

## The NFT Anti-Bubble

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Robert J. Marks:

Welcome to Mind Matters News. I'm your bubble-popping host, Robert J. Marks. We've been talking to Adam Goad and Dr. Austin Egbert at Baylor University about Web 3, about non-fungible tokens, about fungible tokens and all sorts of interesting things. So Adam, Austin, welcome back.

Adam Goad:

Thank you, Dr. Marks.

Robert J. Marks:

We have talked about, in the current place in our economy, of non-fungible tokens kind of hitting the skids. Is this a bubble pop? What's going to be the asymptote of reality here? Are non-fungible tokens going to disappear as kind of an interesting thing in history? Or are they going to survive in some form? What do you think?

Adam Goad:

So I think that a lot of things are not going to survive this. I do believe it is a bubble pop. But I think that we have perhaps passed the peak on the technology hype curve. I believe that's something you've talked about on this podcast before for your listeners.

Robert J. Marks:

Well, no, let's talk about it, because this is in my book. And I never hesitate to promote my book. There's something called the hype curve and this is in my book, *Non-Computable You: What You Do That Artificial Intelligence Never Will*. And this is a curve that's followed by new technology. And I've seen this happen in many, many different areas. I've seen it happen in artificial neural networks. I've seen it happen in super conductivity. I've seen it happen in the Segway, for example, the Segway human moveable cart that the actor, I think, his name is Job on *Arrested Development* rides around. But there is inevitably an introduction of new technology. And there is this buildup of incredible hype. And people began to explore it and dig into it, and it's a bubble. And eventually, people are going to recognize the limitations of this technology and is going to pop down into a depth of cynicism.

Robert J. Marks:

And those that are control engineers and electrical engineers know that the greater the peak, the greater the undershoot. The greater the overshoot, the greater the undershoot. And then all of a sudden, more sane brains begin to prevail. And we find out the places where this is indeed applicable, and where it can be reduced to practice, where it is useful. And this is referred to as asymptote of reality. And so I think that all technology goes through this so-called hype curve, again, over excitement, depth of cynicism, asymptote of reality. And that's what Adam was referring to here. Okay. And we're talking about now, I guess, the asymptote of reality, right, Adam?

Adam Goad:

So I think that the current market downturn here we're seeing is falling off the peak and going down. I don't know where we are or how far we've gone yet. But I know that even just a few months ago, towards the end of last year, the beginning of this year, anyone selling any kind of NFT, it would've sold out instantly and they would've made thousands of dollars. But now, people are starting to be a lot more particular. You're not nearly as likely to be successful just selling a picture of monkeys on the internet as you would be if you had some kind of use behind your NFT.

Robert J. Marks:

But this is true throughout the economy. I know my son and daughter-in-law like to buy rental property. So all of a sudden, with the inflation that we're seeing today and the economy the way it is, the interest rate of hiking, they can't do that. It's just out of their price range. So I can imagine that's somewhat similar to non-fungible tokens. I have a lot less discretionary income. And so non-fungible tokens are way down on the list of things that I might want to buy.

Adam Goad:

Right. So the only things people are really spending money on right now, or at least significant amounts of money, are NFTs that provide something more than just the "ownership" of the image. So another way that NFTs could be used is as a marker of membership.

Robert J. Marks:

A marker of membership. Okay, so my non-fungible token is membership in something. Okay, go ahead, elaborate. This is interesting.

Adam Goad:

Yes. So if you were, to say, be offering a service, a subscription perhaps, just some kind of service, and you believe that your service can currently support 10,000 people, you could sell 10,000 NFTs and say that you have to own the NFT to have access to it. So then, people can also go and trade that NFT still.

Robert J. Marks:

Could you elaborate and give me a specific example of 10,000 of what?

Adam Goad:

So the most common use of this right now as the technology develops is actually NFT analytic tools.

Robert J. Marks:

Analytic tools. Okay.

Adam Goad:

So there are tools that people have developed that help you analyze the NFT market or the crypto market and find opportunities to buy or sell and make a profit. And so the way they provide access to these, is through ownership of their NFT.

Robert J. Marks:

Is this something like stock market tips or something like that?

Adam Goad:

Yes. There are people who do that. In the Web 3 community, that is known as an alpha call. There's a whole lingo inside the Web 3 community of various things. But yes, providing tips, information about things is known as an alpha call.

Austin Egbert:

As kind of an analogy of where you could take that, is it would be like having a transferable software license. Let's say, I bought a license for Microsoft windows or something. Usually, that's then the product key. Those product keys are unique. And it's sort of a way of, I could sell my product key to someone else. I no longer have the right to use that thing, but somebody else now has the right to use that. And Microsoft didn't see any money from that transaction, because it was sold secondhand, essentially. So I'm the one who ended up making money from that transaction instead of Microsoft. So it ends up being a similar sort of process in that sense, right, Adam?

Adam Goad:

Yes. Exactly, that's a use of it. I will say though, that there is an opportunity for the creator to get a cut of that secondary sale. If you use one of the marketplaces, like in the last episode, we talked about OpenSeaopen.io. That is the most popular marketplace. On that, they will provide a percentage fee to the creator and the creator gets to determine what that fee is. But you can still just go through the blockchain itself and send an NFT to anyone you want with no fees going back to the creator.

Robert J. Marks:

So in non-fungible tokens, there are clearly things which you shouldn't mix with non-fungible tokens. There are things which are more successful with non-fungible tokens. Could you give us maybe just a short list, off the top of your head, of things which should or should not be done with non-fungible tokens?

Adam Goad:

So one example of something that's been done fairly successfully with non-fungible tokens that I think could become more popular in the future is tickets for various events. As NFTs have grown, there's been a number of conferences of people gathering to discuss the technology and stuff. And so what they do to ticket those, of course, is sell NFTs. So when they release the tickets, instead of going to the website and putting in your credit card and going through Ticketmaster or something to get the tickets, you go to their websites and you hook up your cryptocurrency wallet and you provide them some Ethereum or whatever they are asking for. And they'll give you an NFT. This NFT is then just like any other NFT. You could perhaps sell it to someone else. Maybe you can't go to the conference. Maybe you bought the ticket just to sell it to someone else, like we see scalpers with sporting events and such, who buy tickets just to resell them.

Adam Goad:

But this, it takes out the middleman, just like we were talking about a moment ago. You can sell them to anyone for any price. It's just a matter of what they are willing to pay them. And so this is something that can provide people a lot more flexibility, and decentralization, more privacy, all of that, because

their information would not be tied to this ticket until perhaps they arrive at the registration for the event.

Adam Goad:

And then an example I was reading about online actually, is what if this was the tickets to a concert of your favorite band? After the concert, you would still have the NFT. And then it would become memorabilia of the concert and perhaps would still regain value, if this was a popular band and people wanted to have the ticket. We see people selling tickets of popular concerts to people for nostalgia. The same thing could be done with the NFT of the ticket.

Robert J. Marks:

Oh, my brother is big into that. Okay, so you could do this with a non-fungible token, huh?

Adam Goad:

Oh, yes.

Robert J. Marks:

Wow. Okay. So what are some things that have been totally a mess with non-fungible tokens that probably should not be revisited?

Adam Goad:

So some things that have been tried, and perhaps will come back one day, but I am not overly confident in them, is trying to actually run a business through NFTs.

Robert J. Marks:

Wait, run a business? How would you do that?

Adam Goad:

So these are known as decentralized autonomous organizations, or DAOs, D-A-O. They are an interesting concept. And people buy a share of this company, be that an NFT or perhaps owning an NFT. It generates a token. And the amount of token you have is your amount of ownership or amount of voting power in this organization. And then people can suggest actions for the organization. But in order for this concept to truly work, they must be fully executable autonomously. It has to be fully written into code that can be executed without people interfering. So the idea of a true DAO is a company with no presidents, no CEO. It's just an algorithm that runs.

Robert J. Marks:

That seems like a terrible idea. I can imagine no viable organization without a central leader that is distributed.

Austin Egbert:

Well, and it sounds like the algorithm would have some knobs that could be turned.

Adam Goad:

Yes.

Austin Egbert:

And it's how to turn those knobs is what's voted on by the holders of the NFTs.

Robert J. Marks:

I see.

Adam Goad:

Yes. So the holders could suggest a change in this code or an addition, a subtraction, an alteration, whatever it is. And then that change would be put up to a vote of all the people who own the NFT, or the token, or whatever it is. And based off how much they own, they have various levels of voting power. And if it meets whatever the defined threshold is of people supporting it, it becomes part of the DAO and is enforced.

Robert J. Marks:

There is some background for this. There is a book called the Wisdom of Crowds, which is just a fascinating book. And it shows how crowds many times are more accurate in their assessment than individuals. The classic example is trying to guess the number of jelly beans in a jar. And you will have all sorts of people guess how many jelly beans are in the jar. And some are going to be off. Some are going to be on. But remarkably, the average of these things is incredibly close to the true number of jelly beans in the jar.

Robert J. Marks:

Now, there's some conditions for this. One is that whoever votes on it must be disinterested. In other words, if I guess the number of jelly beans in the jar, I can't know what the person before me guessed, otherwise that's going to bias me. So it has to be disinterested. So I can see the motivation behind this, but boy, it sure sounds weird. And you're saying, Adam, that these really haven't worked very well. Is that right? What did you call them? DAOs or something?

Adam Goad:

DAOs, decentralized autonomous organizations.

Robert J. Marks:

Okay. That they haven't been too successful.

Austin Egbert:

Could you give an example of what one of these DAOs was maybe trying to do? What service were they providing? Or what was their business output, so to speak?

Adam Goad:

One example of a DAO where this can actually work is you get into the whole world of decentralized applications, DAPPS, D-APP.

Robert J. Marks:

Too many acronyms in the world. Okay. DAPPs. Yeah.

Adam Goad:

So these are places where you can go and do more cryptocurrency or NFT trading, sales, whatever it is. A popular one of these is known as MakerDAO. You can go there and you can invest your cryptocurrency and they will provide loans to people as one of the primary services. So then those loans follow the directions of the algorithm. That algorithm is changed by the voting on the DAO. So that is something that can work. That is entirely encapsulated inside the Web 3 universe. It will work there. It can be autonomous. It is all code. It does not have to interact with the outside world.

Adam Goad:

Where this breaks down is when people have tried to make them interact with the outside world. As soon as you get a human involved, that human can do something that the code is not telling it to do. An example of this is the Helium Blockchain, actually. So Helium is an interesting concept in blockchain. It is a decentralized network that provides internet in the form of long range, it's called LoRaWAN, if I'm pronouncing that correctly. It is targeted at IoT devices, internet of things. And the way you join is by purchasing a transmitter. And then you set up this transmitter in your house. You plug it into your internet. And that is how you mine on the Helium network. Instead of solving complicated cryptographic problems, you are just expanding the network. I actually have one of these miners set up in my apartment. It's just a small little box that sits on a end table and makes me money.

Robert J. Marks:

Really?

Adam Goad:

Yes. So in that one, they're expanding currently. They're looking at adding 5G service to it.

Robert J. Marks:

Okay, what do you do again? This little box sits there and does what?

Adam Goad:

Provides internet connection.

Austin Egbert:

You have your home wireless router. It would basically be, if you were setting that up and you were offering service to anyone, but you got paid for offering that service, essentially. So somebody else would come along, they would pay a subscription to the network and that network would distribute that money back to you for operating a node on their network, essentially.

Robert J. Marks:

I see. Okay. Okay.

Adam Goad:

But yes, it operates as a DAO. So whenever there are major decisions to be made, then it is put to a vote of everyone who owns the Helium tokens. And your voting power can be based off of how many tokens

you own. A vote that came up recently was to add additional tokens to this chain. Instead of having just the main Helium token, it could be broken down into a 5G token, an internet of things token based off what kind of connection you were providing to the network. But this is not a pure example, because this is still run by Helium, the company. So even though the community has placed the votes on this, it is still on the humans of the company to enact what is voted on there.

Robert J. Marks:

Wow. That is really, really strange stuff. Adam, you've told me that one of the problems with NFTs is that they are prone to corruption. Could you elaborate on that?

Adam Goad:

Yes. So while an NFT itself is cryptographically protected and cannot be taken from you without someone getting access to your private key, people can still trick you into buying things or authorizing them to do things on your behalf. This is a common criticism of the Web 3 space, and NFTs in particular. There are enumerable scams out there, because people know that everyone is looking to get involved in this, particularly several months ago. And if they can get you to make a split second decision and buy something, then they have your money.

Robert J. Marks:

Gotcha.

Austin Egbert:

As an example of that, I guess, before we mentioned you could buy and sell tickets. Would it be possible that I could go on and impersonate some organization selling tickets for an event. And I just sell fake tickets that don't actually go to the event, but then still take advantage of people who are trying to attend that if they come across my listing, instead of the authentic one. Is that the type of scam that can happen in this space?

Adam Goad:

That is a very common type of scam. Yes. People pretending to be someone else. So most of the community for this space is run through an app called Discord. This is a common app. It was used originally kind of for gamers, but has grown a lot larger. But yes, it provides the ability to talk with people all over the world through text, video, pictures, whatever. So since these projects are pretty much all run through Discord, people attempt to impersonate someone on Discord. So if you can make it look like you are the owner of a project and you have just messaged this person a private message saying, "Hey, we're about to do something new and exciting, get in now," that is a very common type of scam. And a lot of people have fallen for it.

Adam Goad:

Another one is what is known as a VGPL in the space. So that is where someone builds up a project. They make it look like they're setting up this project. It's going to do great things. Perhaps they've even done a lot of the legwork. They've talked to other projects. They've gotten connections. And they're promising to do something new, big and exciting. But then as soon as they have everyone's money, they disappear.

Austin Egbert:

Which is a common scam from the early days of Kickstarter, is you can make up a great proposal. You can propose some fancy, sci-fi-sounding technology, like the folks who had projected computers built into a wristwatch, and you would aim at a screen or something. And you can make a flashy concept video that looks great and then get a whole bunch of people's money. And you go to actually make it, and you find out, oh, there's no way to integrate a high-fidelity projector with the brightness needed in a box the size of a couple dozen postage stamps stacked on top of each other.

Robert J. Marks:

Austin, you said Kickstarter, like I knew what it meant. Okay.

Austin Egbert:

So Kickstarter is a website. I think one of the first ones in the concept of what's called crowdfunding. So it would be, if I have a business idea, one option is I can go track down a bunch of venture capitalists and try and convince them to invest money in it. But the other thing is, essentially, I can go on Kickstarter and basically pre-sell whatever product I want to make. So it goes, "I've got this idea. I've developed a prototype. But me as an individual inventor, I don't have the startup funds to go spend, say, a hundred thousand dollars to have a company somewhere manufacture this for me."

Austin Egbert:

But what I can do is I can go on Kickstarter. And I can say, "Hey, if you buy this from me now, you maybe can get a discounted version. Maybe I sell some special additions of it and you provide me the funding upfront. I then go and make the product. And I distribute it to people." And it's a way of funding it by the people who would actually buy my product, essentially.

Robert J. Marks:

Well, before investing in that, I would have to give that lots of scrutiny.

Austin Egbert:

Right. So I have purchased things on Kickstarter before. And it's usually small hobbyist electronics or something. So usually it's, I can make a prototype of it. And it's like, I just can't produce this at scale. But I know it works, because I've made at least one or two of them. And I want to make a whole bunch of them. And I want to make them more cheaply. But those types of things take upfront investment that I maybe don't necessarily have. And so Kickstarter is where you can set a goal. And it's essentially, we need X amount of money to make X amount of these things. And if you hit the goal, then you get the money. You're off and running. And then you can ship the products out to people once you get it finished. A lot of times, if you don't reach the goal, then the people who invested get their money back, because you weren't going to be able to deliver on what you were pitching to people.

Adam Goad:

This is also what we talked about previously, starting businesses with NFTs. I have seen people doing this same thing as well with them. There was one project I saw that was trying to build and mass produce a small, little holographic cube projector that you could use to display human NFTs in your house. And just like Austin said, they have developed one or two of them that they could show, but they were looking for funding in order to mass produce them. And if you were to buy their NFT and give them money, they would promise that they would send you one when they were done.



Robert J. Marks:

So this is a different way for inventors to get money other than angel investors and such, right?

Adam Goad:

Yes.

Austin Egbert:

Now, this does bring up an interesting, almost philosophical, point on Web 3, NFTs and this whole decentralized versus centralized space. And that is kind of the question of, should we go after decentralization? We can talk about, oh, centralization has these various pitfalls. Large companies are able to aggregate your data and make decisions with that. But at the same time-

Robert J. Marks:

And censor what you say. That's my big beef.

Austin Egbert:

Yes. And at the same time though, there are some benefits that are derived from that centralization, largely in some of the scams and other things that we've talked about, where people can be taken advantage of. If I go on eBay and buy something from somebody and it never gets shipped to me, eBay will send me my money back. But if I just went on a decentralized platform and tried to execute some contract with somebody on Bitcoin or something, and I get scammed, I have no recourse, because there is no central authority to review that claim and try and reverse that. And so there are pluses and minuses to this side. And there's that question that society's just going to have to figure out in terms of, where is decentralization beneficial? And how can we overcome some of those pitfalls that come from that lack of regulation in the space?

Robert J. Marks:

I think that this is just another manifestation of the risk-reward trade off. It seems to me that if you get more decentralization, you're going to have more risk in terms of the fraud that you talked about. But establishing credibility, and establishing a reputation, and making sure you do due diligence are just open to scrutiny. I can see that the decentralization would eventually work, except for very naive people. And you're right. I think that there would be different things, which would happen, which would not be good.

Robert J. Marks:

But on the other hand, as I mentioned, I don't like the censorship that we have all over the place, on Twitter and YouTube. And it would get rid of it would get rid of that sort of thing, hopefully. So final question, what do you see as Web 3... Web 3 is with us, whether we like it or not. And it's going to be here, non-fungible tokens, blockchains, this decentralization sort of computer. Do you have any prophecies about what this is going to be and in the short term or the long term?

Adam Goad:

It is certainly hard to predict. I think that, like you said, it is here and it's here to stay. I think the hype of it is going to die down and it already is. But it is very difficult to tell what will remain. I am hopeful that we will see a greater decentralization of things, for many of the same reasons you just said. It prevents

ensorship. It provides individual power and freedom to the people. Also, it enables a global community. There are a lot of people in third-world countries who have actually made a living and more by investing in Web 3, because it is available to them, unlike many other things. And they can get in for a very small amount of money and grow it very quickly. So I think it's here. I think it's here to stay, but-

Robert J. Marks:

I think it was the famous physicist, Niels Bohr, that said, "Forecasting is dangerous, especially if it's about the future." I think we have that situation right now. Austin, do you have any thoughts on this?

Austin Egbert:

Yeah, I think one difficulty going forward and in case you couldn't tell through it, Adam tends to be more pro NFT, Web 3 hype man, compared to my Debbie Downer, I don't see the point, I don't know that this is going to go anywhere. I don't think it's going to disappear. But I think if it's going to become more mainstream. There's certainly some user experience ease-of-use questions that are going to have to be tackled. That's one thing, is when you decentralize something, each interaction with it is a one-off thing that somebody has to learn. You can't just go, "Oh, I know how this works with X service." Y service is going to be completely different. And so when you have that decentralization, there's a much steeper learning curve for anyone wanting to get involved in that space and having to figure out how each individual operator handles something, potentially.

Austin Egbert:

And so that's one thing where how Web 2, and we've had all of this centralization, is there's this unification of experience. With Facebook, if I want to go check up on my friend, Bill, I don't have to go track down where Bill is. Or if I want to go meet with Sally, I have to go track down where Sally is. Do they have texting? What platform are they on? There's this whole search to figure out how to get in contact with somebody. If everyone's on Facebook, you just go on Facebook, type their name in, and it's easy to find no matter who you're trying to track down.

Austin Egbert:

When you go to decentralized platforms, you have to figure out, "Well, what platform do I even have to go to find the thing that I'm looking for?" And so there can be a complication in the space from that. And it eats into the ease of use of trying to interact with those platforms. So I think there's those benefits from privacy and things, but it also can make some things more difficult to actually accomplish when you have a decentralized platform like that.

Robert J. Marks:

The thing I'm interested in is whether Web 3 is going to disrupt large companies like Google, Amazon and Facebook, or whether it's just going to be an augmentation of the technology we see. I suspect that the truth is going to be some combination of that. I think it's going to augment, but also affect these different technologies. Okay, any final words?

Adam Goad:

So a lot of optimists in the space think that Web 3 will be the downfall of big tech, that the decentralization, the privacy aspects of it will disrupt their business model so much that they are not able to buy and sell personal information the way they do now. I think that we are certainly a long way off from that, if we ever see it. But I think that this will be the next revolution on the internet. Just the

same way that Web 2.0 brought around the big companies of today. It brought you Amazon, YouTube, Facebook, the rest. Web 3.0 will have similar ramifications on our society, but we'll have to wait a few years to see exactly who comes out on top and what changes those will be.

Robert J. Marks:

This has been a great exchange. I've learned a lot about non-fungible tokens, and Web 3, and all of these different things. And I hope the listeners to Mind Matters News have also. We've been talking to Adam Goad and Dr. Austin Egbert at Baylor University about Web 3, and blockchains, and Ethereum, and all of these other incredible little things which are being bubbled up all around us. So until next time on Mind Matters News, be of good cheer.

Announcer:

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