

Barefoot Innovation Podcast with Tomicah Tillemann, Chief Policy Officer at Haun Ventures

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Jo Ann: I have really been looking forward to today's show because my guest is Tomicah Tillemann, who is the Chief Policy Officer at Haun Ventures. Tomicah, thank you for joining me.

Tomicah Tillemann: A pleasure to be with you, Jo Ann.

Jo Ann: I have been very excited about talking to you. We've been planning to do it for a long time and we've had to reschedule and I have found that you truly are one of the most thoughtful people anywhere on kind of where we're headed with the cutting edge tech in finance, with sort of crypto and beyond, thinking about Web 3, thinking about DeFi. And so we're going to explore that today and I really appreciate having you on the show. I'd like to start by asking you just to tell us about yourself, your background, and then tell us about Haun Ventures, which Katie Haun started not too long back.

Tomicah Tillemann: Absolutely. Well, I've had an unusual journey to get here. I started my career in Washington quite a few years ago when I was wrapping up my PhD, going to work for a little known Delaware senator named Joe Biden. And my boss was a wonderful guy who was even less well known named Tony Blinken, and for many years, served with both of them on the staff of the Senate Foreign Relations Committee, covering a very wide array of issues. And ultimately, when I departed the committee, was running about a third of the world for then Chairman Biden as he became vice president. And Tony, who had previously served as Bill Clinton's White House speech writer, got a call from then Secretary Clinton asking for somebody who could go over and be her speech writer at the State Department. And so I, at his suggestion, began a conversation there and was very fortunate to serve in that role for a time, which was a fascinating vantage point from which to participate in the policymaking process.

And one day we were on the plane back from I believe Estonia and she pulled me aside and said, "Look, Tomicah, we have a problem, which is that the world is moving a lot more quickly than our institutions and I need your help trying to keep up and we need to do something about that." And so she asked me to stand up a team that reported directly to her that was a little bit akin to the State Department's DARPA. And we built out projects at the intersection of innovation and policy in about 55 different countries and worked with a wide array of different organizations, both in government and beyond government and civil society in the private sector to figure out how we could upgrade and update the user interfaces of democracy in our societies. Probably the best job in Washington. I was incredibly fortunate and in the course of that work spent a

lot of time in countries with big challenges, but also tried to benchmark countries that were doing things well.

And one of the places in the latter category was Estonia. They, as many of your listeners will know, have what's widely regarded as the world's most sophisticated digital infrastructure framework. And I was sitting down with their president one day and asked him, "What would it take to get the type of systems you have created in Estonia into other countries? If we wanted to port what you have built in Estonia, what would be your advice for us?" And his suggestion at that point, which really surprised me because this was very early in the evolution of the technology, was that if they were to build again, they would build on blockchain because it was far more secure, far more resistant to tampering and manipulation. And he felt it had the potential to be a really foundational technology for bringing institutions into the 21st century.

Based on his interest, I ended up, shortly after leaving the state department, starting a new program and ultimately a series of programs at a technology and policy incubator called New America where we worked with a wide array of partners at every level of government in the United States and also around the world to harness open source and decentralized technologies to solve big public problems.

And we looked at the finance side of things. We also looked at a lot of non-financial use cases. We deployed the world's first blockchain based land registry, for example, in the Republic of Georgia, which is now rated as one of the best on the planet by the World Bank. And ultimately, in the course of that work, was asked to chair the Global Blockchain Business Council. It was through my engagement there and with others that I was able to meet Katie Haun, who at the time was still a federal prosecutor, and we had a phenomenal series of discussions at a summit that was host by Richard Branson on his island in the Caribbean, which will give you a very non-representative sample of the travel that I generally do.

And years later, when Katie was a general partner at Andreessen Horowitz, she asked if I'd come over to be their global head of policy. That was an amazing opportunity. And then a little bit after that when she decided to start a new firm dedicated to investing in founders building the next generation of the internet, she asked if I'd come with her, which was a great privilege and opportunity.

So that's where we find ourselves today. We were fortunate last year to have a record-breaking raise right at the top of the market, the largest ever raise for a solo GP. And we are now working with an extraordinary group of founders, notwithstanding some of the fluctuations we've seen in the market of the last year or so, to build out core infrastructure that we think is going to be essential to the next generation of the internet and the policy architecture that goes along with that.

Jo Ann: It's very exciting to see such a prominent woman led VC in a time when we don't have very much gender diversity in that field. Can you tell us a little bit about what Haun Venture's focus is or what it is that you're looking for?

TomicaH Tillema...: Absolutely. So we were fortunate as part of standing up a new firm to be able to really take a first principles approach and think about the technologies that will be needed in order to scale the third generation of the internet, Web 3. And we can get into the definitional genesis and origins of Web 3 a little bit later if that's of interest. But to think through what types of technologies will be needed to make population scale impact going forward. And ultimately, as we have surveyed the landscape, we've identified a couple of key areas. One of those is privacy. Right now, many of the solutions that exist in the Web 3 space are at either end of the privacy continuum. You either have effectively complete transparency in the case of big public blockchains like Bitcoin and Ethereum, or you have almost complete opacity in the case of some solutions like Tornado Cash. Neither one of those is a particularly useful place to operate and bad things tend to happen at those extremes.

And so we believe there's room for a new generation of technologies that chart a third path, provide individuals with much greater control over their information and a higher degree of privacy, but also the type of accountability that you need in order to run effective institutions. So that's one area where we're spending a lot of energy. The second is around infrastructure. And again, huge important needs for the infrastructure that will be necessary to scale these technologies effectively and create the overlay of accountability, usability, scalability that will enable hopefully far more individuals to take advantage of the very profound efficiencies and benefits of these technologies. And then the last area where we're doing a lot right now is around interoperability. You've seen a lot of different technologies evolve in the space. Many of them are extremely compelling and optimized for specific uses or specific types of uses. The ability to work across those technologies will be, we think, very consequential in the broader scaling of Web 3. And so those are our three realms where we are fortunate to be working with some great founders and are excited about the potential.

Jo Ann: That's fantastic. And if we have time, I've got some questions that I want to drill down on about those. But let's start by asking you where you think we are today. We've had a very tumultuous year plus in tech world, in the FinTech world, certainly in the crypto world and winter and the FTX upheaval and all of it. What's your take on where we are and where we're headed next?

TomicaH Tillemann: Well, it is the best of times and it is the worst of times. There is an enormous amount to be excited about and enthusiastic about, and there are also some very significant headwinds and challenges, particularly frankly on the regulatory front, that I think we as a community and more broadly the United States is going to have to work through if we're going to be able to realize the benefits of these technologies.

Let me give just a couple of different data points and we can hopefully jump off from there. Right now on the technology front, there is a tremendous amount of progress in innovation and so-called crypto winters I think can be quite useful because they allow the folks who are doing serious building to kind of go heads down and deliver real results. And ultimately, that type of purposeful action-oriented building is where we're going to see the real transformational breakthroughs emerge, rather than some of the frothy speculative activity that we've seen in the field in certain instances when the prices go very high. There's been a lot of obsession, particularly within the media around prices.

Our view is that they're not the most helpful long-term indicators of where things are headed and fields or metrics like talent that's flowing into the field are a much better ultimate determinant of what we're going to see come out of the ecosystem. The talent flow remains very, very strong both from academia where blockchain related courses and cryptography related courses tend to be among, if not the most popular computer science courses at virtually all of the leading universities that operate in this space. But beyond that, we see an amazing flow of talent out of Web 2, out of the big tech incumbents as people recognize very talented engineers and others recognize the intrinsic advantages that some of the Web 3 technologies have over legacy systems.

The other elephant in the room, of course, is FTX, and I think we saw the implosion of a very prominent actor that was not linked in any way to the technology. It was linked to some very classic well understood and unfortunately, repeated forms of corporate malfeasance. And due to the failure of the United States and others to develop a comprehensive regulatory framework for the ecosystem, it was easy for some of the actors involved to engage in that malfeasance. But that has unfortunately cast a reel pawl over particularly the policy and regulatory conversation in the United States. It's critical to note that many other jurisdictions are moving quickly and efficiently to develop thoughtful, comprehensive, enabling regulatory frameworks for this technology. If you look at what's happening in the United Kingdom, if you look at what's happening within the European Union, if you look at what's happening in Japan, if you look at what's happening in Hong Kong, that's just a partial list of the governments that even in the last few weeks, have made significant progress toward a more serious regulatory framework for this technology.

The United States at the moment, unfortunately, is moving in the wrong direction. I am hopeful that this will be a case, to hearken back to Winston Churchill, of the US always doing the right thing after exhausting every other available alternative. But we are deep in the process of exhausting every other available alternative and the failure of US regulators to emulate the best practices that are being embraced in other jurisdictions and put forward a serious comprehensive regulatory framework for this new technology is a real challenge and something that we're all going to have to get very serious about in the next little while if we don't want it to have long-term pretty serious competitive implications. Not only for our economy but for our national security.

Jo Ann: I was going to ask you later about your regulatory thoughts. But since we're there, talk about what you think are those best practices. What is it that makes a good regulatory framework for these technologies? And if you want to talk about the opposite or what the problems are as well.

TomicaH Tillemann: Yeah. Well, there is fortunately, and nobody knows this better than you, a pretty formidable set of templates that we can study when we examine the evolution of new technologies and new technology frameworks. And if you go back to the late '90s and the evolution of the first generation of the internet, what we saw at that point is that a number of different agencies and regulators were adamant that they needed to apply existing legacy frameworks to what turned out to be a very different set of technologies. If I remember well, the FCC was adamant that we should use the framework established for Ham radios to register every new webpage that would appear on the internet. Needless to say, we would be living in a very different world and not a better world today if regulators had gotten their way in that case and insisted on utilizing very antiquated, cumbersome, outdated regulatory frameworks to govern a new technology.

And ultimately, in that case, there was a important report that you'll recall authored by IRA Magazine or that came out from the White House and said, look, this is a fundamentally new technology and if the US is going to retain leadership in this technology, we're going to have to do things differently. Now, there is certainly a space and an important space for regulation of Web 3 technology and digital assets. We are vocal advocates for the need for regulation in this space. So I want to be very clear for those that would say the industry doesn't want regulation, at least as it relates to our team and the projects that we work with, that is 100% not true. We feel there is an urgent need for a regulatory framework in this case. But that regulatory framework, and again, this is the approach that virtually every other sophisticated advanced market economy is embracing right now should be fit for purpose.

And we should not assume that rules that were created in many instances 80 years ago in a very different time before the invention of the transistor, let alone the invention of some of these absolutely cutting edge software innovations are the right prism through which to view this. There are certainly technologies and there are certainly digital assets that will fall under those regulatory frameworks, and that's fine and as it should be. But it would be equally foolish to say that none of the old stuff is relevant as it is to say that only the old regulatory frameworks are relevant.

And unfortunately right now, at least at a number of prominent agencies, there seems to be a real, I think, misbegotten belief that the rules that folks are working with right now came down from Mount Sinai and should not be altered in any way. And I think frankly, that's just pretty preposterous on its face. No way you can look at these technologies in an honest light and reach the conclusion that these aren't fundamentally new tools in some respect and that they will not

require some fundamentally new rules if we're going to be able to use them responsibly.

Jo Ann: Are there some common denominators in the countries and regions where you think the approach is better fit for purpose as people, every country has its traditional securities laws, commodities laws and so on? But what are the key trends that you're seeing in terms of building onto that with something that is more adapted for the new world?

Tomicah Tillemann: Well, I'll cite two different baskets of distinctions. One is structural and then the other is procedural. At a structural level, the US is the only country in the world, and again, you know this better than everyone with such a fragmented regulatory framework when it comes to these topics. And depending on how you count, if you use OMB's taxonomy, my recollection is that you have 15 different agencies with purview in some form over these technologies. It is just-

Jo Ann: At the federal level.

Tomicah Tillemann: Exactly, purely at the federal level. And then you layer in all of the state regulatory engagement. I don't know how we expect the United States to remain the innovation leader of the world if we can't enable the world's most talented technologists and engineers to build here without having to manage 15 federal regulatory frameworks and 50 state regulatory frameworks. There is no startup that has either the time, the expertise, or the resources to manage the existing burden effectively. So that's point number one. And the other dimension of this, if we're being honest, is that, and this is not a new occurrence and this is not unique to the digital asset space, there is huge competition for jurisdiction among those regulatory agencies. And that leads to conflicting guidance, that leads to wildly divergent views on what founders and entrepreneurs need to do in order to be compliant with the rules.

And the unfortunate reality is that many of the most talented and capable founders, the ones who want to do things the right way, the ones who want to be compliant, are looking at the status quo in the United States and saying, "Unfortunately, if I want to do things in accordance with the rules, my best option is to go offshore." And what we've seen in the data over the last little while, and these statistics come from our friends at Electric Capital, is that if you look back as recently as about five years ago, roughly 70% of all developer activity, all software activity in open source Web 3 projects was originating from the United States. So the US had not just a lead, but a very decisive lead when it came to the technology talent that was being mobilized in this new generation of the internet.

Fast forward to where we are today, and less than 50% of the code commits to open source Web 3 projects are coming from the United States. That is a very sobering decline, and it's a sobering decline that's happening quickly in real time and in many cases, as a direct consequence of regulatory uncertainty. I was

talking with an outstanding project yesterday, one that we would certainly want to grow up in the United States, and they said that for all of the roles that they are hiring at the moment, they have specifically said they will not hire Americans for those roles. They are only hiring folks outside the United States because of the regulatory uncertainty. That is a horrific outcome for the United States, our future influence in the world and the future of our economy. There are just many, many layers at which that's a very, very bad thing.

So flip over from the structural side of this to the process side of this. The countries and the jurisdictions that are doing this well are engaging in a meaningful, open, multi-stakeholder process with technologists and civil society to develop new rules. The first thing is they all acknowledge the need for new rules. And again, the United States is kind of unique at the moment, and I'm thinking of one agency in particular here, but the United States is unique in a really extraordinary adherence to the dogma that we don't need any new regulatory framework for these technologies. Every other country that is looking at this seriously has examined the landscape and concluded decisively that is not the case, and they are going in a different direction consulting with stakeholders to create new rules and regulatory frameworks.

And they are doing that work in good faith. They recognize that there are a lot of people in this space who are eager to solve big problems. And here I'll pause for just a moment. When we look out at the financial landscape right now, none of us should be content. If you take something like AML/CFT concerns, anti-money laundering, we spend in North America about 40 billion each year on AML compliance, that is a remarkable amount of money. And for that remarkable amount of money, the estimates are that over 99% of all illicit financial transactions go through unpunished without any problems. That's not a good arrangement. None of us should be content with that. We have millions of people in the US and billions around the world who can't access basic financial services. That's not a good arrangement. We should not be content with that.

And so I think the regulators frankly should be sufficiently cognizant of the gaping holes that exist in our current systems to want something better. We should all want something better, and let's work together to build whatever that is collaboratively going forward. That's what other countries are doing. That's the way that United States has historically retained its very substantial qualitative lead in innovation, and that is the model that we should utilize going forward.

Jo Ann:

Great. So you've been touching on the fact that our current financial system certainly does many things well, but it's very far from perfect. There are many people not served, many people who can't get into it and other people who are in the financial system and then are harmed by their interaction with it. And you touched on the problems that we know we have a tremendous failure in the area of anti-money laundering for one. So I want to talk about your thinking on how we can do better with a Web 3 framework and a blockchain based

architecture and cryptography. And our listeners, I'm happy to say, are a very wide spectrum of people. We've got lots of people who are deep in these issues and we have lots of people who are just trying to get their heads around what are we talking about here? So I'd like to start by asking you to give us your definitions, let's say of Web 3 and of DeFi, decentralized finance.

Tomicah Tillemann: Great questions. So to give a good definition of Web 3, I probably need to start with a definition of Web 1. And we go back, jump into the hot tub time machine and we'll go back to the earliest days of the internet, which was a really exciting time for innovation because it was driven by open source code and open source protocols. And you saw innovations like email and HTTP that have had a really profound impact on the economy, on our lives, on our ability to engage and exchange information in a frictionless way with other people. In the case of email, maybe it's too frictionless, we get too many emails. But certainly incredibly consequential open source protocols that really ushered in the dawn of the internet era. Those protocols were incredibly powerful, but they had a problem, they had a fundamental flaw, which was that there was no business model that could sustain that type of open source innovation over the long term.

And so what you saw pretty quickly in the Web 2 era was a consolidation in very, very large platforms of a lot of our online digital activity because those platforms came up with business models that they could utilize to sustainably finance innovation and frankly make a handful of people immensely, immensely wealthy. And the way that those systems has evolved has certainly created some benefits. So I don't want to minimize the innovations that have emerged from those big platforms and a lot of the big breakthroughs that they have helped enable, but at the same time, we are now at a point where if you want to use technology on planet Earth, you really only have two options. One of those options is an authoritarian framework emanating out of Beijing where your personal private information is aggregated and used to manipulate your behavior for political purposes. And the other is the big tech framework emanating out of Silicon Valley and Seattle in which your personal private information is aggregated and used to manipulate your behavior for commercial purposes.

Neither one of those paradigms is compatible with a healthy, vibrant democracy, and we need to be pretty honest about that. This is becoming an existential issue for our society, it's becoming an existential issue for our economy. And they are much closer, if you look at them in historical terms, to the futile systems that evolved in the Middle Ages. Every morning, we wake up, we take out the digital equivalent of farm implements in the form of our smartphones, and we go to work creating very valuable data, the vast preponderance of which is sent to digital manor houses located in a handful of places around the world. And those that sit in those manor houses, those that own those manor houses, do very well. Those folks make a lot of money and have made a lot of money off of these systems. And in exchange, the rest of us get access to some basic

subsistence services that we need to exist in the digital world. But it's not an equitable or a well-designed framework or an exchange of value.

That brings us to Web 3 and the opportunity, and I will be very clear, it is an as yet unrealized opportunity. We've got a lot of work to do if we're going to get there in Web 3. But the idea in Web 3 is that you can use the combination of open source code and digital tokens to create platforms that are community owned, community governed, and give individuals far greater control over their information. The end result of this, if we do it well, and again, there's a big if here, and I think regulators in particular are going to be extremely consequential in determining whether we realize the potential of these technologies, is that individuals will be able to have some ownership in the platforms that they utilize, that they will be able to have a voice in how decisions are made on those platforms. And we're seeing a number of cases play out in real time right now where the consolidation of immense, immense power in the hands of often a single individual controlling these platforms is proving very problematic for society and the users of these platforms.

And they will have a degree of confidence in the rules that are created in these platforms that they don't have today. There will be something akin to the rule of law in the digital realm, whereas right now, most of us operate at the subject to the vagaries of terms of service that can change any time without our permission or in many cases, even our notice. So that is the big picture, and obviously, there are a lot of different enabling technologies that go along with that. But hopefully that provides a little context.

Jo Ann: And give us your definition of DeFi while we're at it. Where does it fit into the next?

Tomicah Tillemann: Yeah. So here again, I'm going to zoom back a little bit in order to provide hopefully a semi coherent definition. If you go back to the time when we all lived in small communities of hunters and gatherers and maybe even farmers, there was never any real question in those communities about what was Jo Ann's house and what was Jo Ann's land and what was Jo Ann's cow. Those were things that were easy to establish because everyone in the community could understand who owned what, and that community knowledge was sufficient to provide the clarity that people needed on which to go out and live their lives and make important decisions.

As societies got bigger, we solved for the challenge around defining ownership and maintaining a record of ownership by creating financial institutions and government institutions as well. And those centralized institutions played a really important role in continue to play a really important role in functioning as intermediaries to determine who owns what and how resources are being moved around the economy. As a species, we pay a lot for that. So if you look at global GDP numbers, we pay about 20 trillion each year to the financial sector to provide a host of services that ultimately come down to serving as an

intermediary between transactions that you and I might engage in as individuals. We get a fair amount in exchange for that.

So again, I don't want to minimize the important role that the financial sector and financial institutions play, but that's a whole lot of money. And the potential of DeFi and some of the other innovations associated with Web 3 is that by creating publicly owned ledgers that are easily auditable and provide a high degree of confidence for the individuals that are utilizing them, we can take a lot of the friction and a lot of the cost that resides in the traditional financial sector, which again is monumentally expensive for all of us who need to use it, and democratize access to a lot of the services that many people have access to, but many others do not have access to today and do so in a way that is going to be much more affordable. And ultimately, much more accountable and auditable than the pretty opaque, highly centralized systems that we rely on right now.

So Defi at its core utilizes public ledgers to open up and democratize access to peer-to-peer financial transactions in a way that if done right, and again, there're always caveats on this, we're still in the if stage of this game, should provide a lot of benefits to society and a lot of benefits to the users of these systems.

Jo Ann:

So when we started talking right before this show, I told you I thought we had plenty of time and I'm looking at the clock and I'm feeling the time pressure because I have so many things I want to ask you. So we'll take as much time as we can. Take us to this place that you're describing. Because I think a lot of people can follow this argument up to the 30,000 foot description of what Web 3 may look like and how it would be designed, and then we can't get over that mountain and picture what's on the other side of it.

So suppose we're waking up in the morning in the post feudal society, which now has Web 3 and the manor houses are gone, what is our life going to be like? Give some examples. This field, I know you and I were at a dinner together late last year, and I'm pretty sure I said that evening I noticed a very strong utopian streak in the dreams for what might be possible in Web 3. And of course, we're never going to have utopia, as you've noted. And certainly in finance and tech, people are very skeptical that we're actually going to get to a democratized more fair, better distributed world. So let us imagine some actual examples that you can envision.

Tomicah Tillemann:

Absolutely. And here, let me say two things. The first is in the same way, the transition from feudalism to the Enlightenment and the Renaissance didn't create a perfect society in any way.

Jo Ann:

We are human beings.

Tomicah Tillemann:

It's not going to create a perfect society. There's still a whole bunch of problems that this doesn't solve. I'm not in the camp that says for a moment that Web 3 is going to end death and fix tooth decay. We're looking at a specific subset of

consequential, expensive, meaningful challenges, but there's a whole lot that this is not going to resolve.

The second component of that is that while I am happy to speculate a little bit, I think that in some ways it's most useful to talk about the technologies that are already being deployed and proven and the solutions that people are utilizing in real time. And while they are not the old line that the future is already here, it's just not evenly distributed, a lot of these solutions are here, but many people, and it's important to note, especially regulators because of some of the ethics rules that prevent them from interacting with the technology have not had a chance to actually use these systems.

And the fact that our regulators in many cases can't interact directly with these technologies is another challenge that, at the moment, is proving to be an unnecessary handicap on the process of developing good regulatory frameworks. But let's take a few examples. A few years ago I was approached, I mentioned by the government of Georgia. They had historically had a problem, which is not unique to Georgia. It exists in many, many parts of the world. And the challenge they faced was that if you, Jo Ann, had a nice piece of property by the lake and I wanted it, and my cousin worked for the land registry, I could go and talk to my cousin. My cousin could sign that property over to me. And because the registry controlled the record, there was nothing you could do about it. They could wipe out any evidence that it had ever been yours to begin with.

And that type of systemic corruption is widespread around the world. We are mostly insulated from it in the United States, and we can be very grateful for that. But it is a common occurrence in many, many different jurisdictions. And corruption of that sort costs the global economy trillions of dollars annually. And so what we saw in this case is an opportunity to use decentralized ledgers to create greater accountability in their land registry. We put together a good system that did that. It anchored transactions to public blockchains in a way that made them easily traceable and accessible, and anybody could with a extremely high degree of confidence, look at a transaction, know that it had been properly recorded, and know that there was nothing that even a corrupt official would be able to do in order to eliminate evidence of that record. So that's a very valuable real world use case that's already been deployed.

The other component of that is that in the United States, each year we spend, if memory serves me well, about \$20 billion establishing Title II properties. That again is just a breathtaking amount of money. It's an extraordinary amount of money. And the fact that we don't have better systems for doing this is really on us. We need to solve those problems. And if you can do that, it becomes much easier for people to live where they want to live. The costs of our transactions will drop. It'll be easier for working families that are trying to get into their first home and ultimately create a society that's going to be measurably better for the vast majority of people.

Let's take another recent use case, and again, something that's not working and something that we know can work. Right now, if you take the data that's come out in analysis of the CARES Act, which was the big piece of legislation that provided assistance in the aftermath, the immediate aftermath of the COVID pandemic, the estimates are that we lost somewhere between 100 and 400 billion to illicit payments.

That again, even by Washington standards, is just a breathtaking amount of money, an extraordinary amount of money. And the potential of these technologies, and we're seeing this play out, is that you can send money peer-to-peer with an extremely high degree of confidence that it's going to go where you want it to go when you want it to get there, and you're going to have immediate settlement in a way that we don't. We see this playing out right now in remittances. We did some polling a little while ago in a few politically important states and in places like Ohio and Nevada and California, 40% of all digital asset holders are using the technology for remittances. This is one of the most expensive, friction filled areas of the global economy. It unfairly targets individuals who are often at the bottom of the global economy and trying to send money back to family members who are in desperate need.

I've had certainly lots of family members in the story of my family coming to the United States as refugees who both sent remittances and benefited from remittances on the other side. The systems that are available at the moment are extremely expensive, extremely cumbersome. We can do better than that. And these technologies are already demonstrating how we can do better going forward.

I'd say ultimately, if we do it right, we will develop new layers of digital infrastructure around privacy, preserving digital identity around payments, not around data that will enable society as a whole to function far more effectively. And we're seeing glimmers of this around the world. When Bangladesh implemented digital payments, they lifted 2% of their entire population out of poverty purely on the basis of that one program. I'm sorry, that was Kenya. When Bangladesh implemented digital governance and identity platforms, they save 2 billion days of previously wasted time. And Estonia, which I mentioned at the outset, gets the equivalent of 2% of G P back each year because of the efficiencies that are available through their digital infrastructure systems. This is all real world proven data, we don't have to use our imagination on this. But it's a glimmer of what could be possible if regulators take a farsighted approach to nurturing these innovations.

Jo Ann:

Your examples are emphasizing in most cases, I think the blockchain component of this. Can you take a moment, and again, I know we're short on time, to talk about how the tokenization piece fits into this? Because I think part of the argument here is that the combination of blockchain architecture and tokenization is going to make it possible for us to work with very small dollar amounts and big dollar amounts too, but make it efficient for people to retain

ownership in things or trace their ownership. And it's partly because we could tokenize things. Is that a fair statement?

TomicaH Tillemann: I think it is. And to use maybe some tangible examples of this, there's a term that's been kicked around among policymakers for a long time now called stakeholder capitalism. And the idea there is that those that are participating in our systems should have a stake in those systems. We've had that concept for, at this point, easily 20 years. You have to look pretty hard to see anywhere where it has been realized. And certainly in the case of securities law in the United States, 89% of all US securities are held by the richest 10% of Americans. We are not doing a good job of democratizing access to securities, there's no other way to approach this. We have a very, very lopsided system that benefits handsomely, those who have access to the best lawyers and the internal advantages that come with the knowledge of that system.

Let's again try to fast-forward a few years into the future when we can easily tokenize ownership in different activities. If you are building a house, the carpenter who helps build that house could theoretically, and again, this exists today, this is not some sort of fanciable future invention, these solutions have been built, they could get a long-term residual stake in the ownership of that house. And as there are future sales of that house or as it appreciates in value, they could benefit from that. That to me, looks a lot more like stakeholder capitalism and the tools that come with digital tokens are the enabling infrastructure in my mind for stakeholder capitalism going forward. Again, that only works if we take some fundamentally new approaches to regulating this ecosystem. But if you get it right, that's a pretty extraordinary opportunity at a moment when many Americans rightly justifiably have lost confidence in the way that our legacy systems are functioning because they're not giving them a fair opportunity to take part in the benefits of innovation and digitization going forward.

Jo Ann: TomicaH, I said at the start that you're one of the best people I know at explaining this, and I think our audience will agree. There's so much more I wanted to ask you about, I wanted to ask you about CBDC and digital dollars. I wanted to ask you if you have thoughts on ChatGPT and its coming successors and so on. So I think we're just going to have to invite you back again in the future. But for now, I wanted to thank you so much for being on the show. Where can people get information about Haun Capital?

TomicaH Tillemann: Well, they should certainly come visit our website, which is haun.co, so Haun.co. And we frequently post musings on our website, so you'll see a lot of thought pieces that we develop primarily for founders who are working in the space, but also in some instances, for policymakers. And beyond that, while most of our firm is in Menlo Park in Silicon Valley, I'm in Washington, DC intentionally because we recognize a real need for conversation and engagement with policy makers on these topics. And so I look forward to continuing the conversation

with you and also your audience going forward as opportunities present themselves.

Jo Ann: That's fantastic. So Tomicah Tillemann, thank you so much for being our guest today.

Tomicah Tillemann: Thank you.