# XX Network Community AMAs, Part 1

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## With Turkish Telegram Community. English Edit Transcript.

## **SPEAKERS**

David Chaum, Çevirimatik, Jim Dolbear, Robbie Schubert, Aaron Welwood

## Çevirimatik 00:00

Welcome, everyone, once again. The community would like to know what you guys have been up to so far and what you guys intend or plan to do in the near and upcoming days. So who would like to speak first? Robbie?

## Robbie Schubert 00:21

Yeah, yeah. Hi, guys. First of all, welcome to as you said to the Turkish AMA, we would like to say, also, on behalf of David, and me, we were planning of course to come to Turkey. Unfortunately, through the rapidly changing environment, we couldn't join there. So sorry for that. Surely, there will be another time that we will be joining you guys in real life. So first of all, sorry for that.

## David Chaum 00:53

Hi it's David Chaum. I'd like to second what, what Robbie said. I mean, I was really looking forward to being in Istanbul again. And with all of you, you know, we had such a, it was such a great time there with with the meet up, but also that meal, we drove to that little restaurant to have, and everyone was there. That was so great. It was really memorable. So yeah, I'm really looking forward to visiting again soon if I can. Aaron, did you want to speak?

#### Aaron Welwood 01:33

Hey, guys. Yeah, I'm Aaron. I'm, you know me! I've been around a while. Hope everybody's doing well. It took some doing to get this put together. David's obviously, quite busy as he is all the time. But yeah, really happy to have him here in a group meeting, get to chat with him, often on on my own every now and then. But it's nice to have everybody together. And yeah, it's coming together. There's a lot of cool things happening. So looking forward to getting the questions. And yeah, just trying to get this thing... get people kind of cleared up as to what's the newest things lately? And what have we been up to behind the scenes and working on? Yeah, a lot of changes have been happening over the last few months. So, excited to discover...

#### Jim Dolbear 02:34

Yeah, maybe I could - this is Jim, maybe I could just put this in context in terms of what we laid out, you know, as a plan for 2023. And we first went over that, in a council meeting in December that was run by Will Carter and by Aaron, and you know, was titled "Road to growth."

## Jim Dolbear 02:59

The idea of, you know, bringing users and and partners to the XX Network. And we did a video on it in January. And what was laid out was, we had to really focus on partnerships with other blockchain projects, to provide them with XX privacy and security.

## Jim Dolbear 03:25

And then we talked about the whole web 3 kind of revolution and focus, which is that we need to connect through to the smartphone, and web app platform for other users; people who didn't have the same client software that we used in in XX Messenger and Speakeasy, and in the beginning of Haven. And that was about the xxDK. And then we also said that, you know, we needed to continue to decentralise and get the foundation organised. So those were the thrusts, you know, going into this year.

## Jim Dolbear 04:08

And so, for the rest of this meeting, before we get to the question stage, people are going to discuss how we've done each thing, and we'll start with David. And I'd say it's interesting, if you look on the XX Foundation site, there's a thing called 'Directory', which is sort of like who's doing what, and David is listed as the founder of the XX Network. And, you know, cryptographer, under the innovation as an innovator, you know, that's what the title is. And that's really who, who David is - he's bringing new uses to the XX Network. And there's a bunch of very interesting things that he's been working on. So he's going to take a bit of time to go over that and brief everyone on it.

## Jim Dolbear 05:01

We saw an inkling of it if people saw the cMixx+ paper, which was posted by Mario and David, just in the last week and a half or so. So let me just turn it over to David. David?

## David Chaum 05:19

So I've got a number of really interesting new projects, and things. And - three, let's say. And they all relate to that cMixx+ article that Jim mentioned, which is posted on the, on the, on the Foundation site. And this is a different kind of mixing than cMixx. But it's, it's, you know, similar, and XX Network is really well suited to do it.

#### David Chaum 06:04

And I've been talking to a couple of different teams about building it and integrating it and testing it and these, you know, they're interested in doing it. So I think there's some preliminary designs, and so forth being discussed. But, we haven't started implementing it directly. But all the tooling and experience that we have, will be really useful in doing it.

#### David Chaum 06:41

Many of you have probably heard of the WorldCoin project. And the idea that it will capture fingerprints and retina, iris scans, I'm sorry, you know, eye photographs of people - and in exchange, they can receive an airdrop. And the whole idea is, you know, prevent more than one person, one person from getting more than one AirDrop.

## David Chaum 07:25

So the very cool thing is that with cMixx+, there is a solution to this huge controversy about the privacy invasion with the retina, with the, I'm sorry, iris scans. And this was a technical breakthrough that I made. And I've been working with a few people to get it written up. And it's mostly written up. But it's not yet posted - the technical solution and also there is an op-ed, like what I've written several times through the past for, for. Sorry, Jim, what is it? Where does that appear? Where do those op-eds appear?

## Jim Dolbear 08:39

I think it's going to be in the upcoming week. But it's hard to know because they control the timing. But soon.

## David Chaum 08:48

And the publication name?

## Jim Dolbear 08:51

I'm not sure - I mean, I don't know exactly when they're gonna publish it. Because they control the timing. But it'll be in the next 30 days.

## David Chaum 08:59

Okay, so it's somewhere in the CoinDesk world. It's an op-ed that they published with in the past so they will publish this one. And it's written, still polishing it a little bit - but basically, you know, it explains that the, the blockchain world has been receiving a lot of criticisms, for a lot of reasons. And this technology that uses the cMixx+, solving this fingerprint privacy problem and is an example of how our blockchain space could do something better than the standard technology space. In fact, these fingerprints are used by billions of people around the planet. And their systems are just as insecure as the WorldCoin system. So, by being able to solve this using cMixx+, we are able to actually help all kinds of people's privacy around the world, not just fixing the WorldCoin problem. So that's kind of pretty exciting. And that's the way the CoinDesk op-ed is framed.

## David Chaum 10:39

So now, there's a second new technology that I've developed. And you've heard about it before. It's, it's called eCash 2.0. And you may remember that the Swiss National Bank, and the Bank for International Settlements, paid IBM to build eCash 2.0 so they could test its performance. And recently, they completed this project. And, for one thing, the performance of eCash 2.0, in their implementation was able to handle three times the total transaction volume of Switzerland. So that's super great.

#### David Chaum 11:45

Another thing that you may know about is there was a public demonstration of the technology in Switzerland, and I was there, and I saw it work. And I used my phone to, you know, with the app, to buy a t-shirt. As you can see the back end working on the big monitors and stuff. There's about 150 people that came there to see it. And it's kind of funny, because it was just 150 metres from where Credit Suisse headquarters was (the giant bank that's now dead. I guess now, part of Union Bank, actually, later).

## David Chaum 12:33

And so, as you may remember, the reason that I've been working on CBDC, which a lot of people hate CBDC, because they're worried about the privacy aspects. So my work on the eCash 2.0 still proves now that a CBDC can have very high performance and offer privacy. And moreover, the security now, in the latest version, uses a kind of signature that actually, I'm credited with inventing some 20-30 years ago, which were called Fail-Stop Signatures and by using these, we're able to get a security level against counterfeiting of the CBDC that is unconditional, it's secure against even a counterfeiter with unlimited computing power. So it's more secure than even a quantum-safe or anything like that. It's it's provably secure against unlimited computing power. So that's super great.

## David Chaum 14:15

At that demonstration, you could download the software for your phone (iPhone and Android) and then use that to actually pay with the eCash 2.0 - it had a little kiosk that looks like a little cart, market cart that was inside the building, but it looked like a little cart. There was a little cart and you paid there and you could buy a t-shirt so I bought a t-shirt - of Tourbillon (that's the name of the project) - a t-shirt. And if you look to your right, there was a large monitor, I guess, projected screen or something, and you could see all the inner workings of the back-end and everything. And so it was a really great demo.

## David Chaum 15:16

It worked perfectly all, you know, for hours there at 150 people came and tried it. So yeah, that was really great. So let me just say a little bit to wrap up about the case report. Also, the demonstration used cMixx on XX Network. But the real good way to do eCash2 2.0 uses cMixx+, and that greatly improves the privacy. And so that is really the way it should be done in a real system.

**Jim Dolbear** 16:01 David, can I make a quick comment?

## David Chaum 16:05

Oh, sure, Jim, shoot.

#### Jim Dolbear 16:06

Yeah just a quick... to put things in context. You know, CBDC is - the first word is - 'Central'. And we at the XX Network, and we in the decentralised community, we can't stop central banks from having digital currencies. So, you know, David, going back decades, has dedicated himself to making sure that there's privacy in all forms of payments - to do his best to try and, you know, make that happen. So in some sense you can see that in eCash 2.0. It's David trying to make sure that there's privacy. But the other thing we can do from the interest of the XX network is we can offer these centralised projects, privacy. They can't do it themselves because the whole point is that they centrally control all the information. And so they violate, you know, by definition, they can't provide privacy. So what David is describing are projects in which cMixx+ can provide a decentralised way of handling codes. And it's basically us as a vendor, giving them privacy, if you will.

## David Chaum 17:29

Okay, so 10 days ago, I was invited by the Singapore FinTech Festival, (which is about 80-100,000 attendees), to give a keynote speech, about something new, which I've been working on. And I did that - that was the first public information about what I'm calling "Better than Money".

## David Chaum 18:13

And yeah, I'll tell you a little bit about it. So, "Better than Money" is a way to pay people that does not use money. It doesn't use a digital currency. It actually allows each person in the system to choose their own portfolio of digital assets and asset types, and the ratios between them how they are divided to make up the full portfolio and then to transfer from one portfolio to another. So I could pay you by transferring from my asset portfolio that I chose directly into your asset portfolio that you chose, without going through any currency.

## David Chaum 19:31

Without going through money. So that's why it's called "Better than Money". And so let's just go quickly over some of the important advantages of this approach. One of them is that especially poor people and all kinds of people are not forced to hold government money in order to buy food and to participate in the enconomy.

## David Chaum 20:01

So with "Better than Money", you don't have to hold money - you can keep all of your value invested all of the time. So in XX Coins and in gold and whatever you choose. And that will really help poor people, because, of course, it gives them a chance to accumulate wealth and feel like they're part of the growing prosperity. And that will make them, you know, happy and like the current system, and it will decrease the income disparity, and it will improve the global economy, generally, because more people able to participate is a good thing. More people investing, you know, less friction to the global economy today. It's an amazing fact that there is a global tax on the global economy of 2% or so - it's \$2 trillion of fees are paid for payments each year, out of a global economy of about \$100 trillion each year. So that's a 2% tax on the global economy. And it's mostly paid by the poor. Because the rich people are paid to make payments because they use AmEx, you know, or for larger value payments. you know, they're paying a few basis points, but poor people are paying 4-7% to make payments.

## David Chaum 22:03

So that's a huge advantage. Another advantage is that, you know, the global economy may very well melt down because of a liquidity crisis, any day now, or soon, because it's not able to protect itself against social media spreading rumours, and creating runs on banks, or certain equities, or stocks, or what have you. And we've seen some very dramatic examples of that relatively recently. And so we are all in danger of another giant economic collapse, but with "Better than Money" it's all 100% asset backed. So there's no danger of that.

## David Chaum 23:00

So this - what's called global systemic risk - would be completely avoided by "Better than Money", so that's a strong advantage. And "Better than Money" has privacy, and all the surveys and information from all the central banks around the world is that people don't want to use CBDC, unless it has privacy. And they're very concerned about that. And so, privacy in payments, we know is important to have. In "Better than Money", it has the same kind of privacy as the original eCash. And so, you know, it uses cMixx+, because actually "Better than Money" is built out of eCash 2.0.

#### David Chaum 23:58

In "Better than Money", each asset type is issued as a digital token using its own separate eCash 2.0 system. So that's great for XX and cMixx+, and there are other advantages as well of "Better than Money". For instance, when you have an investment portfolio and you want to change it a little bit

because you've got some new information, you have to usually pay fees and suffer slippage to do that. However, with eCash 2.0 - I'm sorry - with "Better than Money", you can include a sort of morphing or changing of your portfolio in to the payments that you make and receive. And so the fees for.... there are no fees for changing your portfolio, you get to change your portfolio for free, because the fees are included in the fees that you had to pay for to make the transfers. So that's another feature of "Better than Money".

## David Chaum 25:37

And I think there's a tremendous interest in "Better than Money", because it's already been on a handful of podcasts and it's going to be on a few more in the coming days. And I think it's, it's a huge thing, because, you know, it could help reduce income differences globally, which is a huge problem. And it helps markets and it avoids global meltdown. And it's, you know, just better for also any kind of payment that's in the future. So, credit, supply chain, you know, any kind of future payments, like annuities or, you know, ongoing payments, they're all much more fairly and therefore more attractively defined in terms of a mutual portfolio of currencies, for that series of payments.

## David Chaum 27:06

This is like what the World Bank uses for loans, so called Special Drawing Rights, a basket of currencies. So... when you plan a future payment, if it's defined in a single currency, that's very risky and so people are reluctant to do it. But when you do a future payment that's defined in a portfolio of asset types, then it's much easier for both parties to the transaction to have confidence in approximately what the value of that portfolio will be at those future dates. And so they're much more willing to do the transaction and it's much safer. And so that will also benefit the global economy because, you know, credit and things like that really help stimulate the economy.

#### David Chaum 28:07

So yeah, "Better than Money" is really interesting thing, and it's built out of eCash 2.0, and therefore, it's cMixx+. So it's really good for the XX Network.

## Jim Dolbear 28:26

This is Jim. The only thing I just wanted to, to point out - what David has been talking about, are new innovations in which the XX Network acts almost like an Oracle for centralised projects, sort of. And, you know, that's a new thing. And cMixx+, running on the XX Network is a new thing. There's a lot of work being done on sort of the level one communications and transaction platform that XX Network is.

## Jim Dolbear 29:04

And we can share that, because we're running out of time, we can share that in writing and we're going to do other AMAs, but I just wanted everyone to know that there's a series of partnerships that are happening around the XX Network and cMixx of course, cMixx itself and we're doing a lot of work on the xxDK to make sure that there are libraries available for all of the different smartphone, and web based app languages and platforms. And there's also a briefing about restarting Haven, but we can deal with that in the next AMA.

## Çevirimatik 29:56

All right, many thanks, Jim. We can begin with the questions now.

## Çevirimatik 30:02

So, David, and Jim have been sharing magnificent developments since we started the AMA session. We are learning a lot of them right now. But let's say another project who have only 5% of these successful developments, and they could be running 100 stories about it. However, when it comes to XX, they're not being really shared, and why is that? Are you guys waiting to share such developments in succession? For example, other project founders could share a picture they took with David's as a news however, we do not see any communication in this context from XX and the XX's weak social media presence has been making the community a little bit sad.

## Çevirimatik 31:02

Do you guys have any plans to, let's say, make a deal to professionalise your marketing, social media management and oral communication stuff? If not, the Turkish community would like to state that they want it. They want more communications in all senses. That was the question.

## Jim Dolbear 31:32

This is Jim. Maybe I could try and answer and then Aaron could probably add a few words. There's a couple of things going on. The first is that we really did focus heavily on some internal decentralisation issues that had to do with reducing the amount of software and services we had from 30 different providers to eight or nine, shutting down database and server stuff that we weren't using. And it took a lot of time and energy. And that's one thing.

## Jim Dolbear 32:18

And then the other thing is that we looked very much at what the impact of the social media that we'd been doing in early 2023. And there weren't the levels of engagement. And it didn't seem like people valued it. Because it wasn't our theory, or our thinking was that we weren't really communicating substantive developments about really driving traffic to the XX Network. So we decided to basically take a month or two and start collecting the real work we were doing so we could communicate that. So we're about to start again, like this week. And so you should see multiple posts every week from from here on in. But there's no doubt that we we took time off from doing social media. So yeah, so Aaron, do you want to add anything? To provide some context?

#### Aaron Welwood 33:24

Yeah, I mean, I think that it's pretty clear. I mean, there's no getting around it, we we really did have to step back after Haven was paused. And the Foundation had to take on a lot more responsibilities of managing the Network. And we had to make a lot of changes to how we did that, in terms of running it efficiently so that we could do it longer term, because the reality is, is we did lose some people that were important for that. And so in order to operate efficiently ongoing, we had to basically restructure how he did things.

## Aaron Welwood 34:12

You know, that's not always pretty. And we were, we were basically juggling multiple things. And so we made the strategic decision knowing that, yes, it would, potentially, you know, make some people upset in terms of how much we were posting on social media, you know, how many, for example, Twitter spaces, were we engaging in? We did make the strategic decision to back off on those things and really just focus on what mattered in order to make us successful long term, not just how do you say - the word is slipping my tongue - but basically, placating people in the short term so that, you know, people weren't mad at us or whatever, I don't really know how to say it.

#### Aaron Welwood 35:11

But basically, we needed to focus on the things that mattered most so that we could be successful long term. And that ultimately meant some pain in the short term. And we can understand how people were upset with that. And that's why the questions like this get asked. But, we think it was the right decision. We know it was the right decision.

## Aaron Welwood 35:34

And as Jim just said, we will, continue to post from now on, because we actually have substance that we've organised and it's coming out now. And, you know, people have seen some of the changes so far. And that will continue to happen, ongoing. So it's basically, yes, we understand that there were some major challenges the last like three months, but, we've stabilised, we're moving forward, and we do have a lot of exciting things that are coming out already, which we can discuss more, and in future AMAs here in the next coming weeks. I'm sure we'll explain more about things like Echoexx, what's happening with that? What's happening with our xxDK, which I can touch on later if we have time. If not, I know we can touch on it in the next AMA.

## Aaron Welwood 36:32

Yeah, there's a lot of things that will be coming out soon, as Jim said. So I hope that makes sense. We don't like doing fluff. And that's basically what Jim was saying is we don't like doing fluff pieces anymore. And what you hear a lot in, let's say, the Twitter spaces arena these days is people talking in circles, about random things that really amount to nothing. And we don't want to do that. And we don't want to just placate people for the sake of it, we want to focus on things that matter and things that will drive value and growth of our network. So we need to be really efficient in how we operate with our time. I hope that makes sense.

## Çevirimatik 37:22

All right. The first written question is from SS. And we will like to add that they will be very grateful if they could be answered directly by those who were being asked.

## Çevirimatik 37:37

Alright, so SS's question is that: You are known as the Father of Crypto throughout the world. As such, shouldn't cryptocurrency exchanges compete with each other to list your projects? For example, will we see the XX project on Binance any time soon? If your answer is yes, do you have a prediction for when that will happen? So this is directly asked to David, I suppose.

#### Jim Dolbear 38:10

David's not responsible for getting the XX Coin on exchanges. <David talks over Jim> That said, there has been some discussion with Binance and there are some relationships there. So the exchange strategy, I'll answer and Aaron can add, is to do a wrapped version and DEX first, and then a centralised exchange. After that..... the experience at CoinW was not particularly positive, meaning we listed on that exchange, it took a lot of time and energy, we thought and with some, significant community input that it was a real vibrant exchange and we got nothing out of it. And so what we learned from that is that making an exchange listing successful is not that simple.

#### Jim Dolbear 39:25

That we have to basically have real momentum on real projects and in social media going into an exchange listing. And we've also grappled throughout our discussions with exchanges about the whole wrapped coin versus native coin problem. So many of the exchange listings for other coins - those other coins are ERC 20s. With us for the first you know period since mainnet, we wanted to list the XX Coin natively, so that the tokenomics of staking and to secure the network happened in the native coin.

## Jim Dolbear 40:10

And now it's been a while, so we're more comfortable with the idea of the coin being traded in a wrapped version. So that's a big deal. Had we had a wrapped coin a year and a half ago or whatever it was, I guess a year ago (I lose track of time), we would have been able to more easily list on exchanges, but it would have undermined the security of the network. So we're about to enter into a new stage as far as being able to list the coin, because of the wrapping. Aaron, do you want to add anything?

## Aaron Welwood 40:49

No, I mean, I think you've covered it. Ultimately, we want to go the decentralised route. There's been so many challenges with the centralised stuff. That being said, once we go into this EVM space, like doing a bridge, wrapping the coin, it does give us a lot more options in terms of getting on to centralised exchanges in a more simple way. Historically, listing our native coin has been well, first of all, frankly, it's it's very expensive for the Foundation to do.

## Aaron Welwood 41:31

And we'd rather not go that route if we don't have to. That being said, we understand people want to go on, the quote unquote, top exchanges. Binance. Please understand, and I've said this many, many times in Telegram or in Discord, or in public talks in the past. Going on these exchanges isn't as easy as people seem to think it is. At least if you want to do it in such a way that... how do you say is, is ethical? I'll leave it at that. I think... <distorted> became quite jaded with the crypto space. Not to say that the top exchanges are unethical, but it's just a lot of the practices in the ways that you get onto these exchanges can be a bit opaque.

#### Aaron Welwood 42:30

I don't know if that trend will translate well. But I hope you can understand what I'm saying. It's not as easy as people think. A lot of people just be like, literally say you know "When Binance" or "When Whatever, KuCoin", all of these things. We we have talked to many of these top exchanges over the last couple of years. And we decided not to list there. I understand that people will be upset about that in some cases. But I suppose that we will continue to say please trust us. If you if you're upset about that I understand. But we're going to manage this project the way that we think is going to position us for long term success. And we're not going to do things that would, you know, potentially sell out our project, for the sake of short term gains. It's just not going to happen. So we just asked it that everybody would continue to trust us for long term success in that regard.

## Çevirimatik 43:36

All right, the second question's from Hakam. You have accomplished so much in the crypto coin sector. We, the XX community, appreciate the technical aspect of the project, but it falls short horribly in terms of recognition and price. Why do you think the project is unacknowledged by the larger crypto community?

## Jim Dolbear 44:01

I'll take a swing. One, it's not easy to understand exactly why. It's tricky. But, putting that aside, we never got the validation of the big centralised VCs like Andreessen Horowitz and we did that on purpose because we were trying to steer clear of US regulations, and we're trying to be decentralised. You know, in a weird kind of way - our dedication to decentralisation - it really hurt us as far as the getting momentum from the centralised financial powerhouses in the United States. So there's definitely an issue there. The other thing is that we have not - I don't know this goes to kind of what Aaron was talking about - we haven't really lied, like everyone else does about all the things they're doing.

## Jim Dolbear 45:12

If you go and look at projects that claim that they have hundreds of developers on applications, and you actually look at the applications, you'll see that they don't really have any users, they're not really.... So, we've not done that. And as a result, you know, we never got that really big run up that some of the other projects did. On the other hand, we're not EOS either, you know, EOS raised, as you may remember, \$4 billion, and then turned out to be pretty much nothing.

## Jim Dolbear 45:51

So we're growing based on real substance, the old fashioned way. We also have... it's taken us a long time to complete technology development, because what we're doing is fundamentally different. So for example, we have, like we talked about, you know, we have the native coin, not a wrapped coin on Ethereum. You know, that's a small example, we have an entirely new way of processing communication based on cMixx that required hundreds of thousands of lines of code. No one else has that.

## Jim Dolbear 46:30

You know, we did our own design for consensus. So that's meant that we spent a lot of time doing technology development, and not being out in the world, kind of marketing ourselves. But it's sort of who we are. And I think you can see, you'll see now, as the development is completed, that we start to market back - everything comes together for us - we'll start to get credit for the real substance we have, and we should really benefit from that. Aaron, you want to like, share any insights?

## Aaron Welwood 47:09

Yeah I just want to piggyback off of the last thing you said where, you know, really, historically, the XX Network, (and I found this to be true when I joined the network and was a community member), is it's always been very different compared to most, if not all, (I'll say most, there's always an exception to the rule.) But, compared to other cryptocurrency projects, we're very technology development based. And maybe that's because it was founded by a lot of, you know, actual academics and engineers in the space that are legitimately brilliant people in the space and were trying to really make a difference with the technology.

#### Aaron Welwood 47:59

Because there's a lot of holes in the industry that really have not been sufficiently addressed. XX does that. Now, the flip side to that is it was never really focused on the hype of crypto, which traditionally has been, you know, the focus of crypto is "When moon?", "When Binance", all these silly things that,

yes, there's a lot of people that make short term gains in the market, and quick money and all that. But I don't think that, no, I know XX has never been about that, ever.

## Aaron Welwood 48:39

Again, when I joined as a community member years ago, in the Betanet, that's one of the things that I actually was drawn to the XX network, because it was building something real. And building something real is difficult. It's not something that you can just spin up and become successful right away. It's a bit of a grind as any true startup is when you're trying to do something properly and do something that's real. And you know, anybody can (as you can see in the crypto market) spin up a hype project, tell everybody what they want to hear, and then become vaporware a couple years down the road.

## Aaron Welwood 49:37

So we've done things maybe a little bit unorthodox or some would some have even said like you're doing this backwards. We did not choose to hype the project immediately and run up or attempt to run up coin prices or something. We focus on the development, focus on the technology The infrastructure of the network has been built out. It's running, it runs very well, it runs efficient. And with the things that guys like, obviously, David are doing cMixx+, guys like Mario, Bernie, Baltasar, Rick, these guys are legitimate, brilliant people in this space, and we're going to see the network value grow. I'm not going to talk about coin price, because we don't do that, obviously.

## Aaron Welwood 50:28

But you're only going to see the value of the network grow over time. And, again, I ask you to be patient, because if you want something real, we have it. It's taking time to get the products in your hands. But as Jim said, there's a lot of projects with a lot of "amazing products" that nobody uses. I'm not going to name names, but you can go around to the top projects and just ask yourself, how many products are you using? On the other crypto projects on a daily basis? For anything other than trading a coin back and forth with somebody else? Just ask yourself that question. We don't want to be those guys. We want to build real things. So I'd say that's my, tag-on answer to Jim's response.

## Çevirimatik 51:33

So, Yücel said: "Does scrapping almost every project and starting from scratch, again, not bother you? Will it not be better if you focused on completing projects, and gaining a wider user base?"

## Jim Dolbear 51:46

I'm not sure that I understand the question. Can you repeat it? You're saying why don't we finish? Is the question we're not finishing things, and why don't we finish things? Is that right?

## Çevirimatik 52:07

I think that's it.

## Jim Dolbear 52:09

Okay. Yeah, let me answer. We are finishing things. It's just the order that we finished them changed. What happened was we started having, for example, what happened was in the business development process, we had real interest from other projects to use the XX Network, to use cMixx, but we didn't have the proper libraries for, for the projects to do it easily.

## Jim Dolbear 52:41

And so what happened is the partnerships stalled. Because they realised they would have to use our proprietary stuff and the languages that we developed in, right. So we really suffered in March, April, May, from the fact that the xxDK wasn't completed in the set of libraries that we needed to make it easy to execute on partnerships. And so when we went to do the round of funding for Haven, two things happened. One, you know, that stalled? And there's a story about that. And we will, I think, we definitely will restart Haven, but it gave us the opportunity to finish the xxDK. Because, you know, the, in some sense from the first reason...

## Çevirimatik 53:39

I'm sorry for interrupting, Jim, but could you go back, right after you said, we were busy in March to May, and then we got into the Haven funding process. I lost the track there, so I apologise. But I think it is important to have it clear.

## Jim Dolbear 54:00

Yeah, no problem. So let me just say in December at the council meeting, we said we would focus on partnerships. And we did that. And then what happened was, we learned that it had to be very, very easy for potential partners, who had different client software to easily access the XX Network. We couldn't just tell them: "Listen, you know, just program in our code like we did for XX Messenger and Speakeasy." They said: "Look, we want you to basically make libraries available in the code that we're using, the languages we're using, and the platforms we're using." And so, we always knew it, but we really learned kind of the hard way that we needed to complete the xxDK and the XX Messenger to Speakeasy to Haven development path was really for two reasons. The first was to going back to the Alpha launch of the XX Messenger, which predated Betanet - people may remember, we had five nodes that we controlled centrally.

#### Jim Dolbear 55:26

We used the XX Messenger to design and develop the network and to understand networking globally, and to get the latency down to two seconds. We couldn't have done that without the XX Messenger. And we learned some things about the cryptography around sharing of keys or codes, in establishing, a communications channel between users and the XX Messenger. And we made some changes to the cryptography for Speakeasy. And then we also had, a whole list of features and functionality - multidevice support, notifications, DM, there's about 10 significant features that were developed, as we moved from the Messenger to kind of a more of social networking application, which Haven is meant to be. All of that went into the xxDK, all the learnings we had to make the network usable and feature rich.

## Jim Dolbear 56:33

So when, when we took the pause with Haven, it was a real opportunity for us to complete the xxDK and focus on completing some decentralisation. So we paused on Haven. And... the launch is on hold, but we will get back to that. But that's sort-of the bad news. The good news is, we were able to focus resources on the xxDK and on some decentralisation and infrastructure issues for the Foundation.

## Jim Dolbear 57:08

So we sort of feel like we actually have completed two key things, a bunch of decentralisation work. And we're now focused on the xxDK, and we're really excited about getting back on Haven, so we can complete that. And then we also have new web apps like Echoexx, which are coming. So yeah, that's how I'd answer that question.

## Çevirimatik 57:36

So the fourth question comes from Hakam. I think this aimed at David. How will your relationship with the XX Network officially and unofficially be from now on? What will it look like?

## David Chaum 57:56

It might I mean, again, this was a.... the answer is sort of built into the question here, but it's the wrong answer. I mean, my relationship is, you know, is just ongoing. I'm in touch with all the same like technical people that have been leading, that I've been leading in the project. And so I don't view there having been a big change.

## David Chaum 58:25

However, I do think there's going to be a big improvement in the amount of exciting work that the network is going to be... the team is going to be doing, that's going to be a lot more high profile, related to "Better than Money" and... the global coin privacy in the in the biometrics and eCash 2.0 - I mean these are all big, high profile things. And I expect that it'll breathe a lot more life into the public awareness of what we're doing, and hopefully bring more resources so we can bring more people into our development efforts. Yeah, that's what I can say. I guess, echoing what other people said - it takes a lot of work to create these things. You can't just - I mean, no one else has created anything like "Better than Money." No one even conceived it in the last couple hundred years of economic theory. It's really quite a profound thing. And some people are shocked by it. And I think it's going to turn a lot of heads and that really raise the profile of our efforts.

## David Chaum 1:00:15

You know, yeah, it's always hard - and I just want to echo what other people said - you know, it's a hard thing to have to reflect negatively on a large part of our community of the, you know, general blockchain space and the kind of norms of operation there. And I guess what wasn't mentioned is what comes along with that is, of course, that, nobody likes the smartest kid in the room, right. In school. You know... Anyways, that's, enough said on that. So I hope I answer your question, yeah. I'm looking forward to strengthening the relationship. It hasn't really changed, but I think it will be changing.

#### Çevirimatik 1:01:14

Thank you. David. Hakam has a follow up question. Right after the one you just answered. So I think I should...

## David Chaum 1:01:24

Ask me that real quick, because I've got about two minutes....

#### Çevirimatik 1:01:33

Hakam says "I think you have not been mentioning the XX Network for quite some time now. Is there a particular reason behind this?" I think those two questions are interrelated. So it could be very easy to answer.

#### David Chaum 1:01:47

Yeah, well, no problem. I mean, like I said, you know, when it rains, it pours. I've been working heads down to get a lot of stuff done. And now all these three projects I mentioned, are coming out of stealth. And so it each one of them, there is the cMixx+ and actually, in all of them, there's also regular cMixx

needed as well which I didn't mention. So I think that, yeah, things should really be changing significantly.

## David Chaum 1:02:40

And yeah, I hope we can count on the, continued support of the Turkish community. I just, I have like two minutes here. And I just want to say, I really do love the Turkish community and appreciate you guys enormously and it was wonderful to meet you. And when I was there, and I'm really looking forward to coming back soon. And yeah, so yeah, I'm really glad we're sticking together to try to make this happen, because the world really needs this.

## David Chaum 1:03:15

And of course, what we're doing is very much crucial for turning a lot of big social problems globally around and also helping people in emerging economies, emerge. So that's, pretty much it for me right now, over and out. I will try to tune back in as soon as I have to chair this other meeting briefly. And when I'm done, I will come back and I hope we're still here. Thank you.

## Çevirimatik 1:03:52

Thank you, David, for being with us here today. The next question comes from Crypto Schofield. "Since you have a patent for the mix network, will you allow the establishment of a mix network other than the XX Network? For example, will Tourbillon use the XX Network only for testing purposes then move on to create its own new mixing network?"

## Jim Dolbear 1:04:20

Maybe I could answer that question. So, the intellectual property strategy and the way that we handled it was - for a private commercialised - commercial centralised - entity to use any of the cMixx technology, they need to get a licence. So we have control of that. Now 'we' in this case is the holding company, the original holding company. We did it that way, because we wanted to make sure that there was never another network, like the XX Network, meaning a decentralised network, that was somehow owned and controlled by a commercial or centralised entity. And we wanted to be able to defend against that.

## Jim Dolbear 1:05:20

Now in terms of what might happen with Tourbillon, and for that matter... Tourbillon of course, it's a BIS (Bank of International International Settlements) project, which is the big association of central banks around the world, but it's tied into the Swiss National Bank in particular. And the Swiss National Bank is, in some sense, kind of the original, I don't know, Bitcoin or something. It was, you know, during World War Two, the Switzerland and the Swiss, you know, Central Bank remained non aligned, they didn't choose sides in the war, they've always been kind of a mountain country that is independent.

## Jim Dolbear 1:06:10

So, I think what they're trying to do is, make sure that they don't get put out of business, say, by Bitcoin, if you can follow that. If they, and - when, and I at this point, I think when - they do a CBDC implementation, in order to handle privacy, they're gonna have to do some sort of cMixx implementation, and then a cMixx+ addition. And they can't do the cMixx, implementation, they can either use the XX Network, or do some sort of like, slightly like a strange, centralised implementation, maybe with the Italian, the German and the French piece of Switzerland, each running a server - it'd be

something like a handful of servers. So it wouldn't really be a true, you know, cMixx decentralised implementation.

## Jim Dolbear 1:07:12

That hasn't been discussed in any kind of specific detail at all. They just know that they can't do anything without either using the XX Network, or getting a licence. We don't look at a centralised implementation of cMixx like that as, any kind of real substitute for the XX Network. And the cMixx+ stuff needs to be used for them to provide true privacy. So that's why we've been talking about it so much, because it's a way to drive traffic to the XX Network. Anyway, does that answer the question?

## Çevirimatik 1:07:56

I think so. But I would like to re-ask as someone strange to the crypto community and all these projects as well. So, you mean that if CBDC is one to implement cMixx or cMixx+ as a privacy measure, they have to go through XX Network and they will not be able to utilise their own networks that builds upon what XX Foundation has built so far. Because you guys are the intellectual property holders, right? Did I get it correct?

## Jim Dolbear 1:08:29

Correct. Yes. But if they if they say that they want to do a centralised implementation, which is kind of bizarre, right? I mean, why have three servers that are controlled by the Swiss government? Might as well just have one - then you have no privacy? Right. So I think there's a real issue there for them. But yeah, they can't do anything without either using the XX Network or getting a licence. And they can't - if anyone gets a licence, they can't do anything that looks like XX Network, a real decentralised network.

## Çevirimatik 1:09:07

Alright, so they can implement it in a central network, but they cannot use it for something similar to XX at all right?

## Jim Dolbear 1:09:17

Yeah. But they can't do a centralised implementation unless we let them. So that's... yeah.

## Çevirimatik 1:09:27

Now moving on to another question. SS is asking: "Why are there no partnerships with popular X accounts? The investors are really tired and the market volume is really low to the point where \$1,000 buying could mean that a 20% movement happens in the XX market. I believe the XX project does not deserve such volatility. What are your comments on this matter?

## Jim Dolbear 1:09:54

Yeah, I can answer that and Aaron and chime in too. I think we should probably... maybe this is the last question. I realise there's other things to talk about. But we've been going for like two hours.

## Çevirimatik 1:10:09

Sure. But maybe like, maybe I could ask. Another question we have here that we picked, and then we could wrap up and call it a day. Another question comes from Smiley Face. Maybe I could ask this and then you guys could prepare an answer to save time? Or should we just proceed with this question? Which one would you prefer?

Jim Dolbear 1:10:35

Go ahead and ask the second one.

## Çevirimatik 1:10:37

All right, Smiley Face says "States, first and foremost, the United States of America, do not want to lose control of money and would like to impose surveillance in most circumstances. As such, could the XX project have a clash with the authorities? And if so, are there any precautions you are taking?"

## Çevirimatik 1:10:55

I think you guys answered this in a way before, whoever I think it might deserve an answer on its own. I leave it up to you due to time constraints, but let's get back to the question SS asked: "Why are there no partnerships with popular X accounts?"

Jim Dolbear 1:11:14

When we when he says partnerships, does he mean partnerships with exchanges?

## Çevirimatik 1:11:20

No. He means X accounts. I mean, all Twitter. So it's about community engagement. Why are you guys not partnering with popular Twitter accounts?

**Jim Dolbear** 1:11:36 Partnering with other Twitter accounts?

**Çevirimatik** 1:11:41 Community partnerships and whatnot.

**Jim Dolbear** 1:11:43 You mean influencers? Or you mean, cross tweeting with partners, like wallet providers and such?

**Çevirimatik** 1:11:56 I think he's meaning influencers on this occasion. So he's not talking about let's say...

**Jim Dolbear** 1:12:06 We did, we spent... Yeah, I don't know. Aaron, you want to? I mean?

Aaron Welwood 1:12:12 Well, I think...

**Jim Dolbear** 1:12:14 We did do that.

#### Aaron Welwood 1:12:16

If you want to talk timeframes I already answered the question in the sense that the last three months? Absolutely. We did not engage with really anybody in general on something like Twitter, and I gave the reason why. Maybe he wasn't there for that. But if, if he's speaking of, why aren't we engaging with? I don't know, let's say for instance... Vitalik Buterin? Or is that the question like, why aren't we meeting

with Vitalik? Aren't we meeting with maybe Turkish influencers like, Efe Bulduk, or the other large influencers?

## Aaron Welwood 1:13:01

If that's the question, I will say, we intend to. We actually, were going to have a meet up with Efe, when David was going to come to Turkey. Now, unfortunately, that didn't work out. But absolutely, our intention is to do that ongoing - the last, again, the last three months, we really haven't done much at all, which we admit. And that was, that was on purpose.

## Jim Dolbear 1:13:32

I would add that we, in the beginning of this year, we partnered with two influencers, and we started doing, you know a podcast called Privacy Matters. And it was good, but partly what happened - it's a down market - so we didn't pick up that many followers. And the content itself was, kind of general discussion about decentralisation and privacy and democracy. And no one got too excited about that. So it didn't really work that well in terms of picking up lots of followers.

## Jim Dolbear 1:14:13

That said, we have two and a half times as many followers on Twitter than we did a year ago. So we've picked up a lot of followers, and they're real. So we do have significant social media followers now, in particular on Twitter. But again, as we get into the substance, that's coming out, I think what we'll do is we'll be able to talk about things that are real, and from an implementation standpoint, and then it'll make more sense to partner like that and we'll get better results.

## Aaron Welwood 1:14:56

That's it. You just nailed it on that last part, where... You know, you can't just talk just to talk, right. You have to actually have development and you pair that with social media where there's actual substance to your content. And then you can cross post to people that you're partnering with to talk about the developments that you're doing either together or something that could help another project, and you're reaching out to them and making that public.

#### Aaron Welwood 1:15:25

For instance, with Algorand. In the past, their their head of technology, their CTO, for instance, threw out a message saying that he'd love to work with us in the future, or that "it was inevitable", I think, was the words that he used. So I mean, those types of statements are a little bit hypey, but it's true, but we need to have the technology development to back up what we're saying otherwise, we're spitting into the wind? Or you're just talking just to talk. Really, we need development and then we need the marketing to go with it, which I think is what people are looking for. So does that make sense?

#### Çevirimatik 1:16:13

Yeah, sure. And I think it is more than sufficient for what he has asked.

#### Jim Dolbear 1:16:25

Should I answer the other question, too?

#### Jim Dolbear 1:16:28

It's a really important question. And it is true that the US government, particularly after 9/11, used all of its soft power to really try and control the reporting, of international money movement. And the US

government will go to great lengths to make sure there's compliance. So, there's a couple of issues, technically - and maybe I'll just use Binance as a quick example. I mean, Binance didn't get a money services licence, and then they failed to do KYC properly, and they're a centralised entity. So those three things - they broke two laws, and they were a centralised entity.

## Jim Dolbear 1:17:30

So we are a decentralised entity. And so we do have a little bit of a buffer against the United States as far as regulatory action, but we don't really have any real interest in radical positions on providing any kind of service or platform where we're gonna get the entire US government coming after us.

## Jim Dolbear 1:18:02

So the way around that is (and this is already been adopted in the international payment system)... one way to do it is to only let payments under a certain amount \$2,500 or \$1,500 - which is the way it is now done internationally to abide by that best practice. And then there's some other things we could possibly do, which are a little bit more radical, like having a council meeting and discussing the notion that nodes could release information to governments if they wanted to.

## Jim Dolbear 1:18:52

That's a tricky thing to implement and it's, it's not clear if we could do it - if there would be a consensus. But we want to be very careful, none of us have any interest in harming the XX Network by exposing the network to legal and regulatory threat. I think you can see by how careful we've been, how we're approaching the issues, how careful we've been to date.

## Jim Dolbear 1:19:22

We only have one US investor, which is Chris Larsen, that we know of, and we did that to avoid, getting getting the US government after us. So we will have the same orientation towards that as we start the payment system.

#### Çevirimatik 1:19:40

So, thank you guys for being here with us for more than two hours. We are thankful as the Turkish community for having you ... and we are looking really forward to doing new AMAs and other conversations. We are really grateful for your presence here.

#### Jim Dolbear 1:20:02

No, we very much appreciate your taking the time. We're sorry that we didn't get to Istanbul in person this time around. And thanks to thanks everybody for listening and for the questions and thank you and to Bitfire for translating. I know it's... it's a lot of work to translate in real time - translation like that is a lot of work. Thank you for doing that.

Aaron Welwood 1:20:24 Absolutely.

**Robbie Schubert** 1:20:30 Thank you so much, guys.

Jim Dolbear 1:20:32 Thanks.