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FUTURE SIGHT PODCAST

Ep. 37: Defi: Beyond The Crypto Crash



Future Sight Podcast by Capgemini Invent

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Episode Transcript

Kary Bheemaiah: This is Future Sight, a show from Capgemini Invent where we explore emerging technology trends and new ways for you to adapt and grow your future business.

I'm Kary Bheemaiah, Chief Technology and Innovation of Capgemini Invent and the co-host of Future Sight.

In this week's episode, I'm speaking to <u>Haseeb Qureshi</u>, Managing Partner at <u>Dragonfly Capital</u> about the current state of decentralized finance or DeFi and the blockchain industry.

Recent developments in the DeFi space have caused many to question where DeFi is headed and what this means for the future of blockchain¹ and Web 3.0². Haseeb and DragonFly are industry leaders in the Web 3.0 capital investment space and Haseeb recently published a fantastic in-depth article explaining the recent Luna collapse and what it means for DeFi in general.

So with that introduction, Haseeb, you're very welcome to the show.

Haseeb Qureshi: Thanks for having me.

Kary: I'm so happy that you've been able to make it and you've got to help us, man. You've got to help us right now in...

Haseeb: Don't know how much I can help, but yeah, I'm happy to walk you through what's going on right now.

Kary: No, no, no. That's really what we want. We want to have like your no holds barred insights about what's going on over here. And in order to do that, I thought maybe we can start with just a bit of an introduction because you've had a pretty atypical career. All the way from, you know, being a no limit heads up Texas Holden player, you're one of the top 10, you published a book about it and then went on to work at Airbnb and then jumped onto the crypto bandwagon in 2017.

So how's all this actually happened and how did it lead to what you're doing in Dragonfly today?

Haseeb: No, it's a good question. How all this happened? So, I come from a somewhat weird background, used to be a professional poker player. I actually never studied anything technical. I studied English and Philosophy at the university of Texas. Ended up becoming a software engineer, worked at Airbnb, moved out to the Silicon Valley and I ended up catching the crypto bug in 2017.

At that time, crypto was, you know... I'd known about Bitcoin for a very long time, but I didn't really get it until actually it was when Trump first got elected that I first bought a bunch of Bitcoin. Because I wasn't as financially literate then as I am today.

And so I didn't really know how to bet on the world exploding. Other than buy buying Bitcoin. That was the, that was the best thing I could think of. And it was that, that kind of gradually brought me down the rabbit hole, but it was really Ethereum and the growth of Ethereum and the idea of decentralized trustless computation that really brought me over the line and convinced me that crypto was going to change the world.

And so I left Airbnb and started working on crypto full time. I worked for a little while at a company called 21, which got acquired by Coinbase. Then I started my own startup working on a stable coin. And then eventually I found my way into the investing side. Previously I was at a fund called Metastable Capital.

Now I'm at Dragonfly, one of the two managing partners of the firm. We manage, you know, a couple billion in assets and we're one of the leading crypto funds in the space. So I mostly spend my time looking at early stage investments in crypto, finding entrepreneurs are working on big problems and helping to support them and providing them with capital and other resources to help them succeed.

¹ "A distributed digital ledger that stores data of any kind. A blockchain can record information about cryptocurrency transactions, NFT ownership or DeFi smart contracts. While any conventional database can store this sort of information, blockchain is unique in that it's totally decentralized." (Forbes Advisor)

² "Web 3.0 is the upcoming third generation of the internet where websites and apps will be able to process information in a smart humanlike way through technologies like machine learning (ML), Big Data, decentralized ledger technology (DLT), etc. Web 3.0 was originally called the Semantic Web by World Wide Web inventor Tim Berners-Lee, and was aimed at being a more autonomous, intelligent, and open internet." (Coin Market Cap)



Kary: Okay. Yeah. And congrats on your third fund, you guys just raised, 650 million fund, right? Pretty recently.

Haseeb: Yeah, fortuitous timing. Because, you know, it's unclear whether we could have raised that fund right now in this environment. But we were very fortunate, and I think our track record of investing into a lot of great founders and companies over the last three years has earned us a spot as one of the premier funds in the industry.

Kary: We are going to come back to the fun later on and also kind of try to find out more about how your experience as a poker player, if that has any impact in the way that you look at, you know, companies that come up to you today.

But I want to get into the meat of the subject. So the past month, you know, ever since May 7th, it's just been a whirlwind. I mean, we all knew that crypto summer was kind of getting over, that we are entering like a bear market. There was a bit of a crypto winter vibe going on, but in the last month, I think that's really kind of become something front and center. It's really cemented. And there's three things which have really kind of changed the opinion and the market sentiment right now.

The first was what happened with Terra and UST. And I liked <u>your article</u> about that because you were able to kind of showcase that there were different elements that were actually at play over there. There was Anchorage, and then there was a connection to what was happening with Abracadabra and all of that going on.

And then the second event, which happened was, you know, stETH getting knocked off its peg with ETH. And there's different reasons for it.

And then most recently this happened like a couple of days back with Celsius, kind of shutting down its lending platform and really just not allowing anyone to withdraw their funds.

So I really want to get your insight on what's actually happening. We can take them, you know, one event at a time what's actually the sequence of events that's led to this. And more importantly, how they are all interconnected.

Haseeb: So the first thing to...If you want to take the thousand foot view, the thousand foot view is macro. It's all macro. I mean, we, we've all been talking about how everything is one big macro trade now. And crypto is, is definitely emblematic of that. So we've seen the correlation between crypto and the NASDAQ spiked all-time highs since basically December.

And now why is that happening? Why is there so much correlation between the NASDAQ and crypto? So the NASDAQ has been getting crushed, right? And the S&P 500 broadly. But the NASDAQ being more tech focused is taking the brunt of it. And risk assets across the board are getting tranced. And of course crypto is the riskiest of the risk assets, but you might ask why is there so much correlation between tech stocks and crypto? Is it just that they're risky?

I don't think the answer... The answer is a little bit more nuanced, which is that, you know, most of what's going on in macro is fear of rising interest rates. And rising interest rates naturally affects assets that pay out farther in the future because interest rate is basically the discount rate on capital that you're going to receive.

So if the interest rate is high, then you'd much rather take a dollar today than a dollar tomorrow or a dollar five years from now. Now almost everything in crypto. Like there are things in crypto that exist today, but the things in crypto exist today are like, they're, they're fine, but they're kind of, you know, they're still relatively small.

Crypto is mostly a story about the future. And to the extent that you are a story about the future, about how things are going to change in 5 or 10 years, then the discount rate, the interest rate massively affects the value of assets that are going to be realized within 5 to 10 years or potentially even longer than that.

And that's why you see, you know, the same thing that is happening to, you know, something like Facebook or, you know, a bunch of other tech stocks that people, you know, corporate earnings are actually fine. Corporate earnings are strong. People buy in large and think that "look, these companies are still going to grow, the growth rates haven't been impaired."

The consumer spending hasn't been impaired, at least not yet. It's mostly a function of, hey, the value of something that is useful today has changed relative to something that's useful in 10 years. That's what it means to have rock bottom interest rates. And we're clearly exiting that regime, which massively changes the kind of assets that you want to hold in a portfolio.



So that's affecting crypto, and it should. It is correct that that affects crypto. And it especially affects things that are further down the risk curve. Now what's further down that risk curve, things like DeFi, you know, things like metaverses plays, you know, anything that's, anything that's riskier than Bitcoin.

Bitcoin is already Bitcoin. A bunch of people own it, right? The whole, the use case of Bitcoin is people owning it. Well, a bunch of people own Bitcoin. So it is drawn down the least relative to other things in that, in the overall portfolio of crypto, the riskier, the thing is the more it's gotten hurt in this downturn.

So, that's the first thing.

Now zooming in into particulars. The first thing that happened that kind of set off this, this rather than winter, let's called a blizzard, right? It is sort of putting the winter presumably into place, but it's been too fast to call it a winter yet.

Right now, there's Terra, you know... I don't want to elaborate because it's been talked over so many times and at this point, it also feels not that proximate a cause of what's going on right now. But basically what happened was that Terra was a decentralized stable coin that was essentially implicitly levered.

There was some leverage in that system and that leverage meant that it was going to be difficult for Terra to survive a market downturn of some size. And then there was, as there has been pretty continuously over this year, some market instability to the downside and that caused Terra to basically face a giant margin call. And the collateral that was backing the stable coin ended up having a run in the bank and Terra unwound.

And for the first time ever, we saw a 40 billion, network, which was Luna go to basically zero. And we've never seen that before. And the reason why that happened was that Luna has an inflationary element that Luna is designed to back the, over the, the total supply of UST, which is the stable coin.

So there was something like 14 billion of liabilities for the stable coin and supposedly 40 billion of assets. Most of which was Luna. And there was some Bitcoin as well. There was about a few billion in Bitcoin. But when the run of the bank started, uh, out of fear of whether or not the, all these redemptions are going to be able to be met, the value of the Luna contracted and contracted and contracted.

And Luna kept printing. The protocol Terra kept printing more Luna to try to meet all the redemptions, which resulted in a hyperinflationary cycle. And Luna basically went to a fraction of a fraction of a fraction of a penny, and that spelled the death of Luna, in a pretty spectacular event that ended up causing a lot of folks to lose money.

So, that was catastrophic, and it's triggered a lot of handwringing: one about DeFi, two about regulation and three about sale coins. So all three of those, I think are going to be big stories over the upcoming months, of how these things get dealt with.

Now, that was the first domino.

Now you mentioned the stETH debacle. So what, what happened there? This is a little bit inside baseball, and the story is not over yet, but here's basically the high level idea. So, when Ethereum transitions to Ethereum, 2.0, you are going to be able to stake your ether and earn a yield.

Actually you already can today. But right now, if you, if you want to stake your ETH, you have to lock it up in the beacon chain, which is basically a one way street. You take it to the beacon chain; you stake it there. It's kind of like a little bit like how people think now about China, that China is kind of a one way street. You can get your money into China, but you can't get it out.

And if, if you're in that kind of environment, then, you know, even if, look there's attractive growth in China, I can't really get access to it. It's just not investible necessarily if I don't have an exit plan. So that's kind of the way that stETH works today is that you can move your ether into the beacon chain.

But you don't really have an exit plan until Ethereum makes the full transition to ETH 2.0. And then even after that, what's called "the merge", they need to do another, uh, upgrade in about 6 to 12 months after that that's going to enable withdrawals. So it's a long time coming until you can actually get your ETH out of the beacon chain.

So, in order to mitigate some of that illiquidity, there has been invented this concept of staking derivatives. And a staking derivative is basically, you can just think of it as essentially turning your locked up Ether into like a T-



bell. So, you know, a T bell, you know, you basically are getting yield in exchange for locking up capital for a period of time, right?

In the same way with ETH, you can basically tokenize or securitize, quote unquote. It's not actually security, but you're securitized your interest in stETH that's in a big pool and then make it, tradeable, make it liquid, right? And if you think about it well, like, well, that should pretty much, trade, pretty close to par.

Now it doesn't trade exactly at par. Because of course there's a one way price band, right? Meaning that there's a price band on one side. Clearly stETH cannot trade for more than, you know... One stETH cannot trade for more than one ETH because if it did, it's very easy to arbitrage it by just, you know, putting more ETH in and then selling it, right?

And once you turn into stETH, there's an arbitrage on the high end, on the upside. But there's non arbitrage on the bottom side, right? If stETH goes below one ETH, there's no way to take stETH out and redeem it for an ETH and then sell, you know, and equilibrate the price on that side.

So if the demand for stETH goes down, then potentially this thing will just trade below the peg. Okay. So this is how it works. It's pretty, if you think about it for about 10 minutes, it all makes sense, right? It's pretty straightforward, how it works.

However, there were a bunch of groups that, I think maybe did not realize that this is how it works. Because of the fact that there's always been high demand, at least in the times of the bull market for stETH, because otherwise ETH doesn't have a very attractive yield relative to what you can get it by seeking it. And so you had not only people, you know, locking up a bunch of ETH and staking it and putting it into stakes to get liquidity, but also, they were levering up on this stETH.

So basically, they would take Ether, put it into Lido, which is the dominant, staking derivative protocol, and get the stETH which is generating yield. Then, they would put that as collateral and borrow more Ether against it. So you could borrow this in Aave or Compound, right? Borrow more ether against... I think it was actually just Aave/ Borrow more Ether against the stETH and then retake that ETH and do this again.

And again, until you're basically levering up many times over getting very high yield, but of course, taking some risk that, you know, you could get margin called if the value of the state goes down too much and you're paying some borrowing costs, but you're getting higher yield to pay for the borrowing cost.

So a lot of people were doing this and in fact, it turns out this is one of the things that many of the lending platforms, that try to offer high yield to consumers were doing this kind of thing. One of them has a sneak preview of what's happening next to be Celsius, which is one of the largest lending platforms that exist in crypto today.

So what's largely happened. So one thing that's happened is that a lot of people... Crypto markets have come down a lot, right? And again, the macro shocks are exogenous, right? Most of the reason why crypto went down is because of macro, it is just that risk assets across the border going down; interest rates are expected to go up higher because this really bad CPI³ that we saw on Friday, and that is causing instability in growth assets across the board.

So crypto markets went down. When crypto markets go down, people get margin called. People need to go raise cash to pay their liabilities. And some of those people who got margin called owned stETH. They had to get their stETH out. So people started selling stETH. Now an environment like this, especially when volatility spikes, there's a huge premium on liquidity.

And suddenly you start realizing stETH is not ETH. StETH kind of looks like ETH, kind of acts like ETH in a bull market over the last six months, stETH and ETH have been like this. They've been just rock solid peg. But there's no peg on the bottom side. If stETH goes below ETH there is nothing, there is no mechanism in any way that, that ties it back to ether, right?

The thing that you would need to do in order to regain the peg on the downside is to have somebody who's willing to take potentially multiple years of illiquidity in exchange for the premium, right? You basically have to say, look, in exchange for getting two years' worth of, let's say it's going to be two years until you can get the stETH

³ Crypto Price Index (CPI)



out then in exchange for basically the yield and the discount, I'm willing to put my ether in a box for two years and not look at it well, in a catastrophic market environment or a place where, you know, liquidity is king.

It's very hard to find people who are willing to do that. But that is the situation right now. So basically what's happened is that due to these margin calls, sfETH has massively drawn below the peg.

And that has caused Celsius, which is one of the biggest lenders to that is one of the causes, not the only cause, but that is one of the causes, that distributed Celsius to no longer be able to meet redemptions. So Celsius, for their customer deposits, has paused all trading, all redemptions, all withdrawals, because of the fact that they just have no ability to be able to move assets without causing essentially a run in the bank and further basically causing a liquidity crisis within DeFi.

And so this has been a pretty massive dislocation that's been exacerbated by groups like Celsius being unable to move. Now, we just saw this morning that Nexo, which is another big consumer facing yields platform, very similar to Celsius. They've offered to buy Celsius and basically to meet all of their customer liabilities.

Now of course, almost certainly this is a fire sale offer and they're going to try to leverage kind of, you know, public opprobrium and anger to try to force Celsius to sell at rock bottom. I'm sure what will be a rock bottom price in order to get some liquidity flowing in the market for...

Kary: And at the same time, they're also buying an interest bearing asset because that's what stake is actually doing. So it's like a double whammy, you know, you get two for the price of one.

Haseeb: That's right. That's right. So if you have a strong balance sheet, it's a great move by Nexo. I'd be surprised if this deal happens, just because of the fact that there right now is no regulator who can force Celsius to go in and take this deal in order to meet customer redemptions. I think in a more orderly and more regulated market, probably this would just be forced to happen.

But crypto being crypto, Celsius, as far as I know is... I don't really know the regular story status of Celsius.

Kary: In that vein, one the things that you realize with crypto is this inherent belief that all the other actors who are with you, your DeFi brotherhood. They're going to actually make the right kind of moves in order to maintain that algorithmic stable coins continue working the way that they do; that even if you have highly leveraged assets out there, which are literally like interest upon interest among interest, like it's like trying to measure the length of a piece of string that there's some kind of like, gentlemanliness that's going to happen.

But this actually brings me to what I've been trying to understand and wrap my head around because on one side there's like multiple spillover effects and knock on effects. And on the other side, there's actually just the actors. So you mentioned dominoes. I think that's a great word for it, because when you look at let's take the first domino, right?

So we had what was going on with the peg that was happening between Luna and UST and okay, fine. That had its own kind of story. But at the same time, you also had Anchor behind it. and Anchor was, you know, the protocol it's offering this stable interest rate of 20% per year on UST. And the way that this was actually working was they were actually taking a lot of the deposits, which are coming in from stTerra.

Or if you had stAtom from Cosmos or stSolana, you know, from Solana or stAvax from Avalanche and including stETH, by the way, from Ethereum, you were ensuring that if you get this kind of liquidity from one bunch of actors, that the staking rewards that you get from these proof of state cryptocurrencies was enough to cover the 20% that you were actually going to pay out at the end of it, to the other people who just had their UST and they deposited their UST, or they were kind of trading that for Luna, whatever it was.

So when, when you start looking at this, you kind of see this network connection that's happening. Because if you're using these extremely leveraged financial assets, then essentially if there's a small change, I'm talking like a couple of percentage points, not even. That has these multiple effects because everything is over a hundred percent leveraged behind it.

And on top of this, everyone was new about this, including Terra by the way. Terra knew about this; they had spoken about it. They had their Luna foundational guard that was out placed. They had spoken publicly about this, but nevertheless, in spite of all of this happening and the May 7th incident that happened, what do we find?



That Alameda Research goes ahead and just makes like a 1.5 billion sale of stETH. And that definitely had a knock on effect on moving the peg between stETH and ETH. So I I'm trying to understand now if everyone's aware of these network effects and there's this ad hoc unwritten kind of rule about, we are all here to help each other.

It's DeFi it's all about distribution and democratization and decentralization. What's happening? How people kind of like... Is everyone out there for their own personal benefit of gain or...?

Haseeb: I understand the thrust of that story, but I would take issue with it. A financial system cannot work if the idea is that we are expecting everybody to look out for the commons, right? Obviously, that is immediately going to fail. If that is your trust model, if that's your mechanism design.

You need to create a system that is robust to individual actors looking out for their own self-interest, right? Now, stETH has never, never actually claimed that we are stage 1 0 1 with ETH, right? They're rational enough. And they're, you know, sort of by the book enough to have been very clear about that. There is no mechanism.

We didn't create one. Look, it's very easy. You can, again, you can explain the whole thing in about two minutes. If there is a liquidity crisis and people are freaked out about, you know, the ability to actually sell their assets, then stETH will go below the peg. There is no mechanism that brings it back above that is risk free, I should say.

I think that, you know, it's a question really of when you design these protocols, right? When you design MakerDAO, when you design Compound, when you design Aave, when you design Lido, do you build this, such that in an environment like the one that we are in right now that these things are robust and continue to survive? There are some protocols that right now are buckling under the weight of this downturn, right?

I mean, obviously, Luna could not handle volatility to the downside. It was not designed to. It was effectively ... It was a levered protocol that really depended on things moving up into the right basically continually. And it was destined to fail for that reason.

But there are a lot of things in crypto that have actually survived other downturns. There are things in crypto that survived March 2020 when the entire world woke up to COVID and you know, markets collapsed 50% in a single day. I remember that. I was there when the first generation of DeFi weathered the storm of what it looked like to have liquidity dry up and markets completely collapse overnight.

And you know what we're seeing today and over the weekend is bad. You know, it's potentially comparable to what happened that weekend, but a lot of stuff was engineered to be able to survive that again, because it's happened before. And a lot of stuff, which is newer.

And this is very common in a, you know, after a bull market, after a bull cycle, part of the standard theory of business cycles is that in a business cycle, businesses become more and more leveraged over time. And basically you, you have business models that are encouraged to take on more and more risk and have thinner and thinner margins, right? And basically, um, not be able to withstand volatility or, or downsides because you just sort of have an environment of abundance.

And so there's not as strong of a selection function or a fitness function that forces people to be lean and very, very careful with their resources. But what bear markets do is they clean all that stuff out. You know, it's like you know, every winter, the least robust animals die out. And that creates room for the strongest animals to survive to the next spring.

Kary: The calling of the herd.

Haseeb: Exactly, the calling of the herd. And that's exactly what we're seeing right now in DeFi is that there were a lot of things that were created that don't actually have the robustness to be able to survive a moment like this, and they will go away.

They will have to be reformulated in such a way that they can survive a moment like this one. And everything that you see in gen one, by the way of DeFi, everything that was around in 2020, it's still standing because it's been through this. They were all built with this kind of resiliency in mind.



Kary: No. I remember that 2017 was a watershed moment for me as well, personally, because I was, you know, getting more and more involved in the crypto game. And I actually got involved in a couple of ICO⁴s and after the initial kind of ecstasy of being involved in a ICO project, kind of, you know, went away. I realized that 90% of what was actually being sold out there was total BS.

Like the tech wasn't ready yet. There was no way to make something like this. And I took a step back. And when the inevitable happened that like 89% of these things just went away and you never heard about them. And then you had a much better ecosystem that came up, right? So you had your exchanges, you had your defi protocols, which are still by the way, limited to lending and borrowing that they're not really doing a lot of other things.

People are trying to tokenize different kinds of assets, but you know, that will take the time that it needs to go, which you essentially found what was very simplistic, primitives being built. And of course there's higher levels of complication. You have the, you know, the L-1s⁵ and now you've got the L-2s⁶ and everything else.

There's definitely a much more horizontal kind of development process that's being put into place. But this is also leading me to the question that if we are kind of thinking about the calling of the herd, well, what is the next space of DeFi ecosystem going to look like? Where do you think that this is actually going to take DeFi?

Is it going to be just being able to make more robust, existing products and services, or are we actually going to find a bigger plethora of variety in DeFi moving forward?

Haseeb: That's a great question. So there are there a few things that come to mind for me right now.

So the first thing is that if you look at DeFi over the last cycle who have been the primary users of DeFi up till now? The answer is mostly wealthy people in the first world. Which is kind of weird, right?

If you actually look at it clearly enough, this is not really the story that we've been telling about DeFi. The story that we've been telling about DeFi is that DeFi is a way for people who don't otherwise have access to financial platforms and financial services, to be able to get access to them, just using a mobile phone from anywhere in the world, right?

That's the idea of DeFi. When you say it that way, it's a compelling idea. It's clearly a very powerful privative.

But right now it is in the hands of people who are primarily using it to speculate as opposed to people who are using it to actually solve their financial needs. That's the first thing that is going to change about DeFi.

It will take some time to get there, but it will get there because of the fact that look, if you are in, you know, Pakistan or in Malawi or in Venezuela or in, you know, Turkey for that matter, this stuff solves problems that you have.

Now, the last mile isn't really there. The UX isn't really there. The scalability isn't really there. There are problems that need to get solved and there are people hard at work on solving those problems and making it so that this stuff actually can operate at a world scale. But the core question of whether DeFi is going to be valuable to people, to me, I think the answer is obvious. But right now it's not in the hands of those people. It's going to take some time for that to happen.

Now, there are also a lot of applications in DeFi that are still gated behind primitives we don't have yet. So just to give you one obvious example, we have no credit in DeFi. DeFi. If you want to go take out a loan, the only kind of loan you can take in DeFi is a fully collateralized loan. Just fully secured. Basically, this means that I don't have to trust you. I don't have to know anything about you. It doesn't matter how many times you borrowed for me. Doesn't matter how much I know you. It doesn't matter how good of a guy you are. I will not give you any different rate than anybody else.

That is not how finance works, right? It is not how borrowing and lending works. There's is a very, very narrow subset of finance that is completely invariant to who you are and your track record and your history. That gives everybody the exact same rate based on their collateral level. But in order to get that, you need identity. We

⁴ A process or event in which a company (especially a start-up) attempts to raise capital by selling a new cryptocurrency, which investors may purchase in the hope that the value of the cryptocurrency will increase, or to later exchange for services offered by that company. (Oxford Languages)

⁵ The term Layer 1 refers to the base level of a blockchain architecture. It's the main structure of a blockchain network. Bitcoin, Ethereum, and BNB Chain are examples of Layer 1 blockchains.

⁶ Layer 2 refers to networks built on top of other blockchains. So if Bitcoin is a Layer 1, the Lightning Network that runs on top of it is an example of a Layer 2.



don't have identity right now in chain. But once somebody manages to solve the identity problem, that is going to open up a universe of applications that currently are gated behind the lack of any identity primitive block-chain.

So I think there are a lot of directions that DeFi is going to move in. And when you think about, you know, what is it going to look like when DeFi is actually used in emerging markets and in different places around the world. And one thing that's obvious to me, you know, back in 2017, 2018, when, in the last bear market. I remember at that time one of our juniors was really despondent. You know, crypto drop one was at like, you know, 4,000, 5,000, you know, it was very depressing time. And he was asking me like, "well, what is this stuff? Even for, if all this stuff is dry drawing down, I don't know if I even believe the story anymore."

And I told him like, "look, there's one thing. There's at least one thing that I know that I'm not fooling myself about that crypto has absolute product market fit for, and that's stable coins." Stable coins at that time were still pretty small, right? There's like less than 20 billion of stable coins that were outstanding at that time.

But the idea that anywhere in the world with just a mobile phone, anybody can get access to dollars in unlimited quantity. That is absolutely going to take over the world, right? Like one thing you don't have to convince yourself is that people want dollars. So it's not even about crypto at that point.

It's just about the core thing that you're giving people access to. Stable coins will grow. Absolutely, so freaking, literally they will grow. It's just a matter of time. And in fact, of course, that's exactly what happened. Now, the one thing that I feel is absolutely true that I don't need to convince. I don't need anybody to convince me of.

I just know it's true, is that when synthetic assets take off and defi and synthetic assets means basically assets. That basically you can think of derivatives that track the underlying value of those sort of real world, things that we care about, right? So you can imagine you in stocks, assets, you know, indexes like S&P 500, oil futures, et cetera, et cetera.

When all this stuff is on chain and you'll be able to buy synthetic Tesla, synthetic Apple stocks, synthetic gold, synthetic, you know, wheat futures, et cetera, et cetera, that is going to have product market fit around the world. The idea that anybody from anywhere in the world can buy anything that you or I can buy. That is going to be huge someday.

Now it's not huge today because the people who would be buying it are not on the blockchain. But eventually they will. In the same way that in the early days of the internet, you might have looked at email, you might have looked at, you know, using that groups and said, okay, someday everybody is going to use this stuff.

But today it's used in universities and by, you know, a bunch of nerds. And, you know, looking around at universities and nerds and, you know, researchers might be very hard to imagine that yes, someday everybody is going to use this, but that was exactly right about the internet.

Kary: But if I pull on this vein of jaded idealism. It reminds me of the episode that you actually did pretty recently on the <u>ChoppingBlock</u>, shout out Laura Shin and the Unchained Podcast. It's really good. Please listen to that.

But I was listening to you and Tarun and you guys were, you had brought in Andre Cronje and one of the takeaways that I got from it, and it also led a little bit of debate.

I was on the bench of like do you actually support him or not? But he mentioned the topic of regulated DeFi, you know, it's like an antithesis. If you talk to pure DeFi people. So from what I'm listening to, what you're saying, especially with what you mentioned with regards to identity and just being allowing a lot of people to connect it.

Are you with him on this? And if you are, what does regulated Defi actually look like?

Haseeb: So I personally, I am a bear on regulated DeFi. I don't think regulated defi is going to be the future of this stuff. I think that crypto is intrinsically a subversive technology. And what I mean by that is that crypto changes the balance of power between individuals and governments. And whenever that happens, it's always subversive when that happens.

It's always challenging when that happens. And it also, it always redraws the rules about how individuals relate to their governments. The internet did that. It did that with respect to media. Suddenly the idea that the FCC controls what the public can see and what goes on the public airwaves, that fell apart with the internet.

It no longer became feasible to have a single government actor be responsible for the messages that the public was allowed to receive. And to the extent that you could exert some government pressure on the press, well, we



had, you know, what we now call the, fourth estate, right? Which was created by the internet. Or the fifth estate or depending how you call it.

And crypto does the same thing. Crypto changes the assumptions that we have historically made about the ability for financial services to be fully intermediated and those intermediaries to be controlled by the state. Once these things become disintermediated in the same way that messages and communication, especially mass communication has been disintermediated.

And now you don't have to go through the government in order to get access to the airwaves. You go through, the, you know, IP and TCP in order to communicate with people. Everything changes, the balance of power changes. That's what crypto does. That's why it's so exciting. That's why it's so compelling.

it's certainly true that governments are going to try to regulate DeFi and they're going to succeed in various places. But there's always going to be an aspect of DeFi and of stable coins out of all these things. Like, look, you have a mobile phone, you can buy stable coins. If you have a mobile phone, you can buy the synthetic Tesla.

And what are they going to do? Are they going to tell you that it's legal for you to buy synthetic Tesla stock with your mobile phone? Really? That's what they're going to do? They're going to tell you that you can't buy, you know, synthetic R&D. You can't buy, you know, synthetic gold? that you have to buy it through the government approved mechanism?

How are they going to stop you? What are, you know, there, there are rules against gambling all over the world, but there is no country and no government in the world that can stop you and I, from making a bet with each. If you, and I want to say, they're like, hey, you know, I think that the Lakers are going to win, or the Lakers are going to lose no government in the world seriously tries to stop us from doing that.

Now you can regulate casinos and every country in the world does regulate casinos, but you can't stop people from making a bet if they want to. And I think the same thing will be largely true of DeFi is that, look, you can't start a DeFi protocol on American soil.

Eventually that there's a totally unregulated one, right? There will be laws and, and rules against that. But the idea that you, as an American cannot buy something on DeFi that the government is allowed to say, no, you're not allowed to buy this because we don't want you to. That I think is going to be very, very challenging to implement in reality.

Kary: Yeah, that's for sure. I mean, and that's where I like looking at Web 2.0 and Web 3.0, and I'm kind of starting to switch the conversation now a little bit towards Web 3.0, because you know, there's that recent quote in which it says, "the original sin of the internet was building a browser without a wallet plugged into it."

And that's what got me really interested in looking at Web 3.0 every time I've actually been focusing on, on crypto and define, it's been eight years now that I've been, you know, looking at the space. It was never the fact that there was a token that was going up and down in price. Like I never looked at Bitcoin or anything as an investment vehicle till I realized that. Well, unfortunately, no one thinks the way I do. There's thinking about it as digital gold.

And I was on board with that. But the main thing that I always found was, we are creating a new tech stack and that's what I've always been interested in, right? So, if you've got TCP, IP, and your entire communication stack built on top of it, which includes your middleware, your back end, your front end and apps and everything else, that's just literally changed the world.

And we've seen this, this has happened in our lifetimes. I still remember, you know, modems coming to home and everything else. And now what we're seeing is we are moving from TCP, IP, and communication protocols to value exchange protocols or blockchains. And you're seeing a repetition of the same kind of evolutionary process.

You had your settlement layer, then you had your layer 1.2. Then you had your layer-2 solutions, and now you've got, you know, firms like, what's it called? Alchemy. And they have the block development environment for it. And we are seeing a lot of new kinds of solutions, whether it's stuff like ARV in which you can do decentralized storage, you got network for decentralized computation.

So we are seeing like a new kind of stack coming up. Now, my question to you is based on what you're seeing in terms of the sculling of the herd and the ups and downs of crypto. How's that actually affecting your view on Web 3.0? And how's that actually impacting the way that you guys are Dragonfly?



What are you investing in? What are you looking at? You don't have to give company names, of course, but you can just give us like, you know, core elements of what you're looking for today?

Haseeb: Yeah, absolutely. So I think I am. So I have some mixed feelings about the kind of broader Web 3.0 story as you described it. The idea that we're going to migrate to an entirely decentralized stack with respect to computing, I think that there are elements of the computing stack that are going to change.

But primarily almost everything that has worked in crypto, almost everything that has been important in crypto has been financial in nature, right? I mean, Bitcoin, the blockchain was originally created to solve the double spend problem, to solve it and to create decentralized money. And almost always every major application that's been successful in crypto and that has actually really achieved adoption has some financial component to it.

So I'm personally skeptical of the broader story that we are going to decentralize everything. And that every future architecture is going to be decentralized blockchain, blah, blah, blah, blah. But I do think there are bits and pieces of these things that are going to work at scale.

Now, you know, you asked the question of what are we investing in. And, you know, right now, I mean, like everyone, we're trying to get our bearings and kind of figure out where this market is going and, and what it's going to take for the market to get its legs we're deploying actively in a way it's an attractive time to be investing.

But on the other side, it is a tricky time given how much everything has gotten hit and how aggressively the market's drawn down. It's hard to do deals in an environment like this, where, as investors, your expectation is that okay? Well, everything is down a lot, so prices should be a lot lower.

And as an entrepreneur, you're like, well, but my friend just raised, you know, three months ago and he got, you know, two or three times the price that, that you're, you know, you guys are quoting me today. But of course, unfortunately that's a lot of times what happens when you see a market downturn is that it takes a few months for the market to equilibria.

And to find a new price level that everybody feels good about. So a lot of the time the deals just stop getting done around this time.

But by and large, we're very long term investors. And so what I care about are the people who are solving the big problems in crypto. So what are the big problems in crypto?

Most of the time when, when something is created, that's really valuable. It's because it's solving one of these big problems. So the first one is of course, scalability. This is what a lot of the last cycle was about, about the big layer ones that ended up becoming very, very successful like Solana and Avalanche and so on. So scalability still needs to be solved.

The second one is usability. So UX is still really painful. And I think there's going to be a lot of work over the next, you know, 3 to 4 years to make crypto more and more usable to mainstream minds.

The third problem is privacy. So all this stuff, we were talking a lot about. DeFi is completely transparent. I can, if I know your address in DeFi, I can see everything that you're doing. I can see what you're buying, what you're selling, what you hold. This will get solved at some point. There is no way that the future financial system is one where we can all just casually surveil each other.

That's you know, there, there will be...You'll still want to retain the aspect of auditability. Where I can look into a protocol, and I can see how collateralized it is. I can look into a protocol and see, you know, the overall health factors that go into understanding the robustness of a protocol.

But I don't need to know who owns what, I don't need to know that this is your position versus someone else's position. And so I think that will get solved at some point.

And then of course, there's the last mile problem. And I mentioned that to you earlier, which is that, look, you know, if you're in the third world and you want to use DeFi, it's actually hard to convert your local currency into the kinds of things you would need to get on chain. In principle, at some point you will need nothing more than a mobile phone, right? Technically any mobile phone today can go and interact with anything in DeFi. It can buy you stable coins. It can borrow and lend on Compound.

It can trade on to swap. but the problem is converting your local currency into crypto. Getting yourself onboarded into Web 3.0. And that takes time. That's hard. It's also in some sense, it's not super scalable in the



sense that it has to get solved in many different places and many different times in order for you to have these robust onboarding mechanisms into Web 3.0.

So when you solve a big problem, you win a big press. That's generally how it works. Almost everything that's been really successful in crypto became really successful because they solved the big problem. And the thing about big problems that they're big, they're hard. They take a long time, but the spoils, if you can, actually solve the problem, are massive.

And so, as an investor and as a venture capitalist, that's what I look for. I look for people who are trying to solve these big, juicy, hairy problems. They tend not to be as sexy as the stuff that moves fast and the stuff that, you know, there's a token next month and you can launch and yield farming and blah, blah, blah.

But it's where long term the most value gets created.

Kary: That's always the case, right? It's the boring stuff. The stuff that nobody thinks about when it becomes kind of invisible and becomes a verb, that's what you're actually trying to go for. And I think this is also interesting because when you look at how the blockchain space is actually evolving, there's almost two schools of thought.

On one side, you've got, you know, ETH maxes. And what I do like about Ethereum is their whole internet of blockchains or blockchains connected to other blockchains. At the same time, when I look at Dragonfly and, you know, you guys have got a lot of your companies listed in which you actually made investments.

What I do find interesting over there is you're also looking at, you know, stuff that's going on in Avalanche, for example. And if you look at Ethereum and Avalanche, the big difference that you find over there is: a lot of these new alt one blockchains that have come out, which are like, you know, Solana and everything else, they've not taken that into consideration that you need to build a layer-2. And the layer-2s I think, are really good because of the fact that it helps you kind of decentralize. And at the same time, ensure a lot of the economic and tech security that comes in. So where are you guys looking at it?

Because when I look that you, you are interested in EDM compatible kind of blockchains, and at the same time you're looking at stuff like Avalanche. Is there a reason why you're doing this is just diversification of risk or do you actually find that there's tangible ecosystems that can be built on each one?

Haseeb: The way that we see it, I mean, one, so Avalanche is one of the largest EVM⁷ compatible blockchain today. So we're broadly very bullish on the EVM as being the substrate on, which I think a lot of blockchains will scale. But I also think that there's room for other blockchains that, that emphasize performance and scalability over the, you know, compatibility that is, you know, primarily, the thing that EVM gives you.

So with Avalanche in particular, and I say just broadly speaking, I think the world is already multichain. It's not a question of whether multi chain is going to happen. The multi chain is just a description of the world that we live in. So there will not be one chain to rule them all. And a large part of the reason why you can't just have one chain to rule them all is the same reason why we don't say that there's one city to rule them all inside of a country.

Blockchains are, are very similar to cities in a lot of ways in that. Although blockchains are networks and they do have network effects, they are geographically constrained the way that cities are, meaning that a blockchain can't get too big. It can't get too big because if it gets too big and you try to scale it too much, then it no longer becomes decentralized. It no longer becomes possible for normal people to be able to audit the blockchain and you run the blockchain on a normal piece of consumer hardware.

In which case, now you have to depend on their parties. You have to depend on someone else to tell you that the blockchain is correct or not. And that goes against the point of blockchains. Blockchains are meant to be verifiable by anybody. So for that to be true you need the blockchain to only be so big. Which is much like a city, right? Cities, if they get too big, they break off and they become smaller cities like sister cities, right? Like, you know, Dallas and Fort Worth or something like this, or you know, New York City and then Jersey City.

⁷ Ethereum Virtual Machine (EVM)



And when you see that, um, comparison becomes very clear, then the same way that, you know, there's not just one city that matters in the US. Now, there is a biggest city, New York city is the biggest city in the US. But then you also have LA and New York city in LA are both cities that are big and they matter.

New York city is quite a bit bigger than LA, but the other thing about them is they're very different. They target different industries. They have very different cultures. They have different governance, they have different, um, obviously they have different costs.

Uh, they have different lifestyles that they encourage. The same thing is going to be true of L-1s⁸, that L-1s will take on different properties. They'll have different kinds of governance. They'll have different industries that they will target and nurture in the way that, you know, Avalanche might be more focused on DeFi Solana might be most focused on NFTs.

You know, Polygon might be more focused on gaming, et cetera. Um, and you'll see more differentiation, which creates niches that allows these things to coexist because each of them has their own specialization. That's the way that we see this evolving.

Kary: No. I agree with that because at the same time the signals are talking. We do a lot of work with, you know, clients who work in like the, the luxury space or just in fashion in general. And increasingly we've seen two changes when we have conversations with them.

The first one is they're much more educated about the topic today. So you just can't go there and give your, you know, 15 minute spiel on what you think about it. And this has led to them also starting to think about public blockchains a lot more than private blockchains, which was super interesting for me. I've always been more biased towards public blockchains in any case.

So that was the first one. And then when they start looking at the public blockchains, especially in their sector, they're all kind of like mentioning flow all the time. They know about the other blockchains as well, but for whatever reason, they've all gravitated towards. And this was interesting for us because when we started kind of running a thought experiment and we are talking to different clients where they were there in finance or they're in supply chain or whatever else, everyone's already come to this weird consensus on which blockchain they want to play with.

Even though most of the times they don't talk to each other, or they might bump into each other in some conference or something, but it's kind of like something which they're self-educating themselves and, you know, they're being autodidactic about it. And I think that makes a lot more sense to me.

It also kind of goes back to. The fundamental rules of how... Not the rules, but at least the theory is in which you had two schools of economic thought: the Keynesian and then of course you had the Hayekian. And the Hayekian school of thought was always based on the fact that you could have multiple currencies, which are tailored to a certain function.

But we still have this interoperability effect and the fungibility effect to allow an economy to actually function. And that was all based on having better efficiency. So I do kind of understand that and agree with the fact that long term, this is definitely going to become much more efficient as a system.

The question is how long,

And do you have a number for that, but anything we're going to crawl out of the script or blizzard or winter, whatever was going on?

Haseeb: I would guess that it'll probably be a couple years until we crawl out of this. I mean, again, crypto is largely tied to macro in a present moment like this. So you have to, I mean, it's basically asking the question of when do you think, the economy is going to look better? And I would say probably a year and a half to two years is, is going to be my medium estimate of when things start to look, not just that the worst is over, but that things start to look rosy again?

Kary: As we are coming towards the end of this podcast, I want to play a little game with you. So the game's very simple, alright? I'm going to ask one word. I'm just going to mention one word. And you got to give your thought on it either with another one word answer, or maybe you can go to five words. You got to keep it short.

Haseeb: Okay. Okay. Word association.

Kary: There we go. So here's the first one: algorithm stable coins?

Haseeb: Not long for this world.

Kary: Terra 2.0?

Haseeb: Good try.

Kary: The merge for Ethereum?

Haseeb: Coming. But may tarry.

Kary: Osmos?

Haseeb: Applicated specific blockchains. Will exist but will be small.

Kary: Web 3.0?

Haseeb: Web 5.0, apparently.

Kary: Perfect. That was actually my next question. Future of DeFi?

Haseeb: Future of defi, um, slow and steady.

Kary: This interview?

Haseeb: This interview...fun time.

Kary: Alright.

Haseeb: Enjoyed.

Kary: Right. So that was it, man. That was a little podcast on trying to get an understanding of what's going on. There's so much more to unpack in this. I mean, I could literally sit here and talk about each and everything that we mentioned, you know, in much more detail, but I think what's going to happen is I wanted to keep the format of this a bit short.

Cause I just think that we need to kind of take a step back and look at each and every one of these things as an unfolding and as a lesson to be learned. There's so much going on right now that we really need to kind of massage the nuances and see how these interconnections are happening, because that gives us some kind of a map and a compass as to how DeFi's next version needs to look.

Thank you so much for that. That was really good, man. And for those of you who are listening to the podcast, we are going to be putting the show notes or at least like a links to a lot of what Haseeb is doing. You need to check out his ChoppingBlock presence. He really chops it. When he is on there and gives a lot of insight and he gets a lot of interesting people.

He's got a very active Medium page going on as well in which he talks about everything that, you know, he's thinking about right now. And it's always with a lot of detail and data. So in conclusion, Here thank you very much for coming on the show today. Um, would you like to tell people where they can actually find.

Haseeb: Easiest place to find me is <u>on Twitter.</u> Just Google my name or something that sounds like my name, and you'll find me. Thanks so much for having me. This was a lot of fun man.

Kary: Thank you at home for listening. And if you've enjoyed this episode, don't forget to subscribe on Apple podcast, Spotify, or wherever you get your podcast.

This has been Future Sight, a show from Capgemini Invent. We'll see you soon.

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