

CRYPTO TOKEN



Episode 127: Felipe Huicochea Talks Crypto in Developing Countries

Kelley: Welcome to Crypto Token Talk, a Crypto 101 podcast exploring how blockchain applications like Bitcoin, Ethereum, and other crypto-assets could change the world. Learn from blockchain experts, thought leaders, and founders of some of the most innovative companies and world-changing ideas of our time. I'm your host Kelley Weaver, CEO of Melrose PR, a leading blockchain communications agency. Thanks for joining us today.

Kelley: Today I'm here with a special guest, Felipe. Welcome, Felipe.

Felipe: Hello. This is Felipe Huicochea from CriptoMonedas TV. We have a Spanish-speaking YouTube channel, and podcast, and platform overall to promote what's going on in the blockchain bitcoin cryptocurrency industry and very honored to be in your show. Finally we're able to sit together. I've been looking forward for this for months now.

Kelley: Likewise, and I had the honor of being on your show. We met in Dallas at the Bitcoin SuperConference and it was a real treat to meet someone so like-minded, so it's fun to have this conversation. How did you first discover bitcoin?

Felipe: Well, it was mainly a utilitarian need. I'm a software engineer by trade. I've been doing internet projects for pretty much all my professional career, but particularly what happened is that I was consulting for a company in one of those countries that you wouldn't want to travel without an armed guard. They hired me to do an auditing project and the first payment was withheld by my bank. They flagged the first payment and they withheld the funds, and then they tried to pay me again through PayPal. Then PayPal flagged the account and the funds were frozen. I was trying to find a way to get the money, basically, so I said, "Well, let's try this bitcoin thing."

Felipe: I get the payment and I cashed that immediately. I'm based in Dallas, we have an ATM here. It was a small one but I cashed immediately. No second thought. I just use it the first time. Then the second payment came and the next time I go to the ATM I get something like 40% more than the first time and I'm like, "Hold on a second. What's going on here?" I start looking into the technology and once I finished reading the white paper I was blown away. I come from a client server architecture, I develop server applications, so for me just the notion of having internet money required a counterparty, a central party, because that's what I've been doing for all my professional career. I couldn't think of an alternative to a peer-to-peer cash transaction system.

Felipe: It was first the experience of using bitcoin for a very practical purpose and precisely to avoid censorship of the financial system, and then I read the white paper and that was it. I was down the rabbit hole from there. I tell people it's the same experience I got when I first saw webpage loading. We're talking early 90s. It was like, wow, this is going

to change everything as we know it and I saw it as soon as I finished reading the white paper. From then I start reading more and getting involved in the community, and-

Kelley: When was this, Felipe?

Felipe: It was 2013, 14.

Kelley: Okay.

Felipe: Then I started reading and getting involved in the community, first as a student, as a learner. Late 2016 I saw this huge gap in the Spanish-speaking world that there's a lot of information, there's eagerness to learn, but there were not enough resources. That's where I started the channel, I started posting videos mainly just about the stuff that I was learning and explaining basics from how the blockchain works, how mining works, the concept of bitcoin, the concept of blockchain, cryptocurrencies, and grew from there. We have grown, I mean for such a specialized platform I think incredibly well, we have grown. We have audience in most of the Spanish-speaking world, every single country.

Felipe: We have a group of Mexicans living in Japan that they often participate in our live broadcasts, and another group of Mexicans in Norway and Argentinians in Italy. It's all over the world where Spanish is spoken we have an audience and I'm very grateful for that.

Kelley: Where are you from originally?

Felipe: I'm from Mexico. Mexico City. I was born in Mexico City and the reason I end up here in Dallas was because as a software engineer the company, the voice over IP company that we founded in Mexico in the early 2000s transfer the corporate office here to Dallas, to Richardson specifically, and so I was transferred with the company.

Kelley: Because your audience is in many Spanish-speaking countries a number of Spanish-speaking countries have fiat currencies where their national currency's very volatile. I imagine that bitcoin and cryptocurrencies are an attractive potential solution. What has the reception been like and what are you seeing in those types of markets where your audience is?

Felipe: Well, it's fascinating because many countries have experienced what bitcoin is supposed to prevent. We've seen, and this is one of the reasons why, for example, Argentina has such a vibrant development community. I don't know if you realize but one of the biggest companies that does audits for Ethereum contracts is based in Argentina and there's huge, huge developers, very well-known developers in the space from Argentina. The reason is because they experienced that collapse. In the late 90s in Argentina there was this decree by the government, so they basically seized people's accounts. Overnight people lost their savings and that's a very recent event in Argentina.

Felipe: In Mexico in 1995 there was this huge financial collapse and people have recent memory of that. A lot of us were already adults at that time or they experienced firsthand the impact of this unreliable monetary system on inconsistent and predatory monetary policies. People have lived what in most developed countries is just the what-if. What if banks collapse? Well, that has happened in many Latin American countries. People understand and they see the opportunity. We see adoption, that it's slow but very steady. We see use cases that have nothing to do with a lot of the discussion that we see, especially in Twitter, in the social media space. We argue about buying coffees with bitcoin and that became almost like a war cry for one part of the argument, like we want to buy coffee with bitcoin, we want to go to Starbucks with bitcoin.

Felipe: Well, there's billions of people who have never seen a Starbucks, who live in places where there's no coffee shops, there's no anything and they don't particularly care or think in those terms. They think in terms of survival, they think in terms of ensuring your legacy, ensuring your wealth. Whether it's a lot or a little people want to preserve what they have earned and that's the vehicle that we're providing, that's what the technology can do for them and a lot of people are starting to realize. I think we're going to see in the next generation in Latin America this quantum leap as we saw with the adoption of mobile phones. There's thousands and thousands of cities and towns all across the world that never saw landlines, they never saw poles, they never saw wires. It's like they made this leap from zero to 100% mobile phones and internet.

Felipe: We're seeing communities across Latin America that are bundling together their resources to put mobile infrastructure, antennas, and mobile internet. They are skipping all that early telecom infrastructure hurdle and they're jumping directly to mobile phones and internet. We're going to see that same phenomena with the financial system. They're going to skip altogether the banking, the ATM thing. They're going to skip altogether and the next generation it's going to be able to do that. They're going to grow with this mindset that you don't need a bank, you don't need these intermediaries to not only slow things and make things like transactions more expensive, but also the risk of people running away with money. It's, I think, all over the financial system whether they're regulated or not. When there's huge access to money from a very small group and they have power over that money the temptation is always there to run with the money.

Felipe: The other aspect, and probably this is the adoption front that we see least resistance, is remittances. Sending money from the US, from the UK, from Canada to Latin America is extremely expensive. I mean, they pay around 10% of what they earn just in fees to be able to send money home, so just saving that, it's huge for a lot of people. It's a huge impact. Imagine if you suddenly get a 10% raise on your income for the rest of your life. That's a lot of money. The other thing is that they also can make money on the selling end if they receive bitcoin in Venezuela, in Colombia, in Ecuador. They receive bitcoin. They can sell that bitcoin at a premium so not only they are saving on the transaction cost but they are even able to make a little bit of money on top of what they're receiving.

Felipe: It is fascinating to see how people are so resilient in many countries and they find the way. They're going to find a way because in many countries we don't realize how much

is at stake in terms of depending on either a central bank making a monetary policy or governments executing economic policies. The people have experienced that and in most countries it's very recent memories, not a time long gone. It's very recent.

Kelley: What have been some of your most popular topics that your audience has been most excited about or guests, I suppose?

Felipe: Well, I mean, Andreas Antonopoulos is always fascinating to listen what he has to say. We have the opportunity to interview him and it was very complicated because we do captions for when we have guests that are not fluent in Spanish. We conduct the interview in English and then we caption the interview. With Andreas it took forever and it was a very complex thing to do but that was a huge, huge booster, not only for the channel but for the understanding of what's really the technology about. Of course the potential of people being able to preserve their wealth, that's a topic that I hear a lot. How can I leave this as a legacy? How can I secure my estate or my savings? How can I secure them? How can I pass them on? How can I make sure that they're going to be available for my loved ones?

Felipe: Of course the opportunity of building wealth, it's a very early stage of the industry as a whole, so there's a lot of opportunities for developers, for people who have talent and are willing to learn. I mean, this is for sure the biggest opportunity that at least I've seen in my lifetime.

Kelley: With your software engineering background what are you most excited about in terms of use cases and-

Felipe: Well, I think actually, after not doing it for many years, I been actually developing small applications and just to show people that you can do it without permission, which is something huge. You don't need to get a license for the software, you don't need to pay anyone any royalties. You just download the software, you start developing. You can use free tools and you can build something. That's something that I have been showcasing in my channel. I showcase how to build a very simple paywall using bitcoin, so if you are a creator, you have a seminar, you can build your paywall and get money directly. No intermediaries, no nothing. It's just you and your customer. It's a very simple application, so I develop this and show them that it can be done. In terms of technology I think what we're seeing in Lightning Network, it's mind-blowing. I mean, the potential that it has and the fact that-

Kelley: Can you talk a little more about that? What-

Felipe: Yeah. Lightning Network, it's a protocol and it's a second layer protocol that runs on top of Bitcoin and pretty much any blockchain that has the transaction malleability problem solved. We're talking about Litecoin and it can run on monitor unit, and it can run on Bitcore, and it can run on Dogecoin. Any coin that has this specific requirement that you cannot change the transaction once it's submitted, so it's a second-layer protocol. What it means is that it expands exponentially the capacity of transactions, it remains very secure, cryptographically secure. It remains bitcoin because in order to use Lightning

Network you need to have a opening transaction. In that transaction both parties agree to certain terms and certain timeframe that this transaction is going to close automatically. Then they can transact amongst themselves any times without paying the fees that would be required if those transactions were on-chain.

Felipe: It's an alternative. It's a stack on top of Bitcoin or the blockchain and if you have some technical understanding of the technology you realize that it's exactly how the internet became what it is today, and there's a reason why we have a specific protocol for email, and another one for streaming media, and another one for transferring files, and another one for the web. Each application has its own protocol, its own layer, and that's how you can scale. You can't scale the internet with bigger cables, right? We don't need. It's not that just if we increase the size of the cable we're going to have more internet. That's not how it works.

Felipe: With Bitcoin it's a protocol first and foremost. It's a set of rules that two parties agree on how they're going to communicate and on top of that we have different protocols for specific applications. Lightning Network is the first one and there's a lot coming in that route that you can build on top of this main road that it's the blockchain, and you can build all sorts of applications. It's just to think about the potential of how this is going to transform not only the financial aspect but the regulatory framework. It's going to be really challenging for people to regulate and understand the potential that this technology has, how it's going to transform how we interact in terms of value, transferring value. How we interact in terms of trust, which is another big part of the technology. We can transact with each other, we can verify each other and that's going to change how societies are organized in very profound ways.

Kelley: It's really exciting, I think. It's just fun to watch it develop. I mean, you were saying before we started the interview how there's never a dull moment. What does your typical day look like? Or what excites you on a daily basis about being in this industry?

Felipe: Well, just waking up and seeing the announcements. I mean, I follow very closely, for example, the development of the Lightning Network. The announcement of what people are doing because it's not like waiting for an update from Apple or not waiting for the release of the app by Microsoft or you name it. It's people from all over the world working on stuff 24/7.

Felipe: Last night I was reading about a project. It's basically what Patron does for content creators but based on the Lightning Network. As you know when there's this central entity that controls access, or controls credit cards, or controls passwords there's a huge liability. There's a lot of risk involved in putting all that information in one server and trusting that the company holding the server it's going to take the appropriate security measures, so having people's information is always a risk.

Felipe: With this development you're going to be able to receive support from your audience without having to compromise their security nor yours, so you don't receive any information, you don't have emails, you don't have passwords. You don't store anything other than granting them access to certain content based on the amount that they paid, so that's fascinating. On other fronts infrastructure. I was reading last night about

engineer. It's hardware that they're developing that it's basically, and this is going to blow your mind, I'm sure. It's mining equipment that can be submerged in water as the cooling medium.

Felipe: As you know miners are very simple equipment that does a very specific task but it does it very fast. In order to work so fast it requires a lot of energy, and energy ends up being heat. For miner to operate efficiently they need to keep their equipment cool. Now, what this company is developing is a miner that can operate underwater, so basically what you're getting is a water heater that mine cryptocurrency. That's pretty much it. You can put one in a tank in your home, and you're to be mining cryptocurrency, and you're going to have hot water day in and day out. It's fascinating.

Kelley: Wow.

Felipe: Yeah.

Kelley: That is so cool.

Felipe: It's fascinating, and same kind of developments we're seeing in Russia. They're developing space heaters that mine cryptocurrencies. If you have an apartment building, you produce a lot of heat with mining, right?

Kelley: Yeah.

Felipe: If you live in a-

Kelley: Well people talk about it being so energy-inefficient but if there's ways that you could put that energy to good use, I mean what a brilliant idea.

Felipe: That's the thing. The incentive is big enough that it's introducing this kind of innovation. We're seeing now miners that are going to be able to operate underwater, so basically you have huge innovation. You're using that heat and you're saving energy, actually, because then instead of having a miner and a water heater you're using one heat source for another purpose. There's a miner in, I think he's based in Utah or Colorado, I can't remember, but has a mining farm connected to a chicken coop facility. He's using the heat produced by the miners to heat the chicken facility, so they're just transferring that heat. They're using it for another thing.

Kelley: So smart.

Felipe: There's another company developing underground mines. It's basically like a cave, which is cool, and that's what you want for a mining facility. The mountain can dissipate the heat really fast so they're installing miners underground in a cave. I mean the amount of innovation that we're seeing, it's amazing. The incentive is big enough that people are looking for ways to maximize the production, to reduce cost, and to make the most efficient use of energy. I understand there's a lot of people concerned about the energy consumption. We see all sorts of comparisons between how much the VISA network

requires to run versus Bitcoin, and it's a waste, and uses more energy than 80 plus countries, and so on and so forth. That's the first stage of mining and now we're seeing these huge innovations.

Felipe: If we go back in history, I mean the oil and gas industry in the very early stage was wasteful, was extremely dangerous and over time they have, at least to some degree, made their processes more efficient, safer for people. We don't see these massive accidents that we've seen in the past so often. There's a lot of industries that at the beginning, well, yeah, they can be considered wasteful or endanger certain aspect. Over time what we see is when the incentive is big enough people are going to innovate, they're going to improve, and always our first attempt as humans, our first attempt at anything is always the worst by definition.

Felipe: It comes to mind the first time that I was on camera on my YouTube channel. It's painful to watch but it was the first and as time went by, as I did more, I got a little bit better and a little bit better. The same thing is for any technology, any industry, any activity that humans do. Our first attempt by definition is always going to be the worst and what we're witnessing right now is that first attempt at cryptocurrencies, and trustless systems, and distributed trust. That's what we're witnessing right now. That's why it's so fascinating.

Kelley: Yeah. Completely agree. What resources do you recommend outside of, obviously, your own channels but what resources do you recommend people who are looking to learn more about crypto and blockchain? Where do you recommend they go? Are there books or podcasts?

Felipe: Yeah. I think one of the things that I always recommend is the Andreas Antonopoulos book Internet del Dinero is available in Spanish and obviously also in English, Volume One and Two. I think in terms of understanding what we have ahead, what we're dealing with, it's a great resource for non-technical people. It's not a technical book, although Andreas is known for his technical writings on bitcoin. This is compilation of his talks so it's very easy to read. Internet of Money, Volumes One and Two, I think that's the best way to get started. Once you've done that there's tons of resources available online, YouTube channels, podcasts. I mean, the amount of information it's growing rapidly and maybe the only thing, and I don't want to leave anyone out or make any particular claim other than if there's one thing that you should take as a new discipline when you get into the space is do not trust verified.

Felipe: That's a concept that we have fallen in this habit of delegating that trust or that verification process to third parties, but I think this technology empowers us to verify what we're doing and that's a core concept in cryptocurrencies, in blockchain, is that verification. We assume responsibility for what we use, how we use it, where we store it and same goes for the information that we consume. We verify, we check two sources, we check three sources because as an industry in a very early stage of development there's also thousands of scams, and people misleading you and trying to get your money, basically. A very healthy dose of skepticism is going to be very helpful.

- Kelley: That's great advice. Where can people reach you or how can they find your YouTube channel?
- Felipe: Well, they can google Criptomonedas TV and it's going to show up everywhere. We're very visible. We're on iTunes with the podcast that we launch, we're on Stitcher in pretty much every podcast platform, we're on YouTube, we're on Twitter. Yeah, basically if they just google Criptomonedas TV they'll find us.
- Kelley: Excellent. Well that you so much, Felipe, for joining me today.
- Felipe: Thank you for having me and congratulations on the great success of your podcast.
- Kelley: That's all for today's episode of Crypto Token Talk. To learn more about blockchain and keep up to date with this fast-paced industry subscribe at cryptotokentalk.io where you can also find today's show notes. If you have suggestions for topics or guests please drop me a line on Twitter [@cryptokelley](https://twitter.com/cryptokelley), or you can follow the show on Twitter [@cryptotokentalk](https://twitter.com/cryptotokentalk). If you enjoy the show please rate and review it on iTunes and share it with family, friends, and colleagues who want to stay up to date on how blockchain technology is changing the world. Thanks for listening.
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