



FINTECH ONE-ON-ONE PODCAST – EDWARD WOODFORD

Welcome to the Fintech One-on-One Podcast. This is Peter Renton, Chairman & Co-Founder of Fintech Nexus.

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Peter Renton: Today on the show, I'm delighted to welcome Edward Woodford, he is the CEO and Co-Founder of Zero Hash. Now, Zero Hash is super interesting, they're in the crypto space, but they're in the infrastructure side of crypto, they provide embedded crypto infrastructure to a whole range of fintechs and non-fintechs for that matter and we obviously talk about how that all comes together.

We also talk about the challenges in the crypto space over the last six to nine months and Ed was very open about that, he does not believe this is really going to be an impediment long term and he does have a long term view, he always has had that, very much focused on regulatory compliance which we also talk about and we talk about how decentralized finance is going to come into play here. We talk about how crypto could become a mainstream payment mechanism and we touch on smart contracts and a lot more. It was a fascinating discussion; hope you enjoy the show.

Welcome to the podcast, Edward!

Edward Woodford: Yeah, thanks for having me.

Peter: My pleasure. So, let's kick it off by giving the listeners a little bit of background about yourself. You've had some interesting stops in your career, why don't you give us some of the highlights.

Edward: Yes. So, moved to the US for grad school then stayed, started my first business that was regulated by the CFTC so started and always stayed in the regulated fintech space and then founded Zero Hash in 2017.

Peter: So, tell us about that, the founding story, I mean, we obviously had the first bull run of crypto or maybe not the very first, but, you know, the first one that got big attention in the broader media. Anyway, what was the founding story, what did you see that really needed to be solved?



Edward: Yeah. So, started the business in 2017, I mean, drawn to the crypto space in part because a lot of people were self-selecting out of crypto. It's amazing to see how quickly the space has evolved to maybe something a little bit more mainstream. But really had got involved with crypto when I was in my grad studies at MIT, big obviously Bitcoin community there and realized the space in my first business, that was regulated business, that we were ten years too early on our first business, but it took us two years to figure out that we were ten years too early.

And so, it became really, really passionate about infrastructure as a service effectively and that's really what led to Zero Hash which is, you know, the old axiom of startups is "fail fast". Well, in a regulated business it's really hard to fail fast, one because the fixed cost is so high, two, you need to get to the start line and so that's really how Zero Hash was born, was out of the first business and kind of those own experiences that I've had.

Peter: Interesting. So then, your first business, maybe you can just describe it a little bit for us because you said it was regulated by the CFTC and obviously the CFTC officially today, as we're recording this in mid-to-late February, Bitcoin and Ethereum seem to be a commodity, let's see what happens there, but tell us a little bit about your first business and how it kind of interacted with the regulators.

Edward: Absolutely. So, we launched a derivatives platform for merging agricultural markets so in the United States it's effectively commodities fit within the purview of the CFTC if they are a derivative contract, right. So, spot contracts are commodities, but they're not necessarily regulated by the CFTC that's why crypto, Bitcoin, the futures trading on the CME is regulated by the CFTC, but we, for example, as a spot platform and our clients are not regulated by the CFTC.

So, the first business was alternative market or alternative commodities and it was derivative contracts, hence, why it fell within the purview of the CFTC. Obviously, a good experience, we built out the infrastructure, we were able to sell the regulatory infrastructure as well, but learned some good lessons and, again like I said, made me really passionate about this infrastructure service and ultimately led to Zero Hash and we call that Crypto-as-a-Service.

Peter: Right. So, maybe just tell us a little bit about that core offering then, how do you describe it and kind of who are you selling to?

Edward: We take the view that crypto is a technology not an asset class so in theory our total addressable market is in theory any business with consumers. I'll just give you one use case, for example, we power one of the largest brokerage firms in the United States, for example, tastyworks and we let their clients buy, sell, hold, send, receive on crypto as a tradable asset so traders. We also power groups such as Stripe so they are the use cases effectively leveraging crypto as a payment mechanism and effectively powering Stripe's on ramp and off-ramp. And the broader thesis there is that as businesses become more Web3 enabled whereby ownership exists on the Internet, crypto which underpins that, you need these payment mechanisms and these payment rails so we, for example, offer payment rails. So, our business is very, very broad because we take a very broad view of what crypto is and what it can be.



Peter: Okay. So, I want to talk about the Stripe thing in a little bit, but I want to dig into kind of some of the things you said there. So, how do you interact with the exchanges, with the decentralized platforms, where do you fit in the crypto ecosystem?

Edward: Yes. Think of us as similar to say Banking-as-a-Service or Brokerage-as-a-Service in terms of maybe more traditional fintech. We offer an API infrastructure that allows customers to offer their customers, through their own front end, the ability to buy, sell, hold, send and receive, gift digital assets and so we are this API infrastructure. Every end customer is legally our customer so we have now millions of end customers, but they interact through the front end, through the platform, through the brand, whatever you want to call it, the middle B, right so we are B2B2C business, allow them to offer that experience natively within their own infrastructure so embedded (garbled), and embed in our APIs.

Peter: Then are you going out on to the open market buying and selling on behalf of your clients and who's doing the custody as well, can you just maybe tease it out a little bit.

Edward: So, what I mean by hold is that we are the custodian of those assets, so we hold the crypto assets for the end customer and when I say buy and sell, we are effectively the counter party, at a simple level we are the counter party to the transaction. And we hedge ourselves, so we basically have riskless principle, we hedge ourselves against other liquid suppliers, but every end customer is effectively trading against us and we're effectively hedging ourselves immediately, so we are purely equipped to see risk/risk principle entity.

Peter: So, someone goes through one of your customers and wants to buy .01 Bitcoin, just take us through the flow, what happens?

Edward: So, at the most simple level, if somebody wants to buy 0.1 of a Bitcoin effectively that price would be presented either as a notional or quantity to the customers so in this instance it would be a quantity, but obviously it's where we can support. For example, I want to buy a hundred bucks worth of crypto, that is presented, for example, I'll use a real customer for example, Current, so there is a customer and it's presented out on the Current platform. Effectively, when you hit buy, you are legally trading against Zero Hash and so Zero Hash will then fund your account with 0.1 of a Bitcoin.

The beauty of this is that all of the cash is at your current cash account and so, effectively, we will then net settle up with Current to make sure that we get paid on that transaction, but the beauty of this is whether it be a brokerage platform, a neobank platform, or a payments platform, the beauty is that you are using existing fiat rails, and existing fiat infrastructure you're used to, that you're used to buying a stock with or anything else and you're using that infrastructure, that fiat infrastructure, to buy crypto really seamlessly. So, we prevent surprise, you hit the price, we'll fund your account and then us and the platform will take care of the logistical fiat back and forth.

Peter: Right, got you, got you, okay. So, before we go any further I think we do need to talk about the year that was in crypto, 2022, it was quite the year, you know, we started off with a lot of optimism and ended up being a much worse year than anyone ever could have anticipated. So, what was that like for you guys, how did you navigate this very turbulent year in crypto?



Edward: Yeah. I mean, we've navigated it strongly, we've not had any balance sheet losses against FTX, Alameda, Genesis, any of these groups and I think that's in large part because we said no to certain business lines that we felt just did not make sense. Sometimes, if it's too good to be true, it's too good to be true, right? Often it's too good to be true. I think often people think of revenue just in a kind of single sense, we like to take a view of risk adjusted revenue and we like to know where we're taking risk, and where we're not taking risk and we did not enter that kind of rehypothecation lending market that has obviously come back and impacts a lot of players in the space. Clearly, the ramifications are larger, there's questions from our partners, there's questions from banks, there's obviously a greater sense of nervousness, fear is contagious, right, it was definitely a busy couple of weeks. You know, answering questions.

We've always been transparent with our customers, with our partners, with our banks, you know, we've been around since 2017, have worked with these accounts since then, we're very transparent, we have public boards, we're regulated including by NYDFS, but we don't view regulation as the goal, it's the floor. And so, a lot of what had happened was just flagrant fraud, flagrant stupidity, those people were not doing things the right way. And so, we were set up in a pretty good sense, we'd said no to a lot of the business that we felt did not make sense. You know, 2022 was the year that that shook, 2021 was the year that all of that looked very attractive, and sitting here and saying no to that stuff is sometimes difficult.

Peter: Well, I imagine that, and that's what I was about to ask you because, you know, when Bitcoin was getting up past \$60,000 and everyone's jumping in on the bandwagon and, you know, it's like sort of real estate in the mid-2000's, it just keeps going up and everyone's getting in on it. I imagine that you had some use cases with people saying, you know, you guys are idiots, you should be taking advantage of all of the other parts of crypto that the FTX and BlockFi and, you know, Genesis and what have you have been taking advantage of, what was that like?

Edward: Look, it was not like we turned around and told them I told you so, it was not something we wanted or wished for, but fundamentally, we take a really long view on crypto, we are here for the long term, we're not here for the short term. And so, when you take that long term approach and say fundamentally what is important to the space, if you can take that long term approach it actually is much easier. Yeah, sure, I mean, look people flip, investors flip, investors are returning to spend more money and then, you know, six months later they spend money less, right. I think, honestly, I spent my entire career in frothy industries and it makes it much easier because I literally see my responsibility, my role is to narrow the emotional bounds.

When things in 2021 became very frothy, it kind of narrowed down and tempered that, when things have become fearful, it's to temper that as well. It's not that you don't react, and you don't kind of temper the sale, so to speak, but you're not trying to attack left, right, and center and put your foot on the accelerator, put your foot on the brake and I think that's what leads to a lot of good, long term business. We were a very profitable business in 2021, having a large amount of cash on balance sheet definitely helps, we did our Series C and Series D in 2022 so it allows you to take this long term view on things. But I just think it's a fundamental, kind of intrinsic way of what are we building here, like we would want to add value which means looking for the long term and how do we want to build this business and it's basically built on a long term stable business versus kind of this accelerate/brake mentality, a lot of VCs and a lot of VC-backed companies have been guilty of.



Peter: Right, right, that makes sense. So then, as look ahead now obviously the FTX debacle is still playing out and it's probably going to play out over months and years, but the reality is that the crypto industry has lost the trust of mainstream financial institutions, not completely, but people aren't as eager and as willing to kind of jump into crypto as they were in 2021 and early 2022. What do you think the crypto industry, and this is a bigger question than obviously about Zero Hash, what does the crypto industry need to do to regain the trust that it once had?

Edward: It's fundamentally just being transparent and obviously learning the lessons from other industries that has had blowups, it is around just getting back to fundamentals, in my view. I don't believe any of this is rocket science and fundamentally, it's going to take time. And so, I think those are the key aspects, right, we have launched an initiative called "Mission Trust," you know, in San Francisco last week, we hosted a panel with, for example, some of the leading fintechs. Groups such as Juno, Nium, both of which are clients as well as, for example, Plaid. And so, groups such as Plaid and all these other players, I think will also bring credibility, bring in their experiences as large traditional institutions to play here, but, I mean, in short, it's getting back to basics, proper governance, proper audits, proper approaches and letting some of that froth kind of just dissipate and it's honestly not a bad thing.

Peter: Right, right. But I look at your company and it feels like this is really embedded finance, it's embedded finance with crypto as the core of it and embedded finance itself is a trend that has a lot of legs. It's been something that continues to become more and more mainstream, shall we say, plugging in a piece of infrastructure into your bank or into your fintech. That feels mainstream today and it's just growing in popularity, is that how you kind of think about what you're doing?

Edward: Yeah. I mean, I think it's part of it. I mean, embedded finance the way that I would define it is more traditional brands entering the crypto space so every company becomes a financial services company, right. I mean, that's part of it, it's obvious that every company over time will become a crypto company, a great example of that, for example, is DraftKings. So, DraftKings is publicly a customer of Zero Hash that is a non-financial services brand and I think ties into kind of this embedded finance or this embedded crypto thesis. They've done a lot of interesting things around how you can tokenize, how you can create game experiences around that so I do think that's part of the strategy. I mean, a big part of it as well is just traditional financial firms entering crypto for the first time which I would say is with an embeddable product, those financial services would definitionally define it, you know, fall into this kind of embedded finance theory.

Peter: Right, that makes sense. So, I want to talk about Stripe, I mean, Stripe is sort of the, you know, the largest private fintech company in the world, they're a behemoth and have pretty much a stranglehold in the payments space when it comes to fintech. Anyway, tell us a little bit about how that all came about, I presume it started during the go-go days of crypto, right?

Edward: Yeah. But I think Stripe has, here's a bit of a history actually, engaged with crypto much, much earlier.

Peter: Right.



Edward: You know, what's been interesting is when everyone thinks there's a good idea then it starts to make it easier to get people to buy into, but a lot of these groups, a lot of these traditional financial services like these fintechs are inherently interested in crypto, how it can fundamentally alter our mechanisms. If you look at, for example, Stripe, if you look at their slogan, I think it's "powering the Internet," now what does that mean? Well, the Internet is changing, and I won't speak for Stripe, but if you look at their blogs, they fundamentally believe that the way that people interact on the Internet is changing. And so, they as a payment institution need to adapt, need to evolve with how people interact with the Internet.

So, if you think of a good example, Nike Swoosh, for example, here that is built on a blockchain and for the first time a payment institution actually needed to interact with crypto, you have to buy the NFT, for example, it's built on the Ethereum blockchain, you need to send Ethereum to that blockchain, yet the customer just wants to buy the NFT. So, that bridge, that thesis of the way that the Internet is changing I think is a much more long term view that Stripe is taking and decoupled from I would say the noise around crypto, it's more of fundamental technological shift that we're seeing and how do you interact with that, how do you provide the rails around that?

Peter: Particularly given the time of the announcement when crypto was going through a lot of tumult and Stripe is a big and stable fintech company, as I said, what do you think that, or do you think that has kind of helped stabilize some of the thinking around crypto or what impact do you think that's had?

Edward: Yeah. I mean, look I think it certainly shows that companies are still invested in the space. I think one of the great things is that at some point, the concept of price, the conversation of price around crypto has largely become de-coupled around the interest so now we're talking about okay, are there real use cases, are there real companies, right. There's a much better discussion to have that, interest in crypto is just one to one linked to price so I think that's a good part of the story, but we are still in relatively early innings. But Stripe, no doubt, is seen as the market leader and for us, you know, looking at all other acquires, looking at other traditional payments players, it's certainly adjusted the conversation because Stripe is seen as on the cusp and edge of innovation, and a lot of people tend to replicate and think about that. For sure, it's encouraging with the timing.

Peter: Right, right. So we're going to talk about Web3 and Decentralized Finance in general. You know, you talked about, like the Nike example is a great example because it's an NFT that sits on the blockchain that is decentralized, but it's coming through a centralized company, like I think no one would say, no one would confuse Nike with being, you know, anything but a traditional firm. Is Nike a Web2 company, I don't know, but certainly Stripe I would say is a Web2 company, a lot of the tech companies out there we sort of put into Web2, how is Web3 going to transform these Web2-type companies?

Edward: Yes. I think often people talk about Web2 and Web3 as a fairly binary things, right, they're actually it creeps to...and so if you look at the definition of Web3 it means that effectively you can read-write which is Web2 plus code, and so it's Web1, Web2, Web3, they are building on top of each other, it's not completely undercutting what the other one is. Web2 companies can also be Web3 companies, you know, we like to subscribe to Moore's Law, that the idea of adoption will be significantly quicker than the adoption of companies as Web1 companies to Web2 companies so we're incredibly bullish about this.



In terms of how it will transform businesses, it does change the way that customers interact with brands, it's going to change the way that customers think about ownership. I think the use cases are broad, ranging from obviously gaming which obviously exists, has obviously existed without a blockchain to, for example, consumer brands, but we're still very much in the early innings around that.

But if you look at the brands actually entering the Web3 space or actually have Web3 initiatives, these are the largest brands in the world, I mean, you look at some of announcements that MoonPay has made and MoonPay is also a customer of Zero Hash, they're looking at, for example, Universal Studios, you're looking at these major, major organizations, you're looking at Disney, you're looking at Nike, you're looking at fashion brands, it's pretty incredible. And then obviously I think when you start thinking about music royalties, there's a lot that is being done around that so this technology isn't the silver bullet for absolutely every single business out there. But I think use cases are starting to materialize really, really quickly and, you know, our role is to serve as the infrastructure for that.

Peter: Right, right. So, let's talk about payments for a second because obviously Stripe are getting into this from a payments angle. When crypto, when Bitcoin first came on the scene a lot of it was talked about as a payments mechanism that hasn't really come to pass in, for the mainstream, anyway, do you think that's still...that is in crypto's future that it will become a mainstream payment mechanism and what will it take if that is the case?

Edward: Yeah. So, my view is that it will be part of the payments infrastructure, it's not going to be the entirety of a payments infrastructure. I think it really depends, we tend to talk in broad, broad strokes, but just kind of tangible examples, right. We've spoken about Web3 businesses, for the first time if you wanted to interact with a smart contract as a payment mechanism, you need to actually own crypto so that's one example of Crypto-as-a-Payment mechanism as a means of (inaudible) channels to buy goods.

If you look at, for example, what I think is really interesting is remittance businesses, I mean, that's pretty interesting, but, you know, when you talk to some of the largest players in the world of traditional finance, what really excites them about blockchains is they call it sometimes the "network of networks." So, obviously, there's a huge amount of work that's being done in the United States and in other places around the world, in particular for example, Brazil, which has really led the way with Pix around real-time payments, but how do you get one real-time payment system to talk to another real-time payment system? Obviously, Australia, your original homeland, has a really awesome real-time payment mechanism, so does the UK.

Peter: Has had for a long time, actually.

Edward: Exactly and so how do you get these two systems, these multiple systems to talk and I think that's another use case around the blockchain. So, again, people still use cash, people still use debit, people still use ACH and they will still use real-time payments. It's not that these things will replace one another, I think it's going to be part of the ecosystem when there's real use cases such as this kind of "network of networks," transferring value, cross border, those are really interesting use cases.



Peter: So then when you think about your business and although maybe even crypto in general, what are the most exciting use cases, where is this going as...do you feel most excited about?

Edward: I mean, look, crypto is going to be a tradable asset that will exist, you know, Bitcoin is certainly here to stay and I think you can take different views around why people should buy crypto. But if you just look at it on a returns basis, if you have 1 to 5% of your portfolio on a risk adjusted return Sharpe ratio, it makes some sense, right, so there's these fundamental pieces that exist. We touched upon a lot of them, I think the adoption of Web3 and how crypto kind of adapt the way that the entire concept of the Internet works, I think the entire way that payments can be done seamlessly, cross border is incredibly interesting.

People that see folk gaming, I think is super interesting around those different pieces, but, again, we view crypto as a technology, not an asset class in and of itself and I think the innovation and adoption that we've seen is incredible. Obviously, if you look at VC funding, one of the benefits of kind of the frothy year or maybe it leaks into years, is that a lot of money went to a lot of smart people doing a lot of smart things. And I think that the use case conversation will rapidly evolve in a whole host of different areas, there's a lot of experimentation going across the board which makes us very, very bullish about the space as a whole.

Peter: Right, right. And do you feel that the decoupling of the price of crypto, because there's always this preoccupation with so many people about the price of crypto, and let's face it, it's been pretty stable for the last several months despite all the FTX stuff. I think that it's truly amazing that it has maintained that stability. Is it now decoupling, the technology you're talking about, the crypto technology rather than the crypto price, have we moved beyond that now do you think?

Edward: I think so. Again, crypto is a very broad thing and so when I think, for example, of payment mechanisms, right, so if you're using for example, Stellar, as a means of payment, you know, and then we talk about fractions of a penny, even if the price of Stellar increases or decreases it's not making a meaningful change the way that you're thinking about crypto. If you, for example, think about an NFT that's being minted, assuming the cash fees don't spike, which is somewhat separate from price, again, it doesn't make too much of a difference. I do think as the use cases evolve, the conversation around price for a portion of the space also goes away because you're not actually using crypto as a store value, you're using it as a means of transfer or as a fundamental technology and the price then doesn't matter so much, like Stellar for example.

Peter: Right, yeah, yeah, makes sense. So, last question then, what are you working on right now that you're excited about, I mean, what's coming down the pipe at Zero Hash?

Edward: Yeah. What excites us is just global expansion. We now power some of the largest financial services and consumer brands and these companies are global in nature. So, you know, the last year we got registered in Australia, in New Zealand, we now have entities in places such as Brazil, the UK, the Netherlands, we're obviously highly regulated in the US and in Canada, and so being that one-stop-shop for brands, one-stop-shop for fintechs is really what excites us, and so that's really our core driver of growth in 2023.



Peter: Okay. Well, Edward, we'll have to leave it there, thank you so much for coming on the show and best of luck to you.

Edward: Thank you very much.

If you like the show, please go ahead and give it a review on the podcast platform of your choice and be sure to tell your friends and colleagues about it.

Anyway, on that note, I will sign off. I very much appreciate you listening and I'll catch you next time. Bye.

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