Disrupt Yourself Podcast with Whitney Johnson
Episode 48: Eric Ries

Welcome to the Disrupt Yourself Podcast. I'm Whitney Johnson. I think, write, speak, and (live) all things disruption. Today's guest is Eric Ries, author of [The Lean Startup](#), a book that has sold over a million copies. He's also the author of [The Startup Way](#), a nuts-and-bolts, dollars and cents, how-to-do-the-math guide that shows how to make entrepreneurship a core discipline of your business.

Whitney:	What I want to do is understand where all of this started. Um, where did you grow up and what did you plan to be when you grew up?
Eric:	So I grew up in San Diego, California. My parents are both doctors. Their parents are doctors. There was a real expectation that I would grow up to be, you know, a doctor or at least some kind of reputable professional. But, uh, when I was very young, probably still in elementary school, my dad brought home a beige gray IBM XT computer, if you can remember, one of those old behemoths, uh, and from that moment on, all I can remember, uh, really wanting to do was to program computers and play around with them. Um, I was lucky, I went to a math science magnet elementary school. We had Apple IIE computers in the classroom, which I just thought were the most magical things on Earth and you, uh, you should have seen the look on my face, you know, years later when I found out you could get paid for programming. I had no idea.
Whitney:	Oh.
Eric:	You know, I thought it was just something you did for, for absolutely for fun. So I wanted to, you know, I wanted to work in technology and do something science, math, engineeringy, you know, as long as I can remember, so that's how this all started.
Whitney:	How old were you when your dad ... How old were you when your dad brought the computer home?
Eric:	I mean, I, I, it's funny 'cause I don't actually have a, a specific memory of it, but just 'cause I know when those computers were all built, I must have been, uh, you know, in the first or second grade maybe-
Whitney:	Hmm.
Eric:	... very young.
Whitney:	Hmm. That's unusual. Most people don't know what they want to be when they're that young, or certainly what they think they want to be isn't actually practical and, as you said, you discovered that it was. Do you remember how old you were when you had this big aha of, "Oh, I can get paid to do what I love doing?"
Eric:	Yeah, yeah. Um, I, I managed to talk myself into a internship, when I was still in high school, for a big defense contractor in San Diego. And, I mean, I was not even remotely qualified to, for this internship, but somehow I was able to convince them that, that I

had whatever the requisite programming skills were. And, uh, and so it was like it was a job. I had a summer job, uh, working, programming computers. I couldn't believe it. I thought I had like, you know, tricked the universe into, uh, letting me play video games all day. It was such an incredible feeling. Uh, and I had a bunch of, of early experiences like that where, you know, I had somehow managed to, uh, to make money or do something, you know, commercially useful, uh, with those skills. But I don't know if you'd asked me, "What do you want to be when you grow up?", I don't think I even understand that, that this was tec-, technology or entrepreneurship or anything like that was like a career that you could have, so I didn't really understand where it was headed. It's just that's what I wanted to spend my time doing.

Whitney: What did your parents say when they realized (laughs), "Oh, Eric's not going to be a doctor?"

Eric: Well, I'm not even sure they've realized it yet, so (laughs) we'll see.

Whitney: (laughs). Hope springs eternal.

Eric: Hope springs eternal. I mean, you got to understand from their point of view, you know, that, that is both a calling, you know, a way that you, you help people in such a clear and concrete way, and also it's such an important source of stability and, and, you know, think about what, what being a doctor represented to previous generations, what that was in terms of, um, you know, a source of prestige, a source of stable income, you know, a useful skill even in a time of crisis or whether you can help, not just your friends and colleagues, but your family, uh, when the, when the time is come.

             So, you, know, I went to school, and it was very important to them that I get a liberal arts education, so I did it. I did a startup while I was in college and dropped out, luckily for them, from their point of view, the startup failed quickly 'cause the dot com bubble burst, so I went back to school, finished my degree, but a computer science degree.

             I moved out to Menlo Park to work at a super hot consumer internet startup. And I remember they would come visit me, you know, and we were working out of this warehouse painted all primary colors and the ping pong table and the bean bag chairs and the whole thing. And I just, you know, it was hard for them to understand that this was, you know, a job. And, and I remember they, they were, even at that point, talking to me about how this would be a fine thing to do to go play for a few years doing this, and then it could still be very useful to go to medical school and get an MD. You know, if I didn't want to become a doctor, there are so many other things you can do with an MD. It's such a useful and versatile degree, as everybody knows.

Whitney: So, your parents are doctors. Your grandparents are doctors. You've lived in a household where healing was a way of life. How do you think their professions and their way of being has informed how you show up in the world as a technologist?

Eric: I mean, that's a profound question. You know, I think your parents and your grandparents and your family culture shapes you in ways that you can't even really

understand, so it's hard to know. I would say, you know, my, my parents had a real service ethos. They felt like, you know, your work is meant to, to help people. It's not just a way to make money. It's not just a, a way to be lauded in the world, but it has to have real substance to it and that, that was always something part of, of our family culture growing up. They had a real disdain for, you know, displays of wealth and, and, our family culture and, you know, I'm sure this is, in some ways comes out of the trauma of World War II and, and, you know what, the experience that my, uh, grandparents had, that, that the only true wealth is what you can take with you.

So, you know, the life of the mind, investing in your skills and yourself that, that is much more important than material possessions, which can be taken away from you in a heartbeat and that, that ultimately don't, don't give you any satisfaction. And then to the importance of education, of science, of knowledge, you know, not just as a means to some kind of business end, but rather as a means in itself, as a way to help people and have a positive impact in the world. Those were always, uh, always values that, that were very present, uh, in our house growing up.

Whitney: Let's now go to something that you've said and I actually quoted it in my last book, "Disrupt Yourself," where you said, "Learning is the essential unit of progress for startups." You-

Eric: (laughs) yeah. Thank you for quoting that. I like that one.

Whitney: (laughs). You've had a number of, uh ... Yeah, it's, I love, I love what you said there and I think it's s-, so profound. You've had a number of startups, some of which, like Catalyst Recruiting, which failed.

Eric: (laughs). Yeah.

Whitney: So, what was, what did you learn and, as a consequence of that, how did you progress?

Eric: Well, I'll tell you a funny story. Uh, after Catalyst Recruiting failed ... That was my dorm room startup. Could have been Facebook, you know, but, um, but it wasn't.

Whitney: (laughs). Of course.

Eric: Uh, right, it's could've, could've, would've, should've.

Whitney: You and Mark Zuckerberg, right?

Eric: Right, exactly. When I, when I watch the movie, "The Social Network," most people find it entertaining, but I find it, it's almost PTSD inspiring (laughs), inducing, so I'm like, "Oh, my God, uh, so close, so close." So, I had that experience. The dot com bubble burst. My company failed. I went back to school. I finished my degree and then I started interviewing for jobs after college. And one of the companies that I interviewed at, they were doing an interview and they were excited to hear about my experience with, with the failed startup and they were asking me what did I learn from it. And I was like, "Oh,

you know, I sure wish I had done X, Y and Z differently." And they're like, "I know, I know, but, at the level of strategy, what do you wish you had done differently?" And I tried to answer the question. I was like, "Well, you know, I, now that I know that customers want X and not Y, I sure wish I had built Y." And they're like, "No, no, I understand that, but what about at the level of strategy?"

And I realized, in the course of the conversation, I didn't understand the question. I, I didn't know what he was asking. I hadn't learned anything, really, because I didn't even understand what a business was or what I ... like I had no idea what I was doing. I didn't even know enough to know that I supposed to learn something about something called strategy. It was like a really embarrassing moment and like, obviously, that's not how you really want a job interview to go either. Th-, the ability to learn something in a startup situation first requires that you have some concept of what it is that you're trying to accomplish.

Whitney: Hmm.

Eric: And it, and so I, my early startup experiences were so messed up, I didn't even know what I didn't know. I didn't know what I was trying to learn. I didn't even know really what I was trying to do. I just know what you see in the movies and you read in magazines, you know. Kid has idea in basement, dot dot dot, you know, makes a lot of money and the dot dot dot is kind of a, you know, it's too boring to make it into the story, so it gets glossed over. So that's all I understood, was you build this product and everything's going to be great. And, in retrospect, you know, I think the most important lessons I learned from that were just what startup chaos and failure looks and feels like. So I remember later in, in my career being in a venture-backed startup that was much better run, you know, much more orderly, had much better financing, much smarter people, much more talented executives. You know, it was like much more of a real business than what I was doing in my dorm room.

And I was talking to some of the other employees. I was just a regular employee, not anybody important, and I was talking to some of my colleagues, and they all believed that the company was going to be worth, uh, just a tremendous amount of money and that all they could see was success into the future. When I started asking questions about, well, what if ... Couldn't this go wrong or couldn't that ... I started to ask about the ways the company could fail, it was like I was almost like breeching a sacred trust, like I'm causing it to fail by talking about these possibilities that are verboten. And then when that company did start to fail and things started to go wrong, I was like, "Oh, yeah, I know what this feels like, you know. I've been, I've been here before." So like instead of like panicking and freaking out, I was like, "Okay, I can actually learn a lot from this experience too and try to understand how is this similar and different than what I did before."

And, of course, the biggest lesson I learned from both of those experiences was no matter how smart you are, no matter how genius your plan is, if you do think so yourself, no matter how well researched it is, you know, like no matter all the assets and attributes you have going for you, that will not save you from building a product that people don't want.

Whitney:	When and how does the Lean up, Lean Startup ... lean up, [The Lean Startup]-
Eric:	(laughs).
Whitney:	... book start percolating around in your brain?
Eric:	Well, the book is a very late development, for me anyway. The way it started was I was in a company that we started in, I want to say, 2004-
Whitney:	What was the company?
Eric:	... and it was called-
Whitney:	Was it the [IMVU]?
Eric:	IMVU, yeah, 3D avatar company. Still going, still profitable, uh, company today. Not Facebook, but not bad.
Whitney:	(laughs).
Eric:	And, uh, my co-founders and I really were trying to do things differently, like we really consciously wanted to try to avoid some of the mistakes I was just talking about, and so we built the company self-consciously in a very different way. And I had all these intuitions and ideas floating around in my head about agile development, about going faster, about experimenting with customers. And, you got to understand the, the landscape has changed so much in, I mean, that, this is, we're only talking about 2004, so now it's 2018. This is 14 years ago. But what I wanted to do ... A/B testing, split testing, in the software of IMVU. People thought that was crazy because split testing was considered a direct marketing technique. They were like, "What does this have to do with engineering?"

And, and like when I wanted to go add A/B testing to our software library, I had to literally write the software myself because there were no third-party tools, services or libraries available, no open source library to just go grab for A/B testing and statistical significance. I wrote all that stuff by hand. That's how different the product development landscape was, uh, compared to now. And, anyway, my co-founders were very indulgent of me and my wacky ideas and then they started to work, so the company was really productive and able to go through product iterations much faster than normal. We were able to build this bond, this connection, with customers in a really unique way.

And, anyway, we built this reputation for, for doing something pretty special. But now we had a problem, which I had never previously considered. When I was just an engineer on somebody else's team, I felt free to just push for the most extreme version of whatever idea I had, knowing that it would inevitably be tempered by the bureaucracy and, you know, countervailing ideas of the rest of the team. So if we're like releasing software annually ... Remember when we used release software- |

Whitney: Yeah. (laughs).

Eric: ... so infrequently that you could put the year it came out in the name of the product, like Windows 2000, you know, Office 95, like the year is, is like a notable thing? So that lead, if that's your model, you know, I'd be like, "Let's release a lot faster." And, you know, if I was like saying, "Hey, we should release like once a month," and the com-, company compromises with me and we do it once every six months, like that's a big win. When you go from being the agitator for change to being in charge, all of a sudden, you can't just be like, "Let's just go as fast as possible," people want to know like, "How fast are we supposed to go? And isn't that too fast? And what ..." And, and, of course, other people are playing that same game with me, like, "Okay, maybe we should release once an hour." And I'm like, "Uh, I don't, you know, I don't know. I just think it should be fast, like just make it fast."

             So it really forced me to start to answer some of these questions, and I kind of became the company's explainer in chief because what would happen was like ... This is embarrassing even to admit now. A VC would be considering investing in us and they would send us to their tech due diligence friend or partner or whatever, you know, a gray-haired industry veteran of the technology industry, and he would evaluate our technology and our technological approach to make sure it was sound. And what I didn't understand at the time is that generally in VC situations, this is more or less a formality I mean you're not supposed to fail tech due diligence. It's like VC funding 101, the technical co-founder is supposed to just go tell this guy whatever he wants to hear to make sure you close around him. It's not, it's not the kind of thing you're supposed to fail at. I would fail because I couldn't-

Whitney: You failed the technical due diligence?

Eric: I failed tech due diligence because like the gray-haired guys was like, "Listen, kid, this isn't how you run an engineering team. You got to create technical requirements documents and product requirements documents and you got to have waterfall and you got to have this QA and you got to have safety and the, and you got to slow it down and do ..." He had the, all these procedures and instead of being dumb and ... I was too dumb to be like, "Yes, sir. I'm sure we'll get right on that after the check clears," you know, I was, I was very focused on the ideas of it. I'd be like, "Listen, with all due respect, let me come show you the evidence that we've discovered a better way." And you may be shocked to hear this, but most people are not that interested in hearing about evidence that the way that have learned their whole career is not the best way.

Whitney: (laughs).

Eric: So these conversations did not go very well and I was so stubborn, I mean, stubborn like you wouldn't believe. I was adamant that I was right and they were wrong and I was gonna to win the argument. And, of course, like I'm the one asking them for something, so it's not really a good time for all-out, total war. So apart from that being like ... I can't believe I didn't get fired as a result of that.

Whitney: Yeah. What did your ... So you were the technical co-founder.

Eric: Yeah.

Whitney: What did your co-founders say to you (laughs) when you came back failing-

Eric: (laughs).

Whitney: ... the tech due diligence?

Eric: They were pretty pissed. I mean, you know, they would give me that look like, you know, "What, you're supposed to be the tech wonder kid, right, You're supposed to be an asset, not, not a liability." And why they stuck with me, even to this day, I honestly don't know. I mean, they must have believed at some level that the mumbo jumbo I was spouting, you know, that it made sense, uh-

Whitney: The seeming mumbo jumbo.

Eric: ... and that it was right.

Whitney: The seeming mumbo jumbo.

Eric: Yeah, right, exactly, like ... Listen, and listen, and maybe they really understood it, better than I give them credit for now and, you know, obviously, in, in memory, of course, I'm always right. Everyone else around me is wrong, but, they had a hand in shaping it too. And it's not that it was only failure. Other investors were excited about it and invested on that basis and, you know, it helped that we had [Steve Blank](#) as an investor. Of course, this is all very much up his alley, so. But I think also we were just, we felt it. We were being productive. We were getting things done that other people couldn't get done. So we also had a certain kind of self-confidence that came from seeing the evidence with our own eyes.

             But then we started to hire people. So forget the tech due diligence person. Now imagine you hire a 10-year industry veteran from the technology industry and he works for you and now his first day on the job, he's like, "Listen, kid, this all sounds great, but, you know, you got to create product requirements documents." Like it, it just kept happening over and over again, where I had to be the person to be like, "Look, with all due respect, you work for me, so we're going to try it my way first and see if you like it. And if you don't like it, then we could talk about products requirements documents." So I, it was, I was like green eggs and ham 24/7, like, "Try it, you'll like it. You know, let's go, let's go run the experiment. Let's go see." And what drove everyone around me crazy, apart from my, you know, arrogance and, and stubbornness, was that I couldn't actually explain why the system worked.

Whitney: Hmm.

Eric: Like I could see that it worked and it made total intuitive sense to me just I couldn't imagine doing it any other way. But people would say, "Why is this working when it's against all the things I've been taught as an engineer? Why is it working when it seems like best practice would dictate that we do something different?" And, for a long time, I just didn't know the answer to that question, and I was casting around almost in desperation for intellectual frameworks that I could use to explain it. And, eventually, kind of by trial and error and a lot of reading and studying and just like grappling with this question, I started to put together a framework that I could use it first for, for employee training.

Whitney: Huh.

Eric: That was the first time I debuted any of this material was to try to teach other engineers, just I was ... like, almost like a manual for how you work with me and, and our crazy system. You know, like they had to understand it. And then, that allowed me to build up the kind of some of the conceptual vocabulary that eventually became Lean Startup. That's when I first became obsessed with lean manufacturing as a metaphorical, uh, uh, source of concepts. And that's when I started to teach it as an engineering methodology. That's long before it was, uh, you know, a startup methodology, a general purpose startup methodology, let alone now we, we have this whole entrepreneurial management framework. But, but before it was any of that, it really was a, uh, an engineering system.

Whitney: You mentioned, uh, Steve Blank. How influential has he been in your thinking?

Eric: Well, quite. You know, I, I feel like the cliché is you stand on the shoulder of giants.

Whitney: Mm-hmm (affirmative).

Eric: Um, you know, it's not every day that you actually get to meet the giants and work with them side by side (laughs). You know, usually, people say that, they mean people who are long gone. So, so I was very fortunate. I mean, he was involved, uh, as an investor in, in IMVU and he insisted as a condition of his investing in us ... 'cause he had invested in one of my co-founder's companies before and had lost a lot of money. And this is like, to me, it was such a good, important education for Silicon Valley way of thinking because my co-founder, I was like, "Hey, didn't you just lose him a ton of money?" And he's like, "Yeah." And I was like, "Now you're going to ask him for more money?" He's like, "Yeah, exactly. I'm glad you understand." I'm like, "No, I really don't understand. Why would he invest in, you know (laughter) ... didn't he learn his lesson the first time?"

           Well, it turned out, you know, that's not how it works, uh, in Silicon Valley, so it was a good lesson for me. But he did, he did attach a condition to his investment. He said, "I, I insist that you audit my class that I'm teaching at Haas at the Berkeley Business School."

Whitney: Interesting.

Eric:	He just started teaching. I mean, I'd met ... It might have been the first or second year he was teaching a class called Customer Development, based on this book he had written. That wasn't even really a book. It was like a compendium of class notes that he had self-published on Café Press, if anyone remembers that, called "The Four Steps to the Epiphany." And so my co-founder and I would go down to Berkeley to sit in Steve's class and listen to him try to teach these MBA students, who were incredibly skeptical, about, uh, about customer development. And that was huge for me because that was the first time I felt like, "Oh, here's someone who, at an intellectual level, kind of understands what I am talking about."
	And it was a wonderful meeting of the minds because he comes from a marketing background, so his whole theory at that time had baked into it this understanding that the engineers are not going to get this, that you do this on the marketing side and then the engineers in their silos, you know, you got to like kind of bribe them and tempt them a little bit, you know, a little cheese to lure them out of the silo every once in a while to teach them a few of the things that you're learning. And it was really, you know, it was, it was customer development, the iterative process, paired with a very straightforward waterfall style engineering development. I'm sitting in class and I'm offended because how dare he suggest that that state of the art thinking in engineering, and, you know, our experience in engineering is we're doing agile development and it's the marketing people who are locked into the waterfall. So it was kind of fun like-
Whitney:	Fascinating.
Eric:	... moment of saying, "Hey, wait a minute. We, I, I recognize you, uh, in this moment." And looking at, you know, we, we're talking across a tremendous generational divide, and dif-, very different set of, you know, circums-, life circumstances and economic success. He was already, you know, he had already bought his estate on the coast of California at that point. But it was a really, uh, it was, that was a very fun time, a very intellectually stimulating time. And it was great. I mean, he was, he was on our board at IMVU for a long time, so we, we developed a lot of those ideas and if you look at our writing from that time, we talked about what eventually became Lean Startup. We, we would talk about it as customer development paired with agile software engineering, as two sides of a coin that could work together. And it's actually kind of a clunky description from our modern standpoint. Now I think we have much better ways of teaching this and we can kind of teach people a enterprise-wide system of learning and discovery, whereas that is still very functionally siloed.
Whitney:	So what I would love is I actually have "The Startup Way" in front of me. I don't know,
Eric:	Okay.
Whitney:	I don't know if you have it in front of you, but-
Eric:	(laughs).

Whitney: ... I'm looking at, um, page 86. And what I think would be really helpful for people, 'cause not everybody's going to be familiar with what you do, if you could just go down the tenets of Lean really quickly. It's page 86, "Identify the beliefs about what must be true in order for the startup to succeed, we call these leap of faith assumptions." Could you walk through for people really quickly-

Eric: Of course.

Whitney: ... so that they have it in their head and they can be like, "Okay, I get ... when he says Lean, I know exactly what he's talking about, whether it's for a startup or a startup inside of a large organization."

Eric: So the, the theory of Lean Startup is actually relatively simple at the conceptual level. First is, you go look at a business plan, which we usually write as a prediction about things that are going to happen in the future. And we say, look, this is actually not Nostradamus. This is not a prediction about the future. It's a set of hypotheses. It's a set of guesses about what might happen in the future. So instead of treating it as a prediction and therefore using our kind of conventional management tool kit of planning and forecasting based on these assumptions, let's identify them as assumptions, as hypotheses, we call them leap of faith assumptions, uh, and write them down, to say these are the things that have to be true in order for this startup or product or whatever it is to succeed. That's kind of first step.

                  And then once you have a series of hypotheses, you say, "Well, gosh, do we have any kind of system in human civilization for testing hypotheses to discover which ones are true?" And you're like, "Hey, how about the scientific method?"

Whitney: (laughs).

Eric: So, (laughs) you know, like not to be all like crazy about it, but instead of using astrology, right, like prediction and forecasting and like, you know, envisioning the future and making things happen through the power of your mind, like outside of business, those are considered like pretty spiritual (laughs) type ideas, metaphysical ideas. They're not considered, you know, serious, and yet somehow, in business, we are still like loving astrology, in ways I've never understood. So let's use the scientific method. Let's run experiments to discover which of these leap of faith assumptions are true and which ones are false.

                  But because we're bu-, we're doing business, not pure science, this is not like academic research, we want to make those experiments into useful products. We call them minimum viable products, or MVPs, that are designed to test those assumptions. And we try to design the experiments to be as fast and inexpensive as possible, so we often will, you know, rather than build the entire product, we'll build just the first part of it. Or instead of having a product that we show to a million people, we'll do a concierge version and only show it to ten people. So those are different MVP techniques.

The point of the MVP, and this is, I think, the part that people have the hardest part understanding, is not to just build a crappy product to get it out quickly. The purpose is to quickly discover if our strategy is actually working and taking us closer to our vision or not. And, if not, we don't just give up, but we make a new strategy. We do what we call a pivot, a change in strategy without a change in vision. So it's like you punch in an address in your GPS in your car and you start driving on the route that it tells you and then you find out that the freeway is closed. You don't give up and go home because the freeway is closed, but you also don't ask the GPS, like, "Hey, robot, where should I go now?" Like the purpose of all this technology is to help you get to your destination through some alternate route.

So that's what a pivot is and then that sequence of having, uh, an idea, testing it scientifically and then adjusting plans, we call that the build-measure-learn feedback loop. So then when we try to turn it into more of a theory using ideas from lean manufacturing about cycle time and whatnot, we measure the cycle time based on how long elapses between when we have an idea and when we validated that that idea is brilliant or crazy. And that's Lean Startup in a nutshell.

Whitney: One of the things that I thought was interesting, building on that, is, and I, I, I hesitate to say this, but you talked about in "The Startup Way," page 269, you talk about innovation accounting and you said it doesn't get a lot of-

Eric: Yeah.

Whitney: ... fanfare. Um, you've gotten just a few pieces of fan mail around that, but they're really great pieces.

Eric: Yeah (laughs).

Whitney: Um, could you give us just a quick overview of what innovation accounting is, sort of 10,000 foot level?

Eric: Uh, yeah, it's my pleasure. This is one of my favorite, most, most, most boring things to talk about. So, yeah, I don't, don't get so much fan mail. The parts of Lean Startup that fit on a bumper sticker or that you can buy a t-shirt of, like are far more popular, obviously. But I don't think that we can-

Whitney: Like, "Get Out of the Building" and what else?

Eric: Yeah, you can actually buy t-shirts that say "Get Out of the Building" on them. A lot of pivot jokes out there.

Whitney: (laughs).

Eric: You go on YouTube, there's some very funny Lean Startup parody videos.

But the basic problem that introducing [Lean Startup](#) into a management system has is that we don't have a rigorous way of measuring progress beyond just telling somebody that you've learned something really valuable.

So, for example, you know, uh, you give me a million dollars, I go off and build an awesome product. I come back to you and say, "Hey, remember that awesome hockey stick shaped graph I showed you when you gave me the money, and I promised you that, you know, these incredible results would follow? Like hmm, because we made some mistakes, you know, we had some leap of faith assumptions that turned out to be wrong, we had to pivot. We had to this ... We've learned a great deal, but we're still on the flat part of the hockey stick, so we have almost no revenue and almost no customers. But we have learned so much. You should totally give me more money."

It's important for us as entrepreneurs to realize that, in general management terms, how insane this sounds. Because usually like if you're like a, a public company manager and you miss your quarterly accountability target by like 10%-

I mean, it's not like you maybe you don't get fired that exact day, but you don't make a habit of missing your targets by 10%, like a couple quarters in a row or you're going to have a severe career problem. And yet, as entrepreneurs, we have a tendency to come in and miss our accountability targets by like 10,000% and have the chutzpah to be like, "And, actually, you should then give us more money because we've learned a great deal." No one cares about your learning. You can't distribute learning. You can't pay out learning as a dividend. You can't put learning in your annual report. You can't distribute learning to your limited partners. Like nobody cares about learning. How are they supposed to know that you learned something that's actually valuable?

So entrepreneurs, internal entrepreneurs, garage entrepreneurs, heck, I've spent a lot of time with government entrepreneurs, like we all run into this problem, that one of our entrepreneurial super powers is spending other people's money and then they want to know what did I get for my money? So we have to create a new and more rigorous framework for evaluating progress when the gross numbers, what we call the vanity metrics, are really small. So to give you a, a flavor for it, imagine I had a great business plan that you wrote once upon a time and like, in a business audience, like everyone's written a business plan at least once in their life.

Uh, the business plan always looks and feels the exact same way. There's always an Appendix B with this awesome spreadsheet. This spreadsheet is always in TwoPoint font. It always shows this incredible hockey stick shaped graph, you know, five years from now. And if I had that graph in front of me, and I had my magnifying glass 'cause it's in TwoPoint font, and I zoomed way in, I would find a cell somewhere that says 10%. And I look to my left, "Hey, what is this 10%?" The label says "percentage of customers who sign up for the free trial." Now the whole theory of innovation accounting is that number, 10%, is not something that should be in Appendix B in TwoPoint font. It's rather the something that should be in like blinking, giant, HundredPoint font, red lights, like this is a leap of faith assumption. If this is, assumption is wrong, like this whole business is totally doomed.

And the way that you know that it's doomed is ... Can you visualize the spreadsheet for a second? Watch what happens in slow motion as I change that 10% to a 0%. Like actually run the numbers in your head. Imagine what happens if 0% of customers will sign up for the free trial. Well, then it doesn't really matter what percentage of free trial users become paid users. It doesn't really matter what the average lifetime value of a customer is. It doesn't matter what the repeat purchase rate is, the viral growth rate. Nothing else matters. The entire spreadsheet like cascades out to zero.

So if that's a leap of faith assumption, what would it look like to run our business in such a way that we wanted to rigorously evaluate if it was true or false? Well, the first thing we would do is we would not wait until the very end, you know, after years of product development to go find out what this number is, but rather we'd say, "Gosh, we need to know what is the willingness of customers to sign up for the free trial today, ASAP." It's so important. So, hey, maybe we would create a web landing page where we'd offer people the chance to sign up for the free trial, but when they click yes, you know, they hit the signup button, on the next page, it says, "Sorry, we're at capacity right now. You have to join the waiting list," or some other apology. If that number is actually 0%, it doesn't matter what's on page two.

So that's innovation accounting first step. We call it establishing the baseline. Build an MVP. Find out what the number is right now and get the bad news if there's bad news 'cause it's better to have bad news that's true rather than good news that we just made up. So we get the bad news. Now, in each iteration of build-measure-learn, we call this tuning the engine. If the first MVP was 0%, you know, maybe the next, we, maybe we change it and make the promise a little bit better. Maybe we can get it up to 1%, to 2%, to 3%, so we sort of build iterations that drive that leading indicator up closer towards the number in the fantasy plan. And, of course, we can't just do that only for the signup rate, we got to do that for all of the key leap of faith assumptions.

Anyway, not to make a long story short, if you follow that method out to its logical conclusion, you eventually realize that the math of the business plan allows you to translate these specific things that you're learning about customers into net present value terms, in terms of how much money they're worth when kind of laundered through the business model that you have in your spreadsheet. So, yes, uh, going from 0% to 10%, maybe that makes the company ... maybe the company starts at zero and if it really was 10% and all the other leap of faith assumptions were what they are supposed to be in the business plan, maybe say, wow, that, that company is worth a hundred million dollars. Well, that establishes really clear end zones. We start at zero and we can work our way towards 100 million.

But if someone from finance says, "Hey, you claim to have learned something. How do I know that it's valuable?" We can actually answer that question in a rigorous way in denominations of units that they care about, namely large numbers of net present value dollars. So that's innovation accounting in a nutshell.

Whitney: Interesting. So you, 0% is zero dollars. 10% is a hundred million dollars and then if it's 2%, then you're able to say it's worth X-

Eric:	Right.

Whitney: ... and it makes it something that the finance people can understand as opposed to, "We just changed this one variable inside ..." I mean, of, obviously, the finance people can understand the change in the financial model, but it doesn't mean anything when you're just working with one little data point or one little input inside of a financial model. But by turning it into net present value, then they understand it. Interesting.

Eric: Yeah, yeah. So I think ... And remember that when you're doing this, the number of dollars that you've earned, in reality, might be so small as to be laughable. All right. So like if I show 100 people this landing page and 10 of them sign up for the free trial, like normally the way you appro-, report progress to finance that way, you say, "We have 10 customers signed up for our free trial and none of them have paid us any money." And they'd be like, "Who cares? Seriously (laughs). 10, you get 10 free customers and I'm supposed to be impressed?"

But you could say, "Look, we can't prove to you that the sa-, as we increase the sample size, this, this result will hold. But we can say that, if it did hold, here's what it's worth to us as a company. 10% is actually really good." And they're like, "Well, this is not a statistically significant sample." You're like, "Great. I agree with you. So we both, we both agree that my budget should be increased so that we can impro-, improve the sample size to find out what, whether this holds at the next level." So, let's say, okay, like we showed 100 customers, now let's go show to 1,000. It structures our negotiation over resource allocation, uh, into a much better direction and allows us to kind of work our way up through the orders of magnitude, instead of doing the typical thing of kind of like a little prototype and then, boom, now let's go to full deployment.

Whitney: Right. So you now have this most recent book, "[The Startup Way](#)." People have been listening to this and they're thinking, "Wow, this is interesting. I want to apply it inside of my organization and I've got, you know, 10,000 employees." Can you talk briefly one or two tips for those individuals?

Eric: Sure. Yeah, I used to think 10,000 employees was a lot, but now, now I've learned better.

Whitney: All right, a hundred thousand employees.

Eric: Yeah, exactly. Now that we, you know, 'cause once, once you've worked like in the, in the bureaucracy of the United States federal government, it really changes your, um, your expectation of what's possible. And I've seen these ideas flourish in the most adverse conditions you can imagine, the most political, the most bureaucratic, the most old-fashioned, uh, environments you can imagine, and I've seen the transformation up close and personal.

So the first piece of advice for someone in that situation is you can't get overawed by the permanence of the status quo. Like our organizations today seem impossible to change, and that's because most of the changes we attempt don't work and so we get

this idea that they're immutable. But, actually, they are quite changeable. They run on a handful of deep systems. They're called deep systems, incentive design systems, organizational structures, promotion and, uh, uh, resource allocation systems that are very difficult to change, but once you change them, drive an immense and fast culture change. Like it's shocking to see.

So the first thing to think about here is to say, all right, if I want to have a company that can think in an entrepreneurial way, that can have internal startups that are able to solve the kinds of problems that, that startups are naturally useful to solve, um, first thing I have to do is build up a critical mass of evidence that this new way of working, you know, makes sense in my corporate context, so that I can eventually build up the political capital necessary to tackle those deep systems. So "[The Startup Way](#)," in part is a book about those three phases of transformation: how do you get started, uh, how do you scale it up, and how do you have that deeper impact. Or, as we say in the startup world, think big, start small, scale fast.

That said, that can sound a little abstract and theoretical, so the very, like the, the really, the most important way to start is simply to treat some internal project like a startup. And you just think about like what makes something a startup? Well, I write about this in the book. You can, you can get all the details. But like a startup is not a part-time committee, right? So, so 12 people who are each working on it 10% of the time, like that's not a startup. A startup, everyone is, who's there, wants to be there. So a full-time, dedicated team, uh, trying to accomplish some goal.

And then a startup is not a committee that is funded through, what I call, entitlement funding, where you have kind of a spigot of funding. It just turns on and goes, you know, with adjustments. It has a real scarcity mindset, so we got to build that tiny team. We, you know, at Amazon, they call it the two pizza team, right, so a team no larger than you can feed with two pizzas. They got to have scarce but secure resources. You tell them like, "Here's your budget," or "Here's how much time you have. Here's 90 days to accomplish the MVP," and then a lot of autonomy to do that.

I was, uh, working with a team at the Department of Health and Human Services in the U.S. federal government. And, uh, and their executive leader had told them they were going to have 90 days to build a certain product, you know, as an MVP. And they were like, "No, no problem, boss. In 90 days, we can definitely convene the meeting of the decision makers to decide when to have the meeting to make the plan to ..." And he's like, "No, no. You don't, you don't understand. This is not 90 days to have a meeting. This is 90 days end-to-end to complete it." And they're like, "Got it. Okay. Uh, you know, and after 90 days, we will present to you a plan to implement the ..." And he's like, "No, no. You don't understand. This is not 90 days to make a plan. If this project is not complete and shipped to customers with data that shows it's a good idea, then there will not be another 90 days. 90 days will be the last day of the project's life."

And he, he really like instilled with them that scarcity mindset, and they were able to do remarkable things, uh, on a shoestring budget with that real startup intensity that I would have previously said would never have been possible inside such a large bureaucracy.

Whitney:	You made a comment about this system and then the one or two levers, if moved or pulled, that will allow the change to start to happen. Are you advocating that, by just starting with one project, one team, a two pizza team, inside of your organization, it allows you to start to figure out what those levers are within a given organization?
Eric:	Yes, exa-, that is exactly what I mean and that's very well said. The, the way the organization actually works, in most companies, is not documented anywhere.

These are, these are programs with no manual. The formal org chart of the company is useless for understanding how power flows and how decisions are made. And like I've been in a lot of companies where they tell me, "Oh, we don't need this new way of working. Our waterfall, stage-gate, you know, innovation process works great." And I'd be like, "Oh, great. Could you give me an example of a project that you built that way?" And they're like, "Sure, Project Blah." And I'm like, "Okay, can I go talk to some people who worked on Project Blah?" and I just work my way down the hierarchy from the super senior person who told me it worked great.

And when I get to the people who did the actual work, I say, "Hey, did you do Project Blah in accordance with the company's official innovation pro- ..." they start laughing their heads off, like, "Oh, come on, obviously not. The only way this project could've gotten done is we took if off book. We did it in secret in a skunkworks. And then once we figured out what it needed to be, we retroactively, you know, let the executives claim credit for their process and did it, you know, we kind of forged a little bit the backdated report necessary to make it seem like we'd done that." I see that all the time.

So the only way to find out how the company actually works, and therefore how it needs to work in this new way, is to run experiments. By running these pilots, you discover what needs to be changed and, in doing so, find out what the actual levers you can pull are. |
| Whitney: | So how have these ideas, Lean Startup, now embedded in "The Startup Way," informed, inspired, you to start the Long-Term Stock Exchange? |
| Eric: | (laughs). Well, that's, that's also a long story that goes back to the same time period we were just talking about of the early days of Lean Startup. So when I was, uh, writing "The Lean Startup," the book came out in 2011, so I was writing it, you know, especially, in 2010. I was doing a ton of research about all the antecedent philosophies that, that made it possible, of course, studying Toyota production systems, studying Amazon, studying all the great entrepreneurs, the great management thinkers of the past. And a very consistent theme, especially in the research on Toyota, is that in order to adopt a lean system, you have to have a baseline commitment to a philosophy of long-term thinking. You can't enlist employees in continuous improvement if they don't believe you have a constancy of purpose necessary to carry it through. If they think you're just going to, ch-, you know, cheap out and use it for layoffs, they're not going to give you their best efforts, obviously. |

So this need for a long-term thinking is very much a part of my education and part of, of my thinking. And yet, as I was teaching the system of rapid iteration and, and MVPs and stuff to actual venture-backed startups, a lot of them would say, "Hold on. Isn't this just another quick to flip, easy way to like, you know, get my product into the public market? It's either by having a quick IPO or selling to a public company." And I'd be like, "No, no, no. That's not compatible. That way of thinking's not compatible with lean thinking 'cause it, it doesn't have this long-term philosophy." But, but at a certain point, I started to feel like a hypocrite.

Whitney: Hmm.

Eric: Why am I advocating for long-term thinking to a group of people who I'm also advocating should build venture-backed companies and take them public when everybody know that the capital markets that we take companies public into are the ultimate in short-term pressure. And I couldn't answer that question to my satisfaction and I, you know, I would get it from entrepreneurs every once in a while and it really bothered me. I said, "God, there's got to be a better way. That doesn't make sense."

                And, of course, if you learn about the Toyota family and the way that, uh, the Toyota Motor Company is set up from a, um, uh, from a corporate governance point of view, it's a nightmare by modern standards, right? It's part of the old [Japanese keiretsu system](). It's like a rat's nest of co-ownership between the suppliers and the vendors and the family and part of the, the issue is the modern standards of corporate governance and capital markets are not really compatible with the long-term thinking that these kinds of institutions require.

                So, anyway, in the book, I was like, well, gosh, somebody really ought to do something about that-

Whitney: (laughs).

Eric: ... and I sketched out in the very last pages of "[The Lean Startup]()," I, I sketched out someone should really create a new stock exchange, a long-term stock exchange and here's how it should work. And the thinking at that time, I was just like, look, we need an institution that can regulate the behavior of companies and investors at the same time.

Whitney: Hmm.

Eric: Because if companies are distracted from fundamental value creation, then they're not worth as much money, so it's not actually in investors' interest to apply all this short-term pressure. So this whole system is self-defeating. And believe me, that was before I even knew that the total number of companies in the U.S. has been cut in half over the last 20 years. It just seemed from first principles that this whole thing is self-defeating. Uh, and so somebody really should create something that would regulate investor and manger behavior. And I, you know, sketched out it should work, called it the [Long-Term]()

[Stock Exchange](#), and then I thought my work here is done. You know, I put the idea out into the world, somebody should really do it.

Whitney: (laughs).

Eric: And if you count up all the ideas in all the pages of "[The Lean Startup](#)" that I said somebody should really do, absolutely every single one of them, somebody has run with in the intervening years except for this one. Uh, a few years ago, I thought, well, I should just try it myself. So, yeah, I have a, I have a company. We have a venture-backed company called [The Long-Term Stock Exchange](#). Uh, we are applying, uh, as we speak actually, to, uh, to the regulators to get approval to operate this new kind of stock market.

Whitney: So when do you, do you have any idea as to when it will go live or what learnings do you have (laughs) around when it will go live?

Eric: I've learned so much about how the, uh, American and world financial system actually works versus how it's supposed to work on paper. It's been, been a really interesting and sometimes terrifying education. I can't speak for the SCC, you know, they obviously have their own timetable and process, but I think there's a good shot that we'll be operational sometime this year.

Whitney: Wow. Exciting. And will it be publicly traded so people can go and invest, um, as a regular investor or will ha-, people have to be accredited investors or do you know yet?

Eric: No, we do know, and it's actually a very important part of our model that this is going to be available to the general public. So one of the really bad consequences of the liquidity crisis that is afflicting Silicon Valley and the tech industry in general.

            Well, we have locked out the American public from all that growth, uh, because, right now, only accredited investors can invest in growth companies and companies are going public so late that now, like even individual accredited investors don't have enough money to be able to keep up. The, the vast majority of Silicon Valley is being powered by oil money. It's sovereign wealth funds and Russian oligarchs and all kinds of people, you know, and we're starting to see the problems of that. So why would you want, as a policy outcome, to have your innovation sector, you know, funded by foreign autocrats rather than by your actual citizens who are saving for retirement? That just seems like a really bad trade. So our whole idea with [LTSE](#) is to create a system where companies are protected from short-term pressure, but they still get access to full liquidity of today's capital markets. So that means every single member of the public is, is allowed, uh, to invest in a safe way.

Whitney: That's fantastic. I'm really excited about this. I, I used to be, you probably don't know this, but I used to be a sell-side equity analyst. I was one of those people applying that pressure in the short-term, and I think this is really exciting to see what this'll mean for companies and for individuals. And maybe someday, someone will come up to you and

say, "Thank you. Um, ah, you made it possible for me to put my children through college."

I think that there is nothing else that I need to ask you, unless there's any last thing that you want to share with me or share with our listeners.

Eric:　　　　Well, just, I mean, I appreciate, uh ... You know, as always, our conversations are always so interesting and, and the questions you ask are not, uh, not the same as, you know, as the usual stuff, so I, I appreciate the chance to have a very intellectually stimulating conversation and, you know, really encourage your listeners if they, you know, if they find any of this stuff useful or inspiring or thought-provoking, to, to join the movement and to teach the rest of us the things that you learn by putting these ideas into action. So I, I ... Thanks for the opportunity to, to speak to all of you.

Lots of nuggets in this interview. Like, no one gets things done in your organization the way the process says they get things done. I think this is also true with job descriptions. Which means if someone has been with you for a few years, it's likely that what do is very different from what their job description says they do. As they've discovered problems that need solving, they've stepped in. Are these people, are you, being rewarded for just how much they're contributing? Also, as you analyze the jobs they're actually doing, you will discover that this breach that they've walked into, wasn't just an opportunity for them, it's signaling opportunities for your organization to play where others aren't, to take on market risk, to disrupt.

Innovation accounting. As you build out a business, as you build out your career, when you are at the low end of the learning curve, where it looks like nothing is happening, when metrics that you would use if you were established (like revenue) are effectively zero, use innovation accounting. Just to be clear, I haven't taken the time to fully understand it, and you don't need to either. What you do need to know is that learning is an essential unit of progress and that it's important, as Eric says, to put a price not just on success but also on information.

I was also really intrigued by Eric's story about Steve Blank who wrote the book Four Steps to the Epiphany. You might remember the episode with Adda Birnir where she said this was required reading by one of her principal investors.

So let's set the stage. Steve Blank invests in Eric's company on the condition Eric sit in on Steve's class. This required Eric, an engineer, to battle his own sense of entitlement, his addiction to being right: after all, what could he an engineer learn from a marketing guy? It reminds me of Emmanuel Levinas who speaks of the Other and how our interaction with "The Other" disrupts us. It's not the similarity that causes the disruption, but their difference from us that causes us to reexamine ourselves. Eric's intellectual collision with Steve Blank, The Other, led to his own epiphany.

Practical tip: Think of one person in your life who is an "Other". Instead of trying to make how you feel around them, go away. Examine this. What is there to learn?

Speaking of mentors, after Sydne Jacque, a civil engineer, read our latest newsletter, she wrote in and shared that she's been using the S-curve to mentor her students. It's helping them to see patterns as they move along in their career, and to feel less afraid to change. Thank you for sharing Sydne.

Now, for a giveaway. If you would like to be eligible for a copy of The Startup Way, leave a review of the Disrupt Yourself podcast on iTunes before April 1st, and we'll select one lucky winner.

For all of you that have followed Eric's methodology and are now scaling your organization or your team, you've brought a lot of people on board and want to be a great boss, but now you're wondering if you actually are, check out Build an A Team – my book that will be published with Harvard Business Press on May 1st. You can download the first chapter at whitneyjohnson.com/ateam for free. If you like what you read, pre-order the book.

Thank you again to Eric Ries for being our guest, to sound engineer Kelsea Pieters, manager / editor Macy Robison, content contributor Libby Newman, and art director Brandon Jameson.

I'm Whitney Johnson
And this is Disrupt Yourself.