

Jeremiah Lowin - Transcript

- Jim: [00:08:03](#) Well, hello everyone. It's Jim O'Shaughnessy with my colleague, Jamie Catherwood with another edition of Infinite... Wait, wait a minute. What the hell is this Jamie? I'm sorry. I'm sorry, audience. I honestly don't know that I can do this. Jamie, I'm rescinding all of your invitation rights to guest here. Well, I guess since you're here, I want my listeners to maybe learn something. So we're not going to let you shill your own company, but we're going to talk about what they might learn from startups actually. My very good friend, who I've known since he was what? Six years old, Jeremiah Lowin, the founder of Prefect. The most horrible punster on the Twitter channel, and growing into probably, also owning the title of, "Worst dad jokes." Jeremiah, how are you?
- Jeremiah: [00:09:06](#) Hey Jim, guess what? I'm here. It turns out, if you harass you long enough...
- Jim: [00:09:13](#) Leave me out of this. What I think is really funny is that people seemed to me to be so much more literal these days. Right? And they don't get context or nuance at all. And to me, it's just incredibly obvious that we know each other. I've known you all your life. I'm an investor in your company. All these things are like... I've actually got DMs. Go ahead.
- Jeremiah: [00:09:42](#) I was going to say, I would not dare pull someone into this ridiculous and horrible routine that you and I... Look, you and I spend hours every Thursday night coming up with these jokes. Right? We should let everyone in on it. I mean, I wouldn't dare bring someone into this that I didn't have such a relationship with. If anything, I am stealing your credibility to pull myself. Right? To me, this is the... You and I both like old movies, right? So to me, this is like an Abbott and Costello. This is like, I get to do stupid things because I get to play off the fact that you have a great reputation and it works. It's horrible, but it does work. I mean, it's been more than two years-
- Jim: [00:10:23](#) Yeah. Absolutely.
- Jeremiah: [00:10:24](#) ... of this insanity. And I keep trying to... It's hard to come up with them, but we try. We try.
- Jim: [00:10:32](#) I admire your diligence. I admire your diligence. Well, so let's actually get serious for a minute. And I thought on your suggestion, the more I thought about it, the more I thought this would actually be great for a lot of our listeners. You've been

going through this incredible experience of starting up a new company. You left a very, very solid, successful job. Right? You were working for someone else, but you got this idea. And what I'd like to talk about mostly is just what you have learned from your crazy couple of years building Prefect, which again, by the way, congratulations. It's going well. And again, disclaimer, I am an investor in Prefect through a variety of vehicles. So give us the opening. I mean, what was the moment where you're sitting there and you're like, maybe I hope you're talking to your wife, maybe your family. And it's like, "I got to do this." What was the agent?

Jeremiah: [00:11:40](#) It's such a great question. And in so many ways, it's a feeling of being compelled to do something. And this has happened to me earlier in my career as well. I've left King Street Capital where I had a beyond wonderful career and loved my job, because I desperately just felt compelled to go learn about, and then build machine learning models. Right? This is in 2010, at the very frontier days of that world. And so, this is a feeling that I know and that I recognize and that earlier in my career, I got a lot of great experience with trying to figure out what does one do when one feels compelled because it's extraordinarily frightening. Right? I mean, it doesn't have to be starting a company and my salary evaporating and all these consequences that come in. It could just be the fact that you're doing something new, is very, very, very frightening, and it's very easy to remain, especially if you're in a place that you like, and that is comfortable.

Jeremiah: [00:12:37](#) That inertia is very powerful. As a matter of fact, one of the things that we have outlawed at Prefect sort of out of the gate, is we have a rule against what we call, "Inertial thinking." And it's the idea that just because we do something, it is an insufficient reason for us to continue doing it. It may be the right thing to do, but it needs to be constantly re-justified. And so, that idea of overcoming inertia is really powerful.

Jeremiah: [00:12:58](#) And when I've made the decision to go off and do Prefect in particular, it was accidental. It was almost with reluctance. It was the observation that we had something for which there was such overwhelming interest in demand in the market. Granted as a young... This technically would have been a pre-seed stage of the company that didn't even exist yet, but there was such intense demand and interest. Let me say that differently. There was such frustration with a problem that to which we held a solution that forming a company was really the only way to properly deliver the solution with the compounding and leverage that one wants to have, to express such a facility.

- Jeremiah: [00:13:43](#) So in all these cases, there's a combination of two things. It's the opportunity, and this compelling feeling, which helps you overcome that inertial friction of staying comfortable. And then, it is the recognition that on the other side of that feeling and that frightening gap, once you take the leap, there's actually something there to land on. You're not guaranteed to land on it. Unfortunately, that's not how this works, then there'd be no risk. But the idea that there is something there is so important.
- Jeremiah: [00:14:13](#) And I think back, there was a lesson I learned when I left King Street to go off on my own and build these machine learning models. A mentor of mine, who I called to say, "Hey, I'm going to go do this crazy thing." He said, "What, are you out of your mind? You don't know what you're doing." He says, "There are PhDs out in the world doing this stuff." He said, "What are you? Oh, great. You know some statistics. You know what? What are you going to do? Why would anyone work with you in this regard?" And I was shocked because this is the opposite of the sort of advice that we all want to give somebody. And I thought about that for a long time. And I called him back a couple of weeks later and I said, "Listen, I really, really appreciate your opinion here and that you're looking out for me." I said, "I really want to go do this thing. And I've resigned and I'm going off to do this."
- Jeremiah: [00:14:59](#) And then, the company he worked for was one of the first to actually hire me. He said immediately, "Great. We got work for you." And it was this incredible lesson that not only do you need to overcome your own personal inertia in these situations, but very few people will actually be willing to encourage you to take a risk for many reasons. For many, just psychological well-intentioned reasons like, "Why would I encourage you to do something crazy? If it doesn't work out, I'm going to get some of the blame. But on the other hand, if you go do it and it works out, then that's great. I can celebrate with you because, because we're friends, right?" So there's an asymmetry in all of this. And I think that one of the things that was most helpful for me personally, was the recognition that what you perceived as the obstacles to making this decision are often not matched by the benefits you cannot yet see.
- Jeremiah: [00:15:49](#) And this fellow was a good example of that. He rushed a support network that I had been building willingly or not, rushed into place. Your O'Shaughnessy family is part of that network. Right? Rushed into place when they heard that I was doing a crazy thing to say, "Hey, okay, you've made this

decision. You are mid-air right now. Let's see if we can work together to find a landing spot." Right? And that's an amazing feeling if you can put yourself in that place, but you can't do it before you jump. That's the tricky part.

- Jim: [00:16:18](#) And indeed. Yeah. I mean, I'm sitting here listening to you and as you know, I'm like nodding my head because I've started three or four companies, some successfully, others not. And I do kind of think, obsession is required almost. Because when I was writing what works on Wall Street, we would go to Nantucket for the summer with the kids. And this is back in the '90s, and you remember the size of the computer monitors, right? And so we had a Ford Explorer, and most of the back was taken up with all the computers I was bringing because I was running everything. And my wife was just like, "Man, you just got to be less obsessive." But the other thing that you said, which I really like, and I try to get people to understand, is that the null hypothesis, when you're going to friends or mentors and say, "Should I take this risk?" Is to answer, "No."
- Jeremiah: [00:17:19](#) Of course.
- Jim: [00:17:20](#) And I personally think that's insane. I mean, unless someone is coming to me and they're saying, "I want to do this. And it's the worst idea I've ever heard." Even then, I'll say, "Have you thought about this? Have you thought about that?" And if they are determined, I'm like, "Jump, jump." How would you, if you were talking to another young man or woman right now, you're having coffee with them... What's the one you always show? Compass?
- Jeremiah: [00:17:49](#) It's got to be Compass Coffee or we could go anywhere else.
- Jim: [00:17:51](#) You know, me, I drink green tea. So what the hell? I don't know. But so you're having coffee at Compass. You can see the passion in their eyes, but you can also see the fear. What are you going to say to them that helps them make that jump?
- Jeremiah: [00:18:07](#) I'm in this situation a lot, like actually. And I'll tell you what I'd say. The first thing I say is, I tell them that my opinions are off the run. It's really important to say that, because I know that I have an unusual set of opinions, in particular, with everything that we're talking about right now. And I don't want them to stop talking to people after they talk to me, because if you don't share whatever assumptions led me to my conclusions, you're going to have a bad time. So that's the first thing I would start with. And maybe that's a good disclaimer for our conversation today. I know that my opinions, they're not controversial

opinions, they're a little bit different, and they've led me to a really interesting place. And that's good. So, that's the first thing. Get that out of the way.

Jeremiah: [00:18:47](#) The second thing is to tell them the story I just told you. To tell them about my mentor, who told me not to do anything, and then was one of the first people who was willing to give me a helping hand. Because I want them to understand that the advice they are going to hear from people who are not me, is coming through that lens, and it's well-intentioned, and it may not be [inaudible 00:19:09]. They may not hear the outcome that they want or that they're looking for anything, but they need to reinterpret it in that way. So I share this story with them, as a way of sort of level setting.

Jeremiah: [00:19:18](#) And then the third thing is, I have a framework for evaluating decisions and in particular, sort of startups in companies, and it always comes down to the problem, not the solution. And so in this hypothetical, which is not so hypothetical that I'm helping someone decide, should I go start a company? Should I go join a company? The questions that I ask are number one, what is the problem? And by the way, this is one of the first places that I think people fall down a lot, because you will almost always get pitched a solution. And the question is actually, no, no, no, what is the problem in the way that a customer would say it to you? Not what is the solution you have and not what is the problem that your solution solves, but what is the problem that a customer referenced? So we have to get it into those words.

Jeremiah: [00:20:01](#) The second item is, why are you uniquely situated to identify this problem? What about you or your circumstances? Why are you doing this, in other words. What is the... I'm trying to get at what we were just talking about? What is compelling you? All right. Why you? Why not just anybody? For example, "Oh, well, I just won the lottery. So I don't need to work for the moment so I can take this..." That's a terrible reason to start a company. You're lacking everything we're talking about. But if you have some unique insight or some experience or something like that or a prototype, that's great.

Jeremiah: [00:20:33](#) And then the third question, which can be tricky too, is what is structural about this problem? Why are you building something that has a reason to exist beyond now and isn't just a feature on someone else's application or capturing a moment in time? Now, all of these three things are not necessary to form a great business, because you can absolutely capture a moment in time. The best traders I know, just going back to my finance days, that's what they do. they're not exploiting structural

differences. They're exploiting temporal little anomalies. And so that is a great way to start a business and move very quickly.

Jeremiah: [00:21:14](#) Also, you don't need unique insight. You might just be in the right place at the right time, and that's a fine reason to do it. And of course, you may in fact, only have a solution that people don't recognize not just the problem that they have and they don't know. So none of these things are meant to be gatekeepers to the idea, but that's the framework that I try to bring to it. And if someone has great answers on that, and usually what I end up doing in these conversations or I try to do on these conversations, is help somebody arrive at answers to those questions. Then, my advice will be useful. Then, Jeremiah Lowin's perspective will be useful if this is the lens through which you are thinking about your business. If you're not, I'm a really terrible person to ask for advice.

Jeremiah: [00:21:56](#) I'm an advisor to someone right now who does pass all of those things, but I am actually not a customer of the product, and I never will be. And so, that was the first disclaimer, is that I said, "I love what you're doing here. I love this. I love this problem set. I think I can be helpful to you in thinking about how to structure this thing." I said, "But I don't have a good product instinct for what you're doing."

Jeremiah: [00:22:15](#) So you can't listen to me when we talk about that. It's almost like the hardest thing here is to know when not to listen to somebody, then when to listen to them. And so all of this, I would try, and I take a long time to say anything, so it takes me a couple hours and a couple of coffees, but I would try to convey to someone how to listen to what people, or the market, or the company is really saying different than the words or the things that you observed that are what people say to you, because of all the biases that we have and the sort of asymmetric incentives.

Jim: [00:22:52](#) So again, I love your answer because we look at things in a very similar fashion. It's like, when Patrick walked into my office and said, "Hey, I think that there's a lot of problems that our clients have that we might have a really good solution to." And so we talked about it, I'm like, "So why are we going to have this solution? And he listed all of the reasons, which were very, very good. Some of which, by the way, were seeing around corners, right? Because that's the other thing I always try to do. I'm not always successful, but I always try to take things to the end state... What's the highest probability end state? I mean, that's how you get to commissions are going to be free.

Jim: [00:23:37](#) Because I started something very much like Canvas called, Netfolio in 1999. And the reason I knew they could be free was because I had a lot of brilliant guys like you working for me. And I said, "Sven," who was a Cambridge guy, "Sven, figure out how broker dealers who do custody... figure out how they make their money." " Yes Jim." So he comes back not even a month later with a deck, 20 slides, and I'm blown away. And it's basically back at that time, broker dealers who were big in the custody business, which by the way, is the blue collar part of Wall Street. Right? So no one was like, "Hey, we're the biggest custodian." Right? Jeremiah, they were making fortunes. And so it led me to call on Bear Stearns, which was the biggest custodian at the time, and I went... had lunch with the head of Global Clearing, and showed him the deck. And he was an ex-SEC guy, a lawyer, so very methodical. Bear Stearns had a gorgeous senior managing director dining room. So really, you're feeling a little bit like the chest pumping thing in the Wolf of Wall Street. Right?

Jeremiah: [00:24:55](#) I know exactly what you mean.

Jim: [00:24:56](#) But anyway, so he was a very, very smart guy. And so, I was going to go and do a pitch mode. And he just goes, he holds up his hands and says, "Let me do this." So silence, that's the other thing. Learn to shut the fuck up if somebody else asks you to, which for me, is almost [crosstalk 00:25:19]. So am I.

Jim: [00:25:22](#) So anyway, I sit there silently, takes him about seven minutes until he gets to the money slide, right? He closes the deck, looks up, big smile, says, "You are the first outsiders to figure out our business." And at the end of the day, we shook hands. That's what I loved about Bear Stearns. There aren't any investment banks like that anymore. We shook hands. We had a deal. They would custody everything for Netfolio. They would pay Netfolio a certain number of basis points on all of the holdings. That was our business model. It wasn't going to charge the customer. It was going to charge the intermediary. But anyway, I love this idea of what's the problem. I hear so many pitches, which is like, "We have this great new solution." And I was like, "For what? Who has this problem?"

Jeremiah: [00:26:16](#) Exactly.

Jim: [00:26:17](#) And so often, I'm going to actually change the order in which I ask questions because I like your order better.

Jeremiah: [00:26:27](#) Can I interject for one second? Is Netfolio, am I remembering correctly, that is where you were issued a patent?

Jim: [00:26:33](#) Yes, yes, yes. It's actually here in my journal boxes. I have a patent, you're going to love this, for the creation of and distribution of investment advisory services over a worldwide computer network.

Jeremiah: [00:26:54](#) That's incredible. I mean, talk about ahead of your time.

Jim: [00:26:58](#) Well, I'm not a patent troll. And it's so funny. It's like one of these... So I have a list of questions that brings me down to, am I going to like this person, or am I not going to like this person? And anyone who's a patent troll, I just know I'm not going to like them, because I'm kind of an "information wants to be free". Well, not all information. But anyway, but Patrick comes in, and I'm like, "Yeah, let's do it." And he executed much better than I did because our tech was better. My love of tech had finally paid off. It's like people who worked for me really hate it, and me saying to them, when they'd say, "What's your end game?" And I said, "Well, really my end game is that no other human being will work for me."

Jeremiah: [00:27:50](#) That's amazing. I mean, I've gotten a front row seat as you've built this out through Canvas and everything. It's been amazing. I joke with people. I say, "Patrick's our lead investor." Patrick's more like my business partner at this point, the amount that we talk and the sort of collaboration we have in and around our businesses. And being able to find someone like that is really incredible.

Jim: [00:28:12](#) I couldn't agree more. And the other observation I was going to make is when people ask you for advice, what they're really asking for you is to agree with what they want. They're asking you to agree.

Jim: [00:29:46](#) Let's get back to helping our listeners. And I'm sure that we have lots. Okay. So...

Jeremiah: [00:29:57](#) You just hit on a really interesting point there, which is, how do you hear or deal with information that conflicts something that you believe are moving towards? And this is just difficult, because we don't have to even go to such a philosophical understanding. It's just, nobody wants to hear somebody saying like, "Hey, I think you're wrong." And getting to that point where you have this sort of, how do you even defend against that? First, I need to give you all the context I have and all the experience I have. And then, I still might be wrong at the end of it. And it's just, it can be a very difficult thing to untangle. And so something that I try to spend a lot of time about, is thinking

about how could I be wrong? And this is not because of anything to [inaudible 00:30:39].

Jeremiah: [00:30:39](#) This is actually again, back to my finance days, where you would wake up every morning, you're trading derivatives. You wake up every morning, you should at least, and you say, "What is my edge here? Why am I doing this? Why do I believe that I'm going to go into this random number generator and come out with more positive numbers than the next person?" That's a crazy thing to say. And I think... But every trader in some sense, has an answer to that question. Must, must wake up with not just the drive, but the answer that question. Now, when I came over into the tech world, into the startup world, I was very surprised to discover that people do not compulsively ask themselves this question.

Jeremiah: [00:31:19](#) In fact, what they tend to do is they tend to rely on the fact that the company has a mission statement and a problem it's solving to motivate future actions, which is of course, terrifying. Because again, borrowing from our investing experience, one of the ways that we identify great investors is that they are right, of course. But more importantly, that they are right when everybody else is wrong. It's not enough just to be right to deliver alpha and have an issue. It must be right when everybody else is wrong. And so when you are a startup, if part of your core philosophy is not the acknowledgement that in order for you to succeed as a startup, the rest of the world must in some way...

Jeremiah: [00:32:03](#) ...for you to succeed as a startup, the rest of the world must in some way be wrong, then you will fail. And so in a funny way, you must find a way to incorporate opinions that you believe are wrong, or conversely, said another way, that other people have that are different than you. It must be true that there is disagreement there, or your startup is not doing something innovative and interesting by definition. Perhaps annoyingly to some of my colleagues, I say that everyone should wake up every day, we did this in the very beginning when Prefect was a nothing of a company and a little baby company, and we would say, wake up every day and ask yourselves, "Why is Prefect a small company?"

Jeremiah: [00:32:41](#) And it's an important question to ask, and if we're not trying to answer it in a way that's instructive or actionable, we're actually trying to answer it in the contrapositive. We're trying to say, "Well, if we were a big company, what would be true?" And two answers emerge. One is that our product might be bad, and the other is that people might not know that our product is good.

And the reason that those are the two things that emerge are because, again, the contrapositive, if our product was amazing and everybody knew it was amazing, then, with a little bit of other details filled in, we'd be a big company or some big company would be doing it.

Jeremiah: [00:33:18](#) So we must every morning wake up and grapple with these questions. And a lot of times, I've now discovered, people, especially joining startups who have a very idealistic, and "of course we're doing this" and "making the world a better place" kind of cliché garbage, don't really like to confront this reality that the fact that the company is small, is indicative of the fact that people disagree with what the company is doing at some level. And if each time the company grows, and we've been fortunate to see our company grow a few times, each time it's reflective of some proof point going into the world that may be actually, this is resonating in a new way.

Jeremiah: [00:33:57](#) And so I think that not only do we have to talk about how do you incorporate a diverse set of opinions and disparate opinions, which we have some structures at Prefect to help us with that, you must first be open to the idea that people will disagree with you at all. Otherwise you fall into a purely confirmatory stance, and listen, at the end of the day, I like to think, I hope to think that I'm good at what I do, but I'm not right a hundred percent of the time, I'm right significantly less than that. When I was trading, I needed to be right 51% of the time, or depending on my [inaudible 00:34:33], I could be right less than 50% of the time, as long as when I was right, I was really right. And that of course is the basis of what a VC portfolio even is, right?

Jeremiah: [00:34:42](#) So the idea that you need to be right is actually much less important than the idea that you need to be right when it matters, and when other people disagree. All of what we're talking about so far, we haven't talked about how to put this into practice. But these are, I said earlier, my base assumptions are a little bit maybe different, just from my own personal experience, in my own career, and especially as a risk manager.

Jeremiah: [00:35:07](#) Being a risk manager forces you to just think about the world in this very weird, probabilistic way. A lot of people are not particularly comfortable with thinking about it that way, it leads to some weird conclusions. But as a consequence of that, I have brought into this, this weird set of opinions that are basically premised on the core assumption that I am wrong, and that we're doing the wrong thing, and that everybody knows better. And it's this constant fight to prove that's not true, as opposed

to the blind pushing the boulder up the hill and hoping that you're almost at the top, which is just a terrifying position to find yourself.

Jim: [00:35:41](#) So yeah, Sisyphus, right? Again, I'm not disagreeing, because I agree, obviously, because I think that the way you think is the way you should think. I find that semantically, we seem to almost be prisoners of language, a lot of people are word thinkers. And the limits of my language are the limits of my world, Wittgenstein I think.

Jim: [00:36:31](#) Yeah, Robert Anton Wilson I love. He was a very quirky, but way-ahead-of-his-time guy, and he said, "I don't have any beliefs, but I do have several suspicions". But so when you posit whatever your thing is, you make it a model and models have a set of characteristics that are very different than beliefs, right? Models are usually based on evidence, usually based on, depending on your ability as a researcher, the best available evidence. But models, and here's the critical thing, are meant to be tested. They are meant to assume that they are in error, either great or small.

Jim: [00:38:42](#) I've seen this with investors so often, and it's very difficult, and this is now leading to my question for you. How do you get people to buy into this? Because this is not a natural way to think. How have you found with your team, waking up, it's like, "How could I be wrong? Maybe this isn't the solution." How do you get them to do that?

Jeremiah: [00:39:11](#) I think there's a lot of ways that we try to foster this idea, and I don't know if it's successful at the outset always. But hopefully as the merit of the idea is born out, it gets a lot easier to subscribe to it, but it does have a lot to do with words and vocabulary. And there's a lot of what you just said that I want to unpack. Look, at the end of the day, I love words and the way that you say such [inaudible 00:39:35] puns, I know they're idiotic and the jokes that come from them are stupid, but the reason that I genuinely love them is because I think that this ability to say things in these interesting ways, it's no surprise I have five of them on my desk right now, because I have to send these to new employees at Prefect. I've got Hitchhiker's Guide here, Hitchhiker's Guide to the Galaxy, which is my favorite book.

Jim: [00:39:58](#) Another love we share.

Jeremiah: [00:40:00](#) Exactly. One of the reasons I love the book is because of this uniquely British, dry wordplay that it is full of. There's a story

there, and there's great humor there, and there's a lot of things there, but at the end of the day, the reason that I keep coming back to this book and I keep rereading it is because I love the way that it's written. I love these, "they hung in the air like bricks don't," and I love this, "almost exactly, but not entirely, like tea," or whatever. These phrases and these descriptions are so evocative of something, and then the power of how you say something. And something that we spend a lot of time thinking about is that, how do we say something? What words do we use? How do we express an idea?

Jeremiah: [00:40:56](#) That can be a challenge. It can be very hard to tell someone that there's a way to do this, because frankly, I don't know necessarily. It's a lot easier sometimes to point out bad examples, to point out guardrails, to say, "This is an example of inertial thinking," and "Don't do this," can be a lot easier than saying, "Oh well, this was the answer you should've come up with." And so I think that one of the ways that I invite my team to participate and take on this way of thinking is through examples and through stories and through illustrations. I'll share one with you, I know this is one of Jamie's favorite all-time stories that I've ever told him, is my experience when Lehman was filing in 2008 in September.

Jeremiah: [00:41:48](#) This story was first of all, very formative for me. I was early in my career. I was helping oversee this massive book and risk managing it and all this stuff, but it was sort of an impossible challenge in the same way of what we're talking about now. There was this cataclysmic event that was likely to take place, and there was absolutely no way to be sure if it would take place, when it would take place, or any of the consequences and ramifications of the event.

Jeremiah: [00:42:17](#) And so how do you prepare for it? You're the risk manager, or I'm the risk manager in this story, right? How do you prepare for this? And it is tempting to fall into this belief that, it's the story I tell us, no hedge fund has ever gotten into trouble, and then the risk manager has come in the room with a cape and hit the red button and saved the day, and magically, the P&L comes back. That's not how this works, that's not the risk manager's job. If the risk manager is called in after this has happened, it is probably too late. The risk manager's job, and of course, for our listeners to extrapolate the role of anyone who's trying to account for uncertainty and decision-making, is to understand how things behave, good and bad, and what are the range of outcomes?

- Jeremiah: [00:43:06](#) And so the approach that we took, and I was lucky, I had a wonderful mentor and boss in this role who helped me learn this, than I had had previously, we started telling stories. And so this is the idea that I've tried to carry forward today. So we didn't know what would happen. So for months before, weeks certainly, we would sit down every single day with one or two folks from our trading team or from the LC, and we would talk through the possibilities. We'd just start with a prompt, okay, Lehman's going to file, gold's going to do this, and oil's going to do that, and equities are going to, and credit's going to go here. What happens? And then we'd just talk through a scenario. And it can be hard to get people to do that, because everyone around the table knows that the things we are saying will absolutely not happen.
- Jeremiah: [00:43:55](#) When I was little, I used to have this belief that anything I wanted to happen never seemed to happen. I'd want this, I'd want to get this present, or I'd want to win this, or I'd want to get that. It would never happen. So I concluded that anything I wished for would not happen, and I would start wishing for all these things that I didn't want to happen, because I assumed that's how the world works.
- Jeremiah: [00:44:13](#) And it's a little bit like that. Everyone around the table knows that this is not how it's going to go. And you could shrug and say, "So what's the point of this?" But the point is that it's building up an experience and an intuition for an event that hasn't happened. Which is weird, but you do this enough times over enough weeks, when the actual event takes place, you have this real experience to draw on for a situation that's never happened before. And it's a crazy thing to think about. And so when Lehman ended up filing, it was a Sunday night, it was actually very early Monday morning after a special credit trading session, that was one of the craziest things I've ever seen.
- Jeremiah: [00:44:50](#) But what struck me was how orderly the whole thing was. At the end of the day, it was quiet. The trading floor was silent, it was orderly. Our software wasn't designed to handle the situation that was going on, because it was this weird trading session that might get torn up, so we were recording a lot of things by hand. It was just a weird, weird situation. And I remember after, I was sitting in the office, it was two in the morning, something like that. We were just waiting and waiting and waiting. And I remember how quiet everything was and then they suddenly filed. And we went back to work, and it was this idea that the sun was going to come up over the city the next day, and nobody knew yet that this thing had happened,

which was so hard to imagine or anticipate. And yet we had just processed in an extraordinarily orderly way, like we had seen it before, because everyone involved was able to borrow from the stories, from the experience.

Jeremiah: [00:45:47](#) And so how do we fast forward that into other situations, other less cataclysmic situations? And again, it's about this willingness to explore hypotheticals and talk through it, and think about it and really understand, what would happen here, and what would I do in here? And what would we do here? Part of our culture, therefore, is to have that exploration. So my favorite book, after the Hitchhiker's Guide, is Ed Catmull's Creativity, Inc. It's the story of Pixar.

Jim: [00:46:16](#) Oh, great book.

Jeremiah: [00:46:18](#) It's just phenomenal. So the Hitchhiker's Guide to the Galaxy goes to everyone when they start at Prefect. Creativity, Inc. goes to everyone with a job offer to show them this is the type of environment we aspire to, and to make sure that it's one that they want to participate in. And one of the key, key, key elements of the culture that emerged at Pixar was this idea that if you are engaged in a creative pursuit, which is to say, it's not like two plus two equals four and we're just trying to figure out the end of the equation. It is the product of research and intuition and emotions and psychology, and delivering something that doesn't exist today. You have to recognize that all ideas start bad. And therefore what you can't do is go into the world and say, "Aha, this is the good idea, this is the best one."

Jeremiah: [00:47:05](#) Instead, your job is actually to remove the ones that are going to actually turn out to be bad, so that the ugly idea, if you will, has a chance to grow into a beautiful swan, to tack a metaphor on that I didn't start. That idea is so important to this, and it again has to do with willingness to explore and correlatively, willingness to fail, and fail fast. So failure has taken on this mythological proportions, I think, in the startup world. And we've rebranded it as pivoting, and you can be proud of it. I think that's ridiculous. That just means you've let a bad idea go too far before you discover it.

Jeremiah: [00:47:49](#) Now, I'm not saying it's not avoidable or anything like that, and if I end up in that position, I'll eat these words and I'll say it's the greatest thing ever. But on its surface, surely there were signs that were available to an astute observer to help you not have such a costly failure. Pivoting is an extraordinarily costly form of failure. And so part of this, again, part of how we would

communicate these ideas, is to embrace the idea of iterative work, lots and lots and lots of failing at a time when failure is extraordinarily cheap. And therefore it doesn't count as failing, it just counts as learning. And I think that at some point, when learning crosses the border and becomes failing, now you have an actual problem. But before that, when it's cheap, you don't.

Jeremiah: [00:48:33](#) So all of what I'm saying now is the types of cultural ideas that we try very hard to bring to bear within our company, to get people comfortable with, but also familiar with, willingness to fail. My CTO, Chris White, comes from academia. And so to him this is the most natural thing in the world, is to learn in this way, and to learn and be open and be candid about the things that didn't work, even as much as the things that did. So one of our standards at Prefect is saying, "I don't know."

Jeremiah: [00:49:09](#) And it turns out that that is a very, very, very hard thing to invite people to say. We all want to say it. We all want to subscribe to a philosophy, which of course, how many folks have lifelong learner or something like that on their Twitter, but we all want to believe in this. But it turns out all you have to do is say, "I don't know a lot." Those are the hardest words in the world to say, but that's all you have to do to actually be a good learner. And you have to be willing, you have to be willing to say these things. You have to be willing to say to somebody, "Hey, you know what? I actually have no idea," or "I don't understand what you're talking about."

Jeremiah: [00:49:43](#) Those are really hard things for someone to do. You have to either have intense confidence in yourself to show that vulnerability, or you have to be in an environment that really encourages it and allows you to develop that confidence. And so that is how we really try to do this, is through a culture that recognizes and rewards these ideas, these signals that we are constantly learning, and through learning, failing, as opposed to putting pressure on people to always deliver the best and correct outcome. Because I don't think that it's possible.

Jim: [00:50:22](#) Wow. So again, this is why I like you so much. It's because you're confirming all my priors.

Jeremiah: [00:50:29](#) Exactly, see, here we are, I'm just telling you what you want to hear.

Jim: [00:50:34](#) So first off on the "I don't know." I say, "I don't know" a lot, because I don't, and the only way I'm going to ever learn something is to say, "Hey, I don't know, what are you talking about? Please explain, enlighten me." Maybe I'm just built

different than the average person, but it seems like the most logical way to live your life to me, to just say, "I don't know." Because when you say, "I don't know," I can watch people visibly relax around a table. So I think it's this idea that failure is bad, and "I don't know" means I'm not prepared, which it doesn't. It simply means I don't know, and okay, we'll tag on, but I'd like to find out.

Jim: [00:51:33](#) And so I learned this thing that I call premeditating, which is Monte Carlo simulations in your head, and better to write them out, because when you write, it's a forcing mechanism. If you don't understand something, try writing about it, and that will quickly teach you you have no idea what the fuck you're talking about, which I often don't. But so my grandfather called it premeditating and I was like, "What is it? What do you mean by that, Granddad?" And he's like, "Think about an objective you have, whatever it is." And he goes, "And then vector..." I don't think he used the term vector, to be honest, he was born in 1885.

Jeremiah: [00:52:17](#) That's a Jim-ism, it's an acknowledgement.

Jim: [00:52:21](#) Yeah, so vector it out, in as many ways, create as many, he would call them histories. So he was ahead of his time there, because basically what he was doing was creating alternate histories. He was not a fan of the many-worlds interpretation of the quantum physicists. Anyway, so he would say, "As you do this, what you're going to learn is, a. Do I really want to achieve this objective?" Because a lot of the vectors are going to lead to really negative things. And so you don't naturally just try to think of negative things, right? Especially a positive person, optimistic person. But what's cool about it is what you say, and I love this idea that you tell stories, because we are, again, you got to get back to human evolution, societal evolution, cumulative societal evolution being way ahead of us as human beings, as a species.

Jim: [00:53:26](#) But look, we're storytellers. And for a quant to admit that, I used to say to people, I tell stories to people to tell them why they shouldn't pay attention to stories, but you've got to have stories because it gives you that base that wouldn't exist without it. And I love your idea of, okay, so this happens and it's something that people are just like, "That could never happen." Well, let's just say it does. And so when something actually happens that's close to one of those things that most people couldn't conceive of, you, your people surrounding you, they have it in their knowledge bank, which I just think is incredible. Also, as to Adams, I have read everything he's written, I love

him so much. And I had this insight, which is once you start thinking about Douglas Adams as a philosopher rather than a comedic writer, your mind gets blown.

- Jeremiah: [00:54:32](#) Yeah, absolutely. My wife, for example, thought I was ridiculous when I said I'm going to start sending people this book. She said, "Why are you sending people this book? I get that you like it." I said, "No, you don't understand, there's just something about it, there's something there." I don't know when I first read it, maybe I was nine years old or something like that. I've read it every year since I was nine years old, and I always find something new, some new perspective.
- Jim: [00:54:56](#) Always, always.
- Jeremiah: [00:54:58](#) It's like the Bible, it's like you find something that helps you explain your life in this moment.
- Jim: [00:56:27](#) But the other thing that I wanted to ask you about is, okay, so you've got the team that you hope is going to work out, right? Nothing's for certain, but they bought into Creativity, Inc., they've enjoyed Adams as either a philosopher or a comedic writer. So what was the first thing? What was your first, "Oh shit, I'm screwed. I am screwed." And how did you respond to it? And you can be general, you can talk about the way you thought about it.
- Jeremiah: [00:57:08](#) I think I felt that so many times, because I'm just a paranoid person. I blow everything out of proportion. But very publicly, we felt that way exactly a year ago, when COVID emerged three weeks after we launched a commercial product. And that was a real "Oh shit" kind of moment. Not because we immediately understood that it had some impact on us, but because it meant, even if you didn't understand how this was going to impact business or what this meant for business, and by the way, the way it played out is vastly different, if anything, the data world has exploded as a consequence of this. I apologize, there are people mowing the lawn behind me. Can you hear that?
- Jim: [00:58:01](#) That's Jamie's second job, right? You took him on?
- Jeremiah: [00:58:07](#) Exactly, Jim. Jamie is already [inaudible 00:58:07] mows my neighbor's lawn.
- Jim: [00:58:07](#) He's such a sweet kid, such a sweet kid.

Jeremiah: [00:58:10](#) We'll actually have to edit this one. Yeah, he's doing a great job though. I'll keep going regardless. So COVID sets in and we've just launched this product. And the only thing that we can say with certainty is that the rules that used to apply to business and in particular to startups, do not apply now. And I think we wrote that in this blog post. We said we're not sure exactly how this is going to play out, but if you are doing business in 2020, and you think that a strategy that you made in 2019, or in our case on February 24th of 2020, is still valid, you are in for quite a surprise because it cannot be true. It just cannot be true. Whatever was optimal on a forward-looking basis last year cannot be optimal anymore under the informations that we have.

Jeremiah: [00:59:03](#) I wouldn't call it an "Oh shit, we're going to fail" moment. I would call it an "Oh shit, everything that we've spent all this time building, the stories, the everything, we need to do again, we need to reinvent our universe and our understanding." And so what I did with my team, this was in mid-March of 2020, is we made a new set of core assumptions about the world, and they were scary, and there were six of them. They were draconian assumptions and they were designed, and again, I sound like a broken record, so much of this is just like, I spent my career as a risk manager. I just had this way of thinking. So they were designed for something that we call right-way risk. If we were wrong, we were going to be better off than if we were right. That was the important thing. And of course, in finance, more often we would talk about the perils of wrong-way risk, where if you are wrong, you're going to be way more wrong than you think because of correlated outcomes or whatever the case may be.

Jeremiah: [01:00:01](#) And so that was our mission in that week in March, was to define a world that was potentially real. Potentially the world was going to be as bad as we and many of our advisors thought it was going to be, but if we were wrong, we would do better. And so the goal was, if we can survive in this crazy world, then any deviation from this, to the upside if you will, will result in a better outcome. I've been thinking about that a lot, because obviously we recently went through the one-year anniversary of this decision processing, and just thinking about how far we've come and how the company has changed and grown since then, and thrived, honestly. But going back to that time, when you asked that question, that's what immediately comes to mind is this, "Oh my God, everything that we've done, every plan that we've made, everything we've put in place really has to be reinterrogated now. And we may not be in the position that is

optimal under these new assumptions." And that was quite a frightening moment.

- Jim: [01:01:06](#) And do you find that your team looks to you for reassurance? So during the great financial crisis, several members of my team took to stopping by my office every morning, and just saying hi. And only did it come out later that one of them, one of the lead portfolio managers, we were out for dinner, and he was like, "Do you know why, by the way, I did that?" I went, "I just thought you were saying hello." And he goes, "No, no, no. I was seeing what your mood was." And he goes, "The fact that I could look in and nothing had changed, Bach was still playing, there was no TV moved into your office, there was no Bloomberg on." And he goes, "That literally carried me through." Do you find the same in your world?
- Jeremiah: [01:02:07](#) I would guess that it would give me a little bit too much credit if that were strictly true at Prefect. I think that in some ways the scariest piece of this for all of us, myself included, was the uncertainty about the future. And given everything that I've just said to you, I certainly was not confident enough to tell people, "And this is how it's going to go out. This is how this is going to play out." And so I was unable in good faith to project the fact that I had some confidence, which I think would be what you're asking about, was I able to project this reassurance?
- Jim: [01:02:45](#) Yeah, just to interject, I don't think it's that, they weren't looking for a pep talk. I think that they were looking for a way, because I was highly uncertain and said it to them, daily. I said, "Okay guys, all bets are off here. We won't be selling another long-only portfolio for probably another five years. Just want you guys to know that. We're going to work on technology and making this the best tech asset manager in the world." So it wasn't like I was brightness and sunshine. I think what it was, was simply the tone that I was taking. Again, maybe I'm just weird.
- Jeremiah: [01:04:03](#) ... Is, I was able to say, "Look, this may be a frightening time and uncertain time. We don't know how we're going to get through this, but there is a way to get through that. There is a way to ensure that we come through this okay. And for me personally, it happens to be through a skill set that fortunately I have developed. And I can't promise what the outcome's going to be. I can't do that, but I know how this can play out. I know what it will look like to succeed in this regard." And so, maybe in the absence of providing an outcome or a target, although certainly we did, "We're going to do this and we're going to adjust our strategy like this and we open source a whole bunch of stuff."

And we moved very, very, very fast to take advantage of the dislocation and the opportunity.

Jeremiah: [01:04:49](#) But I would hope looking back that the role that I was able to play for my team was helping the company move forward and keep a sense of progress and direction without giving anyone a false sense of hope or security that I myself didn't have. And I think that can be a difficult sort of balance. Look, at the end of the day, I think a CEO's job in many ways is to just have an opinion. So, as much as you and I said, I don't know, as a virtue before. At the end of the day you cannot always pass the buck. I can't walk into a room in the middle of March... And what should we do as [inaudible 01:05:29] say, I don't know. And leave [crosstalk 01:05:32], right? And so everything that we're talking about today sort of comes, well did, came to a point in March a year ago, because there was no shrug.

Jeremiah: [01:05:45](#) There was no opportunity to, "Oh well let's just go learn." It was, we either were ready or we were not. And the good news is we were ready and history has demonstrated that. But I don't know... I love the idea of folks kind of peeking into your office and seeing the [inaudible 01:06:03] and the constants in your life reflecting the fact that business will continue as usual. It will have a different shape and a different color and a different form, but it will be business as usual. And I hope that I was able to convey some sense of stability to my team at the time. I think... I don't know. I hope I did. I hope I did.

Jim: [01:06:23](#) Well. Yeah. Retrospect, I always worry about retrospect because everything seems obvious in retrospect, right? Because I believe that our brains, once it's happened, all of the alternative hypotheses that we were actively thinking about, get swept down the memory hole. And so this is why hindsight bias is so pernicious, not just in investing, in life, right. Because people aren't aware that our brain updates our memories. Literally this is one of reasons why I'm such a fan of keeping all these journals, because nothing is better than repeatedly going back and being called a liar in your own handwriting. Right. So just as an example, somebody, we were talking with a friend and he was like, I don't know how we got onto it. But it was like, "Well, that first Gulf War that George Bush Sr. launched, because Iraq had gone into Kuwait and you were in favor of that, right?" I went, "Oh, absolutely, absolutely. I was in favor of that." No, I wasn't.

Jeremiah: [01:07:35](#) There you go you got called out by yourself.

Jim: [01:07:36](#) I got called out by me. And so I'm like reading this. I'm like, I can't believe it. So because I do this exercise continually, I really understand that our memories are unreliable narrators. And so the one thing that you said that I really like though, is what you've got to do, you do have to have an opinion as CEO, right? Number two, demeanor alone can give people confidence, right. And I love the disambiguation of movies, for example, and like Apocalypse Now. And so you had the character who wanted to surf the beach and you had Marlon Brando, which is of course it itself was a remake of another story anyway, Heart of Darkness, which I'm sure you've probably read.

Jeremiah: [01:08:32](#) Classic, I have.

Jim: [01:08:33](#) Yeah, it's fantastic. Anyway, so it, when you're able to create an environment that everybody is uncomfortable... Or sorry, comfortable to a certain level with uncertainty, that is going to be a much more flexible and more durable relationship, I think then, because everybody, I think one of the greatest flaws that we have as human is, we're walking around with these quantum computers in our head and there's no owner's manual right. And so this idea that is actually quite true and that is, people tend to believe people who assert things with no doubt, right. "This will happen. This is why it will happen," right. And very few times do people keep track, right?

Jeremiah: [01:09:33](#) [crosstalk 01:09:33] thing in the world to me. It terrifies me. And again, it's just from all the reasons we've just said now, you cannot be right.

Jeremiah: [01:12:32](#) No, but let me stretch that a little bit, because I think there's an interesting nuance there. So many people who know me view me as a risk averse person. And frankly, much more than I probably am, the truth is I was paid to be risk averse, right? I'm professionally risk averse.

Jim: [01:12:51](#) Right. Which is a different thing.

Jeremiah: [01:12:52](#) Which is a different thing. However, I will be the first to say, I am not risk seeking. I am certainly not a risk seeking person. And in fact, I think a lot of what we're talking about today is how I've tried to combine the fact that I must be risk seeking to do the crazy stuff that I'm up to with a mentality that is anything but that. And so I think what's interesting there is on that sort of 49 51 line is, if I can gain conviction that the world in its either inertia or innate risk of firstness has settled on a suboptimal outcome. Then I can actually push for what appears to all, to be an extremely risk seeking activity without it actually being risky.

Jeremiah: [01:13:33](#) And I think that's sort of the name of the game in a lot of ways. That is what we're talking about here is, how do you make decisions that are risky? And again, the word risky here means uncertain, not bad, just uncertain. Which includes bad outcomes, but how do you make a decision that is uncertain with confidence? That's sort of at the root of all of this and not something that's foreign to your podcast, right. I think even in the title here, Infinite Loops is about this process that we're constantly going through to make these determinations and some of the tricks that we use, one, I love your premeditation idea. One similar thing that I learned from someone who runs a hedge fund is the idea of pre-mortems.

Jeremiah: [01:14:18](#) The opposite of a post-mortem where you... And I do this with my team all the time. And I say, "Okay, if perfect runs out of money in six months, what happened? The product stuff's growing at crazy rates it's growing, what happened?" And it's not for someone to predict what will happen. It's for someone to give us a way to talk about a consequence and build that experience in advance. And all of these are ways of taking the risky set of outcomes and collapsing them to a better set of understood worlds that we can explore intelligently, no matter which one actually manifests. In fact, maybe we've talked a lot about sort of abstract ideas today, and maybe I'll share how I actually tried to explain the decision making that we do as a consequence of all of the assumptions we just laid out. Because maybe that's... Just between you and me and Jamie and 2 million of our closest friends listening, maybe that's something to take away from all this.

Jeremiah: [01:15:20](#) I think an important realization for me personally, is it's not our job to make the best decision at any moment, right? It is our job not to make a bad decision. And that is wildly different. And that is I think, whether you agree or disagree with all the things that we're talking about today, I think that is a conclusion you must draw if you buy these assumptions is that they are innately premised on the idea that the best decision is not known to you at any time, except in hindsight, in retrospect, as you just said. And therefore what strategy do we pursue, and it's not the sort of expectation maximizing strategy. It's actually the avoidance of the expectation minimizing strategies. And so how does one actually do that? And so the way that I try to explain this to anyone who is willing to sit with me long enough to let me get to this point, which is not many people.

Jeremiah: [01:16:14](#) Imagine that you have a hundred paths that you can choose from. You have these many, many different choices. Some of them lead to good outcomes, and some of them lead to bad

outcomes and they represent all the things that you could choose under the circumstances. Many people will come into this and try to choose the best path, the best path forward. And what I counseled to do is say, actually try to remove 90 paths. Try to eliminate 90, leave yourself 10. Under the assumptions that we have set up thus far in this world, those 10 are indistinguishable without more further efforts, right? Without more work, which means by definition, they're all best. It would take more work to find one of them being better than the others. So we've got 10 paths, let's go down one of them, let's pick it up random because again, under our assumptions, they are indistinguishable without furthermore, let's pick one and go down to at random.

Jeremiah: [01:17:08](#) When we go down that path, we might be greeted with another a hundred options as we continue to move down the path. And that's okay, we're back in a position where we can do work to eliminate more choices and continue moving forward. Or we might actually discover that this is actually a bad path to go down. And again, one of our jobs is to determine that as quickly as possible and come back to the branch point. And because we didn't waste our time trying to identify only one viable path, we have nine other options without doing any other work.

Jeremiah: [01:17:39](#) We already can recover from the failure and move forward in one of nine different paths and see if that leads us to a more optimal place. And so by not wasting time going from 10 remaining options to one remaining option. Not only do we save that amount of time, which if we're honest is probably a waste of time in a world in which there are a hundred possible paths, it is ludicrous to suggest that there is only one that will be obviously correct under the circumstances. And there wouldn't have been 100 in the first place. And my whole example becomes a tautology and none of this matters anyway.

Jeremiah: [01:18:13](#) But if I can go down a path, fail, come back and not have to start my search again, to find the second best path and go evaluate all 99 options that remain. But instead just pick at random from the nine that are there and move forward, to me that maximizes the true, interesting quantity of a startup in this case or anything, which is to thrive under any circumstances, right? And the way that this plays out, and again, we just talked about in hindsight and retrospect, the way that this plays out is at any time, it should be true. It's a weird thing to say, it should be true that if you look at perfect at any moment in time, the path we took to get there should be suboptimal in retrospect. And that is a consequence of our decision-making process, which again, can

be very uncomfortable for people to live through. It's a crazy thing.

Jim: [01:19:07](#) Yeah. But it is the right way, and to my mind, the only way. If you want to be successful in life, this isn't just for startups. This is for like everything. And avoiding the obviously shitty paths, right? There's this notion again, I think it's a function, I blame Aristotle, right? It's a function of, yes, no, zero, one, black, white, only one path is the right path. And if you're not on that one, you're wrong. No, not that at all. It's, let's try to remove all of the really shit decisions, put them over here. And as you say, 10 of them flip a coin. Because honestly, if you're honest with yourself that... It's why I always add directionally, right. So I think base rates are really important, directionally.

Jim: [01:20:11](#) Cannot tell you the number of people who've read my book, What Works on Wall Street. And it's like, "Well did a drawdown this big happen?" And it's like, "Yeah." "Well when?" And you point to it, "Well, that was 40 years ago. I mean, this is a different world." And it almost seems like it's human nature to believe that you can always pick the right outcome at the right path and be correct. But here's the hobbling part, in my opinion, that hobbles you beyond any measure because you can't do that. So you're trying to accomplish something that itself is impossible. And so-

Jeremiah: [01:21:00](#) That's that's the horribly frustrating thing too, I think someone, especially in a context like a startup, which is if you had perfect information and you had perfect foresight, then you could choose the best outcome. But to the degree that either of those is compromised, you can't. And just to borrow from earlier in our conversation, let's not forget that the consensus view of what we're doing is that it's wrong.

Jim: [01:21:22](#) Right.

Jeremiah: [01:21:22](#) So it is not possible that any of this is obvious because otherwise that wouldn't be the consensus view. And so under the information set and under the... It's almost like we have to collapse the wave form to the best, the most probable outcome that lets us make more choices in the future.

Jim: [01:21:40](#) Bingo.

Jeremiah: [01:21:40](#) And that's actually how I... Yeah, that's how I define this internally is, we choose options that preserve options. We defer decisions until we have more information. And the worst thing

you can do... Now, how do we sort of culturally enforce this? We don't sit and ask somebody, "Well, which of the 90 options have you rejected?" And all this garbage, but an easy way to do it is the stronger someone believes something, you just ask them, "Okay, why do you think this?" And just see how strong the proof is. And just proportionately. If you're arguing for one outcome, you should have proportionately convincing evidence. And it's probably very frustrating to my team that's my most common question whenever someone says, "Let's do this." I said, "Great. What ROI do you expect from this?" How do you benchmark this decision? How will we know that you were wrong? And if there's a great answer to that, then we don't even have to think twice. If there's a clear way to know that this is a wrong decision, we don't have to waste any time. Yeah. Go do it.

Jeremiah: [01:22:41](#) As long as we can fail cheaply, what do we care? We're not going to waste any more time arguing over whether it's good or not. The world will reveal if it's good or not, as long as we can get out of it cheaply and that means that we preserved optionality in some sense. And you're right. If people are selling [inaudible 01:22:57], and they're happy to do it, then we should be buyers of options to take advantage of.

Jim: [01:23:02](#) Yes. Because what you've just outlined is I think one of the things like, so we started investing in startups and kind of new situations through O'Shaughnessy family partners as you know.

Jeremiah: [01:30:01](#) Yeah. I think one of the core arguments here, and again, I'm trying sensitive of your audience and my audience to bridge my finance days to my current days, this thinking this way is an arbitrage. It's a way to take advantage of the bias. It's what you do as a Quan. It's what I used to do as a Quan, except you're [inaudible 01:30:23] with the agency as a person you are taking advantage of the fact that what we're saying is uncomfortable to people, therefore they are willing to take steps to avoid it. That therefore creates the opportunity. [crosstalk 01:30:37]-

Jim: [01:30:38](#) Yeah. And the most important thing you said, I think, is it would be horrible if everyone thought this way, because Malcolm Gladwell, I know it's not fashionable to cite him because he's been getting beaten up by people, but he had this great book on how to talk to strangers. And one of the things that I took away from it and like wrote down and kind of underlined, we default to honesty, human beings. And there's a really good evolutionary reason for that. Because that's what allows us to cooperate. That's what allows for social evolution to occur,

which by the way, power laws us as a species, right. Because if we can write it down, right.

- Jeremiah: [01:31:22](#) It compounds out yeah.
- Jim: [01:31:24](#) Yeah it compounds out. So I really agree with you. And what's so funny is I don't feel any compulsion to stop saying think probabilistically, because I know people won't, right. And because it's really good for our species that we do default to honesty that we don't think that way, right. Because if everyone suddenly stopped trusting everyone else, that's a bad place to be. I can't remember who said it, but it's a great quote. It was something along the lines of... Go.
- Jeremiah: [01:32:05](#) Sorry, no go ahead.
- Jim: [01:32:07](#) No it's like, "We're three meals away from pure savagery," something along those lines.
- Jeremiah: [01:32:13](#) I think so much of this has to do with how do we avoid sort of... Well, I was going to say, how do we avoid sort of the complacency of like being in the world as it is. The truth is that's actually an awesome place to be. And sometimes I'm like, ah, I wish I could sort of stop worrying about all this stuff that I worry about. But if you are willing to push the envelope a little bit and sort of live in a world that's very scary because it involves a risk, which is to say uncertainty, you can actually have a lot of fun because you can do cool things. You can get cool things done. The trick there and we keep saying it right, the trick there is just to make sure that you live another day.
- Jim: [01:32:52](#) Bingo.
- Jeremiah: [01:32:53](#) [crosstalk 01:32:53] just to just keep going in. And I'm thinking of [inaudible 01:32:59] books, I think are instructive here with the Thanksgiving turkey whose life is amazing until it isn't and all these ideas of being fooled by randomness. But Antifragile is actually one of the most powerful ones for me where it's this idea, I use the word robust so often that someone on my team has made the slack bot in prefect slack, anytime anyone anywhere uses the word robust, it chimes in and it says robust. And then it attributed to me.
- Jeremiah: [01:33:22](#) So I am not just saying this for your benefit. I would say this to anyone who will give me a time of day, that the key thing we have to do is build sort of foundational structures to allow ourselves to thrive under any circumstances and everything

we're talking about today is, how can you do that... Again, conditional on the idea that this is somehow suboptimal. Like you can achieve a much better positioning, but you'd have to be willing to buck the consensus to get there. And that's sort of what we endeavor to do as a startup. And that's what's so frightening about building a startup, is that fact.

- Jim: [01:34:50](#) But I just got done rereading David Deutsch's *The Beginning of Infinity*. And it was funny because I was thinking about that turkey thing right. And I'm like, "That's a bad explanation. I'm not going to use that example anymore." Because somebody, if they're really clever, would say, "Yeah, but isn't there a better explanation? Isn't the better explanation to know that there's a holiday in the United States where they massively slaughter all of the turkeys, and so you would know at least a turkey can't comprehend this, but you would know, 'Enjoy these days my friend, because...'"
- Jeremiah: [01:35:28](#) Right. So the moral of the story is not that the turkey was a fool for being trapped by the randomness in its world. The moral of the story is that the turkey was a fool for not just expanding its universe very slightly and everything about this.
- Jim: [01:35:40](#) Right. Exactly. But the Turkey can't right.
- Jeremiah: [01:35:43](#) Yeah.
- Jim: [01:35:44](#) So it's part of our job, as human beings, who can. I mean, that's one of the other things that distinguishes us. We can imagine the future. And I love reading the studies. I think if anyone might be able to, in the animal kingdom, it would be elephants or dolphins. I don't know.
- Jim: [01:36:03](#) ... The animal kingdom, it would be elephants or dolphins. I don't know. But because we have the capacity, we should do it. And so, but some people will say, "Well God. That sounds very pessimistic." And I'm like, "No, I'm the opposite. I am a rational optimist because as an optimist, I expect big problems, they're going to happen. I have all of history to demonstrate to me that, we're going to... There's going to be a lot of problems and the only way that that shouldn't bother you is if you have been error correcting on better knowledge continually."
- Jeremiah: [01:36:43](#) I like that.
- Jim: [01:36:43](#) Right?

Jeremiah: [01:36:44](#) Rational optimist. I might steal that from you. [crosstalk 01:36:47].

Jim: [01:36:46](#) And I'm stealing it from him.

Jeremiah: [01:36:49](#) There we are so it's a stealing chamber.

Jim: [01:36:52](#) Yeah. Well, and you should because one of the thing is you become a failure blist. In other words, you believe failure is inevitable. But not your own necessarily in a given activity, but you become quite content with the idea that there's going to be all sorts of new problems, but you also are aware that you cannot prophesize future inventions, right? He had a great line if the quote which is, somebody was saying, "Well, everything has been invented." It was a pessimistic, abundance of caution type guy, right? And his response is, "Do you think that the greatest scientists in the world in 1900 were debating the internet and nuclear power?" He goes, "Far from debating it, they weren't even thinking about it because they didn't know that knowledge."

Jim: [01:37:51](#) And we have this, another part of our humanity which makes us believe that we can prophesize and we can't. We can't prophesize. When something happens then we can get going, right? Then we can start talking about nuclear power, we can start talking about the internet, we can start talking about all that stuff but we must always brace ourselves and make ourselves convinced that we do not know the nature of the new knowledge that's going to happen. And by the way, it's going to happen. As long as you have a pre society that does not defer to authority. Again, there's a reason why the dark ages were the dark ages. There was one authority and it was the church and if you said something against them, you got burned at the stake, not good odds, right? And then the enlightenment happened and the allowance of criticism, the allowance for error correction, all of this led us to where we are today.

Jim: [01:38:54](#) And so as a pragmatic optimist, as a rational optimist, I'm like, oh no. I'm sure there going to be tons of problems. But let me ask you, would you rather live in a world where scientists had been working for a hundred years on how to blow a meteor out of space? Or would you rather just be like, "Well, it's God's will. It's God's will and we're all going to die, but it's God's will."

Jeremiah: [01:39:23](#) Sure.

Jim: [01:39:25](#) I want to live in the first world. I want to live in the world with Prefix.

Jeremiah: [01:39:28](#) Absolutely. It's so funny, I... This may surprise some folks who are listening, but I am an extraordinary optimist. I mean, my spirit animal is Chris Traeger from Parks and Rec and that is when I say, literally that is when I usually like, I am an extraordinary optimist. I think it has helped me because my, again, professionally, I live in a scary world, right? I am a professional skeptic in many ways, but I love that we are afforded this chance to interact with this world and explore it and see outcomes and take the agency into our own hands to go and achieve these outcomes it's amazing. And that's why I've loved the opportunity to build a company and to build, because it goes back to the very beginning of our conversation. It's about, this is the opportunity set that allows us to compound and lever a set of skills or a set of opportunities into something greater. Into a way to actually have that impact and create opportunities and create careers and create objectives and missions and visions and all the things that go into this, is only...

Jeremiah: [01:40:36](#) It has to start at some point with somebody who says, "Well, wait a second. I think there might be a better way than what we've all settled on." And it's this little moment that everything that we've talked about here I think is about, well, how do you fan that flame a little bit in a constructive way, not in the same way. It's easy to do it in the same way that makes no sense and there's no grounding, no risk control at all but how do you do this in an informed way. And of course, back to the beginning of our conversation, success is not guaranteed because if you [crosstalk 01:41:06], none of these starting conditions would be true.

Jim: [01:41:08](#) Right.

Jeremiah: [01:41:08](#) With the consensus.

Jim: [01:41:10](#) Exactly.

Jeremiah: [01:41:11](#) And that is the tightrope of... People talk all the time about startups, walk this tightrope of expenses versus revenue and blah, blah, blah, and balance. Of course, but that's just the consequence of the fact that you're a business that's not... What startups really walk a tightrope off is the idealism of what they're pursuing versus the reality and the assumptions the world has already made about the pursuit. And that is the broad challenge.

Jim: [01:41:35](#) And there are a million ways you can die. I'm on the other side of the table now, right? And like, it doesn't bother me at all. In fact, I want to see that kind of thinking. You and I had a long conversation in my office when we were, you remember?

Jeremiah: [01:41:48](#) That's right.

Jim: [01:41:49](#) And so I'm sure you're very aware because you're such a smart guy, but I was asking very specific questions, looking for answers like you've been giving all day here because I don't want anyone to be... Like I have a bias, it's probably wrong. But my bias is that somebody who has all the answers to something is a cheat. That they are a fake. Because nobody has all the answers to anything. And like if I'm interrogating you on something and you have an answer to everything and you state it categorically, I'm passive. And it's like Bernie Madoff.

Jeremiah: [01:44:23](#) I've run these sets, you've just reminded me of something that I... Some of these ideas we're talking about today were implanted in me a long time ago and I just had this memory, I would come in when I was young and I would have heard, I didn't know what I was talking about, but I'd have heard something like, Apple was up 10% today. Apple stock was up 10% today. And I wouldn't know what that means and I wouldn't know how to buy and I'd come in and I'd say, "Dad, you should have bought Apple. Like I own a... You know what? I love my Mac that we use in whatever and you should have bought Apple because it was up 10% today." And I will never forget this.

Jeremiah: [01:44:56](#) He would go over, he would take out barons or whatever he was reading and he would start going with his finger down every single stock in the paper until he found the highest one and he would say, "Well, as long as you're making things up, why don't you choose this stock instead." It was such a great lesson. I've never forgotten it because it was, we can... It's so easy to live in the hypothetical and I should have done this and I would've done this and I would've... But you have to deal with how things are really happening and I've run... I used to call [inaudible 01:45:27] like I look forward with the perfect nauseous. I've done exactly what you're describing many, many, many times. I know how that plays out and most people won't do it on a... If you have weekly data, you'll do it on your data.

Jeremiah: [01:45:41](#) And that's how you forget what you're describing which is that it doesn't instantly go from one data point to the next, there's an entire universe in between. I'm familiar with what you're describing and I'm also familiar with, and again this is where I

come from, I'm also familiar with how easy it is to forget that the world is not as your model represents it. And here the data's weekly and you forget that there's something different and you don't have that presumption and all models are wrong, but some are useful.

Jim: [01:46:09](#)

Some are useful.

Jeremiah: [01:46:11](#)

And that is sort of at the gut of everything here.

Jim: [01:46:14](#)

Totally. All right so this is going to end up being a long one because Jamie, isn't here to be my schoolmarm, but I think... What I wanted to achieve today, I think we've achieved brilliantly and that is, Yuri, I've known you a long time. I'm an investor with you, you're one of the smartest guys I know. I think there are a lot of people who might have that idea that, maybe I should start a startup. I don't think you sugar coated anything for sure but I think that you outlined a great number of ways that they should be thinking that is not intuitive, even for super smart people.

Jim: [01:49:42](#)

Last question and then I've got our parting question. What is the one thing that looking back, was there a moment where you felt that you had emerged, we were talking about paths, right? What was the moment where you were like, "Holy shit, we're on a whole different path right now."

Jeremiah: [01:50:27](#)

That's a fabulous question, Jim. It feels like there have been so many, and yet it's actually a little bit difficult to bottle any one and I think it's because so much of what we've done is to literally attempt to smear, if you will, all of these decisions into one such that there wouldn't be that. Now, there are some of those moments and you are aware of some of them. One major one came, but again, we'll go back to this COVID example we already discussed but not the COVID, not the scary side of it. It was the work we did to release a new product, which our users embraced so beyond wholeheartedly, that five months later we rewrote it and rereleased it because it turns out if you build a product in three days it's not as good as it could be as if you spend about a month building it.

Jim: [01:51:19](#)

Who knew?

Jeremiah: [01:51:22](#)

Exactly, what a surprise. And it was when we did that, that second release last fall, that so many of the observable outcomes of Prefix that anyone can go see really, really started to become manifest. And it became very clear that something

interesting was happening. There was a moment... Our first, I'm just thinking back. Our first customer was a very, very large company enterprise, top technology company in the world. And they bought a piece of software from us that was about eight months pre release. They bought it... We wrote the login screen so they could get into it basically. And that was one of the moments, I'm pretty sure I spoke to you shortly after.

Jim: [01:52:06](#)

Yep, you did.

Jeremiah: [01:52:07](#)

That was one of those moments when we said, "Oh! We are really solving a problem here." Right? This isn't about we put the right drop shadows on the buttons to get people to click them and the AB tested a way into this. That was where we said, "This unfinished piece of software solved a problem for somebody so concretely that they asked for no changes but simply to have access to it." And there've been many moments like that in Prefix story.

Jeremiah: [01:52:37](#)

And in many ways, especially at the beginning of Prefix story, as you know well and one of the reasons that we partnered almost exclusively with strategic long-term folks is to avoid the commitment that a more traditional financing path would have entailed to an idea that we ourselves were not sure what path it would take. And so obviously as our confidence has increased so has our ability to align ourselves on that path. But yeah, there's just been a few times and this is one in particular where we've gotten this jolt of information that we were solving, that the problem we said we were solving was in fact the one that our customers recognize and couldn't find a solution for it anywhere else and back to those three questions, the more confidence we get there the more excitedly we can sort of race forward into the unknown and so that's what comes to mind off the top of my head.

Jim: [01:53:33](#)

It's been a great journey and I've been delighted to watch it and be a part of it. So we make you for one day emperor of the world, you can't kill anybody, you can't put anybody in a reeducation camp but what you can do is be a Babel Fish in their ear, who is actually a sentient Babel Fish and has his own ideas, but actually they're your ideas. And you make everybody wake up the next day thinking, oh! You know what? I'm going to start doing X. What you got for me? Two things that you would think might lead to a much better outcome.

Jeremiah: [01:54:25](#)

That is such a fabulous question. I wish I had a great stock answer for you and I'm worried that I don't. If I could suggest one thing to everyone, it wouldn't necessarily be all the things

we just talked about for the reasons we just talked about. That doesn't necessarily do good outcome, but I would desperately ask for people or instruct, I guess in this hypothetical, to respect the different opinions around them. And the fact that those differences probably don't affect you. I think when I look at the world and if I...

- Jeremiah: [01:55:07](#) It's very difficult to know what we could say here that would sort of affirmatively improve the world but when I look at the world and I see things that upset me at the root of them is almost always some sort of fear or terror and obviously, it's very hard to find someone in this world who, somewhere in their ancestry, don't have to go very far back to find real perpetrated violence or bigotry or whatever the case may be. And it's always just because you didn't like something about them. I'm being facetious of course and I'll catch them describing it, but we don't need to ask for people to embrace others. We just need to ask for people to respect that a difference of opinion is not in and of itself damaging, right? So you can't [crosstalk 01:55:54], right? We can't kill, we can't like rich to get... That's fine. I think in turn, we would say to people, "Do not presume that those are the outcomes of someone's different opinion."
- Jim: [01:56:04](#) I love it. Okay, that's number one. What's number two?
- Jeremiah: [01:56:10](#) Number two is everyone should read the Hitchhiker's Guide to the Galaxy.
- Jim: [01:56:14](#) You know what? I'm going to let you get away with that. I'm going to let you get away with that because-
- Jeremiah: [01:56:19](#) That's not cop out, that is... I am talking my book.
- Jim: [01:56:22](#) No, it's not a cop out. And I have given similar advice and yeah, I love it. Well Jeremiah, this has been so amazing, so fun.
- Jeremiah: [01:56:36](#) This is so much fun Jim, thank you.
- Jim: [02:05:18](#) Cheers, bye.
- Jeremiah: [02:05:18](#) Thank you, bye-bye.
- Jim: [02:05:20](#) My pleasure.