, you'll be balanced. You'll understand your business and your product. And that's what separates a great entrepreneur from a good entrepreneur.

And as I think everybody in this room probably knows, most new businesses fail. Over 20 something years, I've been an incredibly successful entrepreneur, and I have put some nasty craters into the ground. Spectacular failures. $25 million of [INAUDIBLE] and Sequoia money, right into the ground. I learned a lot in that process, but it was natural, not most companies don't succeed. But a lot of them don't succeed, because they don't start from the beginning on thinking about being a good business. They didn't know structurally there were problems until they got way farther into the process. I would rather know that the idea is good or bad at the beginning or know its weaknesses, so I can work around them. So let's talk about how to find those.

So step number one-- and it's obvious. A lot of this, hopefully, to some of you, you're like, oh, this makes sense. This is pretty damn obvious. It should be obvious. If it isn't obvious, it's going to be obvious to you really quickly. You've got to research the target customer. The number one error most entrepreneurs do is they scratch their own itch. Hell, I have a list of ideas. I'm always ready to start a company. I've got ideas that, quite honestly, they're the product I want. They solve a problem I have in my life.

But the problem is to think that you're your own customer is the flaw. It's the first and fatal flaw of many startups, because you don't know how many more of you there are that want the same product. And so you have to step away from yourself as the customer and move forward and figure out who your real customer will be.

And then error number two is you mistake crowdfunding customers for mainstream customers. So I can take-- there's a rule of business called the Gartenberg rule. And it says, in the United States of America, you can sell 25,000 of anything to somebody, and they'll buy it. I could put-- I'm going to be a little crude here. I could put poop in a box, call it iPoop, an accessory for your Macintosh, and 25,000 people will probably buy it.

It depends on what you're selling, but it's a small business, and it will-- so I can make almost

anything and run a small business is what that says.

AUDIENCE: [INAUDIBLE]

ERIC KLEIN: Well, but if it's 25,000 aircraft carriers, you can find people to do that. But my point being is with crowdfunding, there is somebody in America that no matter what idea you think of, they'll buy it. The question is are there exactly 25,000 customers, or do those first 25,000 represent the tip of two million customers? And what we find in crowdfunding research is what you will find is a small group of people who will buy your product, but they don't represent the tip of the iceberg. When you're done with the crowdfunding campaign, you've exhausted a big part of your potential audience.

And so you think you're going into the sky, you've already been over the hump on the coaster ride. And you need to know that, so we can research that. So the first thing you've got to do is to create a type-- what we call demographic and psychographic. Anyone ever heard these terms? Demographic, psychographic? Which is to say you have to describe your customer, who they are. Mr. and Mrs. Smith. They're married. They have a Household Income, HHI, of $225,000 a year. They have a suburban zip code. They're mainstream adopters for new technology. They value time with family and food and quality over cost.

This is describing the beginnings of a demographic and psychographic for a Suvit machine, by the way. This is why this one was built. Inside of this information, if I know I'm targeting married couples with children-- doesn't say whether they have children or not. The picture does. Higher HHI and a suburban zip code. I can take that data, just that data right there, I can tell you exactly how many Americans there are with that. Which by the way, that number of families I believe is like 7 million families in America that fall into this characteristic. That's a very high HHI-- by the way-- of $225,000.

The United States government. There is census data-- you can trust this data. The government builds this data to find out who lives in America and where they live. I can tell you by that, if I know some custom zip codes, I can tell you exactly where these people live. There are maps that are made for free. The government gives you all this data. All I had to tell you was-- I could also say it's a single female, 25 to 34, makes $75,000 a year. I can do the exact same map. I can tell you how many people there are and where they live.

Where they live is critically important, as you saw in recent political elections. People who live in different places have different psychographics, which is how they think about things, how

they respond to things. If I were to say I'm going to build a product that I want to sell to a 16-year-old boy versus a 70-year-old woman, do you think I'm going to run the same advertising campaign? No, because they think completely differently.

But with this type of data, I can start to describe the size of the audience. And as importantly, the minute I know this, I can start to do research. I can make very targeted research into this demographic, which we're going to cover next.

AUDIENCE: [INAUDIBLE]

ERIC KLEIN: So the interesting thing is there's a bunch of available research that says for this particular group-- subdivides this out. Like this group, for instance, subdivides. But I can find out what they're thinking, and I can do research more on that. I can ask them directly what they're thinking about a particular product.

So as an example, this one-- what's underlying this is we're finding a trend in food technologies, the basic-- the preparation of food, delivery of food. You see all these new services like Blue Apron and all these things kicking in-- Sun Basket. What they're finding is Americans want more time at home with their families. And if they spend all their time, their limited time, at home cooking, then they don't get quality time. So they want higher quality foods, but they also want the preparation time to come down. Hence all these new services. All these services found out these people have money, there are a lot of them, and they're looking for higher quality food faster. And a whole set of industries popped up to fill that need.

But when I know this type of stuff-- and at some level, you have to make some assumptions. From the very beginning, you've got to go, who would want my product? Because once I know this, I can test that theory. I could say, you know what? My product-- I'm going to make a juice squeezer. I'm just making something up. Now, I'm going to pick that this is who wants my juice squeezer. Now I can run targeted ads at them and do targeted research and find out whether they wanted my juice squeezer.

So when I walk into anybody and try to convince them that I understand my customer, I actually have real data behind it. But it all starts with you as the entrepreneur picking who your target audience is going to be. The minute you write a couple of those assumptions down, the US government will tell you how many they are, where they are, and now we can start to run validation testing on them.

So by the way, this step right here, for the most part, is free. If you're thinking about this as an entrepreneur, you might be doing this on the side and at night. You might have a little money nested a way to test these things out, but you're not some rich person with hundreds of thousands of dollars of venture capital behind you to figure this out. The good news is this entire process I'm going to take you through, it costs a couple thousand dollars at maximum to figure this stuff out. And if you don't have a couple thousand dollars salted away as a new entrepreneur for your business, you're probably going to be a little challenged yourself anyway.

But the second step is to rely on that customer segmentation. Now I can do implicit and explicit testing. I can go to Google-- and you can literally go there right now and say, look, I want to run-- I want to buy-- I think I was building a juice squeezer, right? So I'm going to buy a bunch of AdWords, and I'm going to say, I want to target the-- I want to buy juice, extraction, squeeze, or I'm going to start to play with different words that describe my product. But I'm going to place those Google ads against properties where those people go. And Google will do that map for you.

I can use Google Analytics, and I can say, Google Analytics $500. I want to buy a thousand-user sample to put a panel up that has a picture of my product, and [INAUDIBLE]. And I want to run it against that demographic. And I can basically create a fake web site-- and everybody does this-- that says, hey, I have this product. It's called the Eric Juice Squeezer. It's amazing. You just even put the juice-- the little lemon right next to it, just [SQUIRTING NOISE]. All the juice-- 100% of the juice comes out of just magically. It's the most amazing device ever made.

But I can put that data in front of as many target customers as I want. I can start to do AB testing. I can say, hey, the juice squeezer is automagical. It does this. I can say, hey, it brings all the nutritional value of your fruit out as whatever. I can start to do AB testing using these different tools. So unbound.com is another great tool for this where you use these tools-- you create a surface and explain your product to the customer. And you go, hey, if this product was $99, would you buy it today? Leave me your email address if you're interested.

I can test inside the exact customer that you think you have and see how many people would want it. You can look for your attach rates. With AB testing, you can check different ways to describe your product and look at the attach rates and see. You can see, oh wow-- as an example, home security products. They are often-- when they are built, there's two different demographics. There's sort of the-- right now there's the IOT, you get to build your-- you get

to do it all yourself. It's sort of a male build it philosophy.

The same people turn around, and for women, use 25 to 44, they use fear. Which is, hey, don't you want to protect your children? And don't you want the best possible solution to make sure your house is safe? They test these different marketing things for the exact same product to figure out what's the best way to sell the customer, because they can use these tools and talk directly to your potential customer base. If they don't respond at all, you have incredibly low attach rates, you either have bad messaging or a bad product or bad pricing. But wouldn't you like to know that before you came to market? In essence, test with your users.

Software companies have been doing this forever. Web properties do this all the time before they spin something new up. Hardware guys, you should be doing the exact same thing. So again, one of the things you're testing is your feature set. When you're describing it to them, you can find different ways to describe it. You can talk about your products messaging, all the different verbs, nouns, how you're going to do that, your price sensitivity analysis. Again, I can buy 1,000 users, and I can run the same ad for 500 of them at $99 and 500 them at 149, and I can just watch the attach rates. This is called AB testing. You AB test everything, but you're doing it for literally 50, 100, 250, $1000. Wouldn't you like to spend $1,000 before you spend $50,000 on your company to find out it's broken?

So you can test your potential market size. At some point, these become statistically relevant samples. You're pulling 500, 1,000, 2,000 users out of a pool of seven million. If you get a 10% attach rate for your product, a.k.a. 10% of your target customers in the small sample set say this is the kind of product I want, you're on to something, because now you can just take your math, times it against the total customer base size, and you could probably figure out how many people might want to buy your product. And you can do this before you ever have any interaction with a factory, before you've made more than a couple of prototypes.

You should do this. Don't build a product you don't know will or won't sell. Or if you found it you had a 1% attach rate, you're like, maybe this is a B spoke business. It's a little smaller. I can't take it to venture, but I'll show you all the other ways you could get it funded. So again, this takes just a few weeks and definitely less than $5,000. 5,000 is the maximum you have to spend on these sort of things. And you can take your idea, that thing you've been working on in the garage or in the back room or wherever you're doing it, and you can know whether people will buy it or not.

Now, once you've done that, remember, we use demographic and psychographic data, we got attach rates, we know across a statistically valid sample set how many users might do it. From that first slide, we know how many total number of users there are. I can build you a business model. They're not hard. I literally took my customer segments to generate what is known as service addressable market, or SAM. All I'm doing is taking that census data-- like I said before, there are roughly 7 million families in America with above-- what was it? 225 HHI. So if I had run a sample test against that, and I found I had a 4% attach rate that was statistically valid, 4% of 7 million homes, that's 280,000 homes that I could sell to. That's 280,000 customers that I know, across the model, probably will respond to this.

Once it becomes statistically relevant, you have enough samples, you can extend it out. Now I could tell-- if you want to talk to your friends or if you want to talk to a banker or if you want to talk to a venture capitalist, and they go, how many units do you think you could sell? I'm like, 280,000. And he's like, well, how did you come up with that number? That's how I did it.

Out of the hundreds of venture capital applications I get a year, maybe 15, 20% of those people have ever done this. It's so easy, but no one does it. They don't think to do it. And so it's a debate now between me and the entrepreneur as to what the real number is. Never get into a debate with someone who's trying to give you money, because they always think they're smarter than you. You're smarter than them when you do the math. They can't argue with this math.

So now it's just do they want to fund you. So again, you mapped the product ecosystem to highlight these different things. Once I sell you this product, then once I have you-- you bought the base product, I can sell you consumables. I can do all sorts of things, which we're going to talk about a little bit with the business model.

Now the other thing you've gotta do is you've gotta check your current and projected competitive landscape. Who else is going to make the Eric Juice Squeezer? By the way, go to Bed, Bath, and Beyond. There's a lot of juice squeezers already. So as much as I think I've invented a new one, boy, I better have some differentiation, because there are a lot of other juice squeezers in the market.

Now this is another exercise you can do for free. But how do you know about projected competitors? Well, I'll tell you. Go into Crunchbase. Go in and look at where new companies are hiding building products. I can tell you who's coming. There are five different [? sous-vide

?] companies, and there are two more in development. No matter what idea you have, by the way, someone else on planet Earth had the exact same idea. Ideas are a dime a dozen. They really are. I have hundreds of them. The difference is converting them into a business.

But I would love to know who my competitors are. So you can go into the market, but you can also look to where the venture capitalists are funding it to find out that there is a current-- whether there's a lot of other companies coming. And then again, you can define constructive attach rates to your SAM. And then I can do things like channel margins, product channels, the different channel margins. And I can build a full model.

And what I mean to say by that is-- as an example, my juice squeezer. I'm going to sell it directly to you. I'm going to sell it to you. I'm selling it to all of you directly. That mean there's no overhead. I'm not paying anybody. I have to warehouse it. I can do the math very quickly. But when I sell it to you directly, no one else is involved in the transaction, which means 100% your money comes to me as gross money, and then I have to pay all my bills, and then I get my net money at the end.

Now let's say this thing-- I'm thinking, you know what? I'm going to take this to Amazon. I'm going to go to an e-tailer. Amazon will take-- at a minimum-- takes 25% of your margin, upwards of 40 depending on the channel. Now, on the other hand, how many customers does Amazon have? Hundreds of millions. How many do I have? Zero. When I go direct, I have to build all those sales myself. So that's why so many people go to Amazon. Amazon, if they like the product, if it starts to sell, they'll advertise it. You'll become number one. You have good reviews.

Now I'm going to turn around, I'm going to say, you know what? I'm going to take that to retail. So I'm give you an example. Williams-Sonoma. How many have you ever been in a Williams-Sonoma? Really nice store, right? How do you think it got to be a nice store? Good margins. Williams-Sonoma, if you brought in-- let's say I was making a coffee maker. Williams-Sonoma wants 40 to 55 points of your margin. Half the money you make, they take. They give you half back. So for instance, if Williams-Sonoma sells that product for $1,400, you're probably going to get seven. That's what you're charging them. And by the way, it may have-- if that unit cost you $800 to make, you're losing 100. If it costs you 200 to make, and they're giving you 700, now you've got healthy margins. Yes?

AUDIENCE: Did you say they're taking 40% of your margin or 40% of your revenue?

ERIC KLEIN: Well, they're taking 40%-- it's called-- I mean, it's gross margin. So it's revenue at the end of the day. You charge them x, and then they're going to do-- you two, between the two of you, you decide what your markup is going to be. But they want to make on whatever you're selling it to them-- they need to make 40 or above points of margin.

AUDIENCE: [INAUDIBLE]

ERIC KLEIN: What they care about is-- as an example, that $1,400 tea machine. How many people want to buy a $1,400 tea machine. Not as many. What if I told you it was $9.99? Would more people buy it? Yes. $6.99? More people buy it.

AUDIENCE: That still has nothing to do with your [INAUDIBLE], your margin. That's just your [INAUDIBLE].

ERIC KLEIN: Right, so there's a three-layer stack going on. There's number one, what we call bomb or transformer landed cost. And I don't think I get into this on this. So it's going to cost you, for whatever you've decided you're going to make, to have it land in a box at their warehouse facility-- it's called landed costs. That's your total cost to make it.

Now, you need to make typically, in this business-- and let's say it's consumer hardware-- you need to make-- it's traditionally defined that you need to make three to four x what you're charging on your landed cost to run the rest of your business. Remember, because whatever it costs you to make it and land it there, that's all material cost. It didn't pay your salary. It didn't pay your marketing person's salary. It didn't pay the rent on your building. It didn't pay anything. So you need to make three or four x above that just to keep your lights on.

The way to think about it is Williams-Sonoma needs another 40% above that to keep their lights on. And so that's how a product goes from being something that it costs you-- as an example, an iPhone costs $276 to make. And that's at volume, scale. You're paying 849. In between there, AT&T gets a little slice. And they don't make very much at all on the phone, because they want you to ride on the service. And guess what Apple's making? The difference between 276 and most of 849. And by the way, if you do the math on that, about 3x. That's how Apple gets to be a big business, depending on those things.

And knowing these numbers, these basic markups, tells me-- by the way, running to retail. If you could get Amazon, if you could go direct, much better business. You keep all the money, but you have to earn the customer base, which means you've got to be really good at viral marketing.

So again, in this discussion, I've given you a rough revenue model. You do not have to get a finance degree for your first rough models. I'm not trying to give you your exact revenue numbers. I'm just trying to figure out is there a business here or not and how big could it be.

So we talked a little bit about building the revenue model. One of the things you've got to understand is what type of business model you're getting yourself into. And there are four big business models that companies come from. High margin businesses, what we call razor/razor blade businesses or consumables businesses, facilitates a service, and platforms. And when folks walk into my office, and they go-- I go, what type of business model do you have? And they're like, a good business. I'm like, that is the incorrect answer. You need to know which one of these you fall into, because it has implications on how you're going to grow your company and how you're going to make your revenue. So let's dive into them.

High margin business. Everyone goes, yeah, my business is going to be a high margin business. It's like, do you like apple pie? I love apple pie. Problem is high margin businesses aren't as easy to build as you think. Here's three great examples of high margin businesses. SpaceX is a high margin business. Every time one of those rockets goes up, it's a lot of money comes back to SpaceX. What's the problem with that revenue? Takes a huge amount of money to get there. And they occasionally blow up.

Omega. Fine watch manufacturers. You know how much it costs to make a nice Rolex or an Omega? Not nearly what you pay. The markups are huge. But it's because everybody knows that symbol. Everyone knows that. We're going to talk about why in a minute. And of course, down at the end, Apple. A company with one of the largest cash reserves on planet Earth. How did they get there? Massive investments in one of two things.

Truly differentiated technology. SpaceX. They can land their rocket again. You just heard earlier today, they can land their rockets. When you-- I work with SpaceX all the time on stuff. The stuff they do is truly rocket science. They are at the leading edge of that technology, and they're able to charge massive differentiation for that.

Or in the case of Omega, that watch-- they've been making the same watch for 20 years. The guts of it, the movement doesn't change that often. Where they spend all their money, where do you see them? In every magazine. They build a brand. Apple spends huge amounts of money protecting a brand.

So as a venture capitalist, you come to me, and you tell me you're going to build a high margin business. Did apple just come into existence yesterday? Did Chanel appear yesterday? No, it took Chanel years and decades to build that brand. Omega, Rolex, Chanel. Think of the luxury brands. So if you tell me you're going to be a luxury brand, what I'm going to tell you is you're going to spend years of my money building that brand. And by the way, I'll fund it. I fund these all the time, but I know that I'm about ready to spend years and a lot of money to make a new great brand.

Apple didn't always mean what it means today. There's a lot of investment to get there. So when you come in, you tell me you're a high margin business, you're telling me things about where your money is going to be spent. You're either going to do massively differentiated technology, and I have to believe that, or we're going to spend a lot of money on brand development.

We often say that for a consumer company to go from zero to NPI, or new product introduction, the first time it's on the shelf, you're probably going to spend $20 million. You're going to spend over half of that on marketing, letting people know about the product and getting your brand started. So when you think you're doing a startup, and you're building a product, and you think all your money is going to go into the product, depending on what channels you're going into, most your money is going to actually go to getting people to know about your product can have a positive affiliation with it.

AUDIENCE: [INAUDIBLE] a high margin, which is not a differentiated technology, and its a local brand development, and if you actually are going to fund this, then how are you differentiating between-- if you have two startups, startup A, startup B, how do you decide if they have nothing yet, and you're going to spend years-- so what is your metric to differentiate?

ERIC KLEIN: So the funny thing is-- everyone in I think this room gets it-- the insides of an iPhone-- by the way, it's an engineering marvel. But the actual parts, pick parts. It's all in the brand. You're buying the cache. And we're going to get to what Apple really is in a little bit. There is much-- Apple is an anomaly in the universe. So when you say, I'm going to be the next Apple, you're actually an anomaly, because you are really a high margin platform. You are truly-- you are a unicorn that rainbows shoot out of your eyes. It's not going to happen.

But when I come back here to answer your question, and I look at two companies who say they want to build higher margin businesses. I'm looking, and I'm going to go, number one, do

they have a moat that they can defend? Some piece of technology that no one else can figure out. Or if not, I'm looking at their founders, and I'm going, are they good marketers? Because if you're going to go high margin, and you're really shellacking a relatively simple product, and you're going to build cache, you better be really good marketing folks.

So a lot of great hardware startups are actually really good marketing engines as opposed to necessarily having the greatest products in the world. I'll give you a great example. Anyone heard of GoPro? Yeah, we all heard of GoPro. They won. They became one of those unicorns. There was a little company called Contour that came out at the exact same time that had a better product technically. And GoPro came into the market, and said, its all about that hip action sports. Fabulous marketing. They crushed Contour into the ground. Contour's gone.

AUDIENCE: [INAUDIBLE]

ERIC KLEIN: A lot of times for high margin, when I look at those teams, I'm going, which is the team I think can deliver the marketing around this type of product? Because the differentiation of the tech level is not separated enough. SpaceX? Completely separated. And I invest in a lot of these businesses if I'm going high margin. But I also will do this, but then I'm looking at the marketing team.

So let's keep going. OK, so razor/razor blade or consumables. Anyone ever heard of Keurig? Great business. Everyone-- darling, rock star. Spent a tremendous amount of time getting you to buy cups. Nima is one of the companies in my portfolio. What they are doing is a protein based gluten detector. So literally, you take a little piece of food, put it in that little disposable cartridge, and two minutes later, it tells you whether you can eat it or not. 35 million Americans are-- what are known as-- are gluten sensitive. 3 million have what's known as celiac disease. They eat gluten, they get incredibly sick.

So the reason Nima exists, number one, outside of helping a lot of people-- as an example, my son has a peanut allergy. So we're working on a test for that. I will buy as many of these as I can possibly get my hands on, because it will save my son from going into anaphylactic shock. Consumables business. Coffee, the addiction of a lifetime.

So you're like, this is an awesome business, right? If you tell me you're going into the consumables business, I'm going to tell you, guess what your massive investment is in? Keurig, for years, the venture capital community was dumping money in to get bases out there. The razors. It doesn't matter how many K-cups you can-- you can't sell K-cups until you

have a lot of machines. You can't sell a lot of disposable kits until you have a lot of users.

So where you invest your money is building the base product and getting distribution on it. So if you come to tell me you're building a razor and razorblade business, what I'm looking at is your capital efficiency in getting the base product into the market. The entire business revolves around your attach rates. If you sell a coffee machine, but no one buys the K-cups, we're probably losing money on the machine. We'll make it back up on the consumables. That's the model. So it's all about you convincing me that you can get your attach rates up, because if you can't, all the money we pump into the base product is for not. What we got is a lot of base products out there that no one ever uses.

So we're ruthless on reducing the base products' landed costs. I need to get into the market cheaper, because then the consumables will kick in, and you get a Keurig, which is a cash generating machine. The story behind the scenes is Keurig-- hundreds of millions of dollars were pumped into Keurig before it turned into a company that threw off hundreds of millions dollars a year in cash.

AUDIENCE: Amazon's the same story [INAUDIBLE] need money for [INAUDIBLE].

ERIC KLEIN: Yes, Amazon built-- I mean, they're a platform, but they sunk money in for years, and now the engine runs. The one thing about and sort of a summary of this is-- and you're going to see this over and over again-- you put a lot of money in, and some point the engine takes off and you get way more money out. But if you don't understand what you're doing, you'll put a lot of money in, and nothing will come out, and that will be your failure.

So you have to understand where you're going. So again, consumers, when you come to me and you say, I got a consumables play, I'm really interested in focusing in on how fast you can get the base products out and how good your attach rates are. So as an example, all I watch with Nima is the attach rate, because if the attach rate is really, really good, and they have more and more disposal, I know if I spend more money and get more people the base, more people will buy the consumables and the engine will run. So that's what I'm thinking about. I'm constantly thinking about if it's got a good attach rate, I can pour more capital into Nima to have more of these get into the field via good marketing and good distribution. And then I know any one of these gets out, 10 of these get sold. That's what Keurig is. You buy one, and you start drinking K-cups. That's the business of consumables. Razor-razor blades.

AUDIENCE: What was Keurig's plan to not have a generic [INAUDIBLE] Starbucks or whatever disposable coffee cup [INAUDIBLE]. Because I think we have a Keurig, but I don't think my wife buys the Keurig cups.

ERIC KLEIN: Right, so if you remember the little side story, Keurig tried to make the-- do the same thing HP did, which was it would only read cups that came from Keurig. And people went ballistic about it. So that's the trick is, how do you keep them attached? Mock 5 Razorblades. There's only one way to get them in. There's always little tricks you do to try to feed that attach rate high. On Nima-- by the way, this technology, the protein based allergen detector is really, really hard to duplicate. So you're not going to go to Shenzhen and knock this puppy off.

AUDIENCE: [INAUDIBLE]

ERIC KLEIN: But part of it is his brand and making-- hey, I want the right experience. This cup will give you the best cup of coffee, because we engineered it perfectly, and we picked the beans in Colombia. You market as much as it is a lock in on the technology. These are-- every business is hard to defend that way. But again, marketing-- if I haven't stressed it enough, business and marketing knowledge, as much as a great idea, great product execution, is what keeps a startup alive.

OK. I've gotta go fast. OK. Facilitates a service, number three. Ever heard of Dropcam? Turned out to be a pretty darn good company. Why do I care about Dropcam as a venture capitalist? They sold a lot of cameras. Is that why I care? I care, because if you know anything about Dropcam, Dropcam has a service, $7.99 a month. 42% of the customers that bought the camera signed up for a long term 7.99 a month commitment.

In that business, it's known as LTV, lifetime value. This thing prints money. And by the way, do you ever turn off the Dropcam? Because what's it doing? Basic security for you. For most people, peace of mind. 7.99 for peace of mind? 42% conversion rate. 42% of millions of customers give you $7.99 every month. That's a good business.

Facilitates a service. Dropcam, when you call Dropcam up, and you go, hey, my camera is broken. I have a couple of these. When you call them up, you go, hey, my camera is broken, or I am having an issue, they baby you. If it's broken, you'll have another Dropcam at your house one day later. By the way, that was $80 worth of hardware that just went back in and out. Why? Protect the $7.99 for many years. Facilitate the service.

Skybox. Skybox put satellites into orbit to take pictures of the planet. Is their business making satellites? Nope, it's about making images. They sell those images for hundreds of thousands of dollars to enterprises and corporations and governments. The satellite is just facilitating their business.

So I put a massive investment, again, in the hardware, but what am I doing with that investment? I'm unlocking the attach rates. I'm unlocking the service associated with it. So VCs love these businesses, because we feel justified in putting all that money into the hardware, because we know we get a customer over many years who's locked in. For these type of businesses, I'm interested in watching things like CAC. How much does it cost to get a new Dropcam customer? CAC, customer acquisition cost.

And churn-- not-- woah-- chum. Hey, that's cool. That's a bug. Churn. If I sell you a camera, and you use it for three months, and I take a slight loss on the camera, but I figure I'm going to pick it up, and then you churn out three months later, guess what? I lost money on that deal. Xbox, Playstation. The Xbox One cost $500 when it was first shipped. The Bob on it was almost $400.

Microsoft lost hundreds of millions of dollars on the Xbox business for years. Steve Ballmer almost canceled that business three times, because it was losing so much money in the first three years. Guess what happens in years five, six, seven, and eight? Boom. It's all revenue, because now they're buying games. They're paying for Xbox Live. It turns the corner. It's the LTV of the customer. And you're betting on LTV, so you're protecting your annual recurring revenue. You don't want them to leave, which is churn. And you got to make sure you don't pay too much to get them. That is a service business. So when you come in, I'm going to look for an expert who understands what it is to run a service business or is really ready to learn, because this is what you're getting into when you tell me you're facilitating a service.

Your last one is a platform. Does Oculus want to sell you hardware? Is Oculus a hardware company? Sure as hell look like one, don't they? They're not. Overtime, why are you buying the hardware? To run software. And guess who gets 30 cents of every dollar going through the system? Oculus.

So over time, their initial revenue comes from hardware, but they figure out how to facilitate transactions with partners. When you say you're building a platform, by the way, you have to learn how to share. That's the big difference. So many companies come to me, and they're

like, I'm going to be a platform play. I'm like, well, not really. Because to be a platform play, we have to invest in hardware and the software to facilitate partners making money. When you say you're a platform-- at Apple, Belkin makes money on Apple, Logitech makes money on Apple, Adobe makes money on Apple, Nintendo makes money on Apple, and Apple makes money on Apple.

Everyone-- when you make a platform, you have to facilitate an ecosystem and find the choke point in your system where you make your money. For Apple, it's the App Store. For Oculus, it's the App Store. But you have to figure that out.

For Nest-- everyone thinks Nest's business was selling you a 299 thing, and it would save you some money. Guess what? That's not how Nest makes its money over time. When you have enough Nest units, and in particular, you have their little thermostat, that allows Con Edison to reach into four million homes in the middle of the afternoon in a near brownout situation and dial back power usage and prevent them from having to build a multi-hundred million dollar power plant.

Nest can make money in multiple directions, because they own the platform. They make money off their users. They make money off of industrial customers on the back side. And they sell a ton of data to people about how power is used in a home. That was the Nest vision. Never happened. But that was how it was sold to venture capital.

So again, we sink a tremendous amount of money into it, but you have to predict your primary monetization mechanism. And then over time, understand different avenues you can open up. So if you come to me saying, I'm going to make a platform for x, you've just said a trigger word that, for me, trips a whole bunch of things I'm figuring I'm going to have to pay for before you can monetize it. So the p-word, platform, is sort of a word you use really carefully around venture.

So we're nearly at the end of the hour. And one of the things that I wanted to say was that-- I think I said it-- is that there's venture money. And I told you that for a lot of businesses, venture is not necessarily the way you're going to be to raise money, because your business is too small. But I'm going to come back all the way to the beginning. How do you-- when you're just getting started-- obviously, you may have some money put away yourself. You're your own friends and family. You're your own angel.

But so many businesses are started here. And so you're spending-- I always love this,

because who's the investor in your company? You are. You feel the pain when you make the mistake. So all that stuff I was telling you, that's just good sound investments of your own money. But as time goes by, you're going to often-- early on, you're going to bring in friends and family and what's known as angel money. Local businesses, other folks, people you know who have more money. That's how I got into the business. Just my engineers figured I had more money than they did. I had just enough more to get them started. These are 50s, 25k, 100k checks. And you're being super frugal with that.

As you move along, one other you can do is the federal government loves to give money to small businesses to do research. They're called SBIRs, small business something research. Should know that. Yeah, that's exactly it. So the government funds across any major category all sorts of innovation. The other speaker at one o'clock is using SBIR grants. The nice thing about the government is when they give you money, it's called non-dilutive capital. They write you a check for $100,000, and say, why don't you build this product, because we have the Department of Energy or the military or somebody-- the Department of Education-- someone wants potentially that product. And we want to see it come into the market.

They take no equity from you. Zero. Your cap table, a.k.a. the number of shares in your company and who's owned, stays with you. This is a wonderful thing to do if you know how to do it. There are also lots of grants. Early on, it is a great way to get started, in addition to calling on people who will give you money.

Now, as you move along, you're-- and this is in prototype phase. Very rarely, unless you're an experienced entrepreneur, can you go to a VC or a bank or anybody and go, I have the greatest idea for the juicer in the history of man kind. Give me $100,000. I've got to build a prototype and build my business model. I've got to spend money to prove whether I can make money. What I told you today is you don't have to spend a lot to figure that out.

As you move along, you're saying, hey, I got to start building EVTs. I've got to start to validate that I can manufacture these things. Now we can play with things like syndicate equity. You saw maybe yesterday the announcement. Indiegogo, when you release a campaign, people can actually invest in your company now. Thanks to our federal government, they've allowed normal people to become investors like me.

So syndicate equity. You can start to raise seed money. This is where-- if you have a business big enough for venture capital, it's typically your own sweat equity, then you raise what's

known as seed capital. And seed capital is the money before you ship that I give you to get you ready to go into market, to build your product, to build your marketing team, often measured in a couple of million dollars. Again, I said it's going to take you $20 million to build a great consumer product that's going to be sold at mass retail. And then you go series A and series B.

But it's not the only money. There's equity. And I'm going to come down here. Let's say your business isn't quite big enough to get venture cap money. I'm going to slide down here, and I going to be using pre-sales and deposits and crowdfunding. And by the way, crowdfunding-- tell me you're a musician, you want to make a CD, there's a crowdfunding platform for you. If you're a writer, there's Patreon. There's Indiegogo. There's so many different platforms now. And by the way, the nice thing about them is they have the customers already. Kickstarter has millions-- tens of millions of users.

And so if you have a good pitch for them, they have sub-niches. Game developers-- board game guys-- millions of dollars run through the system down here. But to do that, you've got to prove to these people-- you got to get far enough along to prove to Kickstarter that you're not a fake, that you can actually take this product and finish the process.

As you cruise along, as you're closer to production, you can unlock things like lines of credit. Banks don't want to talk to you. Suppliers don't want to talk to you until they think that you're ready to make money. And when you're close enough that you just need to go into manufacturing, and you can prove to them that there's demand, they'll give you a lines of credit against either your inventory or your product-- your finished product. There's all sorts of things you can do here.

Factory financing. The funny thing is the closer you get to here, Williams-Sonoma, Amazon, they all have programs for small startups to help them lower the cost of coming into market, because they need new products too. They need something new and cool on the shelf. Amazon has something called Launchpad that helps folks go through this. Each of these channels do this, but the funny thing is when you're coming down through here, if you can go direct to consumer, it's the cheapest way. But you've got to find a way to talk to your customers.

I'm amazed how many startup folks are using Facebook ads, instant messaging, using social media channels to create one on one connections with a customer. And if the product is viral,

they tell their friends, and the acquisition costs, that CAC, is so low down here. And Amazon is actually a great partner for a lot of companies, because it's hundreds of millions of users, and the points they take versus what they give is actually relatively reasonable.

These guys-- specialty retail. Like the first time you take a product to retail, it's a terrifying experience, because it's a little box sitting on the shelf next to all these other boxes, and your box has to speak to the consumer. Specialty guys will help you learn how to do that before you end up at big box guys.

So from the venture perspective, there's other little vehicles-- they're known as venture debt. Whenever you-- we literally top up your venture capital investment with debt investing, as well, to give you more money. There's all these different tricks in this. But the key thing is if you thought you had a big business, you might be up here. But if you did all that math, and you found that you had a 15, $30 million annual run rate, it's still a great business. But I might slide down here and see if I could SBIR it, have some of my friends deal with it, be capital efficient to get to those crowdfunding campaigns and those opportunities as quickly as I could.

And I'm going to probably stay down in these lower cost acquisition channels initially, because I'm going to keep my cost down. I'm going to keep my number of employees down. Like if I'm going to hire a marketing team, they better be really good at D to C, because that's all I need to do. It's the cheapest way for me to acquire customers and with the highest margin. So I'm going to spend my meager marketing dollars down here. If I'm a venture backed firm, you do everything, you just do it at a bigger scale. You have more money to spend, but you're still going through the same exercises.

So with that, I'm going to-- this is a big long traction slide. But the thing I would say is if you have great ideas, the best thing you can do, more than any other piece of advice I can give you, is to network. If you're seriously thinking about starting your own hardware startup, you're not the first, and you won't be the last. There are generations of us who have built products like this before, and all you have to do is ask us, what did we do? How did we approach the problem? We were all just like you, and we all jumped off the cliff. And it's the greatest adventure. It's hard as hell, but the rewards are phenomenal.

At some point, you wake up one morning, and you realize you're an entrepreneur. You want to own the business. You want to be ultimately responsible for every mistake that's made. And you reap the reward, and you get the customer interaction. My biggest piece of advice is once

you've decided to do that, there's no going back. It's a drug. But use them responsibly. Study before you jump off the cliff. Understand what you're getting yourself into. Figure out the size of your market. And if you do that, you have a much more likely chance of surviving the fall, that process of building your product.

And then as you're doing it, network. If you had great products you saw that were startup vendors-- hey, by the way, if you send a note to the guy who created Pebble, Eric Murkowski, he will typically write a response back to you. If you say, hey, I'm an entrepreneur, I have this particular question about this-- because Eric three and four years ago was exactly like you. And he built a little company that became Pebble. James Park, Fitbit. I can give you the names of every one of those people, and they all remember exactly where you are. And so we all spend the time to try to come out and help other entrepreneurs make this voyage, because again, if you mentally commit to it, it is the funnest-- I mean, it is the place you go to really be a business person and to not only build a great product, but own great relationships.

But be smart about it. Ask questions of everybody. Network ruthlessly, and that's your best chance of getting started. So with that, I'm happy to just sit-- I'll sit here for a little bit, answer extra questions, dive in as much as you want. I'm not going anywhere. So that's it.