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- Jaime: Welcome to *Eventual Millionaire*. I am Jaime Masters, and I am so excited to have Rebecca Costa on the show today. You can check her out at RebeccaCosta.com. She is a futurist and sociobiologist. And I have a million questions for her. Thank you so much for coming on the show today.
- Rebecca: Well, how long is the show? I don't know if we'll get a million in.
- Jaime: Well, you can come back over and over and over again, right? I can monopolize all of your time. That would be amazing. One of the first things that popped up is, "Why are human brains so slow at evolving, and yet, the speed of our technology, it seems to be so much faster nowadays?" Do you have those answers, too, for me?
- Rebecca: Well, one way to think about the trouble that we're in right now is – I'm gonna steal a quote from the very famous Edward O. Wilson where he says, "We have paleolithic emotions, medieval institutions, and godlike technology." And I've never heard it put more succinctly that this is the human condition right now. If you think about two clocks, the clock of physiological evolution and then the clock of human progress, you quickly realize that progress begins to exponentiate. And knowledge exponentiates, right? I mean, we are creating more knowledge now than any other time in human history. And yet our brains are largely unchanged for the past million years.
- And so, that prehistoric brain that has a lot of programming that we don't need anymore is kind of getting in the way. It can't remember as much. It can't react as quickly. It can't adapt. It's really having an adjustment problem. And as you know from my book *The Watchman's Rattle*, I chronicle what happens to civilizations when they reach a point that I call the "cognitive threshold," the point at which the brain can no longer discern between an empirical fact and an unproven belief.
- Jaime: Which is mind-blowing. Everybody needs to pick up the book anyway, but to describe it to my children and go, "Yeah, we're just like this. And we can't really do anything except for try and mitigate as much as we can." Right? Especially when it comes to business and bringing it back to, "What do we do in the moment?" knowing that our brains aren't fully capable of so many things, and yet, we're trying to do so many things.
- Rebecca: Well, as you know, in previous civilizations, we didn't have a way out. But I'm an optimist. And I didn't wanna write a book that was
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doom and gloom. Eventually things get so complicated our brains can't handle it and then there's systemic collapse. That's what happened to every other great civilization. As you know in my book, I chronicle this from going back to the Mayans all the way to present time. But one of the advantages that we have today is that we've kind of subcontracted a lot of the activities that are necessary for civilization to continue to move forward to computing. And more and more, whether we admit it or not, we rely on computing to do the heavy lifting for us.

And we're developing a very trusting relationship with technology, which has a good side and a bad side. I don't wanna paint a rosy picture that it's all good. We've never had anything that's ever been invented since the beginning of mankind that hasn't been abused. But a simple example, if you go outside and your neighbor says, "Hey, you might wanna take a rain jacket. It's gonna rain later today," and then you walk inside to get the jacket, and you say, "Alexa, what's the weather?" and Alexa says, "Rain at 9:00 tonight," who are you gonna believe? Chances are you're probably gonna believe your smart device rather than your neighbor.

And that's a really important thing for businesses to comprehend because what it means is, is that we rely on data to inform our decisions rather than each other or intuition or unproven beliefs. And that shift is very, very critical for leaders in business.

Jaime:

Assuming we actually do that, right? Don't go on based on old premise. So, when it comes to big data, I was reading about how with predictive technology, we're gonna know exactly the time to call somebody so that they will definitely answer so that – right? There's just so many predictive pieces that I don't even think small business owners are even close to aware of on how close we are to some of this stuff. Can you tell me about the next five or 10 years and what we should sort of be expecting or hoping for, maybe?

Rebecca:

Well, it's not the data so much because we've been aggregating so much data. And the data's rather useless unless you can find patterns. And those patterns then predispose you to understand outcomes. So, you can build algorithms. Now that all sounds really complicated, and it is complicated. But one way to think of it is, if you have 10 data points, you might get lucky and guess what No. 11 is, right? But when you have billions and billions of data points, it isn't so hard to guess what a billion and one's going to be. Right?

And so, that's one way to sort of understand that quantitatively we have so much data that we've become extremely accurate predictors of exactly what the next event is going to be. And whether that's somebody buying something, them buying something purple, them buying something purple under \$21.43, them buying something purple under \$21.43 tomorrow morning between 9:00 and 10:00 a.m. I mean, we're just closing in and closing in so that we approach business in terms of the highest probability of making the sale or the close.

Jaime: Do you think that small business owners will have access to this information, though, 'cause it's so expensive right now, right? So, the big companies that can have access to paying attention to more of the predictive models and patterns vs. the small business owner going, "I know the information's out there, but I don't know how to get it." Like, where does that look like in the future?

Rebecca: Well, this is where I think there's a need for a service. And I think that the Amazons and the Googles of the world are really looking at being able to provide those kinds of services. Because a small business – a mom and pop shop – isn't going to be able to go get some supercomputer to run these kinds of algorithms. But in the same way that, remember, that it was only a couple of decades ago that you had to be a big company to have a website. You needed website designers and programmers to make the website. And then, suddenly, there was a barrage of easy-to-use tools. And now, a grandma can set up a website to sell cookies. Right?

So, we're going to see these predictive services come into play, but that doesn't let us off the hook to keep our eye on it. Because when these services are available – and some of them are right now through Google, through Amazon – we need to jump on these services. Because what they do is, they allow us to pinpoint a positive outcome in a way that we've never had that power before.

Jaime: Which is amazing because business is tough, right, and to make it a little bit easier using data instead of trying to, like you said, use intuition or what we think might work is difficult. So, hopefully, we can be using it for good and for small businesses to really flourish. What are some of those things – the technologies that are coming up – that will be really helpful for small business owners in the future that you think of? Like, I'm thinking, I used to do website design back in the day and how expensive and how hard it was to code for everybody. But because we're moving so fast, there must be so many other things that are up and coming that

business owners don't even see.

Rebecca: Well, there are many things. I talked to a small business owner the other day who was pretty shocked when I said, "Look, you can get facial recognition software loaded up on your computer," and every computer has a camera. And I said, "And you can look, as you're talking to a customer, you can look and see if they're responding to what you're talking about." And I said, "How much do you think that facial recognition software costs?" And they said, "I don't know." And I said, "About \$200.00 bucks."

Jaime: All right, I'm gonna need that link. Yeah. That's amazing.

Rebecca: Because here's the thing. You have 52 muscles in your face. And going back to prehistoric times, this is the way we express ourselves. This is the way we express we're pleased. And this is also the way that we express that we believe you, that you're telling us the truth, and that we're going to take an action. All of these are expressed through those 52 muscles. And facial recognition software has gotten very cheap. And if you have to interview an employee, why wouldn't you put facial recognition on an employee and start to ask them questions? That facial recognition software will tell you, specifically, that they're avoiding a question, that they're deflecting.

If you asked them, "Hey, well, why'd you leave your last job?" or, "What did you do in your last job?" and you find they're exaggerating, all of that will show up in facial recognition software. So, it's not just the customer, it's also the employees. If an incident occurs, you wanna be able to interview them. And these tools are very, very inexpensive. So, we've been talking about big data. Big data – I don't wanna just look at, "Okay, you wanna make a sale, or you wanna sell your service," there's other aspects of it that are inexpensive and that you can use. And that person said, "Well, I'm all over facial recognition software.

I want it in all my stores so I can see when someone looks at a price tag, maybe they're reacting to it really negatively, and we'd better bring that price down."

Jaime: See, that is awesome. And thank goodness that stuff is coming out 'cause a lot of small business owners that suck at hiring, like you were just saying, the amount of skillset and time it would take for them to learn how to hire well takes a really long time. So, these are kinda like shortcuts. Are there other shortcuts like this that

technology will help with small business owners that we should be looking for?

Rebecca: Well, absolutely, first of all, there's security systems, right? There are smart labels that are coming out now so that if you have a customer that comes in and really wants to know, "Hey, where did the ingredients of this packaging come from? What were the labor laws?" Just recently, today I believe, it came out that many cosmetics were using a particular type of grown – I don't know – agricultural product on farms in Indonesia where there's regular child abuse and rapes going on. This news just broke today. So, if you're a retailer, and you're carrying Shiseido and all of these products and all, and that news hits, you're going, "Well, wait a minute, how many other products am I carrying are based on this?"

And consumers, particularly young consumers, they care about that. And bear in mind, smart labels are getting to be more and more popular where you can just take your phone and tap that label, and it will take you all the way to the source of every ingredient, including indicating labor laws that governed that farm that produced that ingredient. And you may be able to go to them and say, "Is that something that you are concerned about?" and they say, "Yes," and you might be able to tap that label and scroll down to a particular thing that that consumer is concerned with. Because that really matters to the younger generation.

Jaime: Why do you think that is, too? Like, I do see sustainability and really paying attention to where things are bought and the integrity of the companies that we're buying from. Do you think that's just part of our evolutionary process for younger people caring more about that?

Rebecca: I think it's all a generational thing based on how comfortable you are with digital technology. I really do. I mean, I'm 65 years old, and everybody thinks I'm really hip because I'm a futurist. And so, I have to be on top of all emerging science and technology. But I can tell you that everybody else in my age group is going, "I don't really need to know that," as though it's difficult to know it. Right? I think that over 40, you think there's gonna be a degree of difficulty. Or you're having so much trouble navigating a complex world, you just don't want it. You're kind of self-editing the data. Right? Whereas I find that my children, they're just data hogs.

They wanna know everything, even stuff that I don't think particularly matters. But they wanna be informed. And so, my

hat's off to them because they know how easy it is to get to that data.

Jaime: That's a really funny way to put it too. Even with my kids, they're younger, and I'm like, "I'm a geek. I have a degree in computers. I used to build them. And yet, I have no idea half the crap that they've got." And I'm feeling like, "That's too much," at this point. But the speed is just so fast right now. I mean, 20 years from now, who knows – I mean, maybe you know – where things will be?

Rebecca: Well, everything will be instantaneous. And we won't be using external devices. We'll actually be using implants.

Jaime: Okay, let's talk about that.

Rebecca: And we're already broaching that. If you look at people that have medical problems, they're coming back from the war, they're using robotic arms, legs. Ray Kurzweil talked about the man-machine meld. And we're already starting to make that transition when you think about trusting Alexa and trusting your nav system. And most people rank the level at which they trust machines higher than they rank the level of trust they have of their political leaders. That's true pretty much throughout the United States. So, you can see that this transition is already beginning to occur.

Jaime: Wow, okay. That's really interesting. And it just made me think of politicians and then using the facial recognition and so we'll know when people are lying, maybe, potentially? Right?

Rebecca: Well, you see, I'm interested in a whole new news media that uses facial recognition when these Senate hearings are going on, like the confirmation hearings. Why are we having confirmation hearings without facial recognition?

Jaime: Seriously.

Rebecca: I mean, this is ridiculous. We're picking a Supreme Court Justice when we could have cameras on them and say, "Hey, they're deflecting," or, "That wasn't true on the truth meter." And cameras on every one of the senators asking questions. So, I mean, we're not fully using the technologies that we have. And believe me, it's not because of price. It's not a matter of money.

Jaime: Well, then it becomes moral dilemmas, right? And it's like, where

is the line between what's okay and what's somebody's opinion of not okay? Right? 'Cause it sounds like we can do a lot of things even right now, and yet, that's scary as all heck. Right? I mean, I like the level of transparency.

Rebecca: Well, [inaudible – crosstalk] [00:16:06], you start to get into the invasion of privacy, right? What if my customers don't wanna be photographed or videoed? They already are when they walk on the public streets. But that train has already left the station. But let's pretend it's a real thing. It's a real concern. 'Cause you don't have any privacy. Right? People asked me about it, and I said, "That might've been something to talk about 20 years ago."

Jaime: Too late.

Rebecca: "It's too late, way too late. Not interested as a futurist." But people may be squeamish about that. Well, in the commercial world, if you go out and you're doing a documentary or anything like that, and people are walking by, you have to have them sign a photo release. And the photo release says, "It's okay. You're in the background here," or, "You give permission to use it." So, you can ask people that are coming in to look at their phone and hit a, "Yes, I agree. I agree that I'm gonna be videotaped." You already have security systems in 7-Eleven that are videotaping you. And you're not asking everyone that comes in to buy a Coca-Cola or an Iced Tea to sign a photo release.

But apparently, some people get nervous about that. But it's not that difficult to do. It could just pop up on an iPhone, and they'd tap it and say, "I'm okay."

Jaime: I love that you're like, "That ship has sailed."

Rebecca: Well, if you knew how much retailers know about you –

Jaime: I mean, marketers, yes.

Rebecca: –and how much the Silicon people know about you. When this whole thing came out about the government collecting metadata, I was just laughing. I said, "Well, what's the big deal?" Because, I mean, all you have to do is search for "blue drapes" for four minutes, and you know that ads are popping up all over the place for drapes, right –

Jaime: Yes.

Rebecca: – that are on sale. How did that happen? Well, because their eye’s on you all the time. All the time. Everywhere.

Jaime: Well, and even having the Amazon Echo where I didn’t even it look it up. I said something, and then I get an ad for it on my phone. I’m like, “Oh, crap.” Like, of course, but what the heck?

Rebecca: And so, why is that? Because everybody’s trying to narrowcast. Right? Broadcasting is really inefficient. You put an ad on TV. You put an ad on radio. Most of it’s wastage. It’s not who you’re trying to get to. And so, narrowcasting is really, really important. And that’s what all this data is doing. I mean, it’s narrowcasting down to, “That person said, ‘blue drapes’ in their living room. All right, I’m gonna send them all the blue drapes I can find, and I’m gonna get a sale. That person happens to be on their computer between 8:00 and 9:00 in the morning. I’m only gonna send it between 8:00 and 9:00 in the morning. I’m only gonna send it when the man of the house who buys drapes logs on.”

I mean, we are so transparent to everything. You should function as a small business that, “Everybody knows everything. There’s no secrets.” Right? And as Shiseido is discovering this morning with this farm in Indonesia, this horrible, horrific news. I mean, it’s shocking and terrible. But that’s what farm to table and that kind of supply chain and block chain technology has done. It’s really allowed us to see even further than we could see before.

Jaime: And we all think we’re special snowflakes, that nobody will know that blue is our favorite color, and therefore, right? And I think that’s the hard thing too. But don’t you think with implants, there’s a lot more potential for horror? Like, we now have wearables, which I think is awesome. But there’s tons of data on that. You have so many pieces. And it’s only gonna get more and more and more. It seems like a blessing and a curse with both of those things, right?

Rebecca: Well, we’re in a really funky place where most of these things are external. And they’re based on size limitations. But an area that I’m very interested in is nanobot technology. And those are robots that are smaller than a single human cell. And so, eventually, I mean, small businesses may or may not be interested in this, but eventually, when you have a disease, you’ll just simply take a pill that has a nanobot that is smaller than one human cell, and it will be programed to eliminate the cancer in your body or the plaque

that forms pre-Alzheimer's. It will be programmed to go after that specific disease.

We won't be cutting people out and removing organs. I'll tell you, in about 10,000 years, that's gonna look really neanderthal and very primitive. "You saved people by what? Cutting open their bodies and taking stuff out?" It's gonna look primitive. And on many things we're doing are gonna look pretty backwards.

Jaime: Well, and even just I was thinking of the robotics in surgeries. We're like, "Oh, but it's the size of a room, now, right, where computers used to be the size of a room." But not that long ago – and I think that's the thing that's so tough. I know Ray Kurzweil used to have a 2040-something line. Where do you feel like we're gonna be living a lot longer too? 'Cause that's so potent for business owners right now to go, "Oh, if my customers are living longer, it just changes things."

Rebecca: Well, that gets back into the predictive analytics. An example I just gave that people loved is, I said, "You know, we've gotten to the point where we can predict an old person's gonna trip and fall within the next three weeks with about 85 percent to 90 percent accuracy." So, you go, "Well, how is that even possible?" Well, it turns out that there's a somewhere between a two to three centimeter change in their walking gait that occurs that's the ultimate predictor that they're gonna trip and fall. We didn't know that occurred again, but again, this is what predictive analytics has allowed us to do. It's to associate the change in the walking gait – the normal walking gait – with the trip and the fall.

So, if you know technology, we're gonna get better and better and more accurate doing this. But the point is, is that for the elderly, most of them lose their ability to live independently and wind up going into assisted living because of those falls. So, if you can just prevent the fall by putting a Fitbit type of device on that would ping their phone or their caretaker's phone or their family's phone that said, "Hey, their walking gait has changed. They're getting ready to take a fall in the next day or two. Get them off of uneven surfaces into physical therapy to correct that walking gait," whatever, and avoid that fall.

We've found that we can keep the elderly living independently anywhere from three to five additional years. So, that gets to the, not just the medical health, but the prevention of what causes people to deteriorate. And so, now we have better and better

models about what obesity does to shorten your lifespan, what diabetes does, what depression does to shorten your lifespan. We're getting to know those things, and as we get better and better and dial those in, the longevity is gonna get longer and longer. And, you know what? We need different types of products for those people.

Jaime: Yeah, I love this. It also seems so science fiction, even though it's not at this point, right? So, when you're talking about nanobots, what's the timeline on that? I know you said 10,000 years. But when do you think we'll actually start using it in a way that it would really be impactful?

Rebecca: Well, we're already using them. We've already used them in Norwegian rats, I believe, in – I don't remember which country right now – but we've already tested nanobots to remove the plaque that forms pre-Alzheimer's. And it was 100 percent successful. The robot removed the plaques and turned itself off and was eliminated through urine. So, we know it works. When will human trials begin? Not for a while. But as a futurist, I'm the first to admit, I'm always wrong on my timetables. I always think that something's like five years out or 10 years out and then all of a sudden, it's available on Amazon in one year. So, I'm not a good predictor of timetables.

I'm a good predictor of what's going to happen but not of when. I always think there's more time.

Jaime: Yet, until we have predictive models for our predictive models, right, so we know what's coming and when.

Rebecca: Yeah, I'm way off on my time. It always happens much sooner.

Jaime: It always happens much sooner. It's just interesting that you say that. I know a lot of people talk about Ray Kurzweil's thinking that it's sooner than it really is. But you're saying you're wrong on the sooner-side typically.

Rebecca: I am. I'm always wrong on the sooner-side.

Jaime: Wow.

Rebecca: It always happens much faster than I anticipate. And that's because there's a quickening that goes on as you exponentiate. The speed of change begins to quicken.

Jaime: Okay. Can you give me like the next five or 10 years-ish, especially 'cause we're business owners especially are in this rocky road of COVID and pivoting and changing? And not only that, but technology's still moving forward. And we're in this weird – I mean, we've always been in this weird thing with technology recently – but especially 2020. Like, it's been creating a whole bunch of change. So, five to 10 years out for our civilization, what are you seeing, both the tech side but things that business owners would care about?

Rebecca: Well, we knew that the internet was gonna play a big role. And that's going to now be accelerated by 5G communications technology. So, what's going to happen now is that machines are going to speak to other machines. And there won't be a human intermediary. And that has a really big effect on how businesses are run because it basically means you'll be searching for things on your computer, and your computer will get to know your criteria, and then somebody will send your machine blue drapes that are in the price range you want and that are perfect for your windows. And your machine will buy them. And it will not require you to edit and to be part of that process.

So, machines will become consumers. You'll be actually appealing to a machine from your machine. And that's the big change that will occur within the next five years. And the only thing preventing that is really 5G. The way I explain it to people is that cars will no longer have drivers, right, and you'll be driving along. And your car will tell the car next to it that you need to move into the left lane and make a space. And in that way, machines will be talking to other machines. And they won't be controlled by humans.

Jaime: Which is a gift in some ways, it seems like, especially when it comes to car accidents and stuff like that. But what about like emotional buying. Like, if it's machine to machine, where does the impulse buys and where does the more of the human psychology come into play on any of this?

Rebecca: Well, don't underestimate the machine's ability –

Jaime: Valid point.

Rebecca: –to know what your impulses are.

Jaime: It predicted everything. Darn it.

Rebecca: We're barely out of the caves. And our impulses are pretty primitive and transparent.

Jaime: That's a good way to put it.

Rebecca: I don't think that's a big challenge for an AI machine.

Jaime: I know. It's funny. Like, even Uber Eats, my parents are just like, "It gets delivered, right? But I still have to hit the buttons. But I just want them to know what I'm feeling like eating and just have it tell me."

Rebecca: Well, it is going to know. And again, you'll have internal devices. It'll start externally. But you'll have internal devices that'll be communicating to a hub. And that hub will be talking to other machines. And it'll be monitoring everything. It'll be monitoring your hormone levels, your health levels. It'll be monitoring your joy levels and whether you're unhappy with something. You may open up those drapes that were ordered without you when you're not happy, and immediately your machine is saying, "We're sending them back. We'd like a full refund." I mean, it's taking care of everything.

Jaime: You're like, "Yes, good. This is like the Jetson's. Yes, I want everything to know everyone." But on implants, would you get an implant? Like, if they had one soon, would you get one? Or are you worried about that technology too?

Rebecca: I am up for everything. As a futurist, I'm open for everything. So, yes, as soon as there's an implant, I'm top of the list to try to get one. Yes, absolutely.

Jaime: See, I've always joked that I don't wanna be in the alpha trials. Like, I'll be in a beta group once they've really tested a bunch of others 'cause I just feel like there's so many problems that can go wrong in tech also that, of course, once they get good at it, but we can't even keep our internet working right now. Right?

Rebecca: That is true, but you have to remember there's an age difference between us. Amongst EU insects, the elderly are always sacrificed first. Although, I'm not trying to draw an analogy between human troops and ant colonies.

Jaime: That's so funny.

Rebecca: But amongst highly sophisticated eusocial organisms, you will note that the elderly are sacrificed first. They're sent out as soldiers in the frontline. And, perhaps, that sounds rough, but that's the way it works.

Jaime: Yeah, I mean, when I'm 100, I'm gonna be like, "Sure, why not? I'm gonna die anyway. Who cares?"

Rebecca: Yeah, so I'll hopefully be the first to sign up for the implants. As they were testing for the vaccines and everything, I said, "Look, what we need is a long line of elderly people willing to sacrifice for the –"

Jaime: It's crazy, though, to think of 'cause like, so, my former husband has Stage IV cancer, and, I mean, for him at this point, he's like, "I'm gonna test whatever they're willing to give me because, I mean, I'm gonna die anyway." Right?

Rebecca: Yeah.

Jaime: But what I'm interested in, and especially on the future of technology – not that this is a medical show in any way, shape, or form – but a lot of my friends are having issues with toxins and mold, like, all of these things where doctors can't even figure them out at this point. And our medical industry is so disjointed in so many different pieces. I mean, I know with nanobots eventually, but do you think that's sooner rather than later that we'll get a better handle on all of this?

Rebecca: Well, we are getting a better handle. If you're lucky enough to be admitted into an ER that has a Watson-type of a big data system, it doesn't matter whether the best doctor is on duty or the worst doctor is on duty. Whoever the intake person is will type in whatever your symptoms are, and Watson, an AI-based medical system, will come back say, "The chances are 90 percent the patient is suffering this, 89 percent this, 63 percent this, 23 percent this." And then the most important thing that the AI system will do, is it will say, "But if you get me this information next, I can improve my diagnosis by 33 percent." So, it provides a pointer.

So, you can be a medical student, your first day on the job, and you'll be as good as the best physician in the entire hospital. So, we have to remember that that's what AI has the power to do.

Jaime: Yeah. That's so exciting, though, too. How quickly – and I know you said yours is usually sooner – but how quickly do you think that'll actually be adapted? Is it just a cost thing right now? Or is it that we don't trust it yet?

Rebecca: Most ERs throughout the United States – not in non-developed countries – but most ERs in the United States of major hospitals are relying on Watson-like AI systems. The doctors are putting in the symptoms. And those symptoms then are going into algorithms that are coming back with the probability that you have this, this, this, this, this disease. Many people don't know this, but most people don't know that at least 20 percent of the health problems that you encounter are going to be rare diseases. Rare diseases in and of themselves are rare and hard to diagnosis and usually take up to seven years to diagnose.

Jaime: That's right. Yeah, right.

Rebecca: But when you combine all the rare diseases, there's about a 20 percent chance. So, if you think about it, 20 percent of the ill people are gonna go through this horrendous journey of seven years of trying to figure out what's really wrong with them. And my bet is, at some point, they'll wind up in a psychiatrist's office who's telling them, "Nothing's wrong except you just think something is. It's all in your head."

Jaime: Yeah.

Rebecca: But using AI algorithms, there's a company – I'll have to remember the name of it later – but there's a company in Silicon Valley that basically said, "Well, why can't these rare disease experts all be able to go on a site, and you load up all your symptoms? If you're a year or two, and they haven't been able to figure out what's wrong, load up all your tests, and these specialists will be able to tell you if you have a rare disease." They've cut that time down from seven years to less than six months for a diagnosis.

Jaime: So, I'm thankful for this. Yeah, I mean, it's information that we have, it's just – what was that?

Rebecca: **[Inaudible – crosstalk] [00:34:30]** yeah, a couple hundred dollars. And there's another example of it's not the cost. It's just getting it used and getting the availability out to other people.

Jaime: I love talking about this. So, okay, do you think we'll be needing to use our brain less as far as information processing 'cause we're gonna have other external?

Rebecca: Oh, no. No, no. Our brains are gonna be in full use, full power. As you know, at the end of my book I talk about brain fitness. There's a lot of evidence that brain fitness tools, particularly those that were developed by neuroscientist Mike Merzenich out of the University of San Francisco. He was that first guy that really looked into the adaptability of the brain. When you have brain damage, sometimes other parts of your brain take over whatever that function used to be. And he's just a brilliant neuroscientist. And he began thinking about how hard it is everyday for our brains to be in maximum use, right? And it's just like you have no other gears on your car. You only just know.

You have one gear, and you push the pedal to the metal all day long, right, until you collapse and sleep at night. And some of us don't even get proper rest on top of that, right? So, when you really look at that, you really have to give your brain all the help that you can give it. And one thing to do is to spend five to 15 minutes using brain fitness. They're just simple games. You think you're just playing video games. But really, what it's really doing is, it's exercising everything from memory to spatial distances to all kinds of things. And because he's designed these, it's firing every part of your brain. And there's a great indication that in schools it really helps the schools.

In the Oakland School District in California, they began opening up everyday with kids starting out with brain fitness 'cause you can imagine as a youngster trying to learn all this.

Jaime: Yeah, I was listening to one of your other speeches about this, and I'm like, "I need my kids to do this now."

Rebecca: Yeah.

Jaime: Because if they start it now, it seems like it's an ever-evolving, that it will last, if they continue it, hopefully.

Rebecca: You'll see a real change. You'll really see it. And even as a business owner, when things are moving this fast and feel really uncertain, and you've gotta take data, and you've gotta figure out what to do, it's just so taxing because it's not just the stress. It's just overload on your brain to go, "Hey, I gotta figure this out. I

gotta get myself through this.” And just any help that you can give your poor brain that wasn’t designed for this and is getting left behind by technology, any help that you can give it is a good idea.

Jaime: What are your thoughts on meditation or ADHD or – I just feel like we have a lot of these anxieties, a lot of these things that we’re trying to fix and just work harder. Like you were saying, like, most of my clients will be like, “Well, then I just have to work more,” or, “I have to use my brain better,” or we try nootropics or drugs or something to try and be better faster at everything. What are your thoughts on meditation vs. brain fitness to try and be more focused and to really have our capabilities as used?

Rebecca: Well, I’m very empirical because I’m a scientist. So, I like data, right? So, if meditation sounds really good. Okay, try it. If it’s helping you to think clearer, your reaction times are better, you can stay up, you don’t feel tired after you eat lunch. I mean, I believe you have to take these things and just try them. Try them out. They won’t work for everybody. For some people, they’ll work very, very well. There’s a new app called Calm. It makes you spend one minute and not do anything, right? Well, it’s a little artificial because you can stop all the devices and everything around you but try to stop your brain. Yeah, there are gurus that have spent their lifetime trying to shut their brain off.

So, there’s a lot more to it than the little Calm app. But try things and then see what is working for you. I’m a big believer in that. Meditation does not do anything for me.

Jaime: Really?

Rebecca: That’s me personally. No, I become very agitated after I meditate. It’s not the right thing for me. But I will tell you what works for me that really clears my mind is a walk – a walk in nature. I happen to be here in Oregon where there are any number of trails. And most of my wardrobe is waterproof clothing. I throw it on. I throw my waterproof boots on, and off I go. And I happen to have a one-year-old yellow lab that loves the water, so off we go. And I notice that when I come back, I’m able to solve problems much easier.

Jaime: What do you think of when it comes to testing your own self? When we don’t have statistically significant information but we think it helps. Right? Like, how do we determine those nuances on the placebo effect on taking a new nootropic vs. something else?

We're like, "Oh, well, I might as well keep doing it 'cause it seems like it's working."

Rebecca: Well, you need an empirical test, right? So, create some math tests. Go online and find some math tests and then time yourself and see how long it took you. That'd be a good benchmark. Maybe one morning it took you 10 minutes, and then next morning you took a walk before, or you did some brain fitness exercises, and it only took your four minutes. Then do it again and again. And if it's four minutes, three minutes, two minutes, you're going, "All right, I have empirical evidence." Look, we like to believe what we like to believe. It's something's fun, we wanna believe it. If we like it, if it makes us look good, we wanna believe it. I mean, we wanna believe what we wanna believe.

Be sure that you're not just falling into a trap of talking yourself into something that isn't doing anything for you. I mean, look for empirical evidence and be a scientist. Devise an objective test. And nine times out of 10 it isn't too hard.

Jaime: I love your perspective. Okay. So, one other question. When it comes to small business owners, especially with everything that they have going on, what should they be reading – besides your book, of course – what should they be reading or paying attention to really know what's coming so that way they have a little bit more time to adjust for what we're going through?

Rebecca: There isn't gonna be anymore time to adjust. These kinds of things, okay, I mean, we're not living in a fantasy world, so let's just be honest about it. These kinds of things are going to come. Right? There'll be a crash of the dollar. A war will ensue, a 9/11. They'll be a virus that shuts us down. A mass shooting will happen in your town. Something will happen to disrupt you. So, what is your strategy to deal with that? You must be diversified. The No. 1 rule in nature for survival is any drive towards singularity is a drive toward extinction. I'm gonna say it again. That's the one rule that businesses need to remember. Any drive towards singularity is a drive toward extinction.

That's why we have lots of types of birds, lots of ants, lots of varieties of fish. So that when the environment makes a sudden shift, all of them won't be wiped out. Chances are a couple of them will have what's compatible with that environment. And some will thrive. And some will barely hang on, but they'll make it. So, we have to remember that 99.99999 percent of all the species that have

been on the planet are no longer here. They're no longer here. It is the groups that were diversified that made it through sudden change. And we can take that lesson outta nature and adopt it to business. We can say, "If I'm diversified, then my odds are when this doesn't work, this will."

You know about this because you invest in the stock market, which is a highly complex, high failure rate environment. And so, why do you invest there? Well, and how do you invest there? Well, stocks go up, bonds come down, maybe real estate goes up. You spread your money around because you know that when the financial environment changes, you can be hurt if you just bet everything on one stock. So, in that same way, as a business, if you're only selling one type of product, one type of service, diversify as broadly and as quickly as you can, and you will survive any disruption.

Jaime: I love hearing all of these theses. Especially, I was listening to one of your videos like 10 years ago, and you're like, "And there will be a viral pandemic." And I'm just sitting here going like, "Yep, right, expecting the unexpected, though," quote/unquote, even though it was expected the expected, I suppose, considering we have all the data saying that this is what it's gonna do. How can we use our time as wisely as possible for a business owner that might only have so much time and space to diversify?

Rebecca: There's probably many ways you can diversify. Just get creative about it. Let's say you're selling ice cream cones. Right? And you go, "All right, I'm selling ice cream cones. How can I diversify out of ice cream?" Well, most places that sell ice cream, you go in and you can buy coffee. Right? And then they set some tables up outside. And maybe they moved into sandwiches. How hard is it to get a panini press? You have to keep moving. You have to keep broadening your product and your service offerings. The mortgage industry is a good example of that. After the subprime mortgage crash, you woulda thought they'd never come back.

But then they came back with so many creative options, and they keep broadening and broadening those options. So, you've gotta remember, it's just like investing in your retirement. You're not gonna take all your money and put it on one stock. You're gonna spread it out. And diversification is the defense against sudden disruption. That's all we have.

Jaime: I love that you're an optimist because when you read books or any

of those things, there's a lot of things to be pessimistic about, but there's also, like you're saying, a lot of opportunities if you know how to navigate and pick up your book so we know what's coming a little bit more.

Rebecca: That's exactly right. I'm consulting with Abbott Labs right now. So, Abbott Labs was the first to get the five-minute test out – COVID test out – by adapting one of their existing test mechanisms. But if you look at Abbott Labs, it has a pharmaceutical arm. It also makes PediaSure, Ensure, all of these nutritional supplemental drinks. That if you look at Abbott as a company, it's very, very diversified.

And as a result of that, when COVID hit, maybe the pharmacy group didn't do so well, maybe the diabetes testing wasn't taking off as fast they had hoped, but, boy, you couldn't produce enough Ensure, Pedialyte, and PediaSure for the hospitals. And you certainly couldn't get enough of those five-minute tests off the production line. So, again, the more diversified you are, the better off you will be.

Jaime: I love this. I know we have to start wrapping up. But again, we didn't get to a million questions, but we'll put a pin in this one for right now.

Rebecca: We stopped at a million?

Jaime: Close to, close, right? Pretty close? You're a scientist. You shoulda been counting the – oh, no. I'm sure we can go back and find out. When it comes to this week – because we only have so much time – what's one action listeners can take this week to help move them forward towards their goal of a million?

Rebecca: Spend some time thinking about how you can diversify your products and your services, some real time getting creative about it. "What else could we offer and continue to offer that would tax our resources as little as possible?" And I bet there's a lot of ideas, in particular, that will come from the frontline employees. Ask them, "What else could we offer?" And get creative about it.

Jaime: Yes, business owners are supposed to be creative. Come on, go use your visionary expertise to diversify so you might still be alive after all the craziness that's gonna be happening.

Rebecca: That's right. And as a backup, if you really don't have the

resources to diversify that way, then collaborate. We are great collaborators when we face danger. That is our heritage as a human organism. And so, we always see these movies where a meteor is gonna hit the earth, and then all of a sudden, there's no war. And all of the countries that hate each other get together to figure out how to deal with the meteor or aliens from outer space or whatever. We love those movies because we're natural born collaborators. So, as a small business, those people that used to be your competitors, they're not your competitors anymore.

They're people that you can come together with and, perhaps, share resources. And together, by joining together, you'll be a diversified group.

Jaime: Great perspective. Thank you so much for coming on the show today. Where do we pick up your book, and where do we find more about you online?

Rebecca: You can just go to RebeccaCosta.com. And as you say, there's lot of videos and lots of information there. And we have a blog that we update periodically.

Jaime: I really, really appreciate you coming on the show. Thank you so much.

Rebecca: Well, thank you for the good work you're doing. And hello everybody and stay safe.

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Duration: 49 minutes