

EPISODE 514**[INTRODUCTION]**

[0:00:00.5] JM: Your friends from college are asking you how to buy Bitcoin. Your mom is emailing you articles about the benefits of decentralized peer-to-peer networks. Your shoe-shiner is telling you to buy XRP, and NEO, and Tron. It's 2018 and cryptocurrencies have become a daily part of news headlines. The general public may not understand how this technology works, but everyone knows that changes are on the horizon. At some point in the future, our financial and computing systems will be deeply integrated with the crypto economy.

We all remember the .com boom. We know that some people got fantastically rich during that period through speculation and we think maybe this is our chance to make a bunch of money. If you read Reddit or almost any news site, you will see stories of obscene wealth intertwined with pseudoscientific discussions of how a new cryptocurrency is going to change the world. What is fact and what is fiction? How far are we from a beautiful future with frictionless micro-payments and self-driving cars that are paying for themselves?

Matt Leising is a journalist at Bloomberg who has covered financial markets for 15 years. Today, his reporting has been completely engulfed by cryptocurrencies. There are so many dramatic stories. It's hard to pick what to focus on. Today, we discuss two topics that he is covered recently; Ripple and Tether. Ripple is a company that makes enterprise blockchain solutions for global payments. That sounds like the future, and it's no surprise that people would want to buy into Ripple if possible.

Ripple has been around for seven years and they have a strong team in relationships with major financial institutions. One of Ripple's early projects was a currency called XRP. The goal of XRP was to make a fast, scalable, digital asset that would be facilitation for currency exchange among banks. We covered Ripple and XRP in previous episodes with David Schwartz and Greg Kidd, who have both been involved with Ripple, the company.

XRP remains in circulation but Ripple, the company, has shifted development resources away from XRP and towards Ripple Net, which seeks to replace the aging swift code system for

banks today. Today, XRP is being experimented with by several money transfer companies, but the digital currency itself is not widely used for anything. Well, other than speculation.

In the tremendous crypto coin bull run of early 2018, XRP shot up as sharply as almost any other coin. In an article about Ripple, Matt Leising tried to get to the root of the explanation for why this occurred. Was it a sudden market recognition of some long-term value of XRP? Was it a stampeding herd of people who did not know the state of XRP and then they were just having fo-mo from the other people who were putting money into XRP and you just have classic herd mentality? Was it a pump and dump that was orchestrated by people who recognize that people might be subject to buying into some story of XRP?

A few days after publishing his article about Ripple, Matt wrote another story about Tether. Tether is totally unrelated to Ripple, except that it's another story of crypto insanity. Tether purports to be a stable coin, which is a digital currency that is pegged to the value of something less volatile, because crypto currencies have a lot of volatility, and typically, in your currency, you don't want a lot of volatility, because you want to know that if I'm going to have to go to the store to buy milk tomorrow, I don't want to have to plan my day around the times in of the day when my dollar is worth more so that my milk is essentially cheaper.

Stable coins are useful and that they can reduce friction of exchange between tokens. So without a stable coin, you might have to transfer from one cryptocurrency to USD, which probably involves the US banking system.

There is a good discussion of stable coins in our previous episode with Vlad Zamfir and Haseeb Qureshi on crypto economics. You can find the links to those in the show notes for this episode. And if you can use Tether instead of USD, if you're a trader, you have less transactional friction. You might be able to escape the onerous tax consequences of day-trading cryptocurrencies also.

Tether claims to have one dollar USD in reserve for every one Tether in circulation. So if you wanted to cash out Tether for USD, you should theoretically be able to do that, because Tether says, "Okay. We've got one USD for every Tether in circulation. You should be able to go to the Tether repository and take out USD, except that Tether seems to have no connection to any US

banks and Tether has severed its ties with auditing agencies that it was working with, these auditing agencies that wanted to — Well, Tether had initialized relationships with auditing agencies that were going to verify that Tether was legitimately doing business, and Tether severed the ties with those auditing agencies. So it's a little bit of suspicious.

There's \$2.3 billion worth of Tether in circulation, and that's a small fraction of the overall trading volume of cryptocurrencies, but it's unknown how much the current crypto bubble is propped up by the functionality of Tether, the ability to seamlessly move between cryptocurrencies without going into USD. As long as the market believes in Tether, and today the market does indeed believe in Tether, it's valued at \$0.999014 per Tether. So the market only disbelieves in Tether to the degree of a fraction of a cent, and this stable coin mystique is going to persist as long as that valuation of a dollar per Tether persists, and so the market frictions are going to continue to be smoothed out by that belief. So it's an open question as to what degree Tether really is propping up the market and reducing friction.

This was Matt Leising's second appearance on the show and it was a blast to have him back on. I love talking to him. In his last episode, he discussed the infamous DAO hack, which led to an Ethereum fork, theory, and fork and if you want to find that episode as well as links to learn more about the topics described in the show, you can download the Software Engineering Daily app for iOS or android. These apps have all 650 of our episodes in a searchable format. We have recommendations and categories and related links, discussions around the episodes. You can find all of our blockchain related episodes. It's all free. It's also open-source, if interested in getting involved in our open-source community. We have lots of people that are working on the project and we do our best to be friendly and inviting to new people coming in looking for their first open-source project, and you can find that project at github.com/softwareengineeringdaily. We've got lots of stuff to work on, so if you're interested in getting involved, please check it out.

With that, let's get to this episode.

[SPONSOR MESSAGE]

[0:08:19.9] JM: DigitalOcean is a reliable, easy-to-use cloud provider. I've used DigitalOcean for years whenever I want to get an application off the ground quickly, and I've always loved the

focus on user experience, the great documentation and the simple user-interface. More and more people are finding out about DigitalOcean and realizing that DigitalOcean is perfect for their application workloads.

This year, DigitalOcean is making that even easier with new node types. A \$15 flexible droplet that can mix and match different configurations of CPU and RAM to get the perfect amount of resources for your application. There are also CPU-optimized droplets, perfect for highly active front-end servers or CI/CD workloads, and running on the cloud can get expensive, which is why DigitalOcean makes it easy to choose the right size instance, and the prices on standard instances have gone down too. You can check out all their new deals by going to do.co/sedaily, and as a bonus to our listeners, you will get \$100 in credit to use over 60 days. That's a lot of money to experiment with. You can make \$100 go pretty far on DigitalOcean. You can use the credit for hosting or infrastructure and that includes load balancers, object storage. DigitalOcean Spaces is a great new product that provides object storage and, of course, computation.

Get your free \$100 credit at do.co/sedaily, and thanks to DigitalOcean for being a sponsor. The cofounder of DigitalOcean, Moisey Uretsky, was one of the first people I interviewed and his interview is really inspirational for me, so I've always thought of DigitalOcean is a pretty inspirational company.

So, thank you, DigitalOcean.

[INTERVIEW]

[0:10:26.2] JM: Matt Leising, you are a reporter at Bloomberg. You were previously on the show to talk about the DAO Hack. Thanks for coming back on Software Engineering Daily.

[0:10:34.3] ML: You're welcome. It's great to be here, Jeff. Thanks.

[0:10:36.9] JM: We're in the midst of some crazy bubbly times and you're one of the few people who's very capable of reporting on blockchain related stories, cryptocurrency related stories. How are you choosing what stories to write about today when there's so much that you can choose from?

[0:10:58.2] ML: Yeah that's my dilemma. I liken it to drinking from a fire hose. There's different layers, I think, of the reporting and the stories and their seriousness. There's always like — I don't know, a Kodak coins story out there that sort of seems just where does this come from or some of the stories about stocks that are changing their names to reflect some kind of blockchain play and they go up 300%. Those are good stories and we cover those stories, but I try to dig in a little bit deeper and use the sources I've built up over 15 years of writing about the financial market to kind of get a little bit deeper and maybe, at this point in the cycle here in blockchain, to kind of take the temperature and hold some of these companies accountable for the promises that they're making. That's sort of always been my preferred way of doing my job.

[0:11:51.3] JM: The shoe is going to drop eventually on some of the companies that you're talking about, and once the public really starts to get hammered financially. Like I went home to Austin — I'm from Austin originally, for a wedding recently and I was catching up with some friends and we spent the whole time talking about cryptocurrency speculation and my friends are computer science people, but we didn't talk about the engineering. We didn't talk about the technical internals. We just talked about speculation, and if I'm talking about speculation even with my technical friends, even the less technical people, the discussion of speculation is even more acute, and it's concerning. I mean, it's inspiring but it's also concerning. Have you seen this obsession with speculation, the shoe shiners? Has it seized your friends and family as well?

[0:12:47.4] ML: Yeah, it has. Absolutely. I can go to a party or even to a bar where I'm just not trying to bring it up and it will come up. All over here, people talking, or somebody will ask me about it and then they find out what I do, and then the horses out of the barn, and I try to explain to them how things work and the different aspects to it all, like an ICO is risky, Bitcoin is here to stay, and it's amazing to me how often the people who have money in this market just don't really understand any of the underlying technology. I think they're just seeing these incredible gains. Yeah, it is scary, and part of what we try to do at Bloomberg is just put out balanced good reporting on this so people can make their own decisions.

I feel like there is going to be a reckoning when a lot of the ICO craze starts to go down in flames, and that's troubling. The reaction I get on Twitter to my stories makes me feel like these

people have a lot of money at stake and they are taking it out on me when I report on things that they don't want to hear. So it seems like that's a concern.

[0:14:01.5] JM: It's like a religious fervor.

[0:14:03.8] ML: Absolutely. Yes, it is very much a religious sort of tinged moment right now. I went to a meet up in Santa Monica a couple months ago where Roger Ver spoke about Bitcoin cash and that was immediately what I — When I wrote it up, I compared it to a sort of like a tent revival. It was in a backyard and people were just in awe of him and in this new thing that was something that they could invest and they could've make 10 times the amount of money that they've put in in a matter of weeks and it's kind of astounding.

[0:14:42.7] JM: I remember this documentary I saw about the 1920s stock market run-up and crash, and there was — I think it's on Netflix. It was really good. I don't remember the title of it. Maybe the great crash or something, but there is like — This always happens in these kinds of run-ups.

I remember there was like a fortuneteller in the 1920s and she was like writing a newsletter. She had like a fortuneteller newsletter and it was like, "These are the stocks that my premonitions have informed. We are going to rise." Of course, she had a following and the following would bid those things up and not much has changed in 100 years.

[0:15:26.1] ML: No. I agree, and even the casual observer of something like Twitter in the cryptocurrency space will see this every day, every minute of every day. People are pumping things and it's just with — I don't know. It's hard to wrap your head around, but just the sheer sort of psychological delusions that are going on in a lot of these markets and it's there for all of us to see. Just the fact that it seems to me a lot of these coins, on Bitcoin and Ether and all the others, seem to go up and down in tandem, which is kind of should be a warning signs that something, if this is a diverse area, you wouldn't expect to see that.

[0:16:14.1] JM: I find it hard, like I really try to steal myself psychologically against these more basal human tendencies of falling victim to the greater fool theory, but my — When I was back in Austin, and I was just talking my friends and everybody's foaming at the mouth about what

cryptocurrencies they should buy or what people are talking about on Reddit. My friend showed me his mobile wallet and he showed me some 82-X gains on something called RaiBlocks. I have never heard of it, and I've tried to follow this space pretty closely and I saw those gains and I was like, "Maybe I should be doing this. Maybe — As insane as it is. Maybe I should be getting in on the pump and dump roller coaster." You could take \$2,000, you treat it like you're throwing money into penny stocks. You get in on the pump and dump telegram chat rooms. You see if you can get a 100-X. How do you avoid like falling into that temptation? Is that tempting to you at all or is it just not hard for you to steel yourself against it?

[0:17:25.3] ML: No. I have to steel myself again it. I'm not allowed to invest in any of this stuff. It's against the rules, the ethics rules we have Bloomberg news. It's also just good reporting sense to not — If I covered Microsoft, I wouldn't be allowed to own Microsoft shares, because you would then have a good case to say that, Oh, I've got a bias to the upside and I'm only going try to report positive things about Microsoft," and as a reporter you can do that. You have to just go out and find the story, and no matter what it is, make sure it's accurate and get it out to your readers. I think that's what I — I get accused of that a lot on Twitter of, "Oh, you must have a position in something, or you want XRP to fail because it's going to make you money in some other coin." It's almost impossible to try to stem the tide of criticism, because it's just not true.

[0:18:18.9] JM: You can't even own Bitcoin or Ethereum?

[0:18:21.2] ML: Correct. I have experimented with Ethereum, because I cover it. So I've checked out MetaMask and I've bought a record on the Ethereum blockchain, because that's the thing that people are talking about, these new digital apps. Just to know the beat. But no, I'm not allowed to invest or hold this stuff as some sort of portfolio.

[0:18:47.5] JM: Yeah. I want to get into talking XRP and eventually we'll talk about Tether a little bit, but a little more on the state of the union. These pump and dumps are kind of crazy. Like the telegram chat rooms where people are pumping and doing this orchestrated pumping and dumping, what have you heard about this stuff? Are the blockchain pump and dumps, is this stuff any different than what goes on with penny stocks or biotech? Is this unprecedented?

[0:19:20.3] ML: I don't think so. I would say that at this point the SEC has started to dip its tow and they are getting more serious about this, and I think there's still the gray area of whether these coins constitute securities. They put it through the Howey Test to try to figure out, Okay. Is this a security or is this a utility token?" If it's a security, okay, you have to abide by the rules of the SEC as long as you're in the US.

I think that's got to be a challenge for the SEC and other regulators. I know for a fact that they've already taken action against certain companies who have tried to exploit the blockchain and the penny stock area, for example, and other just egregious sort of Ponzi schemes dressed up as an ICO. They just issued a temporary restraining order against Bitcoin the other day. It was \$600 million. It was out of Texas. That's the biggest action they've taken in that market. So then, of course, we'll get to the CFTC action with Tether.

So as you know and your listeners know, this moves at lightning pace. It's just so fast, but I do think the regulators understand that and they know that they have to move a lot faster than they might've had to do in the past.

[0:20:46.2] JM: Yeah. So I think it'd be more interesting for us to talk about Ripple now, because this actually has an air of legitimacy. I mean, Ripple, the company, I've done a couple of shows about it and there is a legitimate technologist at this company. So ripple is — It's been around for seven years. Let's talk about Ripple and the currency that they have; XRP. So give a little bit of back story on Ripple, the company, because you wrote this article about Ripple. I'll put it in the show notes. It's a really good explanation of sort of what Ripple, the company, is and a discussion of the currency that they have and sort of the potential or the lack of potential and certainly the run up around it. So what is the company itself do?

[0:21:32.2] ML: Yeah, sure. I find Ripple fascinating for many different reasons and have written about it many times and I've known the CEOs over the different — Chris Larson was there. Now it's Brad Garlinghouse. So what they did seven years ago, they realize that they could make the correspondent banking system more efficient if they introduced digital currency into the equation. That digital currency was XRP, and I believe it was a predecessor company to Ripple. They created 100 billion of these XRP, and the purpose at the outset was to use XRP as a

bridge. So if you had, say, a different difficult currency in an emerging market, like the Bolivian dollar and you wanted to change it into Thai baht, that's not a very liquid market.

So what their idea was, "Okay. Let's provide this pool of liquidity in the XRP currency so that you can change those Bolivian dollars and XRP and then somebody over in Thailand who can then change that XRP into the baht." So that's a pretty elegant solution to these illiquid currency pairs. Whether you need that for a market like the US dollar to the Euro is another question. So they got going on that and started to sign banks up around the world and other financial institutions to do exactly that. They got market makers to you know be willing to sit in the middle and hold that XRP so that the fiat currency could trade in and then out, and they started working with exchanges to list XRP so that people could get access to it in those markets.

We found interesting was it's now seven years, five years, into it. So that's a long time to be establishing a business model and we wanted to sort of take a check-in and say, "Okay. Who's at this point actually doing this in the world?" They announced a lot of partnerships, but what we found is that they don't have many projects that are in the real world. They have a lot of banks and money service companies in tests internally, but in terms of people in the real-world today using XRP for this stated function, we've we've only found one. It's a Mexican US company that is using XRP to help with remittance payments between the US and Mexico.

So that's sort of where we were coming from, and I've worked with this story with my great colleague, Ed Robinson, who's in London, and between us we know a lot of people at banks and people in the payment industry. So we went out to talk to them and gauge whether — So just to take a step back in the correspondent banking system. This is a trillion business for Wall Street. It makes them a lot money and the they put a lot of resources into having currency desks all around the world and having bank accounts with local currencies in them all around the world. So when their large corporate customers need to — Let's say it's a US company and they need to pay suppliers in Japan, they go to, say, a city group and say, "Okay. Please get our dollars and change them into yen and pay our suppliers in Tokyo," and the banks have been doing that for decades for the largest corporations in the world.

The question then is; does XRP and Ripple have a chance in that market? It's an ongoing question, but at this point, what we found by talking to executives at some of those largest

banks that really have a lock on the correspondent banking market was they don't want to get involved with the digital currency. They have a lot of concerns about it and maybe they don't understand it, and then on top of that, they would have to convince these commercial clients of theirs that, "We're going to do something new here. Don't worry," and it's got a digital currency in the middle of it and this currency goes up and down.

I think — So what we found through our reporting was, for those reasons and some others, that doesn't seem to us that these large banks are going to just sort of let Ripple take over this market. To be blunt about it, Wall Street doesn't let people just come in and take over their markets. They're fiercely competitive and there's a lot of money at stake here. So that sort of where we came out on one part of this story, and I think what happened through Ripple's evolution is they know this as well, and this is not something that was new to them by any means.

As they've been working with these bank partners, like Santander and BBVA and some other folks around the world, I think the banks started to tell them, "We like your technology. This is great. You've created a really good fast and accurate network, but let's just use your ledger to connect me and my bank to bank in, say, Japan, again, so that we can just move dollars to yen over your network. We like that part of your business. We just don't want XRP to be in the middle."

So I think they're having more success with that in terms of the banking sector than maybe with XRP being taken up as the new kind of global reserve currency that would be replacing the dollar. So hopefully does that make sense? Sort of the overview?

[0:27:41.7] JM: Yeah. So you're basically — As I understand, they started with this XRP thing, which was — I mean, it's kind of like, in some ways, sort of like Tether, which we'll get to, where you have this intermediary currency that can be seamlessly transmuted between different currencies. They try to do that. They tried to do it as a partnership with banks and work closely with banks, and they moved away from that eventually. Like the currency stayed in circulation. The ideas were still there. Maybe they were still working on it some, some of the engineering, but they shift their focused — They shifted their focus to this thing, Ripple Net, which is what you're talking about, this network of banks and financial institutions. It's like a trust network. It

probably has some of the ideas of XRP, because when I reported on XRP, what I remember is — What's cool about it is it's sort of — I mean, people will criticize the idea of a private blockchain all they want, but what's cool about a private blockchain is that you can have environments where there is it like semi-low trust. You could say that I trust these three other banks and I'm willing to work with them and you can build automated systems of that trust, and you're not necessarily saying I trust everybody in the network. Whereas with Bitcoin in Ethereum, these are zero trust systems. So I've thought of XRP, if I remember correctly, is it's like a low trust or a medium trust protocol, but I guess this has all been shifted to Ripple Net, all the focus.

[0:29:23.7] ML: I believe you're right. Yeah, they have nodes on their network. It's a little murky to me still about how that network is involved with XRP and whether URI wanted to —

[0:29:35.8] JM: [inaudible 0:29:35.9] Ripple Net now?

[0:29:36.8] ML: No. Ripple Net is just the bank-to-bank transactions. They call it the payment rails, but I think the XRP transfer is on a blockchain, like you mentioned. So there are nodes that make up that block chain that serve as validators of transactions. It's still an open question to me how that — If URI wanted to be a part of the network, if that's possible, because I believe Ripple has the ability to sort of choose who is on its network for that purpose.

Then Ripple Net is the — Back to the banks and other financial companies saying to them, "Let's just use this network that you've created and connect — Let's get everybody in the same network source, sort of sharing this ledger, and that would make moving fiat currencies faster and cheaper and more secure."

[SPONSOR MESSAGE]

[0:30:40.8] JM: The octopus, a sea creature known for its intelligence and flexibility. Octopus Deploy, a friendly deployment automation tool for deploying applications like .NET apps, Java apps and more. Ask any developer and they'll tell you that it's never fun pushing code at 5 p.m. on a Friday and then crossing your fingers hoping for the best. We've all been there. We've all done that, and that's where Octopus Deploy comes into the picture.

Octopus Deploy is a friendly deployment automation tool taking over where your build or CI server ends. Use Octopus to promote releases on prem or to the cloud. Octopus integrates with your existing build pipeline, TFS and VSTS, Bamboo, Team City and Jenkins. It integrates with AWS, Azure and on-prem environments. You can reliably and repeatedly deploy your .NET and Java apps and more. If you can package it, Octopus can deploy it.

It's quick and easy to install and you can just go to octopus.com to trial Octopus free for 45 days. That's octopus.com, O-C-T-O-P-U-S.com.

[INTERVIEW CONTINUED]

[0:32:11.9] JM: Let's take a step back. Money that flows through the traditional banking system is quite slow. Anybody who's done at a bank transfer probably is aware of that. So why is that? In the classical sense and since you've got so much experience in this sector, explain why it is a slow process to get money through the traditional banking system.

[0:32:36.7] ML: So think of it as each bank has its own ledger and those ledgers need to be reconciled. So a lot of times, it's may be manual work where money is moving internationally from one country to another and the banks involved might not have a presence in the country so they need to have a partnership with the bank that is in that country. So now you've got an additional ledger involved in the — It feels like it's a time-consuming process where these numbers have to be checked, and that can take days or weeks sometimes. It's not unlike when you write a check and it takes several days to clear and actually hit your bank account. That's because your bank needs to check with the bank that it's coming from that the money is there and these are — These take time and they're prone to errors.

Now, if you think of those individual ledgers and then you say, "Wait. Let's have one ledger where everybody's a party to it," and those transactions can be verified and moved in a much more timely fashion. That's the breakthrough here. Yeah, that's basically what we're talking about.

[0:33:51.2] JM: To return to this XRP discussion, I think part of what spurred you to write your most recent article about Ripple — Sorry, well, XRP, this currency associated with Ripple, the company, is that the currency shot up tremendously. I think it was in early January. Early January 2018, it shot up just tremendously, and kind of for no reason, probably it had something to do with the fact that everybody was foaming at the mouth and people were reading about what are the currencies I can or should invest in and what are the ones where I can get massive leverage for \$1,000, and they were looking at the market caps and they're just saying, "Okay. Which market caps are not at 200 billion yet? I just want to put the money into those ones, because they're going to go up to 200 billion for whatever reason." Maybe there were some pumping and dumping behind that, because you wouldn't necessarily have to be Ripple, the company, to do the pumping and dumping. You could be somebody in a telegram chat room and you could say, "Hey! XRP is like the — It's like — If you took UNIX and then you made MacOS out of it, you made the more presentable, more consumer-friendly, the next generation of the primitive technology that is not accessible to the big shiny corporation and you made it accessible to the banks and the shiny corporations, that's XRP." That's is the narrative that I've heard from people is like, "This is going to be the path to the shiny, glossy, multibillion-dollar banks getting into cryptocurrency," but there's no reason for that narrative to actually exist other than the fact that that was sort of what Ripple was trying to do with XRP in the past, but like not anymore.

[0:35:48.6] ML: Yeah, I agree and I think the price must have had an effect here, because when everybody was no getting into this last year, towards the end of the year, and your you're watching Bitcoin go from \$5,000, to \$10,000, to \$20,000 and Ether doing similar big gains, then you see, "Oh! XRP is the third largest crypto by market share, market cap, and oh my gosh, it's \$0.20. So yeah, let me get some of that." I think it's a lot easier for people to get it on something when it's a \$0.20 than at 15,000. Obviously you can buy no tiny shares of Bitcoin, but I think that psychological sort of price point must have had an effect here.

I think the company itself, Ripple, has been promoting XRP really strongly for the last year and they have announcements about new tests that they're conducting with like, say, MoneyGram, which is a big money transfer business. I think it's second to Western Union.

The thing that I wanted to try to make clear to people was these are pilots and this is not real-world. It's not like it's nothing, but I would be cautious if you're investing and if you think that this is now going to be — If this is a real-world use for XRP. It might be in the future and that's fine for investing. I just want to try to make it clear to people that this is the state we're in right now. MoneyGram is using XRP in test for its own transfers internally in their back-office operations and might, in the future, if it works for them internally, they might start using XRP to move money around the world, but that's from the company itself and that's the state that it's in.

You compare that to the kind of people on Twitter and other social media and the chat rooms that you're talking about and it's like XRP has already replaced the US dollar. I mean, people need — They can invest however they want, but I want to be at least somebody who gets information out there that is well-sourced and accurate and so that people can make decisions based on that and maybe not on what they hear on Twitter or something that's misleading.

[0:38:22.5] JM: In order for XRP to be successful, would it have to have a lot less volatility? Like would it have to be a very — Would it almost have to be a stable coin or is that a misunderstanding of their technology?

[0:38:35.7] ML: I asked the question. Didn't make it into the story, but I asked the CEO, Brad Garlinghouse, about that. I said, "Why not peg it to the dollar?" I think the answer there is the that's expensive and difficult to do, and you need to hedge or you need to have like a dollar reserve account. One of the things that XRP provides is that it's really cheap and it's fast, and if you start sort of laying on —

[0:39:05.9] JM: In terms of transfer fees you're talking about.

[0:39:07.3] ML: Yeah, transfer fees. So the margin for using it is really good, but there is only so much margin, and if you start adding on things to make it less volatile, maybe you're hedging with derivatives or someone like that, there's a cost to that. So it's sort of like you got a way that the costs and the benefit of doing something to make it less volatile.

Another thing that I personally don't quite still understand is why XRP is available on the public market when its use is for banks and financial institutions, these middlemen. I'm all for them

having access to it and buying it, but I'm a little concerned that retail investors and other people who might not be as sophisticated are getting into it, and that's a question, I think, that people need to think about. XRP, as far as I know, is not ever been pitched as a currency to go buy things with. It's always in this money movement system that's global. So why is it listed on exchanges? I still haven't really gotten a satisfactory answer to that question, but that might be something that I just don't understand yet.

[0:40:19.9] JM: Is it the same thing that Filecoin would say? Like average user is not going to want to use Filecoin. You're going to want to use some client or something that abstracts away Filecoin and IPFS, but we want to make it accessible to people just basically as an ICO where you have access to investing in that protocol. I mean, did you ask Brad Garlinghouse, the CEO about that? About why is this available to public people?

[0:40:48.1] ML: I did, and he said that they aren't responsible for that, that they don't control all of the XRP in circulation.

[0:40:57.4] JM: So if somebody bought it — If a bank bought it during the presale or whatever, however they ICO'd or whatever, the bank could then release it to exchange.

[0:41:08.0] ML: Yes. A secondary market started to develop, and I think what happened over the years was I think Ripple did exactly that. They sold XRP or they gave XRP to some of their partners so that they had it, of course, because they needed it for their system to work, and that doesn't mean that that financial institution or whatever had to hold XRP. I think they started — They could sell it in the secondary market, and then eventually when crypto exchanges became more prevalent and they started getting listed there — Remember, seven years ago, I'm not sure there were many crypto exchanges out there. That's in the few years or so. I mean, there always have been, but there's a lot more of them now, I guess is my point.

So at this point, Ripple does control the vast majority of XRP. I believe they control 61 billion and 55 billion of those are locked up in escrow, which they did to try to soothe fears that there would be some huge XRP dump. So they've locked that up and it can only release a certain amount per month into the public markets.

That's just some of my concerns, that it's sort of like every day, folks, it's hard to open up a derivative's account. That's supposed to be sort of like for sophisticated investors with a certain amount of money in their brokerage account. I feel like with cryptocurrencies, we should be thinking the same way when something that's intended for the financial system internally, maybe that's not the best thing to have out for people to be able to buy and sell. That doesn't make me popular. I just think that we have rules in all these other financial markets about who can participate in some of the more sophisticated parts of the derivatives or the bond market, for example. I don't feel like this is that different.

[0:43:05.9] JM: They are continuing to work on XRP. They're continuing to do these experiments. Do you have a sense for where that project is going? I mean, Ripple, the company, they're working on Ripple Net, they're working on XRP. Can you take me inside the Ripple company and explain what their product roadmap looks like or give me a best sense from you're talking to the CEO as you can?

[0:43:29.4] ML: Yeah. I wouldn't presume to speak for them, but I don't think they disagree with — They seem to be having success with money transfer businesses more than banks. So MoneyGram and a few others who maybe in remittances, that's a huge market where people are sending small amounts of money to Africa, or India, or Mexico back to their families, that sort of thing. I think the relative cheapness of XRP and the speed make that a good fit.

I wouldn't be surprised if in a few years XRP did have a toehold there, and that was something that was gaining in popularity. Whether it's going to be the large banks, that's at this point still doesn't look that way. They do have a deal on the Ripple Net part of their business that we've been speaking about with a bank in Sweden and they're using it to move Swedish kroner into dollars between the US and Sweden, and I think they might've done \$100 billion of transfers last year in that. That's happening. Again, that doesn't use XRP, but that's ripple technology being used and sort of integrated into the financial world.

I think they're going to try to build that business and try to get partners, and they have great funding in the sense that XRP is valuable. I haven't checked the price lately, but when we wrote our story, that XRP that they held totaled something like \$86 billion. So that's a nice war chest to

have for a company. I'm not saying you could liquidate that and get \$86 billion, but I think XRP, as a currency, is a very interesting funding mechanism for Ripple, the company.

[0:45:22.4] JM: Yeah. Even if it's just a belief that Ripple, the company, has been working for seven years to figure out the banking system and to figure out ideas for how cryptocurrency-like systems could accelerate the banking system. Even if it's just a bet on the team and the knowledge they've accumulated and the mistakes they've made, that's not necessarily an irrational valuation.

[0:45:47.1] ML: No. I agree, and when you talk about investing, you're always looking towards the future. You're always saying, "All right. I need to get in now for the future gains," or maybe those gains are being priced in by people getting into the market now. Stocks sell off or get bought up based on what the company says is going to happen in the next quarter and the quarter after. So along those lines, yeah, it's definitely rational.

I think they just have a lot of work to do, and the competition is fierce here. As I've been saying, the banks make a lot of money and invested decades worth of infrastructure and costs to have operations all around the world so that they can service their clients who need to move money.

One thing we should touch on briefly is the current system is swift.

[0:46:41.9] JM: Yes.

[0:46:42.4] ML: It goes back to the 70s. Nobody likes it. It's really hard to find somebody who says it's great, but it is the current system and it's a messaging system that banks used when they need to send. They message — The messages go around and everything needs to be verified and then the banks actually send the money. That's the kind of the steps and the process.

I think Ripple has definitely gotten Swift's attention and they are now working on vastly speeding up their own network and making it much more resemble the way that Ripple Net works. The thing is there is something like 11,000 financial institutions already in the Swift network and

using it every day to send — I think we said it's \$76 billion a day moves in this market around the world. So that's the incumbent, and they have quite a home-field advantage. If Swift can listen to the banks and upgrade and make itself more like what Ripple is offering, I think that's going to be another tough hurdle in Ripple's hopes of kind of modernizing and becoming a big player in that market.

[0:48:01.2] JM: Okay, just to close off on Ripple. The bottom line, from your article, Ripple wants to change how banks move money around the world, but that may or may not have anything to do with XRP, and maybe the market is confused about that, maybe not. Anything else we didn't touch on about Ripple?

[0:48:24.6] ML: No. I think we covered it. It's just, you got to take away — Hopefully there's enough information out there to be informed about how things are going, and it's important that an independent press does stories like this so that you can get a different perspective than from a company or from people who own XRP already and want to see it go up by other people getting in.

[0:48:52.1] JM: Okay. Speaking of the importance of the press, I think writing about Tether is pretty important. Tether is this purported stable coin, and this is something you wrote a piece about yesterday. Explain what Tether is. What is problematic about Tether?

[0:49:14.0] ML: Yeah, like you said. So a stable coin is a digital currency that unlike Bitcoin or XRP or ether, it would not fluctuate. It would not have any volatility. The way you achieve that in regards to Tether is they say that every Tether that is created is backed by a US dollar that they've received and they hold in a bank account.

So if the demand for Tether is, say, 20 million, that means that they've received \$20 million and put it in reserve in their account and then they create 20 million new Tether for the company or the person who wanted that amount. That's, in theory, it's great. I think it's, in theory, works — It's it seems like that would keep it from fluctuating, because why wouldn't it just move in lockstep with how the dollar moves?

The concern is that Tether, the company, has not convinced the broader market that it actually has that money in reserve. So at this point, I believe 2.3 billion dollars' worth of Tether have been created and are out in the market. That means they should have \$2.3 billion sitting in the bank account. They haven't been able to prove that sufficiently to people. When I've written about them, they say, "Yes. It's there,"

but they were going through an audit process, but they just severed that agreement with the auditor. I think that kind of raised a red flag with people. Also, the backdrop here is Tether is very closely related to one of the biggest exchanges in the world, Bitfinex, they have the same CEO and they sure executives.

Bitfinex lost its access to US customers last year when Wells Fargo ended its correspondent banking relationship with them, and they lost some banks that they also had, I believe in Taiwan. It might be Hong Kong. I can't remember.

So for a company like Tether and Bitfinex to not have banking relationships is a concern, because how are people moving money in and out there if there's no bank? Since last year, they have refused to tell us that they are using new banks. I think all that led to some stories late last year, first, in the New York Times and then I wrote a story in early December about it, just sort of raising these questions and trying to get the companies to talk to us and tell us what was going on.

So it turns out it was a day after my story ran in December, the CFTC sent subpoenas to Bitfinex and to Tether with the intent of trying to get to the bottom of this, and that's the story I reported on yesterday. It appears that that's really the only way that we're going to be able to get to the bottom of this.

[0:52:17.6] JM: I don't know if you remember this story, but there is a company called Full Tilt Poker. Well, it still exists. But back when I played poker, I always remember this, Full Tilt Poker people would put their money in and you would expect, "Okay. I transferred \$30 to Full Tilt Poker. I've got \$30 in my Full Tilt Poker bank account, in my Full Tilt Poker account and I can go and play at tables and gamble with people for that \$30."

What happened was Full Tilt Poker decided, “Well, we've got \$800 million in player account balances and we've had at least \$500 million in bank account balances for the last 10 years. We can take out \$300 million and play with it.” Their employees, their employees took out the \$300 million and just like distributed it amongst themselves and played it with themselves and took it off the table, essentially, because they figured, “We're always going to —” This is the idea of margin, right? Basically, like they can assume that because people have put so much money into the casino, they're always going to have some amount of money that they can just take out and do whatever they want with. To some extent, that's true. I mean, banks do that to a certain extent.

The concern is that Tether positioned themselves as saying, “We have one dollar in our bank account for every one Tether that has been issued,” but if people believe that enough, if people build up enough trust in that, then Tether might start to say, “Well, let's take a little bit of the table. Maybe let's buy some Bitcoin with it. Bitcoin is as good as dollars. Let's just have that in reserve,” and then that starts to be a complicated house of cards. I think that's what people, such as yourself, have probably realized for a while like, “Okay. If you can really do this Tether, let's see your technology, or let's see your account balances. What do you have to hide?” From Tether's actions, it certainly seems like they have a lot to hide.

[0:54:34.1] ML: Yes, I think you said it very well. I don't know this for a fact, but I would imagine that the beginnings of the company, they were receiving money. My suspicion is that at some point the market believe them and would value a Tether at one dollar. So I think it's possible that they said, “Well, let's print some Tether and go out and get dollars for it,” or more like Bitcoin, and the concern is that Tether is printing Tethers with nothing, no dollars backing them and going to exchanges like Bitfinex and using that value to buy Bitcoin.

So while there's been a great retail demand and institutional demand for Bitcoin over the last several years, there could also be this may be phantom demand that you can tie back to Tether. When you look at the numbers, that they're quite staggering. When I wrote about this in December, they claim to have 820 some million in a bank account. That numbers now 2.3 billion. So from the time they got subpoenas on December 6th to today or yesterday, they have put out into the market 1.3 billion, I think it's 1.3 billion new Tether. That should be of major concern for people when they have not been willing to just publicly verify or bring in an

accountant or an auditing firm to just say, “Yeah. This is real.” Because another way to think about it, think of what you could do with \$2.3 billion in a bank account. That's money and you can turn that money into more money. Like you were saying about what margin, they would want to be careful about how much they always had in reserve, but the staple of finance is you have a certain amount that you always need, but you can loan out the rest or you can go into the repo market with the rest and sort of there are many, many different companies and industries who need cash on an overnight basis. You would think if they were smart they could sort of work that into their business plan. So there're just so many red flags here. It's just I think it's going to be fascinating to see how it all unfold.

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[INTERVIEW CONTINUED]

[0:58:56.1] JM: I think what I read was that the way that people are using Tether is basically similar to what we were talking about with Ripple, except for cryptocurrency. So the idea is it is hard to transfer Bitcoin into Gollum currency or whatever, and so people instead of going from Bitcoin, to dollars, to Gollum currency, you would go from Bitcoin, to Tether, to Gollum currency, and for some reason that is more liquid, it's faster and it's so much faster that this is perhaps contributing to the fast-moving markets, so the markets would just really slow down because of a loss of — Do we have any idea how much liquidity or what percentage of the cryptocurrency market liquidity makes its way through Tether on a given day?

[0:59:51.0] ML: I don't know. That would be great to know. I think the difficulty there is that it's offered on a lot of different exchanges around the world and you'd somehow have to aggregate all of that and understand the volume. Again, in theory, this is a thing that I think is good for the market. It seems not that hard to come out and say, "Yes. Here are the numbers. Here are the books. We want you to have confidence in us."

When I was dealing with Tether on the last story I did in December, they wanted me to sign a nondisclosure agreement and then they said they would tell me who their ranks were. Of course we didn't do that, but I don't understand that they said that they have privacy agreements and that they don't want to expose these banks to public scrutiny, but when you're a big part of a market and people have confidence in you, you need to earn that trust in my opinion and I feel like it wouldn't take a lot for Tether to sort of show the world that it is in fact on the up and up.

[1:00:55.2] JM: There is this Twitter account. I think you've seen it. I think I've seen you re-tweet or something. Bitfinex, or what is it? Bit —

[1:01:03.7] ML: Yeah.

[1:01:04.6] JM: It's like this anonymous Twitter account and it just tweets all of these stuff that's basically like, "This is why Tether is bad or very skeptical, or this is why Bitfinex is skeptical." Do you have any idea who that person is, because it kind of reminds me of Zero Hedge. You know, Zero Hedge, this semi —

[1:01:26.1] ML: Tyler Durden, right?

[1:01:27.2] JM: Yes, exactly.

[1:01:27.6] ML: Yeah, of course.

[1:01:29.4] JM: But it's sort of like a Zero Hedge of cryptocurrency. They just kind of talk about the conspiracy theories and maybe the bearish cases on different aspects of cryptocurrency.

[1:01:39.7] ML: Yes. I am very familiar with Bitfinex. I follow him or her or them, but I don't know the identity. I've asked, but that person is concerned about his safety and other things, and that's a sort of a sad commentary right now about some of the elements of this new market. So I don't know who this person is, but I have found the information that I'm just going to say he for the ease of it, that he puts out — Has been really very accurate. A lot of the documents that he posts are real, and I've been able to verify them independently.

So I wish I could get to the bottom of him and then just what is your motivation here, because it's amazing how much effort he puts into it. I think he has done the market of service by keeping attention on this. Like in my position as a reporter, I'm forced to pay attention to him, because it keeps coming and I can't look away. So for that, I think we owe him some thanks, and I think he helped lead to the New York Times story and a lot of other stories in other publications, and it will be very interesting to see if all of his work is vindicated someday.

[1:02:59.0] JM: What do you think about his perspective on Litecoin, which was this was currency that was started by Charlie Lee who is one of the early employees at Coinbase, but Litecoin was started before. He joined Coinbase, I believe, and it's a currency that he started

and then recently, in the huge cryptocurrency run up, Litecoin turned into a multibillion-dollar currency just like all the other, any other crap coin, but this is a little bit more a legitimate coin. I mean, you can actually buy it on Coinbase, but he sold all of his holdings and he got a lot of criticism from the community.

I thought it was totally fine. I was like, “Okay. Whatever.” People sell their startups all the time. They sell all their equity in a startup. That doesn’t mean that they’ve lost faith in the startup, but he got so much criticism. I guess maybe the optics were bad, but Bitfinex really tore into him and really criticized him. So I actually made suggestions that perhaps there was some insider trading involved with, perhaps, Coinbase, which I thought was like a pretty brazen to say.

[1:04:15.0] ML: Yeah. What’s fascinating about that is any sort of allegations of insider trading right now have to be policed by those exchanges and those participants, because let’s not forget this is not regulated yet by the SEC and I think there’s this gray area where some coins are going to be deemed securities and others are not. But at this point, I don’t know that insider trading — Yeah, it’s bad, but is it illegal? I don’t know. I don’t think so. You’ve raised a big point.

If somebody at Coinbase knows that they’re going to be listing a new coin and they go out ahead of that and buy a whole bunch of it and then when that news comes out, the coin goes way up. I think there is an internal investigation at Coinbase about that right now whether employees were engaged in that.

So I’m not going to opine on Charlie Lee. I’ll let those folks speak for themselves and Bitfinex can certainly speak for himself. I agree with your point that you should be — Startups do get sold all at time. Maybe what he could’ve done was say, “I’m going to sell my stake and I’m going to do it every week for the next six weeks.” Maybe a little more transparency would’ve not unleashed the anger that he received. I don’t know. Because I think — I don’t remember, but did he just sort of tell everybody, “Okay. I just sold.”

[1:05:37.2] JM: I think that was it. I think it was literally a tweet that was like, “I just sold all of my holdings. I’m just going to kind of focus on the technology now.”

[1:05:47.1] ML: Yeah. Like, “Here’s the bag. You guys hold it.”

[1:05:49.2] JM: Exactly.

[1:05:51.5] ML: Yeah. I think it's fascinating to see these folks sort of like — That are by all intents and purposes are brilliant and they're smart and they work really hard and they're on the cutting edge here, and then they sort of run into this financial world where there is a certain type of behavior expected of folks, and that's a really interesting dynamic to me about how the crypto world and the Wall Street world are going get along and how they're going to teach each other about the different aspects of what they all know.

[1:06:24.9] JM: Tell me more about that. Like what you think is going to happen, or given the cross-section of your banking background and your current aggressive reporting on the on the cryptocurrency world, do you have any interesting predictions about where this is going?

[1:06:40.8] ML: A good example is the ICO kind of craze, and I think you've got a whole group of folks who realize that this is a great funding mechanism and that there was a lot of money in digital currencies. So let's tap into that money. But they didn't have an appreciation a lot of times for the fact that it's really — It seems like you're raising capital from a broad marketplace, and the SEC exists to police that.

Thinking that you can just come in and say to your investors before the ICO, “No. This isn't a security. this is just our utility token, and we hope to raise \$200 million for this project that we will then build.” That, I think they need better lawyers. They need people to advise them on the fact that that looks almost exactly like an IPO, and there's strict rules about IPOs and about disclosure and about making sure investors are informed and about [inaudible 1:07:45.7] into the IPO, and all of those things are real and serious and people go to jail for violating those rules. That's a pretty bright example to me of these two worlds kind of mashing together.

On the flipside, I think Wall Street's sort of — The way that it turned its nose up on to Bitcoin for so many years and then finally had this big reversal when it started going through the roof is this kind of ridiculous. It was evil incarnate and then banks couldn't get a trading desk together fast enough. So there are biases on each side here, and the really interesting folks that I find are the

ones who have a good foot planted in each world. Those are the people that I find really helpful to sort of guide me through how this market is evolving right before our eyes.

[1:08:41.9 JM]: Yeah, well maybe I'll have to get some pointers to people I should be talking to as well. Okay, I know we have gone over, basically. But what's next for Tether? What is the next step in the investigation?

[1:08:56.2] ML: That is a great question and that's what I'm going to be trying to find out. It's very difficult to get information on ongoing investigations. So that's a challenge for me and for other reporters that cover the space. So the subpoena process, basically, what they do is they may issue subpoenas to these companies and say, "We want to know what you're doing." We need to talk to you." And a lot of times regulators won't know what they're doing and they'll broadly subpoena a firm or a company and come in and start talking to people, and then based on that information, then they start building a roadmap and they might issue more subpoenas to talk to somebody that they've just learned about. So it's a step-by-step process.

Another question — Obviously, they would want to get to the bank accounts, right? If you were Tether, you would want to have all of your bank balance sheets ready for them and open on the table when they walk in and try to clear this up. That's the thing we've been kind of speaking about is this doesn't seem that difficult to resolve. If the money is there, just prove it. It might be a short investigation and everything might be okay. I'm not saying it's not. It's just that the company is acting in ways that make you have these concerns. So the subpoena process will continue like that.

I think the CFTC is getting a lot more savvy about these investigations. I think most of the US regulatory agencies are getting more sophisticated and understanding that actually a blockchain is a great regulatory tool, because it has a trail of every transaction that occurs. When you want to launder money in cash, you can give somebody a suitcase and they put it in the trunk of the car and it's gone. On a blockchain, you're going to have a record of that. I think they're understanding that aspect to it and realizing that in some ways it can make their job easier.

Just as broad, one more thing on subpoenas, the CFTC is a civil — They issue civil subpoenas and bring civil cases. They do have the option of going to the Justice Department and the FBI

and saying, “We think there's enough here for you guys to start a criminal proceeding.” So that's a possibility and that's happened in other areas of market manipulation and cases that I've covered.

I wouldn't tell anybody to expect this — It's not a fast process. They're thorough and it takes time, but that's sort of how it's going to play out. Whether Tether and/or Bitfines come out and publicly say anything, I don't know. It's pretty rare for companies that are being investigative that they don't really want to make public comments about that. Certainly with Thether and Bitfinex, they barely make public comments to begin with. So think this is going to be a story that plays out in the press for the foreseeable future.

[1:12:02.4] JM: Not to open a can of [inaudible 1:12:03.7]. I thought of one more thing I wanted to ask about, which is the Chinese ICO. For example, Tron. You must've seen Tron, right?

[1:12:15.0] ML: Man! When you were talking about this earlier, I was thinking of that exactly, because one day I just looked at the coin market cap and just the top 10. I'm like, “I didn't recognize three or four in those, one is Tron.” I'm like, “What the hell is this? It's got an enormous market cap.” I don't think it even really exists.

[1:12:33.7] JM: Tron, when I was in Austin, and the night like after my friend showed me those 82-X gains on his RaiBlocks where he had just put in some money and got 82-X gains, I was like, “What the heck is going on here? Do I need to get into this?”

I was like, “Okay. I'm going to look at these. I'm just going to take a look.” I haven't actually read any of his white papers for these crap coins. Maybe one of these is actually good. So I've read a white paper for the Tron one, because it was the sixth highest cryptocurrency. Reddit was talking about it. So I said, “What the hell? I'll try to vet this thing myself.” Maybe I am a crypto expert. Maybe I can start a crypto hedge fund.

So I've read the white paper and it starts out — It's really romantic and compelling. It's written by someone from China. They're talking about decentralization. They want to get out from under the great firewall. They wanted decentralized social networks and cloud providers, and I'm getting into it. It's like four in the morning. I'm on three hours of sleep. I've got the image of my

friends 82-X gains on RaiBlocks just seared into my imagination and I'm getting swept up into this cyberpunk narrative of Tron. By the way, the Tron White Paper, you could find it at tron.network. that's their website. I'm looking at the team, the engineering is — The engineering team looks okay. Like there's somebody who was at Tencent, and then I read a little bit further and I'm getting into the technical weeds and I'm like, “Wait a second. This is not decentralized at all. It's not a decentralized blockchain. They have what they call centralized consensus. It's just like a set of servers on like running Kafka.” It's just a centralized database, basically. It's just like centralized database. They plan to eventually move to decentralization.

Also, they mention off-the-cuff, “Oh! We want to build a VM system that's better than Docker,.” and Docker is this like open-source VM like system. It's all just vaporware. Then I read that the Tron White Paper was just plagiarized from the IPFS white paper. At that point, you look at the — I's the sixth highest market cap cryptocurrency. You don't know whether to laugh or to cry.

[1:14:52.4] ML: Yeah, I am totally with you, and that's sort of informing some of my coverage and trying to just get at the bottom of some of these stuff, because you're obviously very sophisticated and noticed and they had you going for a while. Scammers are always good at that. That's why the scam people. So it's up to people in this community and the press the covers that to hold these folks to account and try to get some just basic facts established. Yeah, I'm glad you didn't get in.

[1:15:28.4] JM: I certainly did not. Okay. Do you have any idea, like can we regulate the Chinese ICO's?

[1:15:35.8] ML: God! That's another fascinating part of this whole story, is how do you regulate a blockchain that's global, that's now pretty much, if it's done right, it's immutable and sort of beyond the control of governments and corporations. It comes down to whether you can restrict Internet access or not. You know how difficult that is. It's not impossible.

So that being said, yeah, of course it can be regulated and it's going to — I do get the sense that this is really testing regulator's relationships with their foreign counter-parties, like the Japanese regulators and the CFTC, and the Chinese regulators and the SEC. They all need to be coordinating to an extent that I'm not sure they've ever done before, because this market is

global and we've seen it move quickly when China has put out restrictions on Bitcoin exchanges, for example. That really — It was just a blip in the radar and things will just move to a friendlier country. That's going to be a challenge for regulators too. I'll get on the same page, because they like their home turf. They want to feel like they are capable of regulating their home markets. So some American outsider coming in might be seen as, "Oh! You're belittling us. You think we don't know what we're doing." There's no time for that in this sort of world where this Tron coin can just emerge and all of a sudden be worth billions of dollars on a plagiarized white paper. Who's left holding the bag there?

Unfortunately, I think the vast majority of the ICO stuff is going to fall under that bucket and people are going to lose a lot of money and the only ones I see coming out on top of this are the lawyers who are just going to have years and years of cases.

[1:17:41.2] JM: All right, Matt. Thanks for giving me so much time. It's been awesome talking to you. I'm sure this will be a good episode. The DAO hack was really popular. Yeah, I'm looking forward to more of your reporting. I'm sure we'll have more talk about the future.

[1:17:55.9] ML: Yeah. I hope so too, Jeff. It's always a pleasure talking to you.

[END OF INTERVIEW]

[1:18:02.8] JM: If you are building a product for software engineers or you are hiring software engineers, Software Engineering Daily is accepting sponsorships for 2018. Send me an email, jeff@softwareengineeringdaily.com if you're interested.

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Thank you.

[END]