



## The Deloitte On Cloud Podcast

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**Title:** Blockchain is maturing, and it can help solve critical problems

**Description:** Blockchain is evolving, and use cases for it may be almost limitless if the technology is harnessed effectively. In this episode, David Linthicum talks with Edgevana's Mark Thiele about how blockchain has evolved and how it can help solve pressing problems ranging from protecting intellectual property and personal data, to boosting IT security, to detangling global supply-chains, to democratizing computing in general. Mark also believes blockchain may someday underpin the emerging metaverse.

**Duration:** 00:18:36

**David Linthicum:**

Hey, guys. Welcome back to the On Cloud Podcast. Today on the show I am joined by Mark Thiele. He's the CEO and cofounder of Edgevana. And I think the last time we talked, Mark, you'd just started Edgevana. Catch us up since then.

**Mark Thiele:**

Yeah, no, it's true. It seems like almost a decade ago in Web3 days, IT days in general. But Edgevana's come a long way since then, from its original concept of effectively cloudifying access to global infrastructure, resources, and footprint to fundamentally helping the Web3 world lower the barrier to entry for participants and more effectively grow and support their level-one chains. It's been an amazing turnaround, but it's super exciting.

**David Linthicum:**

Yeah, I love the fact—because that is a huge barrier to entry. People who are interested in Web3, in certain digital currency and blockchain, don't necessarily have deep technical skills. And the ability to kind of onboard and get those things working is going to take a lot of work, take a lot of knowledge. And the reality is that it's cutting-edge stuff. So, what made you decide to get into an area of work where you're basically focusing on where things are going versus where things have been?

**Mark Thiele:**

Well, it's interesting, David. I mean, a lot of things we do in life fall in a couple of different buckets. They fall into, "I've planned my career and everything I'm ever going to do, and I follow a set path to get there or a business plan," or they're more about you work hard, you happen to find yourself in the right place at the right time, and you find a way to leverage that. And I'm definitely more on that other—the latter example of career planning and job growth. And we effectively came out of stealth to address a problem with a layer-one chain in doing exactly what I described, at least parts of it, and that's reducing the barrier to entry for participants on the chain, in this case the validator, or node operator as it's called, and from that, doing that and being successful with releasing that solution globally for this particular level-one chain.

We basically started to realize that, fundamentally, the Web3 community was missing a lot of what people like you and I, and Mike Kavis, and other folks that we know from our work histories, consider fundamental to operationalizing what would be considered business-class applications. How to make them more usable, how to make them more successfully adopted, how to provide SLAs. And, so, we've opened up a golden can of worms, for lack of a better description. And our hardest problem now is determining what not to spend time on in order to focus on the things we already know we can make money on.

**David Linthicum:**

So, I'm assuming chain means blockchain, correct?

**Mark Thiele:**

Yes, yes.

**David Linthicum:**

So, let's kind of get to that. Blockchain, big deal, it's been a big deal for a long time. I got into it when it first came out, doing a lot of writing and speaking and architecture problems around how to leverage blockchain, certainly for digital currency, but also in different ways, data integration, supply-chain integration, and really kind of looking at this peer-to-peer validation thing to really provide, finally, the capabilities to securely deal with peer-to-peer transactions, company-to-company, people-to-people, things like that.

**Mark Thiele:**

Definitely.

**David Linthicum:**

So, catch me up. 2022, where are we with Web 3.0 in general, and blockchain specifically?

**Mark Thiele:**

Yeah, it's interesting. So, I think some of the things—and I was a real novice when I first started exploring blockchain maybe 2017 or something like that. 2018 was when I really started getting more involved. It just evolved from an interesting technologist standpoint. And at the time, I thought the immaturity of the global suppliers, combined with the hyperbolic assumptions of use case models, and then finally the fact that it was all tied to were you mining, it seemed really weighted too much on the—for lack of a better description—the boom-and-bust approach to trying to make a lot of money out of hyperbole and move onto the next thing. That's what it seemed like when I first looked at it. And what's happened, which is fairly natural in most major technology sectors—I mean, you and I walked through it most recently with cloud and then—and now it's sort of ongoing with edge, as edge begins to mature.

Blockchain has a lot of maturing opportunity to do, but it doesn't detract from the fact that it is already solving real problems. And everybody's real problem is somebody else's who cares. But I have a number of friends, including a relative, in the music business, and they see blockchain, in combination with some of the applications that run on blockchain, as a major boon to enabling their access to their clientele, to protecting their information, to protecting their copyrights and their IP. And that's just one aspect. I talked to a healthcare organization the other day who's extremely excited about the ability to better protect and make available patient records. Strangely, twice in—well, once each day, yesterday and today—I heard from and about the same major global logistics company that's looking at supply-chain to help them leapfrog where they are today to the future of supply chain.

And I really think that we're—from an overall industry—and I hope I'm not spending too much time on this, but from an overall industry, I think we're kind of where the web was in '95, '96. And almost everything that was available in '95, '96 was likely to be replaced in '98 or '99. But some things came through and went on to exist for a long period of time. Whether they were fully exploited to their optimal or not is immaterial. They came on and lived for a long time. I think we're sort of in that stage with blockchain right now. And many of the companies that exist today likely won't be what'll be serving us five or six years from now, but there are many that are creating a stake for themselves, both in private blockchain and public blockchain, that I think have an opportunity, with a combination of smart contracts, to really create an explosion in the economy down to the smallest level of transactions, the likes of which most of us don't fully recognize yet.

**David Linthicum:**

Yeah, democratization of computing, the ability to participate in markets that would normally be not accepting you into the market. So, let's back up a bit. We have cloud pros who listen to this show, heard of blockchain—everybody's heard of blockchain—but don't necessarily know what it is. What's the elevator definition of blockchain, including its origins?

**Mark Thiele:**

Yeah. I mean, the origins—I don't know if I want to try to paraphrase the origins, other than this notion of being able to guarantee immutability and an unchanging record of transactions. But where blockchain has come since then, from a novelty of mining, and the dream of more secure networks where people were often heard arguing what's the difference between that and an Excel database, et cetera, et cetera, to today. The blockchain of today as I see it is a form of decentralizing how people record transactions and how people get access to opportunity, how people's work gets guaranteed, how goods are traded and moved from one place to another.

But more importantly guarantee that the record is there, that no one can mess with what a transaction looked like or what exactly occurred, and that that basic mechanism of that distributed—I don't want to call it a database. I mean, it is considered a ledger, and there are—we could go into a little bit of talk about the problems with a ledger that isn't really very elastic, so much as it's appended and what problems that creates and why storage on the blockchain will become more and more important. But realistically, that immutable ledger is sort of what I think most of us hoped would be part of the original Web2 from a distributed internet standpoint. And I think blockchain has a real opportunity to remove the molasses, as it were, and fear of transaction, and to the point that you highlighted earlier, the democratization of access to both technology and transactions.

But that democratization piece I think is made a little bit more important, when you take a look at the economy and the number of products and services that fit into the "If only I could sell this at almost zero overhead, how many more people could buy this or would use this product that I have?" And that's where I really think the future of blockchain, beyond the whole ID protection, potential security for personal data, and healthcare record sharing—a lot of that stuff is fantastic to consider. But as someone who wants to continue to find ways to see how the market can grow, the idea of democratization through smart contracts and allowing people to resell the same product 1,000 different ways, I think is just an amazing opportunity.

**David Linthicum:**

Yeah, and I love the fact that it came about, like a lot of really good ideas, through grassroots kind of open beginnings, and it's not owned by a particular company. So, in other words, we're not dealing with proprietary technology where royalties have to be paid and we have to consider copyright, things like that. But it's something that people can leverage and also contribute to. If there's any way to make blockchain better, and I do think that the ledger size issue will start to pop up as an issue as we're trying to make this thing scale, as we put more and more transactions in it. So, what are the intersections with blockchain and cloud? Where do you see the most activity these days?

**Mark Thiele:**

Well, it's funny because it seems like all the companies—and you've probably seen the same thing—all the companies got in and then they sort of ignored it or got out and then they've started to get back in again, and I think that that's as much a timing issue as it is a—whether or not it's a real opportunity. And I think we're finally getting to the point now—and there's a great example of this with a company like Chainlink in the Web3 space—where private blockchain is becoming more and more of an opportunity. And do the cloud players have an opportunity to feed into that market? I don't see why not. I mean they've certainly got the scale. They've got some of the distribution. You could argue it wouldn't be decentralized, but in private blockchain maybe that's not quite the same concern as it is in public blockchain. On the private side, I think we're just a little bit behind the curve relative to public, and so we're likely to see more excitement and enthusiasm from the cloud space probably over the next 18 to 24 months than we would expect to see right now.

**David Linthicum:**

Yeah, I think the cloud providers are going to have to take another run at this. And I first started tracking this in the cloud about four years ago and they had some DIY ledgers that they announced and then had some more automation around it. And the reality is that you've got to make simple things simple. If we're going to set up and onboard things into blockchain and participate in this, whether it's supply-chain issues, data integration issues, or just getting into the digital money market space, things like that, we've got to have the capability of making this thing really kind of possible for things to leverage. So, what are the use cases that you see emerging out there? I did an article a couple of years ago on different ways to use blockchain and got into data integration and supply chain, and that was really kind of the low-hanging fruit as far as leveraging blockchain out of the digital market space. So, where are we applying technology which we probably didn't think about when blockchain was first created?

**Mark Thiele:**

Yeah, it's funny. I don't think we thought at all about metaverse when blockchain was first created.

**David Linthicum:**

No, we did not.

**Mark Thiele:**

And I think that that's actually going to be an amazing use case for it going forward. I happen to be a believer that, metaverse eventually will be the replacement for the way we interact with the web today. And boom, bust go through seven different versions for how to get to your metaverse or whose metaverse rules or whatever—those are wars yet to be fought, or that will continue to be fought for some time to come.

But I still believe that in the long term about metaverse. But many of these future products that we hope—and future services that we hope to gain value from—edge, edge helping to build the metaverse, edge independent of the metaverse, distributed healthcare solutions, logistics and entertainment in general—as I mentioned before is still an important money-making industry that a lot of people's jobs depend on, and innovation for the rest of us to enjoy depends on. So, I think all of those areas are massive.

And, so, I think any or all of those areas over the next three to five years are likely to see monumental change in adoption. And, frankly, I'm excited about it for any number of reasons, not the least of which is because I'm in the middle of it. But, also, because I really think that there are opportunities.

**David Linthicum:**

I think ultimately that it's a foundation for innovation and we love that kind of stuff. In other words, it's already been invented, we know how to do certain functions, and now it's becoming innovative and creative in terms of how we leverage these functions. So, what are the directions of blockchain that we'll likely see in the next few years? So, look at your crystal ball and see what you see in terms of the evolution of this technology.

**Mark Thiele:**

I really see the opportunity of cross-app or cross-chain applications, especially in the security space, as being an enormous area of opportunity for, not only chain adoption, blockchain adoption, but for the success of applications, success in providing higher levels of availability, success in being able to complete transactions with the same identity, without having to create new identities across every chain that you ever work on, things like that. I think those are areas of opportunity that also help get us to that point that you and I were discussing earlier about lowering the barrier to entry from a human standpoint, from a "Do I need to be a PhD engineer to use this or can I be a dad who just wants to dabble in trading stamps online."

But that's the gap that we have right now, and the ability to get to a point where you can use the blockchain to see the world. I think is really the future we should head for. And I've seen some movement in that direction.

**David Linthicum:**

Yeah, I agree. I think it is going to evolve in those directions. And again, the evolution is going to be focused on the ability to make very complex things simple, which I wouldn't view blockchain as really complex, but it's definitely not something that a weekend hobbyist could set up a ledger in their house and things like that.

**Mark Thiele:**

Right, right.

**David Linthicum:**

So, where can we find more about your company on the web, find out about you? How can our listeners reach out to you if they have any questions?

**Mark Thiele:**

Oh, wow. So, easy enough to find me on Twitter, first initial, last name: @MThiele10 on Twitter, and on LinkedIn it's just Mark Thiele. In both areas I'm reasonably active, although recently my duties have kept me busy enough that I'm not as active as I'd like. But one of my characteristics is that I love to challenge my assumptions, and so if you ever have or feel like you want to debate somebody about everything from datacenter strategy to organization strategy in IT to cloud adoption or Web3 adoption, et cetera, et cetera, I am happy to play that game because it helps me learn. You can find certainly what we're doing or at least some of what we're doing at [Edgevana.com](http://Edgevana.com) where my blog and my podcast are also recorded.

**David Linthicum:**

Why don't you spell your last name and Edgevana?

**Mark Thiele:**

Yeah, so my last name is T-H-I-E-L-E, pronounced Thiele, not that it matters too much to me. And the website is [Edgevana.com](http://Edgevana.com), E-D-G-E-V-A-N-A.com. And I would love to see you there if you have any questions. Our alternative new website is in the middle of being developed and should be released sometime in the next 30 to 45 days, and that will bring a significant amount of new information about what Edgevana is and what we're working on to the record. But I'd love to hear from anybody who's interested in talking about what we're working on or just interested in geeking out about modern IT trends and adoption in general.

**David Linthicum:**

Yeah, check Mark out. He's got probably one of the more thoughtful blogs and communication mechanisms out there. I certainly follow him on LinkedIn and just one of the folks that's in the know. And I've known Mark for a long time. He even predates Deloitte. I can validate he's a good guy and he can help you out.

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