

On The Brink Podcast: Andi Simon and Jared Tate



Andi Simon: Welcome to On the Brink, A Fresh Lens to Take You and Your Business to New Heights. I'm Andi Simon and my guest today is Jared Tate, the founder and creator of the DigiByte blockchain. Jared is a very, very interesting guy and I can't wait for all of you to learn about everything he's doing in the fascinating world of blockchain. Okay, let's get started.

Jared Tate: Everybody is very excited. We just hit the launch of our Digi-ID information website and GitHub repositories this morning as well.

AS: So you're very busy on lots of cool stuff.

JT: We have an amazing amount of cool stuff happening right now.

AS: The questions that came off Twitter were really very varied and very interesting. So for those listeners who aren't familiar with you, let's start with who is Jared Tate? What is DigiByte?

JT: That sounds good.

AS: And then we can migrate into what's going on now and then we'll go into the questions that everyone's asking because there are so many of them that they almost want a personal time with you, if I could read between the lines. Can they get a minute with Jared, so I'm honored. Your listeners are all looking for information about DigiByte, what's happening with blockchain, what's happening with you, how do you build real momentum around this. So my question for you is, how do we begin to engage with them? Let's use this as a platform and make it valuable for you and for them. So first, who's Jared Tate? Share with our listeners.

JT: Well, I like to think I'm a simple guy. I was born in a very small town in the middle of nowhere in Idaho. In fact, my hometown is so small, it was the first city in the world that was actually lit by nuclear power.

AS: You're kidding.



JT: A little town called Arco, Idaho. To this day, it still has less than 800 people in it. But that's actually the place where I discovered bitcoin back in 2012. My father had just fallen off a roof, he had broken his neck and both of his arms and I moved back home from Phoenix, Arizona to take care of him. I was working as a freelance web developer at the time and obviously, in a small town in the middle of nowhere, you've got a lot of time on your hands. And that's when I was surfing the internet and I discovered bitcoin. So when I

was looking through the bitcoin source code back in 2013—I actually started out as a bitcoin miner—when the first ASIC miners, which are the super advanced, specialized miners, came out in the spring of 2013, at the time I was actually mining bitcoin with my gaming computer. Within about two days, I went from being able to mine almost a bitcoin a day to, I calculated, it would take me about 6,000 days to mine another bitcoin. So I was like, what is going on here? This is not how this is supposed to be, bitcoin is supposed to be a decentralized system. And then I started seeing some of the fundamental flaws in the bitcoin protocol. So it's a beautiful idea, but starting out when I first started thinking about DigiByte, my original intent was to create something to prototype changes that could later be implemented in the bitcoin protocol. I never really thought DigiByte would take off to where it is today. It was kind of an experiment. But that's the story of how DigiByte started with the genesis block, which is the first block in the blockchain. And the news headline was: "Target: 110 Million Customers' Data Stolen."

AS: Wow.

JT: And that was the beginning and that's kind of the vision of where we saw this technology and where it can go.

AS: So your commentators everywhere, I was doing research, said something very powerful: you're the sleeping giant cryptocurrency. And everybody is talking about, how do we begin to build you into the leader because in four years you have the longest, most secure, most amazing system. So talk a little bit about how you're beginning to focus on the security of it, the size of it, the scope of it. Give our listeners who may not be cryptocurrency gurus on this, what's going on?

JT: Well, to start out, Dr. Simon, over the last four years, almost five years now, DigiByte has undergone a series of improvements. We've actually undergone something known as a hard fork, which is where we completely changed the protocol and we upgraded it. And we've actually been through that four times, we've done a series of those, which, by the way, four times in this industry is almost an eternity.

AS: Yeah.

JT: Especially to be able to pull it off successfully without a lot of issues. Over those last four years and four hard forks, we've implemented a series of improvements to build upon the initial foundation of what DigiByte was. And those improvements have actually been implemented in dozens of other blockchains since. So part of the technology that we've developed and pioneered is literally securing billions and billions worth of cryptocurrency now. It's been implemented in everything. One of the things we developed, called DigiShield, has now been implemented in everything from Bitcoin Cash to Zcash, partially into Ethereum and many other cryptocurrencies. So we've been a forerunner and the first to do a lot of things in this phase. And so one of the things that sets us apart is, we were never an ICO or a token. It's been a completely all-volunteer effort for the last four and a half, five years. Which is completely different than how you're seeing projects operate in

this time. So, when people talk about us being a sleeping giant, that's kind of what they're referring to. The technology can stand on its own, it can speak for itself and it can market itself. Also, we're really good at holding to that true vision of an honest, decentralized system.

AS: Well, your transactions can operate 40 times the rate of a bitcoin. It's one of the most secure cryptos out there. You have a different vision. It sounds like you're building an infrastructure to transform transactions, security, reduce the uncertainties that we work with and expand it well beyond just cryptocurrency. This sounds like you're building a system, an ecosystem.

JT: Absolutely. That is our vision. We are building a worldwide platform.

AS: Yes.

JT: Sure, you can send payments in a matter of seconds to somebody in Australia from the United States or somebody in Europe to somebody in South America for a fraction of a cent. But the real utility here is a worldwide communications platform that's rigid and secure. And from that, you can start building a lot of cool stuff on top of it. So the way I'd like to break this down is, if you imagine an Oreo, right? Or a cake. But three layers. So on that bottom layer, you effectively have a communications protocol. At the very most basic level, the DigiByte blockchain, and this also applies to bitcoin, is a very, very effective, decentralized, communications system. And you can bounce a number of messages back and forth with that. And it's secured by the most advanced cryptography on the planet. Now, in that middle layer, you have an incentive layer. And that incentive layer is where the digital assets, known as DigiBytes, or bitcoin, come in. Now, once you have that incentive layer, you incentivize people to run the software and that's what allows for the communications at the bottom layer. And once you have those two layers, at the top layer, you have an applications layer, which, at this point in time is almost unlimited and it's just in its infancy of what is actually going to be possible with this technology. There's so much more possible than simply making payments.

AS: So stay there. I mean, that's really the purpose—I'm an anthropologist. We study culture. And as I was digging into the world that's changing, that you're leading, Dubai wants to be entirely on blockchain. It wants all of its information on blockchain. Zug, the city in Switzerland, wants to be a cryptovalley that is completely on blockchain. I'm watching companies begin to use blockchain to transform the intersections of what's going on in your platform. So let's talk about the vision. Where do you see things going, because our conversation started with, why don't businesses know what this is about? I spoke to 60 CEOs over the last three days, and I must tell you, they don't know what's going on here at all. And they sort of were scratching their heads as if to say, "Really? It's not just about bitcoin?" I said, "No, this is transformational. This is going to challenge the whole way you do everything." Tell us, what do you see coming?

JT: Well, this is a fundamental paradigm shift in humanity. It is literally a fundamental wave in the way that things are done on the internet. And it's also a reinvention of the internet itself. I like to use the analogy that blockchain technology is very similar to what we see in nature. And what has allowed us as a species to evolve and survive.

AS: Yeah, I agree.

JT: To give you an example, if you take the DNA that's in my fingertip and the DNA that's in my ear, it's the same DNA, right? If I had a centralized system where I only had the DNA in my finger that controlled and dictated my entire body, and for some reason I had an accident and my finger was gone, that would be a problem, right? Well, if you look throughout nature, there's this innate ability for biological systems to replicate themselves in an exact pattern, whether it's the spores of a mushroom or the seeds of a tree, and that's what allows them to survive in a decentralized fashion. So, when I look at data, I look at it like a living, breathing thing that should be decentralized or replicated and secured. And that is, I think, a good way for people that are brand new to this technology to just look around them. Look how many times you see a decentralized system that's replicated very similar to how a blockchain functions. And if you study human history, you have these trends toward centralization, decentralization, centralization, decentralization.

AS: Yes.

JT: And I believe, in 2008, with the financial crisis, we hit peak centralization. And out of that came the first prototype of the bitcoin protocol and now we're headed toward a massive wave of decentralization. And the one thing I've noticed, traveling around the world, meeting, speaking at different events, is Western businesses are the least informed on this topic and they're the slowest ones to actually start adopting and understanding this technology. I tell people, there are 7 billion people on this planet and 300 million Americans. And that other 7 billion people is extremely hungry for change and opportunity and they're adopting and adapting and embracing blockchain technology much faster than Americans are and the Western societies. But Europe is even slower than the American society.

AS: This is, I think, very much a big idea because their cultures are open to the innovations in very big ways and ours are so secure. I mean, we were talking about something like Western Union being resistant to the disruptor that's coming, that's already in place, that will allow you to take one iPhone or cell phone to another across the world to transfer money at a much lower cost, much faster and in a moment. Banks are slowly beginning to realize that blockchain will eliminate the need to have a temple to put your money in altogether. And why not become a leader in the transformation instead of a resistor to it? And supply chain—you want to tell your supply chain story? Because I have logistics companies in my list of clients and they're all going to be disrupted, aren't they?

JT: Well, if we can go back to the Western Union topic for a second, it's actually interesting. A lot of people in the DigiByte community probably won't know this, but in 2016, in the

beginning, I actually went to Western Union's worldwide digital innovation headquarters and lab, and I met with them for about three hours at their headquarters in downtown San Francisco. Innovation lab, right? I presented DigiByte and everything we were working on at the time with DigiByte gaming, payments and everything, and they told me, "Wow, this is amazing. This is pretty cool. You can literally put us out of business tomorrow, right? But we would never go for something like this and we would never embrace it, because we make billions floating interest on payments between countries, so the board would never go for this."

AS: Yes.

JT: And I appreciated the frankness and the honesty, at the time, but that's kind of been my interaction with a lot of companies I've met with. One of the questions I asked was, Do we have an NDA with some Fortune 500 company? But part of having an NDA is not acknowledging having an NDA, right? But just to get it out there to people, frankly, any sort of public Fortune 500 company is not going to risk their brand and associate it with a decentralized open-source system that they can't control.

AS: Yep.

JT: It's just not going to happen. It's just, they're fundamentally opposing forces.

AS: Well, as you know, the human brain hates to change. And I often wonder what it was like, the first people who invented fire and were able to capture it, so that they can now cook their antelope and share it differently. And whether they all fought the idea that fire was good or bad. The herd mentality takes over—this is the way we've always done it. When you said that out of 7 billion people, there are only 350 million in the States, all of the rest are opened up to opportunity, possibilities well beyond what they have now because there's nothing to resist. It's sort of like, "This is really cool." So if Estonia wants to bring in blockchain and completely go blockchain, they're all open to it. And when Indian farmers can use blockchain to find out what the market is and actually make exchanges, it's going to come soon. All around the States, it's going to be interesting to watch.

JT: A lot of this has already been happening. Look at what BitPesa in Africa has been doing the past three or four years. They've literally been used as a stabilizer for exchange rates between countries in sub-Saharan Africa. I mean, it's been effective, it's been working. A lot of these solutions are already out. You mentioned the trade solution. What we've developed, starting in 2016 and presented to a lot of people, has already been implemented and it's actively out there, securing international trade shipments and documents. It has nothing to do with payments. We're talking about contracts and signatures and a process where a retailer puts in an order, it takes nine days, on average, for that to be accepted and the contract formalized, the purchase order, etc. We took that system from nine days to one day with a cryptographic base, identity blockchain solution, which is DigiSign. If you go to DigiSign, you can sign up, test it out and try it. A lot of these solutions are out there and it's an exciting time because it's just in the beginning. I think it's really, really fascinating to

think where we're going to be in five years with this technology because it's just starting. It's just beginning.

AS: John Sculley, I think it was, who said, "Technology should either be invisible or beautiful." And in some ways, it's the invisibility of blockchain that makes it off-putting. I can't see it, I can't touch it. On the other hand, the simplicity of it is really quite beautiful. Once you put in all the infrastructure around it, I don't have to see it, I just need to transform the way I'm going to buy a house and get a title for it, right?

JT: Absolutely. Speaking of which, I don't want to talk too much on the subject, but I actually think some people in the DigiByte community are aware of this. I'm actually working on a similar process. I can't go into detail with real estate, it's exciting. We'll know more in a few months, but, yeah, absolutely. Because what it really boils down to is, with the decentralized blockchain—and I want to make an important note out here so people understand this—not all blockchains are the same.

AS: Yes.

JT: You're seeing this term being thrown around loosely. You'll have teams that either, a) want investment or b) development and they'll be like, "Oh, we're on a blockchain! We run our system on 12 centralized servers we control." Which, in my mind is...

AS: Not a blockchain.

JT: ...just basically a clustered database and it's not a blockchain.

AS: Maybe the cloud, but it's not a blockchain.

JT: Yeah, it's just not a real blockchain. So, I hate to invoke some Trump references here, but there's totally fake blockchains out there. And they're advertising and some of them are worth billions of dollars and they're not even real functioning blockchains.

AS: Yes.

JT: So that'll be weeded out over time. But once you have a decentralized backbone, which is what we really have, it's the first time in history you have a decentralized trustless system that anybody can reference electronically from their mobile phone or their desktop or I've even seen blockchains that are capable of being broadcast over ham radio without the internet. That's fascinating.

AS: It is, any way we can connect. That is really fascinating.

JT: One of the things that I believe this technology will lead to, and I'm all for, is literally decentralization of the internet itself.

AS: Yes.

JT: I don't know if you're familiar with the term "mesh network"?

AS: Yes.

JT: Where devices can just communicate.

AS: Yes.

JT: Well, as more IoT devices are on the planet, I think—especially with 5G rolling out—five years from now, we could have a system that's completely blockchain-based for authentication that doesn't even involve our ISP, doesn't even involve some central snooping authority. And we could literally liberate ourselves and be completely electronically free and private. And that's the vision I would like to see and am working towards achieving.

AS: Jared, what do you think are the main hurdles, because five years is a short long time? Other than the human resistance to change, and the reluctance to risk what we have for what could be really transformative, what do you see as, I'm going to say the Western Union lookalikes, what are the hurdles that are coming up? Other than we're making a lot of money and I don't want to bother.

JT: Well, the first thing is the fact that everybody thinks that blockchain is just money. I think that's the first hurdle. Next is education. I think education is by far the biggest hurdle and that's where I appreciate you taking the time, Dr. Simon, to do this talk because I feel like this is important just to have these discussions and to inform people that it's not just money.

AS: Yes.

JT: When I've met with companies and banks and their compliance officers or law firms, one of the things I've learned is, if I go in there and start talking about payments and we can send DigiBytes in a fraction of a second and you could make payments to Australia or South America...that instantly brings up all these red flags and barriers. They say, what about drugs? What about terrorist financing? What about money laundering? Instantly, those are the objections. So if you lead in with that, you always hit these walls and these barriers and I've found that the best thing when I sit down with some of these people is to say, "Okay, so how do you feel about your Equifax data and your credit data being exposed online to anybody? Within five minutes, I could go look it up." Or, "How do you feel about your data being breached with Yahoo or, you name the company, there's a data breach," right?

AS: Yes. Almost ubiquitous.

JT: Instantly it changes the conversation and I'm like, this technology can fix 95% of those security vulnerabilities if we embrace it and allow it and give it room to prosper and grow. So for anybody listening or watching or hearing this in the future, why should you care? Cybersecurity. That is the biggest problem businesses are going to face.

AS: Yes. And it's not the future, it is today, right?

JT: It is right now.

AS: Right. And the other problem is, there's not enough people to handle the cybersecurity. They don't even know how to manage it. So this is so transformative, it could eliminate it. Right?

JT: Yeah. I mean, you could never fully eliminate it because you always have the human element, but yeah, we can get 95% of the way there. It's really fundamentally simple. The problem with the internet today is our reliance on what is known as certificate authorities. Root certificate authorities. So when you buy a new computer, a new Windows computer, a new Apple computer, they have these cryptographic keys which effectively are the exact same thing as the keys in your bitcoin wallet or DigiByte wallet. They function the same. These root keys are used to issue root certificates for all websites. And there's only about 15 or 20 of them that are used globally. So if you buy a computer in China and you buy a computer in the United States, you're going to get different pre-installed root certificates because this is how nation-states attack each other.

AS: Yes.

JT: So if we take that system and completely decentralize it, you can eliminate the majority of DDoS [distributed denial-of-serve] attacks, you can eliminate the majority of centralized points of failure. So, sure, one person can be compromise, that's possible, but it's not where if you compromise one server, you're getting 10 million passwords and user accounts and information and identity. So it's really going back to that nature example. Decentralizing data, that's the most important thing we can do. Secure it, duplicate it and decentralize it so if one thing is taken out, it has its own independent security.

AS: So with that in mind, let me migrate to the questions that came to us off of Twitter for you from our listeners who have been so kind to say, "I must talk to Jared." And they have really personalized the questions. Do you have anything in particular or shall I start and read you some of these?

JT: Yeah, go for it.

AS: Now that we have a framework for it, some of the resistance going out there, some of businesses' time to really dig deeper into it. Okay, here's one: "How fast will the DGB [DigiByte] network eventually get and when? And what kind of applications can be built on top of it?" That's a big question. But it sounds like, "I should better understand what we're doing here to build accelerated speed and the types of applications." Any thoughts?

JT: Well, I think to really fully answer this, we need to go back in time and look at where it started, to describe basically, fundamentally, how does a blockchain actually work. The way that I've used to describe this to people is to imagine that you're in a restaurant and you take a 10-minute snapshot of everything everybody orders. And you take that and you write that down on an Excel spreadsheet. So you just list it in a ledger format. Well, that snapshot becomes what's known as a block. And so the 10-minute block started with

bitcoin when bitcoin came out originally, in 2009. So you have this Excel spreadsheet that's a block of data. It's a snapshot. Then instead of just having everybody in that one restaurant, you actually add the transactions of everybody on the planet that has made a transaction in a restaurant. Well, in the case of bitcoin, you actually can go outside of that. You can actually say, not only just the restaurant but anybody paying for anything everywhere.

AS: Yes.

JT: Obviously, you can't take 100,000 transactions per second and put that in a block that only happens every 10 minutes. So how do you fix that problem? Well, as a lot of people know, the bitcoin blockchain basically became bloated and full years ago. It was maxed out. So one of the things we pioneered with DigiByte is that when DigiByte launched, we had a 2-minute block time. And over the course of those improvements over the years, we sped it up to where we have a block happening every 15 seconds. That's how we can actually handle 40 times the amount of data and transactions worldwide than bitcoin has. Why did we limit it to 15 seconds? This was actually based on research that was done by Microsoft and it has to do with the latency of the entire internet worldwide. So if you're in Cape Town, South Africa and you send an email or a message to somebody in New York City, it literally has to go through these deep-sea, underground cables and it takes time. It's not instantaneous. And what we found is that with today's modern internet infrastructure, you can't go more than 15 seconds without creating advantages for miners in certain geographic regions, where they're able to basically propagate and take over, but that's a whole other side conversation.

AS: Yes.

JT: But we figured, through testing, that's about as fast as you can go. So once you hit that limit, what you do is you simply make that Excel spreadsheet bigger and you allow more data to be transmitted and more transactions. So that is how DigiByte scales and what we're doing is, effectively, every two years, we're going to be doubling the block size. So the idea is by the year 2020 we can match Visa and then going into the year 2035, we estimate we can be doing upwards of 300,000 transactions per second. Visa, I think, is doing about 2,000 transactions per second on average at this point in time. So what I tell people about scalability in the future is that blockchain is kind of like a living, breathing thing. It's going to continue to evolve. Unlike a lot of people in our field, instead of just going out and creating a new name and then going out and hyping up and pumping up new currency, like some of my peers have done, we could have basically relaunched DigiByte with four different names over the last four years.

AS: Yes.

JT: And probably made hundreds of millions of dollars by now, but we didn't. We continued to improve and enhance the DigiByte blockchain and we'll continue to do that. So, going into the future, we'll get to a point where we'll have to swap out the main encryption

algorithms. Quantum computing. I wouldn't be surprised if the United States or China or maybe the Russians have quantum computers that are actually out in the wild. Eventually, we're going to have to implement quantum-proof algorithms and actually, a lot of people don't know this but there's actually a fundamental flaw in the programming behind every blockchain where, we can go into more detail on a side note, but effectively, I think it's like by the year 2039, they're all going to fail because of a coding bug that's actually in the programming language. So we've got to fix all of them by that point anyway. But I don't want to start too much of a conspiracy theory there.

AS: We could go into conspiracy theories, but the question people are looking for is what's coming next. So let me play out another question. Digi-ID seems to be a theme that's going through all of this. Can you talk about Digi-ID and the security of the idea?

JT: Yeah, so, first of all, Digi-ID is a 100% community-led effort. It's actually launching today. If you go to digi-id.io, you can read about it. There's information. The community has done an amazing job with it. We had a fantastic designer who helped with it. We've had some awesome programmers. And it's been something we actually had prototyped almost two years ago. But what it really allows for is for you to use the DigiByte blockchain for more than just payments. It allows you to log into the website and effectively, you're replacing passwords or SMS two-factor. Do you remember when the guy by the name of Craig Wright came out and claimed to be Satoshi Nakamoto, the inventor of bitcoin?

AS: I don't, but that's okay.

JT: So there was a bunch of drama in the cryptocurrency world a year or two back. All of us that are in this space asked him to do one thing. We said, "Use your private keys from the genesis block, sign a message cryptographically stating that you are the creator." And he didn't do that. I used the genesis block from DigiByte and said, "I, Jared Tate, am the founder and creator," and I signed it cryptographically with my wallet private keys from that first block. Charlie Lee of Litecoin did the same thing. And Jackson Palmer, the founder of Dogecoin, did the same thing. And we're like, that's all you gotta do to prove that you are the creator.

AS: Right, go ahead.

JT: And that little-known property is the completely most underutilized aspect of blockchain technology that's out there today. Because with that, you have the ability to start building security stacks for software that is basically limitless. And here's the more important thing. When you use that to secure everything from documents to healthcare records to insurance contracts, you name it, it basically can scale infinitely. You don't actually have to send transactions every single time. So what we're trying to do is educate people with Digi-ID and say, hey, you can implement this. So, for example, we have a WordPress plugin so you can actually use it to sign in to your WordPress website.

AS: Great.

JT: So your users can go to your website, they don't have to use a password, they can literally just take their phone, scan a QR code, it's linked to their DigiByte wallet, and they can actually sign in. Now here's the thing: you don't actually have to use the same DigiByte wallet that you transact with. You don't really want to do that. You want to use a separate one. But there's a lot of cool features that will be developed. But our main goal, and the launch coincides today with this interview, and I believe actually Josiah is doing another interview—

AS: Now, will that help me open my car door or get into other kinds of things? It's a theme that came through here. What else can we do with it?

JT: Yeah, we actually have something to unlock your house: Smart Lock. And here's the problem with the Smart Locks that you'll get at Best Buy or other electronics retailers. Once again, going back to this problem of centralized root certificates, every single one of these devices that's being manufactured has the same back-end crypto and security.

AS: Yeah.

JT: And that's the vulnerability. So if you go buy a webcam or a smart door lock and then some guy goes in and hacks that system, all of a sudden, instead of just taking over one, he's taking over 100,000 of them simultaneously. And that's why every IoT device that's created should be rolled in with its own blockchain-based identity or cryptographic public and private keys. And that's where we can fix, once again, 95% of these security vulnerabilities that are out there.

AS: Now, we're sort of summarizing the questions that came through and you've been really great at talking about them. One theme is the value of the cryptocurrency itself. Because what I'm excited by is, blockchain isn't just about currency. But a lot of the investors in it are concerned about the coin and its value and so forth. We haven't talked about it because, in some ways, we almost didn't want to because, for business, it's not about the currency, it's about what blockchain can do to really transform the way they do things. But I do think we should talk a little bit about the coin, the currency, and what do you see going on with that.

JT: Well, first of all, you just touched on it. I think those that know me in the space, I hate talking about currency. I hate talking about price. One of the things that I've been saying for four and a half years is, I don't give speculative advice. I never give price predictions because, 1), if I tried, I would mess it up and 2), the fundamental problem right now is, when people look at a blockchain currency, when they look at bitcoin or they look at DigiByte, inherently they're comparing it to fiat. And as long as you have a fractional reserve system, banking system, where the powers that be can print as much money as they want, infinitely, you're never going to have a direct stable price in cryptocurrencies. It just won't happen. It's going to be volatile because, in the case of DigiByte, where DigiByte is limited to 21 billion DigiBytes in 21 years, it's created at a finite rate, there's a percent that's new coming into circulation every month. We can't go in there and just print more.

Same with bitcoin. You'll have 21 million bitcoin in 144 years. Right? So it's a very scarce, very finite, mathematically determined and enforced system. So as long as you have this limited scarce supply, you can't have a functional peg to a fiat currency. Any fiat currency.

AS: Yep.

JT: And I think a lot of people, a lot of times, have trouble with that. It's advertised as currency, it's this and that, but also a lot of times, I feel like people fundamentally just don't understand their money and exactly how it works. Or the fact that their money, in the case of the United States, has been reinvented five times in the last 100 years. Effectively, how it works. So, to me, it's the first use case. It was obviously the most important use case because that's what's got everybody's attention. Everybody likes money. But it's not the best long-term use case because I've never been one of those in the community that's like, oh, cryptocurrency should replace every fiat currency on the planet. It's not going to happen any time soon because the powers that be, the people that control that, are never going to let that happen. That's why we're trying to position DigiByte, cybersecurity, but there's nothing wrong with incentivizing those use cases with a digital asset. So instead of talking about currency, I like to transform that conversation into the fact that, with this blockchain technology, you have the ability to start creating unique digital assets. That has never been possible before. So when you start talking putting property deeds on a blockchain or ownership stakes in whatever sort of property you start talking about that can be transferred digitally. Because up until the advent of a blockchain, if I send you an email, I'm not sending you the original email. I'm sending you a copy of that email. And that copy can be duplicated infinitely.

AS: Right.

JT: For instance, take a picture. That photo can be put on the internet, it can be shared thousands of times, right? Well, if you attach that photo and embed it cryptographically and give it a unique identity on a blockchain, you can literally have the chance for a very unique, independent, digital piece of art that can be stored and cryptographically secured and proven that it originated at a certain point in time, and kept completely original. So you think about the opportunities from that and you can go in a number of amazing places.

AS: They are all amazing, too, because all the problems, limitations with uncertainty now, on reneging, on questioning, can all be eliminated in a fashion that would create enormous transformation in how we deal with each other. I mean, the idea of taking a picture and making it unique on your wallet, which protects it, and then you decide how you want to share it with whom? It's really going to be quite something. There are some that are arising, such as Viuly who wants to compete with YouTube. By allowing you to share your video with somebody else and the more times it's shared, the more coins or tokens, and if not, they skip over it. So now it's not somebody manipulating us, it's us being able to control all that we have going on. Am I right?

JT: Yeah, absolutely. Imagine, for instance, you go to your physician and have an annual checkup. You walk into your physician's office and you have your smartphone or another device and the office can literally use your own wallet keys to authenticate. You use your private keys, you decrypt, and you open up your healthcare records and nobody else can see it but you and your physician.

AS: Yes.

JT: You don't have to have eight different parties in between. And then, if something happens, your lawyer, your spouse, they can have what's known as multisig, so they're also given a private key, and they can access it.

AS: But you don't have any of that now. There's no interoperability. The medical records don't talk to each other. You have to tell every doctor everything all over again, hopefully you remember it. Healthcare is going to be tremendously transformed and I don't think that should wait five years. That should come right now because the need is tremendous.

JT: Yeah, that should start happening right away. And if every government on the planet embraces this technology, which I think most of them are, except for the Americans. You should be incentivizing the creation of this technology, whether it's in healthcare, insurance, real estate, copyrights, digital rights. The legal profession is going to be disrupted. If you look at the United States, for instance, at the backlog of court cases in a lot of areas. A lot of this stuff can be resolved with blockchain-based systems that can resolve contracts, can resolve disputes, automatically.

AS: I can almost imagine doing tax returns on my blockchain.

JT: Yeah. Absolutely.

AS: Which my accounting clients won't be happy about, but that's coming.

JT: Yeah, it's definitely a problem. There's a huge opportunity there if a startup wants to tackle that. But it's a very exciting time, for sure.

AS: Well, I've had a very exciting time talking to you, my friend. I can only tell you that, as you step out and you look at our society in a snapshot—I think the first website was 1991? And look what's happened since. I remember the head of Blockbuster not being concerned about Netflix and where's Blockbuster? And I remember all the people who had BlackBerries and they don't exist anymore. Certainly not the way they did. And so the times are going to be changing and thanks to Bob Dylan, they are changing fast. But this has been more fun than fun. I can only thank you for taking the time. I know that our friends on Twitter were all very excited about the possibilities. And what I will ask them to do is send more questions and we'll forward them along. But, in some ways, they were all asking similar questions, some of which you covered and some of which we answered directly. But it's a state of tumult right now. We don't know where it's going. We don't know really if it's real. We're making investments in it, but I do think it's going to be transforming. Your last thoughts and how can they reach you if they'd like to?

JT: Well, I try to be as accessible as possible, whether it's on LinkedIn, Twitter, Telegram, email, different things. And honestly, I do apologize to people. Sometimes I'll wake up and I will literally have a thousand messages across all the platforms. And as one person, it's impossible to just keep on top of everything but if anybody takes anything away from this, like where is this technology headed? It's going to be a merger. You're going to see artificial intelligence, blockchain, and IoT technology coming together and that's really going to be how systems function moving forward for the next 20, 30 years. So if you're out there and you're interested in this technology, I encourage you to dive in head first and just go for it. After six years in this space, every single day, I am learning of new ways this technology can be applied to different industries.

AS: Yes.

JT: And it's completely fascinating and I'm still learning every day. And I'm sure I'll be learning for the next 20, 30 years on how this technology actually gets implemented and adopted. So if you want to be on the cutting, leading edge in the transformational part of moving humanity into the next era, this is it. This is where it's at, so I encourage you to do that.

AS: Good.

JT: Thank you, Dr. Simon, for taking the time and having me on.

AS: Thanks, Jared. It has been more fun than you can possibly imagine. You've started my weekend off with joy. For those of you who are unfamiliar with my book, *"On the Brink: A Fresh Lens to Take Your Business to New Heights,"* it's available on Amazon and our podcast is available as well. You can find us at andisimon.com.

JT: Just to step in there, it's an excellent book. I have read it and it opened my eyes to this whole concept of corporate anthropology. It's a great idea, so I would highly encourage everybody, especially if you're a business manager or business owner, to go out there and read it. It's a great book.

AS: Well, that's very kind, because at the end of the day, this is culture change at its best or its worst, depending on how you look at it. But I think the times are going to change and fast and we're going to have some fun watching it happen because it'll be so much better and all the bad stuff that's going on now can be eliminated fast. So I'll say goodbye. It's been fun, thank you. Let's do it again and I can't tell you how much I appreciate it.

JT: Yeah. Thank you.

AS: Thank you. Going to say goodbye now.