The John Marshall Journal of Information Technology & Privacy Law

Volume 34 | Issue 1 Article 3

2019

Panel III: Practicing Blockchain Law, 34 UIC J. Marshall J. Priv. & Tech. L. 52 (2019)

Peter Nadimi

Samuel Korver

Zach Smolinski

Lauren Steinhaeuser

Corey Bieber

UIC JOHN MARSHALL
JOURNAL OF PRIVACY AND TECHNOLOGY LAW

Symposium Issue

BLOCKCHAIN AND THE LAW: RISKS, CHALLENGES, AND OPPORTUNITIES

PANEL III: PRACTICING BLOCKCHAIN LAW

PETER NADIMI, SAMUEL G. KORVER, ZACH SMOLINSKI, LAUREN M.W. STEINHAEUSER, AND COREY BIEBER
MODERATOR: CARLA L. REYES

ABSTRACT

The most disruptive technology to emerge in the past decade, blockchain technology has had an immediate impact on the legal industry to address the new issues that blockchain, cryptocurrencies, and distributed ledger technologies present. This panel discusses why it is important for lawyers to take an interest in this area, and more importantly, *how* lawyers of all experience levels can get involved in the blockchain space. The panel will share diverse experiences and insights from those on the ground who do blockchain legal work.

Cite as Peter Nadimi, Samuel G. Korver, Zach Smolinski, Lauren M.W. Steinhaeuser, and Corey Bieber, *Panel III: Practicing Blockchain Law*, 34 UIC J. MARSHALL J. PRIV. & TECH. L. 52 (2019).

PANEL III: PRACTICING BLOCKCHAIN LAW

PETER NADIMI, SAMUEL G. KORVER, ZACH SMOLINSKI, LAUREN M.W. STEINHAEUSER, AND COREY BIEBER

ROBINSON:

I'm going to start out with a brief introduction again of Professor Carla Reyes. What I didn't mention this morning is Carla is also a Fulbright Scholar, and her most recent article which she mentioned earlier, "If Rockefeller Were a Coder," was selected as a winning paper at the 2018 Southeastern Association of Law Schools Call for Paper Competition. She's also published several other papers that you may want to take a look at, in the Nebraska Law Review, "Conceptualizing Cryptolaw,"[1] and in the William & Mary Law Review Online, "Distributed Governance" with Ben Edwards and Nizan Packin.[2]

Our second panelist is Mr. Peter Nadimi. He is senior counsel at McDonald's Corporation where he supports McDonald's global, U.S. IT and digital organizations, as well as other McDonald's organizations, with their deployment of technologies into domestic and international markets and the procurement of new technologies. Prior to joining McDonald's, Peter was in-house counsel at a health information technology company and also an associate in the corporate department of an international law firm. He's a graduate of the University of Minnesota-Twin Cities and the University of Iowa College of Law.

Our third esteemed panelist is Sam Kramer who is a partner at Baker McKenzie. His practice focuses on multi-jurisdictional outsourcing, complex technology licensing, commercial contracting, and supply chain agreements and integration. He's frequently involved in outsourcing transactions and large scale IT services projects, and also focuses on emerging technology services, including mobile virtual network operator transactions. He's recognized in Chambers Global in the field of outsourcing and in Chambers USA in the fields of technology law and business processing outsourcing.

Mr. Zach Smolinski, the other half of Smolinski Rosario, is here with us today. Partner at the firm, he is an experienced general counsel having a focus on intellectual property, transactional, and M&A law, and a strong interest in emerging technologies. His skills include evaluating and negotiating license agreements with cloud services contracts, coordinating IP due diligence for investors and purchasers, and working with founders and executives to optimize their companies' legal strategies.

Mr. Corey Bieber is an associate at K&L Gates in the firm's Chicago office. His practice includes advising clients on technology licensing, information security and privacy compliance. Specifically, he consults on engagements involving data privacy and security, biometrics, HIPAA, software copyrights, and software and information technology services licensing. He has over ten years' experience in

---

[1] Carla L. Reyes, *Conceptualizing Cryptolaw*, 96 NEB. L. REV. 384 (2017).

[2] Carla L. Reyes, Nizan Geslevich Packin, and Ben Edwards, *Distributed Governance*, 59 WILLIAM & MARY L. REV. ONLINE 1 (2017).

regulation and compliance in the legal, technology, healthcare, and insurance industries.

And we have Ms. Lauren Steinhaeuser who is an associate at Faegre Baker Daniels in Minneapolis and specializes in emerging technologies and patent litigation. Your wonderful panel, Carla.

MODERATOR REYES:

This panel's charged with discussing why it's important for lawyers to take an interest in blockchain and how we can become more involved in blockchain law practice, and so that's where I want to start. How did you come to a place where your practice involves at least a piece of blockchain law to the extent that that's a thing?

NADIMI:

I come with in-house perspective here, so I'm a little different than our other panelists who are on the private side. But I think more and more businesses more and more have to at least recognize that blockchain has many use cases that could help their business, make things more efficient, save costs, and the like. So, at a global company like McDonald's, we have, I think, the responsibility to our shareholders and our customers to look into emerging technologies like blockchain, and so we're doing so.

KRAMER:

I got started in this area at the kind of very tail end of the Mt. Gox debacle taking a look at some issues for certain of our clients. I looked at it, and I thought, boy, cryptocurrency, this stuff has no legs and kind of put it down for a little while. But I then started to read a little bit more about it, and I'm more coming at it from the technology side as kind of a technology transactions lawyer. And you always have to look for kind of what's the next thing and how is technology going to impact your clients, your clients' businesses, et cetera, and I really thought that there were some legs to it kind of reevaluating the ideas. And about two years ago, along with one of my banking and finance partners, we started the Fintech practice in our North American offices, and so he and I co-chair that practice now. And it's kind of a, "If you build it, they will come." You start doing the stuff, you start writing about it, you start speaking out it, and, gosh, people find you, and they'll actually pay you to do work. So, it's been a great rollercoaster for the past couple of years.

SMOLINSKI:

I'll make an analogy to games. I'm a big gamer, video game, board games, anything with game attached to it I'm pretty much interested in. And in the mid-2000s, 2005-ish, poker became this big thing. So if you were into games, you could not avoid poker. I don't particularly like poker, but I played it, like, every week because everyone wanted to. Likewise, I'm into technology. And if you're into technology, there got to be a time I would say probably about four or five years ago where if you were paying any attention, you just did not avoid discussions about blockchain technology. The articles were appearing in literally every source that I read. I thought it was one of the dumbest ideas I'd ever heard of, and so I ignored it until I just couldn't ignore it anymore, and so here we are. And I just got more and

more interested in it. A couple years ago I started hosting a monthly discussion group about the technology here in Chicago which I continue to host, along with Emily Hayes, who was on the earlier panel. And now it's become part of my practice where I advise and counsel clients who work with the technology.

STEINHAEUSER:

I'm coming from the perspective of a senior associate at a big law firm who was trying to find a way to carve her own path and create my own career. A couple years ago I stepped back, and I said where are my relationships? Who are my client contacts that are mine, not necessarily the clients that I work for every day. It turns out they were all in financial services. And so I thought, well, I should start looking at what's interesting to them, what's going on with them right now, educate myself, which dropped me into the world of financial technology, Fintech. Obviously I'm coming from the perspective of a patent litigator, so what's the technology issues that they're dealing with? Then I looked at what are others in my firm doing? What are others in my group doing and where is there some white space? And there wasn't really anyone who had taken on blockchain. And so I said, well, you know, my job generally is to take complex technology and reduce it into understandable ideas. I do that in my patent practice every day. So I can do this. I can figure out blockchain. And I'm on that path still. As I believe it was Samuel saying, you start doing this, you start talking about it, and people want to talk about it. I think there's a really big interest in understanding this. A lot of people aren't really willing to sit down and figure it out, or they just don't want to or they don't think they can. And so you start talking about it, and it starts a conversation, and then you go from there. It's been really interesting, and I'm excited to see where this takes me.

BIEBER:

I come from a different perspective than everyone potentially. I actually did not start out in law. I spent about twelve years as a software developer and as a solutions architect toward the end of that at a large health insurance company, Blue Cross/Blue Shield. You may have heard of them. I went into law about four years ago focusing my practice on technology-related matters, information security and privacy. And what I found was—and, again, I also agree that I thought blockchain was one of the dumbest ideas I'd ever heard of in the beginning—and what I found was that clients were increasingly asking me questions about blockchain. When I would talk to them about what they were doing, how they were trying to implement it, it didn't seem like the appropriate technology for what they were trying to do. I needed to learn more about it, and I needed to have a better way to talk to clients and talk about the legal issues that would come out of implementing the technology in the wrong way. So I went out, and I took a course—because, again, software development background—I learned how to code on the Hyperledger Fabric, and the firm ended up putting me in a hack-a-thon recently. It was great. But that's kind of how I got into it, more from just based on my background in software development than necessarily in reference to my legal background.

MODERATOR REYES:

I think this is one of the most fascinating pieces of this is anybody in this space has a different origin story, and it's different—the impetus for being in this space is different for everyone, but the space welcomes us all, and I love it. So I'm going to start with Zach, and I'm hoping you can give us sort of a broad picture of what it's like to be outside counsel in this context. What does it look like working with blockchain clients? Is it really that different from your non-blockchain clients and how?

SMOLINSKI:

Yeah, I think it is different, and I come to this a little differently than maybe a lot of private practitioners. I was in-house for a twelve-year span. I left my in-house position at Panduit Corporation down in Tinley Park to start my own practice two years ago. I would say the first thing that comes to mind for me is that never in my life have people tried to scam more time out of me than in this space. One of the nice things about being in-house is that no matter who comes into your office, you're going to be paid. And you might waste some of your time, and you might not be working in the most productive way every single day based on what people have you doing, but there is, like, zero chance that you're going to come away from a ten-hour experience with nothing. You're going to get paid every couple of weeks. That is not the case in the blockchain world. So to me one of the big lessons in this space is just the amount of absolute fluff that exists out there. I always considered myself to be a pretty quick learner, but I think in this case not so much. I mean, it was a good six months of this before I realized, like, these people are literally never going to hire me. And it was fine. I had really interesting conversations, and I met a ton of people. And some of them—you know, I think a lot of the scamming in this space is sort of tangential scamming. I think it's people who think that they're really doing something interesting and good, but really they're just gathering a bunch of money, and who knows whether they'll ever do anything good with it.

So sort of principle one to me is to hone that critical thinking sense as an attorney, bring that critical thinking to your very first contact with the client. And I would say 95 percent of the potential clients who I've talked with weren't ever going to build anything. They didn't know that themselves, but maybe in some cases they did. But I try to look on the bright side, right. So that would be one thing. And then another principle I would say, and I think this is a theme throughout the course of the day here, is there's nothing particularly new here on the legal side in all honesty. I mean, you're going to be applying most of the same legal principles that have been—most of what you'll find in this space has been around for 50, 100 years in some form or another. You're applying it to new technology. I know not everybody agrees with this. I know that there are plenty of people out there who say, no, this is a new technology, new rules, new laws; that the stuff that's on the books is completely outdated. I don't particularly believe that. I do think it's an interesting exercise to figure out how the existing law applies in this space. Are there edge cases where we truly have no precedent of any form whatsoever? Probably. But broadly I would say we're dealing with the same types of questions we've dealt with for a long time with clients. And then sort of third would be as boring as it is, it's issue spotting, right? And this sort of goes in with my second point, but for the students who are

here and even for some of the attorneys, it's honing that issue-spotting muscle. Like, when someone comes in and has a bunch of questions, how do you categorize those questions and how do you figure out what directions those questions are going to lead to? Those have been the sort of lessons that I think I've taken out of my two years of practice directly in this space.

MODERATOR REYES:

And when your clients do hire you and you have gone through this exercise of identifying what they really need, what do you do when even still they have different views than you do about law generally?

SMOLINSKI:

Yeah, that's a really good question. I mean, we've heard today that a lot of the main drivers in the space—and when I say "main drivers," I mean the people behind the companies—are highly principled people and actually have, like, very deep-set beliefs in what they are doing and the way in which it's disrupting and the way in which it's standing in contrast to precedent. Ultimately my feeling is you kind of have to figure out who you are as a lawyer, and are you going to be the type of attorney who is going to follow clients down those pathways and sort of walk alongside them? If so, how long will you walk alongside them? There are just clients in the space who are going to be, quite frankly, very dangerous to work with. They're not going to listen to you. They're going to balk at every opportunity that you have to bring up some regulatory regime that might apply to their case. There is a lot of what is so-called open-source lawyering in this case where why do I need you to prepare a Private Placement Memorandum when I can grab one for free on the internet, right?

And they have a point, right? You can't necessarily combat that there is a reason that boilerplate exists, but there is also a reason that lawyers exist. And boilerplate and lawyers have existed alongside each other for hundreds of years now and trying to find that dividing line and ultimately having to make some decisions at some time. Like, I'm simply not going to work with this client anymore because I don't enjoy the process of every time I bring up some concept, that they're going to be pushing up against me. So there's a little bit of just look and feel that comes into it, I would say, and a little bit of instinct. And then there's some cases where instinct doesn't come in at all, and you're just like, oh, I just definitely should not be representing this person. But in the ideal sense—I think I'm coming off as being very cynical and negative—but in an ideal sense, you will have clients who are there to listen, who might not like the fact that they have to pay for this advice but dig in and do it anyway. And one reason for that is, as has been said multiple times today, these regulations exist for a reason. Many of them are meant to protect the consumers and to sort of give a predictability to this space that ultimately will help everyone, I think.

KRAMER:

It's really, again, nothing new with respect to having clients potentially that come to you that may not be as receptive to hearing the advice and may act in a riskier way. Sure, they can go onto EDGAR and get an S-1 Registration and Offering Memorandum, and if they want to do an IPO on their own without hiring a lawyer,

sure, go ahead, let them do that. But pretty much that industry and area has settled down, and people don't tend to do that. I think we're just in the early days in a lot of the blockchain and cryptocurrency area, and so there's a little bit more Wild West. It reminds me a lot of what happened in the E-commerce world. You had a lot of people at that time that just decided they were going to shoot first and ask questions later. They got into trouble. A lot of those companies just aren't around anymore. And if you kind of are a lawyer practicing in this area and you stay the course, you'll be able to figure out who the reasonable clients are and who the unreasonable ones are as well.

MODERATOR REYES:

Well, with that sort of broader overview of, like, what life as outside counsel in blockchain land looks like, we're going to drill into three specific examples of substantive areas where our panelists practice. One use case we hear a lot about from Walmart's mango video, to Walmart's suppliers complaining about putting their lettuce on the blockchain on Twitter, is supply chain management. Could you talk to us a little bit about the promises and perils of blockchain for supply chain management?

KRAMER:

I'm happy to do that. I wouldn't say that I'm an expert in this area, but then again, I don't think there's anybody who really is an expert in this area yet. The supply chain management has a lot of tentacles that form part of what the practice is and what that particular line of work involves, and there are a lot of different legal disciplines that intersect with it. And from a technology lawyer's perspective, I think blockchain technology offers some real benefits in the supply chain world. But like we heard on an earlier panel about the overhyping with respect to blockchain, it's an overused idiom that people say, you know, if you've got a hammer, everything looks like a nail. Well, this kind of environment, if you have a problem, someone wants to throw a blockchain solution at it, and it's not always fit for purpose. But there are some cases I think where blockchain can really help in the supply chain, and one of those areas is in traceability which is a big problem as supply chains get more globally distributed, they get more complex, and players in the supply chain are more remote. When you can see, touch, and feel all the people that are part of your extended enterprise, life gets a whole lot easier and you may not need these technological solutions. But that, unfortunately, is not really the world that we're living in anymore.

So the Walmart example that you mentioned, mangoes, right, sliced mangoes, and for those of you who don't know about it, this was something that came out of a supply chain manager at Walmart being very concerned with what happened in 2006 with respect to an E-coli outbreak with respect to spinach. And if you remember what had happened at that time, we had physicians all over the country that were telling people kind of, apologies to Popeye, don't eat your spinach because there's an E-coli problem that we have there. And he was thinking, boy, you know, we're doing a lot of throwing the baby out with the bath water with respect to food safety issues. So this story, whether it's true or hypocryphal, he comes in with a package of sliced mangoes, throws it on the table, challenges his managers and says,

okay, what I want you to do is trace where that mango that's in that package of sliced mangoes, where it was grown, where did it come from? Walmart has always been a leader in the supply chain and has pretty sophisticated supply chain tools and technologies, but even using kind of best-of-class technologies that they had, it took a little over six days for them to be able to trace exactly where that particular mango came from. They did the same exercise using blockchain-based data with respect to blockchain being used in a supply chain, and it took 2.2 seconds.

And that so difference, light bulb goes off in everybody's head, and they say, oh, for example, when we had the romaine lettuce scare that happened earlier in the year with the lettuce that was being grown in Yuma, what we wound up doing essentially was kind of like letting a fire burn out. We waited until the growing season in Yuma ended before the all-clear was given with respect to eating romaine lettuce again, and all the romaine that was on the shelves was thrown out. I love Caesar salad, so I was pretty bummed about this idea. You couldn't get it in restaurants, this whole idea of kale Caesar salad came up, and that just didn't do it for me. So I like the idea of being able to use this kind of traceability aspect to be able to say we can very quickly determine what's the bad stuff, segregate it from the good stuff, and leave the good and proper foods on the shelves and not do one of these massive clear-outs. Because obviously when it comes to food safety, you'd much rather get rid of some good stuff rather than having the risk of leaving some bad stuff on the shelf. And I would say that that is a great example but only one example of the issue of traceability and how it helps the supply chains. So food safety, great issue.

But we have some other issues as it relates to one of the areas that I like to talk about in supply chain which is corporate social responsibility issues. There are things like involuntary corporate social responsibility. Think conflict minerals reporting under Dodd-Frank, right, you don't have any choice. This is something that you have to report on. If you've got a geographically-distributed and remote supply chain, how are you going to do that? Blockchain does provide not a hundred percent of the solution but can really go a long way in terms of being able to create records of information that are not alterable, or they're alterable but you can see it immediately if that happens. And that kind of reliability and transparency in the supply chain aids in complying with those kinds of requirements. You also have a lot of voluntary CSR statements, large companies that are making claims regarding sustainability, you know, regarding no child labor being used in a supply chain, et cetera. You still have to go to the chicken ranch where the chickens are being raised to determine that they're being raised in a method that is humane. But once you've done that, you can use blockchain-based data so that the chicken, as it traverses through the supply chain and ultimately winds up either at your favorite restaurant or on your plate at home, you can know where it came from, and you can report on those things as a company that you have reliable data for compliance purposes. Because these are statements that wind up in companies' 10-K's when they're public companies, and we know that you can get in big trouble if you don't have the backup for that kind of language. And even if they don't, if you're a brand that's a recognized brand, the street is going to hold you accountable for those activities whether you are the person actually raising the chicken or slaughtering the chicken or frying the chicken or

whatever it is. If your name's on it, McDonald's, you're going to be held accountable for it.

MODERATOR REYES:

I'm going to turn another sort of substantive practice area, the intersection of data and data security, the intersection of GDPR and blockchain technology. Can a blockchain be GDPR complaint? It's a topic that's sort of hot.

BIEBER:

So this is an interesting question that came up recently in my practice. And who is familiar with GDPR generally? Several of you probably practice in that area. I can tell you as a data protection attorney, about 98 percent of my week over the past six months to a year has been spent exclusively dealing with GDPR issues. I'm going to give a really quick summary for the folks who aren't familiar. Because we have other GDPR attorneys in the room, I apologize if it's overly simplistic. But on May 25th of 2018, the EU put out a new regulation, a General Data Protection Regulation, GDPR, that applies to EU data subjects' personal data. And it gives them certain rights with respect to transparency of the data, the ability for them to have the right to be forgotten, their data deleted, the ability for them to control how their data is processed, and have access to data that company has available to them. It's broad reaching in territorial scope. U.S. companies can fall under the GDPR simply by collecting EU personal data. That's not always the case. They have to direct their business activities to EU individuals, but that's a completely separate topic that we can do about an hour on. And the definition of personal data is quite broad, so the material scope is quite broad as well. So we have a lot of clients that are running up against this in a number of different ways, and one of them happened to be a client that was working with blockchain. Their particular implementation of blockchain allowed for data to be appended to the transaction, in this case, personal data, which is great except the immutability properties and the distributed properties of the blockchain created an issue with respect to data subjects, EU data subjects exercising their rights. Suddenly each node becomes a point of liability. If the complete ledger is in multiple jurisdictions, and we have personal data that was delivered in the EU or offered in the EU, now suddenly we have the requirement of the GDPR under certain circumstances to provide access to that, to identify where the data is located, and also to allow the individual the ability to delete their data. You can see quickly how this runs into a problem with blockchain. And the inability to pinpoint the location is also an issue.

What we've been doing in this circumstance—and we only have one client that's really running into this problem right now, but I can see it being an issue more broadly—is really working with the clients to collect the data in ways that—and again, I should have mentioned this. The EU data subject rights are broad, but they're not absolute. There are certain purposes for which data can be collected. There are certain purposes for which data can be processed which preclude that personal data from being subject to data subjects' rights. For example, and this is a classic example, we have a client who is doing financial transactions with clients in the EU and sales with the clients in the EU. They get data subject deletion requests. The requests usually come in in the form of, "I want you to delete all of my data,"

which is too broad, so we don't immediately respond to that. We need clarification, and we need to verify who the individual is who is sending the request. But the client immediately responds with, well, what do I do? What about the invoice data? What about the financial transactions involved with this? I need that for tax purposes. I need that for defensibility, all sorts of different things. They don't have to delete it because that data was not collected on the basis of consent, which is one of the lawful bases with which EU personal data can be collected, but it was collected with respect to that particular business transaction, and they have a business need to keep it. Now, the GDPR requires businesses to identify the lawful purpose for which each type of E-personal data is collected given the function by which it's collected. And what we've really been working with clients on is if you're collecting this data, and if you're going to be storing it in a blockchain, and it's going to be distributed across multiple jurisdictions and be immutable, then you have to collect the data based on a lawful purpose, and you have to clearly identify that you've collected that data on a lawful purpose that will not run afoul of the GDPR and compromise the purpose for which you're using blockchain in the first place. So that's really one approach that we've been taking with respect to GDPR.

I can tell you another one. This is a tangent relationship between blockchain and GDPR. But we had one of these situations where I was working with a client on GDPR compliance outside of the blockchain space, and the CEO I guess came in one day to the IT group—I was working with their IT attorneys—and said, yeah, you know, I saw some skit last night on John Oliver. He was talking about blockchain. I've been hearing a lot about this. I went out to Home Depot, I bought some blocks. I bought some chains. Let's get started on this, right? And then the IT group is sitting there, okay, what do we do now, right? They did have a directive, and they were supposed to find a way to implement blockchain. And, again, as I said earlier, appropriate technology is one of my big things. Well, what do they do? It really wasn't appropriate for their business. There wasn't really a customer-facing solution they could do. But they were a multinational company. They had various sister companies in different jurisdictions, including the EU. I said, well, if you want to implement blockchain, if you want to say that you're playing in this space and have something that makes sense and is appropriate for you, what if we use blockchain internally and the different sister companies have nodes, okay? And when you're dealing with internal agreements, such as data transfer agreements, which are very important under the GDPR, we can load these types of contracts, these types of agreements into the blockchain. We can have consensus and verification among the different sister companies, against the different affiliates, and we can stay true to what blockchain is because it truly is distributed, and there is an actual function to it. And they can load anything outside of data transfer agreements, if there are employment policies that apply universally across the different groups, if there's privacy policies, whatever the case is. These are things that they could load into the blockchain and distribute. And then they could go back to the CEO and say thank you for the blocks and chains. You can return them. We've implemented blockchain, on the other hand, and sure enough, it's something that's useful within our company.

Now, one other thing I wanted to mention why this whole immutability principle is going to be challenging in the future for U.S. companies even if GDPR doesn't apply, is we have laws coming out of California right now, specifically the

California Consumer Privacy Act which goes in effect in 2020, if it actually goes into effect in 2020. We'll wait and see. The jury's still out on that even though it's been passed. But there is a lot going on in that space. This gives California citizens the ability to delete their data, to access their data, and a lot of the same rights that we see in GDPR. So we could see a broader application of that type of protection and those types of data subject rights for consumers and individuals who are working with businesses which may have an impact on how we implement blockchain within the companies and legally what we have to do to protect our clients.

NADIMI:

Some of the EU regulators have come out recently and opined on the compatibility between GDPR and blockchain. And it seemed in no uncertain terms that they are not—it's inconsistent, and GDPR does apply to use of blockchain. So those are the two things. Now CNIL, which is the French data protection authority, gave some guidance, and I won't really get into the details, but I think encryption was one example they gave of possibly satisfying the erasure requirement, which is kind of one of the big kind of question marks, is, you know, how do you erase someone's data? You can't do it on the blockchain. But if you come effectively close to that point of erasure, then it's possible that it suffices or it's sufficient. I mean, it's all very gray as everyone probably agrees on this point.

BIEBER:

Right. And it's a good point actually. So, I mean, the data, if it's anonymized, if it's truly anonymized meaning you have severed the tie between the personal data and the ability to link it to an individual, then it's no longer personal data. The GDPR doesn't apply. I would say at best blockchain data is pseudonymized, which is another term under the GDPR, where you have data that's in a format that can't be identified, but you can identify it with the appropriate key. And by definition, we have keys in blockchain. So that doesn't entirely get us around the rules. It's just one form of securing the data, but it doesn't get us around the data access, data deletion requests, these sorts of things. So I'm interested to see the direction this goes.

MODERATOR REYES:

So far our discussion has been pretty transactional law heavy, but on the litigation side of things, particularly at the intersection of patent law and blockchain technology, what are you seeing in that field, and how does a litigator's approach differ, if at all, from the types of things we've been discussing so far?

STEINHAEUSER:

It doesn't differ a whole lot right now. There are actually no patent litigation cases currently filed on a blockchain patent, so from that perspective, there is nothing different at all. So it comes down to how are you, like we've talked about, applying the laws that we know of to this new technology and helping clients assess risk, keeping them informed of what's going on. And that's really where my interest has been is tracking patent trends, who's patenting this technology, how quickly is that trend changing? For example, the first publication of a patent application with the word "blockchain" was in 2015, and there were only six patent applications with

the word "blockchain." We are at 479 applications year to date in 2018 alone. So if you think about that in terms of the curve, it's pretty substantial. And those are just publications, so who knows what else is out there. I find that our clients are really interested in who is patenting blockchain? What are they patenting it for? Supply chain is a big one. And the big names on that are Walmart, and there's some healthcare companies. Accenture is really active in the patent applications, and IBM is actually number one in the U.S. So I find those trends interesting. I think our clients find those trends interesting to see what's the other guy doing?

And in terms of the mix of who's applying for blockchain patent, so you've got the Walmarts, you've got the Accentures, but then you've got Coinplug, CognitiveScale, some newer blockchain focus or cloud-computing-focused companies. There's also a lot of individuals who are filing patent applications, and that brings up the question of is there going to be some—I'm sure there is—nonpracticing entities filing patent litigation lawsuits against big companies who start using blockchain technology? So, keeping up with these trends, kind of seeing what's going on and who's filing patents. And then there's just, what are they filing them on? For example, Accenture, I believe, has filed a patent application on a rewritable blockchain which turns the whole thing on its head, right? Then you think about some of the requirements of patenting any technology, so it can't be abstract. You shouldn't be able to get a patent on a mathematical algorithm, for instance, if that's all it is. So then you look to what companies are doing to get around it. So Walmart is filing a bunch of applications on blockchain, but then they're tying it to hardware. So there's robots and there's shipping containers and shipping packages that are all tied into the technology that they're patenting around blockchain. It's really fascinating to see what they're doing. Who knows what the use cases will actually be for these, if they're actually doing anything with them. But those are the types of things I'm looking at, and hopefully by keeping myself and my clients up to date on what's going on, they're better able to assess what they want to do in this space, if anything, and what the risk might be to them based on what their competitors are doing.

MODERATOR REYES:

Transitioning now to the in-house counsel role. Why do you think it's important for in-house lawyers to take an interest in blockchain, and are there specific issues that in-house lawyers should be more concerned with than others?

NADIMI:

I think it depends on your perspective of where the technology is going and what the impact will be just generally. Let's just kind of talk about the one extreme, the this is going to take over the world, Web 3.0, decentralized web. If you're on that end, the answer is clear why you'll want to know about blockchain. Probably the more realistic viewpoint is this is great technology for certain use cases. From that perspective, you can look at it if your industry is being disrupted, for example. Financial services probably comes top of mind. You're just going to have to get to know it because otherwise you'll be out of business. From I guess McDonald's perspective, it's maybe more use-case specific. And I think supply chain, for example, Sam touched on it, is something that companies like McDonald's, Walmart, and others in the retail sector they're starting to understand the value I think blockchain

can provide. Also, in the retail space, loyalty programs and how it's upending loyalty programs. The biggest I think retailer in Japan, Rakuten, they moved their whole 9-billion-dollar loyalty program to the blockchain. And you're seeing more companies, more and more companies mull that over.

So it's use-case specific generally I think from the perspective of this is great technology that it can improve operations, cut costs, give you realtime access to data which is huge today. The privacy security aspect to it to protect from data breaches, for example, which was plaguing a lot of companies a few years ago, still now, but you know what I mean. So that's one big reason why, you know, in-house counsel. Also the use of smart contracts, that's probably been touched upon earlier today. But the potential of smart contracts infiltrating our lives here as lawyers, it's real. It could happen. I don't know how—I don't think it's going replace lawyers by any means, but we're going to have to learn possibly how to use that piece of technology in one way or another. From that perspective, I think in-house counsel lawyers need to be cognizant of blockchain technology and its implications.

MODERATOR REYES:

And when you think about—you don't have to use a specific use case, but when you think about working inside your company to implement a blockchain solution, what are the things that keep you up at night?

NADIMI:

At a company of McDonald's size and scale and the data that we have, probably my biggest—and it's forced me to learn a lot about GDPR and the like—is when you have so much data, putting it on the blockchain, it sounds great in theory because it's immutable, and it's hack proof, allegedly. But there's certain compliance concerns, and with the kind of fines that the EU are giving out, you have to be really cognizant of data privacy compliance. And the California thing is huge. I really do think that there is going to be a federal privacy law probably in the next three to five years that's going to upend a lot of this. So, it's going to be top of mind for people like myself for a while.

MODERATOR REYES:

And we've heard a lot both throughout the day and from this panel on what it's like for outside counsel to manage clients. What do you wish the other way around? Like, what do you wish your outside counsel knew from your in-house perspective as they walked alongside you in these things? They've all got their pens out.

NADIMI:

I think in today's fast-moving world, especially with technology infiltrating so many different industries, McDonald's in particular has made it, I think, one of the top priorities for our CEO, has been just the modernization of our business, and you can't not take risks. I think when I work with outside counsel, the most important thing is we want to take calculated risks because we can't not take risks; otherwise, we're just going to fall behind. So that would be my number one, you know, kind of point or recommendation to our outside counsel, is help us take calculated risks.

Because an answer such as, "It's just not possible," or, "I wouldn't advise doing it," is not sufficient in today's world.

MODERATOR REYES:

Do the panelists have questions for each other given the discussion?

KRAMER:

I have a question for Lauren, on the patent side. Just in terms of the blockchain-related patents that you're looking at when you're looking at the claims in those particular patents, are you seeing kind of shades of the software patent world where a lot of software patents were kind of improperly granted? And then it took court action, you know, *Alice*[3] and cases like that, and we had a lot of uncertainty before those things. Are we going to see that? Are we going to see an explosion of blockchain patents only to find later that they get judicially narrowed to the point where in operating in commerce you don't have to worry as much about tripping over them?

STEINHAEUSER:

It's a great question. So what he's referring to is what I was talking about with abstract ideas the mathematical equations and functions, it's called Section 101.[4] And right now where the law stands is if you sued on a software patent, you look very long and hard at filing a 101 motion to try and invalidate the patent. The case law on that kind of swings back and forth, so I think it's going to depend on where the law is when people start filing patent litigation cases on this. But I think because it's at the forefront of a lot of people's minds right now, I'm not seeing quite as many applications that are just straight functional software kind of applications. Like I said, for Walmart I thought it was interesting. Robots, are we there? But the more I looked at their patents, the more they are tying those patents to hardware. And I think that that could be a calculation that they're making to try and overcome some 101 challenges. That said, I'm sure that it's going to be a challenge that these patent owners are facing if they try and assert the patents.

MODERATOR REYES:

Given that you all came to blockchain just organically through your practice, when it came up, how did you start sort of getting up to speed? You all said so I got up to speed or I taught myself. What did you use to teach yourself? What are your favorite resources for that? I tried to give my favorites earlier, so it would be really great if you'd offer folks additional resources.

NADIMI:

I can make a quick one. And I know one of my friends, another former panelist that was on an earlier panel, we really love CryptoTwitter. And believe it or not, you can learn a lot on CryptoTwitter about just the technology, the trends, and where it's going. It's amazing. Obviously that's just one source, but if you haven't been exposed to it, I would suggest kind of taking a look.

---

[3] Alice Corp. v. CLS Bank, 573 U.S. 208 (2014).

[4] 35 U.S.C. § 101.

KRAMER:

I guess from maybe a big law perspective, there is both the issue of talking to clients about blockchain and also talking to your other partners to get the kind of support that you need internally both for business development funds potentially but also people who'll collaborate with you in different groups who may not be at the forefront. What I've always found as the key to making that happen is being able to explain what the technology is because that seems to be the biggest barrier that people have is really understanding, well, what is blockchain? I read about it in the New York Times. I hear about it on television news, maybe even see a webcast here or there, but I really don't understand what the technology is. Being able to explain that at a deep enough level where people have questions that you can respond to as they get into it, I think is really important. One of the things that I did is actually just on YouTube. You can do it through Coursera where professors at Princeton have done an 8-, 10-lecture course on cryptography and blockchain. And that for me was huge in being able to understand that and being able to explain and respond to potential clients and partners as well.

SMOLINSKI:

I'm a big fan of CryptoTwitter, a big fan of YouTube. I have the five-video rule on YouTube, which is that if after five videos of some topic I'm either an expert, or I'm never going to learn it. I'm a big fan of taking in information in a lot of different ways, and everybody learns a little bit differently. Another thing I would say is a huge breadth of different sources of information is very important in this space because there are books, and there are big name books about this technology that contain absolutely incorrect passages within them. And you're not going to understand that unless you refer to other references that, actually, probably also contain a lot of incorrect information, but they're probably going to be wrong about different things. So, I think gaining information from a bunch of different sources, getting to the point where you can explain it to others is a big thing.

And the thing about people being wrong in this space really came home to me recently when I was doing some research for a presentation I was going to give on smart contracts. And the top ten Google responses said that smart contracts were developed post Ethereum and that Ethereum was where smart contracts started, and this is just off by a matter of like decades or centuries depending on who you ask. The amount of misinformation and disinformation—people actively trying fool you in this space—is pretty high. I think the way you guard against that is to, you know, I'm down with books. But, no, by all means read some of the big text in this space, but also be a little more I think the word is ecumenical about where you're going to gather information from.

STEINHAEUSER:

I would echo a lot of what's already been said, diversifying your sources. I read everything I possibly could find, and by doing that, I learned the point that a lot of it is misinformation. And then also talking to the resources that you have around you. There are a couple of people at my firm who are very well versed in this technology, and so I would talk about it with them and they would correct my

misstatements or give me more information to answer my question. But having that dialogue is really important. I also have some friends who are really into cryptocurrency, and they go way deeper—I'm still not sure I understand everything they're saying all the time. But they're another resource. They're not lawyers, so they have a completely different perspective. They use a different language sometimes, and I find that to be really helpful.

BIEBER:

I would plug Coursera, I mean, in addition to YouTube and all the different options that were said. I find that unless I actually do something, I have a hard time understanding it, which is why I started working with the Hyperledger Platform and building blockchains internally within the firm. And, again, it doesn't really make sense if you don't have a coding background, but Coursera offers—in addition to the Princeton-led courses, there is a course from IBM that will teach you how to code blockchain. You have to enter it with some coding background, with some knowledge of—I think JavaScript is kind of the bare minimum. So you don't really even have to have a hard-core programming language. You can use a scripting language. And it shows you how to download the framework. It shows you how to install it. They walk you through building a very simple application about transacting cars, somebody selling a car. There is some very simple banking application in there that they'll kind of walk you through coding it. I think once you get your hands in the code, and you see how these things—how everything communicates back and forth and how the data flows, you can really get a broader understanding of the issues your client might face with respect not only to the implementation, the complexity, but also the data as well and lead issues.

MODERATOR REYES:

On the Coursera and Princeton ones, it jogged my memory. There is a Princeton professor who has a textbook "Cryptocurrency"—you know what I'm talking about? I can picture the book in my head.[5] It's blue. Anyway, that's a really good one too. But he's a computer science professor not a lawyer out of Princeton who has this textbook, and it's a good resource too.

AUDIENCE QUESTION:

Have you guys ever discussed about transacting in crypto, like, McDonald's actually doing transactions in crypto?

NADIMI:

The last panel I was on a few weeks ago someone asked if we were going to create a McDCoin or something. You know, there hasn't been, I'm just being frank with you, as far as I know, and those discussions would probably be done above my head. But I think there's real use—I like the loyalty space in particular, and we're not by any means there yet. But I really think there's a lot of value to blockchain in the loyalty space, and if I had to guess, I think that would probably be kind of where

---

[5] ARVIND NARAYANAN, ET AL., BITCOIN AND CRYPTOCURRENCY TECHNOLOGY: A COMPREHENSIVE INTRODUCTION (Princeton Univ. Press 2016).

we may entertain it first from a transacting standpoint. Unfortunately, I think we're a ways away from accepting cryptocurrency.

MODERATOR REYES:

I'm really interested in that use case. What does that mean, you putting your loyalty program on the blockchain? Like, what does that look like? Does it mean I get to sell my stars to other people?

NADIMI:

So it depends on whether you want a permission blockchain or you want to kind of open it up to partners, which I think the people will love this, and I would love this. If I could trade my McDonald coins for United points, and, you know, United points to Nordstrom points or what have you, I think that is the ultimate vision from the open kind of crypto advocates to say, why not open this entire loyalty space up, and let the best kind of program win, so to speak.

MODERATOR REYES:

I can think of one reason as a lawyer because it puts you into the money transmission bucket and not in the stored value bucket, so there's that.

KRAMER:

There are active loyalty programs that are being run now that are essentially doing a consortium. So it may not be as open, Peter, as what you're talking about but certain allied companies that may find that they want to get together and have a limited amount of fungibility is something that is being actively explored on the blockchain.

NADIMI:

The other benefit is it prohibits—I think there could be quite a bit of fraud and kind of miscalculations with respect to the loyalty points. That's one of the benefits I think that people are pushing for employers to think about is think about how much possible fraud and abuse—or miscalculations—the cost you could kind of save in connection with that, in putting your loyalty point program on the blockchain.

AUDIENCE QUESTION:

Are you thinking in terms of use cases and implementing blockchain about the potential evidentiary issues? And, you know, you've got this new technology, and if there is a business dispute that you have to take to court, how would you introduce that evidence to establish either a contract or some kind of transaction?

NADIMI:

Frankly, I'm just being honest, we are nowhere near implementing blockchain at McDonald's. Obviously, just as a forward-thinking company, we have a responsibility to investigate and look into it. I think that's really where we're at. I think your point is well taken. I think these are questions that our recordkeeping and record retention kind of experts internally are going to have to, if and when it ever gets to that point, consider.

SMOLINSKI:

I think one of my questions about this space is if you're running a blockchain that's essentially a centralized single-node blockchain, then sort of why are you running a blockchain? If you're trying to implement let's say a loyalty program, the definition of a blockchain in a sense and in a decentralized sense is that multiple different entities are going to be running nodes. So who outside of the four walls of your organization are you going to trust to run nodes on your loyalty program? And if the answer is nobody, then you're simply using the word "blockchain" to gain public interest. That's my opinion. And, I mean, there's a good chance I'm wrong. But the question is, is someone going to implement this in such a way that you actually need a blockchain, and it provides real value beyond the fact that you're just saying the word "blockchain" a whole lot. I don't know the specifics of Rakuten's implementation of that. I mean, they're a big company. I presume that they had a reason for implementing it beyond simply attaching themselves to a catchy word, but I don't know that.

NADIMI:

I think it's pure network effects, right, the benefits of blockchain. The network is only as valuable as the number of participants on the network. So you're right, if there's no one else who's going to be on it, it's purely internal, why are you running on a blockchain? It's a question.

BIEBER:

I found that when clients come to me with a blockchain-related solution or a blockchain-related problem, I find that that's where it mostly falls short is in the distributed ledger piece. They have an idea that they're going to implement blockchain. They're going to use Hyperledger or whatever the case is, and they're going to have a single node that they maintain, and everyone's going to access that one node. Well, that's not an appropriate use case for blockchain, right? And you can do it much cheaper using technology that's been around for a long time and get the exact same effect. You can use a secure database for something like that. I'm not certain if it's that the folks who are pitching blockchain don't understand it, or I should say, try to implement it don't understand it or potentially don't even really care. They just want a blockchain because they were told that it's important. They know if they say they're doing blockchain, that it'll bolster sales or whatever the case is. So, yeah, sorry. I was just backing your point up there.

BAUMERT:

Apart from supply chain solution, what other business use cases do you envision could actually work?

STEINHAEUSER:

There's a lot of buzz around healthcare. I don't have any specific experience with it but medical records and medical devices and how you store information.

BAUMERT:

But as with personal data, isn't medical data also kind of sensitive?

STEINHAEUSER:

Absolutely, yes. There is privacy concerns with it, but that's one use case that I have seen. Prescription drugs and packaging, which is kind of still supply chain, but outside of the food context is another one.

KRAMER:

Well, just to speak up for a minute about permission blockchains because I think sometimes they get a bad rap. I think there are good use cases for those. One of them that we see in the financial industry is interbank settlement is one of those areas because it's the issue of having, yes, you're going to have a confined number of people who can write to the blockchain. You can have a confined number of people who can validate transactions. But you've got a very high transaction involvement that's running through it. Today, because of settlement and clearance issues, we have enormous cost and enormous delay that's associated with it. The kind of permission-based blockchain for interbank settlement is something that a lot of the largest global banks are investigating and starting to implement. And the expectation is it could suck about $12 billion in cost out of the global banking system. That does a lot of things. One of them is in an era of—I know no one is going to weep for the bankers, but—an era of lower profits than they had pre-global crash. They're looking for ways to set cost down in the system. So that's why there's a huge amount of potential benefit in that area. And from maybe a slightly more, you know, issue where people maybe have happier thoughts about what people are doing in the financial industry, when you're talking about micro payments and out-bound remittance, that's another area where you have a lot of people who are either unbanked or trying to make payments to other parts of the world. And because of the way the system is working now, that it's so expensive to make small payments, that there are I think really attractive use cases that will help people out who need to get access to small amounts of money.

MODERATOR REYES:

Two other use cases that I've heard or maybe essentially three use cases that I've heard a lot about recently, one is RegTech, right, so R3, the group that's working with the banks for interbank settlement, completed Project Maison with the UK Financial Conduct Authority that enabled banks to do their reporting via blockchain technology automatically, right. So RegTech through blockchain technology is one. I've heard a lot recently about using digital payment instruments in international trade finance, and there's actually to the extent any of you are ABA members and are interested in participating, there is a task force looking at how do we craft private rules, so standard contract clauses that sort of mimic UCC Articles 3, 7, and 9 rules in that context because you can't have electronic negotiable instruments under UCC currently. So that's one. And then the third, I heard American Family Insurance give a presentation at an ABA conference about automating performance under travel insurance policies, for example, right, to make payouts more efficient. Really using

smart contracts as a performance automator, not as a contract, but as a performance automator. So, I think there are any number of those use cases out there.

AUDIENCE QUESTION:

I had a use case with long-haul trucking with blockchain, for following the contracts all the way through.

MODERATOR REYES:

Oh, sure. They love bills of lading.

BIEBER:

We've also seen some use cases in the energy industry with respect to energy credits. I'm not going to go into too much detail because, quite frankly, I can't. But that was one area as well as with respect to the minutes use in the telephone industry.

AUDIENCE QUESTION:

I have one more question for the gamer over there. How do you see blockchain or crypto working in the gaming and even the gambling world?

SMOLINSKI:

Yeah, I think it's an interesting use case. Honestly, one of the first conferences I attended had a panelist who was speaking about exactly this. And currently there are a bunch of different what are called Massively Multiplayer Online Role-Playing Games out there, World of Warcraft being a big one of those. In these games, you have assets, and generally the assets are stored on some central server. And if, for example, Blizzard, who makes World of Warcraft, would go out of business, all those assets would just disappear. You can see that there would be a pretty beneficial use case for let's say a distributed gaming implementation wherein the game could be—I'm just sort of spitballing here, but bear with me. The game could be run by a number of different nodes that are controlled by entities that are all interested in continuing the game but aren't necessarily profiting directly from them or are profiting in the sense of mining. So I think it's a really cool idea, and I think someone is probably going to get there. But probably the easiest use case yet for blockchain aside from bitcoin has been CryptoKitties, which is a game that's built on the Ethereum network, and, you know, gained a lot of headlines because CryptoKitties are, let's just face it, they're kind of cute. And people like the idea of having these unique assets that they control. I'm a little surprised that we're not seeing more because it's such a natural sandbox for the technology. It may be the case that it's just too hard. It might be the case that too many game companies are making too much money with centralized systems. For example, I mean, what's the incentive for Epic Games, who created Fortnite, to in any way open up their system? There is no incentive for them to do that. And the question is, are there sort of cryptoanarchists who are going to come along and say, look, I'm going to create a gaming alternative to the centralized world.

Looking back, I mean, I think that there were a couple examples of those sorts of things. There was one alternative universe game, I'm blanking on the name

of it now, where you could have an avatar in this other space, and I think that was a bit more decentralized. I think it closed down a decade ago. Maybe someone else here will remind me of the actual name of it. And I suppose if I'm going to another level, maybe it just speaks to just how hard it is to implement a blockchain effectively, and maybe that means we should all applaud bitcoin for the fact that it has been around for ten years. And maybe it points to the fact that the technology is a little premature for the average person to have anything to do with, and I don't know. These are all questions that are very much open, but I really appreciate the question because I think it—again, I just don't know why we're not seeing more gaming applications. I'll just get on my soapbox a little bit more here for a moment, and that is that I don't buy my coffee with bitcoin, and why not? Okay. You all have your own answers to that question, but until I can buy coffee with bitcoin and do it on a daily basis and have a lot of comfort with that, I am not that interested in having my house title on the blockchain or my medical records or anything else that's of true importance to me. And so if I can't game on a blockchain network, why wouldn't I want to do those things first that are relatively minor before jumping into these "Boil the Ocean" solutions.

MODERATOR REYES:

I have one more question for the panel, and, namely, for those of us who are legal educators or for those of us in the room who are students—I know there are some of you—what do you wish law schools were teaching students in this area either about the technology specifically or skills wise that would help you when they come work for you?

STEINHAEUSER:

There's so much.

SMOLINSKI:

I suppose one thing that pops to mind for me is sort of examples of real-world practice. I'm a big fan of clinics in the law school environment. I think it's a little bit of a problem in the legal space that one can graduate law school never having spoken to a client, and one can enter the workforce never having dealt with issue spotting in a very organic way. I mean, if you're answering a constitutional law essay question, you know all the issue spotting is going to be about constitutional law. And so it's not really a blockchain response, but it's more of a generalized practice response, and that is why are we turning out so many law students who have never sat on the other side of a table from someone who might actually employ them?

MODERATOR REYES:

So, provide opportunity to engage in critical thinking in a more organic context, the same tools that you use as outside counsel.

SMOLINSKI:

That's a good way to put it, yeah.

BIEBER:

There is a reason that doctors go through medical residency before they start practicing out on their own, right. I think the same thing applies in the legal industry—well, actually it doesn't apply in the legal industry. But, yeah, I think you're right. Practical experience if possible is great.

MODERATOR REYES:

And be entrepreneurial, if it is not organically offered to you. If you're a student in the audience, be entrepreneurial in seeking out those opportunities maybe outside of the curriculum.

KRAMER:

At a more mundane level, I think one of the areas that I think would really benefit both legal education and practitioners on the commercial side of things is application of blockchain and cryptocurrency issues to the Uniform Commercial Code. Not only Article 2 sales issues, but there's some really bizarre things that happen in connection with Article 9 and its relationship to Article 8, oddly enough. You know, cryptocurrency is not money as defined under the UCC, and, therefore, that probably makes it a general intangible. Zach's right. We can't use cryptocurrency for the day-to-day transactions if we're not going to do the kind of ordinary diligence that you would in terms of prior security interests. And you can trace cryptocurrencies pretty much forever for every particular transaction, and if you never have comfort that that crypto that you've received doesn't have a security interest attached to it, it's never going to be an alternative to money.

MODERATOR REYES:

This is a super interesting issue that many people don't think about. There are a couple of articles to look at. George Fogg has a really digestible, I don't know, is it a blog post, is it CoinDesk I think, from Perkins.[6] And then Jeanne Schroeder from Cardozo has a more lengthy Law Review article about that topic.[7] And I know the ULC is looking at that along with ALI to see if they can fix that, that specific issue.

KRAMER:

But that's the kind of thinking that I think we need to understand as to how we're going to apply the legal regimes that we have now to these types of new technologies. That's just one example.

MODERATOR REYES:

Right. And if you're interested in that kind of thing, again, ABA task force working on it for Articles 3, 7, and 9 right now in the context of international payment instruments for international financial transactions.

---

[6] George K. Fogg, *Perkins Coie: The UCC and Bitcoins—Solution to Existing Fatal Flaw*, COINDESK (Feb. 5, 2015, 17:18 UTC), https://perma.cc/Z766-3XRU.

[7] Jeanne L. Schroeder, *Bitcoin and the Universal Commercial Code*, 24 U MIAMI BUS. L. REV. 1 (2016).

STEINHAEUSER:

I would also just say especially to the students in the room, just keep your eyes and ears open, and if you're interested in something, don't think that you have to have a coding background or some other kind of background in order to figure this stuff out. It sounds like a lot of us came to this without that background, and you can figure it out, too, if you're interested in it. So don't let that stop you.