

What Should Law's Role Be in Social Media? Vasant Dhar, Professor NYU Stern & Center for Data Science - E52

Eric: Hi, this week on The Encrypted Economy, we had NYU professor, founder of the machine learning hedge fund and the host of the Brave New World podcast that examines the implications of big data and its collection. Fundamentally, this episode is about the role of government in facilitating and protecting the use of online identities and reputation.

Vasant has an interesting perspective on the regulation of social media that is more optimistic than mine, but our underlying concerns are the same. Really, it boils down to weighing risks and desired outcomes and so he hit it from a few different angles. In many contexts, we are often concerned with the reach of government, into our privacy and the abuses of government surveillance powers of the science perspective is that maybe more government regulation is needed to protect our society from the abuses of social media platform whose conduct may pose greater risks to our society than the abusive surveillance.

We started off talking about machine learning in trading algorithms, which makes for a smooth segue into algorithms and social media platforms. Easy to see how his earlier experiences translated into where he is today. At any rate, had a lot of fun changing gears a bit for this episode and happy to bring it all to you.

Of course, if you liked this episode, please share it. And Hey, we're making progress. Recently, we were referenced in a SEC commissioner speech. So clearly we're getting picked up. At any rate, thanks, and I hope you'll enjoy this episode with Vasant.

Welcome to The Encrypted Economy, a weekly podcast featuring discussions exploring the business laws, regulation, security, and technologies relating to digital assets and data.

I'm Eric Hess, founder of Hess Legal Counsel. I've spent decades representing regulated exchanges, broker dealers, investment advisors, and all matter of FinTech companies for all things touching electronic trading with a focus on new and developing technologies.

Welcome Vasant.

Vasant: Thank you. Happy to be here.

Eric: So, Vasant is a professor at the Stern School of Business and the Center for Data Science at New York University. He's a former editor in chief of the Journal of Big Data founder and seat

of SCT Capital, which is one of the first machine learning based hedge funds in New York City in the 90s. He researches based on building scalable, decision-making from large sources of data using techniques and principles from AI machine learning.

And he is also the host of the Brave New World Podcast. So again, I did a little bit of background, but maybe you could go a little deeper and tell us about your journey to where you are today.

Vasant: Well, I guess maybe I'll just start with the podcast, which is I'm a big Aldous Huxley fan, Brave New world.

It was one of those, I went to engineering school, I went to the IIT Delhi and there were two non-engineering books that were assigned to us. One was Gravy World and the other was Death of a Salesman, both classics. And I've always been an Asimov. And you know, during COVID it was becoming quite evident to me that humanity was being there was a change being accelerated by the virtualization and tech and that we're sort entering a brave new world of tomorrow, faster than I had anticipated.

So, I started the part just to explore the issues, at the intersection of technology, in our changing norms and how, how we should think about the world going forward. So, I've had a tremendous set of guests so far, um, and it's been. Very invigorating and I'm looking forward to some you know, some very interesting guests coming up in the next few weeks, including the presidential candidate, Andrew Yang will be on my part in a couple of weeks.

So, I'm really happy with how things are going. My guests have been awesome and I'm having a great time. So that's my podcast, but of course it's been a longer journey to get to that, to this point. And you know, we can talk about that to whatever degree you'd like.

Eric: So maybe we talk a little bit about, um, STT capital and the use of machine learning back in the nineties.

Machine learning takes an enormous amount of data to, to manage. And certainly it must have been a challenge to, to take in all that data and develop market signals if you're really basing it on machine learning. There's, there's quantitative trading, but machine learning I guess, is possibly more data intense or.

Vasant: Yes. The more data you have the better. And one of the things I've realized in finance and life in general is that you can never have enough data. It's like you can never be too rich or too thin. And the same applies to data. And in the nineties, the amount of data available was actually a lot less than you have today.

And at that time, the only people who had data were banks and telephone companies, essentially, and being in New York city in a business school, AI had been my area of research since the age, since the early eighties, when I first got into it through healthcare.

And it just seemed to me that, um, there was tremendous scope for applying a new set of methods.

To trading, and, and go beyond the linear models that have been the workhorse of quantitative modeling. So to me machine learning just offered a new lens into sort of that kind of inquiry. And the way I used to explain machine learning to people at that time was traditional sort of data analysis used to say, here's a model, here's a set of data, fit this preexisting linear model to the data and let's call it a day.

You know, what's the R square, what are the coefficients? And that was the interpretation. Whereas I found, and this was actually prior to wall street. I had done a project with AC Nielsen household services at that time where I was analyzing consumer purchase data. And I was playing around with something called genetic algorithms at the time.

And I was aware of the fact that with machine learning, you could essentially, the machine would, would say to you, I've got all this data. If you only knew what question to ask me, I could show you something really interesting. And so to me, that was a revelation like, wow. You know you know; I don't know what question to ask, but the machine could actually ask the questions on its own.

And so that's what really got me into. You know, applying machine learning and trading was these genetic algorithms that sort of given the data they'd repeatedly applied queries to it. And as long as you could avoid overfitting, it will find interesting patterns for you. And so my very first foray with the prop trading group at Morgan Stanley was, they gave me a bunch of data.

They were already trading, but they were using a trading strategy using something well, the Elliot wave theory. And I didn't know that at the time, by the way, it's because they didn't want to tell me anything. And that was the thing about prop trading on wall street was they wanted to know everything you note, but they didn't want to tell you everything they knew.

So I proposed a simple experiment. I told them, you don't give me all the trades you have, and I'll tell you if you could have done better. And they said you don't need to know anything about what we do. I said, no, just give me the trade. So they gave me their trades and to every trade I attacked.

Some indicators about what the market looked like at that time, what was the volatility? What was the trend? What were the stochastics? So I applied some standard technical indicators, and I cracked the algorithm, and it came up with a bunch of patterns, similar to what had happened to me in the consumer package space, where I discovered that, all the women do a lot of shopping on Thursdays and, and, the Nielsen guy said, oh yeah, that's because it's coupon day.

And I was, I was just still thrilled that the machine had found this without me actually explicitly telling it what to find, so here I was four years later applying the same sort of machinery. And this time the machine said, oh, when the 30 day volatility, isn't the lowest quartile.

Your trades are three times as profitable, so I went to the weekly meetings. Told them this, and there was silence around the room for a while and then exploded, people started cursing each other and the head of the group told the scientist. He says, how come this numbskull who knows nothing about markets is telling us that volatility matters.

How long have I been telling you that it matters? So that was and I asked him, I said, Hey guys, can you tell me what's going on? And they said, no, we feel that every time volatility spikes, we lose a lot of money. So it's interesting that you're telling us this without knowing anything about what we do add to me, that was really interesting because I only found the reasons for the pattern many months later, when I went into the research into the theory of finance, I actually found the reasons for, what I had found.

And so that was my first revelation that patterns often emerge before reasons for them to become apparent. And to me, that was a tremendous motivation for using machine learning because. The Mo you know, the machine could say, Hey, I can tell you the right questions to ask, given this data.

And in that case, the right question was what happens when volatility is low? And the answer was your trades are more profitable than volatility's low. So that was my first success, because the group then put a filter on their strategy. Whenever the, the 30 day volatility was in low sport tile, they would crank up the bet size, and, and it worked.

So that was my foray, but I didn't quite realize how, what a difficult path it would be. So I was, cursed by some initial success. So that's what sort of got me going, and I've been in the game ever since.

Eric: So that's interesting. It's been a number of years since I worked a lot with quantitative trading strategies on the street.

And one of the issues that you often encountered was this notion of decay. You researched the heck out of a strategy, and then over time it would decay. So the most successful strategy had a limited life, but, and I, you do a ton of back and testing was always one of those things. It's oh, back tested.

Great. That's because you have perfect vision, but now you actually have to do it in prospectively where you don't have perspective vision. Cause you can tweak your algorithm to, to kill it for the last 10 years. But that doesn't mean that you've got it right for the next year or six months or even the next week.

It just increases the probabilities has have quantitative trading and trading strategies evolved to such a point where decay is, is less of an issue because of the machine learning would actually change the underlying strategy or, or do you think that's not really something that's quite actively pursued at this point on the street?

Vasant: Oh no. The decay is very much an issue and that's something I noticed in the early two thousands as well. Which is what sort of got me going towards more of an adaptive strategy, right? Where the machine would retrain itself at regular intervals. But this is a problem that sort of India. To finance, right?

Because it's an adversarial situation. They unlike a lot of other problems in AI, like driverless cars, that's not adversarial like cars learn from each other and they get better. And everyone wins. But in finance, everyone is trying to screw you. They're trying to get the upper hand.

If you've got something that works word gets around, other people copy it, and the word is that alpha factors to undue risk factors, that is stuff that gives you an advantage now becomes a risk factor and that's the name of the game. So it's it's a constant treadmill that you're on.

And anyone who's been in this business for a while will tell you that. You know what they do now, bears little resemblance to what they did 5, 10, 15 years ago. You just have to keep adapting your strategies and that's the name of the game. You just have to adapt.

Eric: Your podcast talks a lot about the rate of change and technology change.

You talk about like the Googles and the Facebooks and the use of big data. I and I'm going to just frame this question broadly. So facade that I spoke a number of times before this podcast and we had a great time and every time we tried to set the, the call or the communication short, it just naturally expanded because we, I, I really enjoy uh, speaking to him.

And uh, we can go on but, but when we talk about, um, big data or even things like. And all the rapid technology change in the world. There's, there's so much that has gone on, even since COVID, it's amazing. It's almost like you're in the age of, that age of enlightenment that, that emerged in in, in the historical context with the rate of change, our governments and the regulations that the government enacts ready for this technological change.

Now I realize this is a broad question and it may vary by jurisdiction but, but have governments been keeping pace?

Vasant: The short answer is no, but let's back up a little bit, right? Because that's, this is like a really big question, right? Because all of these platforms, right? Google, Facebook,

Amazon, they are essentially at the core AI platforms, they take in huge amounts of data. They, they apply machine learning. They learn about people. They learn about our behaviors. They learn about our desires, our fears, all kinds of stuff. And, and that they monetize that in, in some very intelligent ways right now. That's actually fine.

There's nothing wrong with that. But I want to back up a little bit, because I think that and, and I think indirectly you know, what you're getting at is things like section two 30 and, the rule of government and people and big tech and, how do we uh, get our hands around this animal that is now you know, a big part of our lives.

And it seems to have had some serious sort of unintended consequences as technology. Invariably does. So let's back up a little bit here because, I remember this cartoon in the nineties, two dogs on the internet and one thing, on the internet, no one knows you're a dog and it was anonymous and now it's anything but anonymous.

And I think the bargain initially with these digital platforms was, Hey, you're protected, there's no liability on your platforms. You're just platforms. You're connecting people. You're, you're, you're providing a means for people to exchange information, and now you can also transact and buy things.

But you're not really liable for anything on your platform. So, and, and this is like a little bit, I, I draw the analogy. Between you know, the railroads in the 18 hundreds, where the government said, we don't have the capacity to build the railroad. We don't have the resources.

This has got to come from private enterprise, not the rails have to be laid, but let's have a partnership, let's, you for each track of you know, for each mile of track that you lay when you can have five square miles of land for free along the tracks. And as long as the tracks will lay the railroad company started to monetize those because those properties became valuable.

I think there's an interesting analogy here in, in big tech where the government basically said, you know what, you've got a free pass. To develop this digital railroad, because I don't think it's the role of government to build this because I'm sure we'll get it wrong. And they probably would've gotten a drunk.

Although we have to remember that the internet was not developed by private enterprise. The internet was developed by the us government. So that was taxpayer money, used to develop, the fundamental sort of low level platform on which everything has been built. So that became a public good on which big tech came along late, the digital railroad, for all of us, but in the BA, but in the process, they got a great bargain, they got all of the data for free. No one, like ask them anything and they didn't ask for permission either. They just took it and now they've become tremendously. And you know, and there's all kinds of

concerns about, know, abuse of this data that we're getting a raw, minimal raw deal. There's surveillance capitalism, there's all this, concern. That's come to the surface now around big tech and, historically we've all been concerned about the government, assuming power, the state assuming power, like Orwellian kinds of notions, like 1984, where you we don't want government in our affairs.

We've got to keep government out of it. And that's that, and that makes a lot of sense. You know, and my friend, James Robinson, who's written this book called why nations fail and now the narrow corridor talks about. You know how this Leviathan has to be kept in check, right? Starting with Hobbs and the social contract you know that there's got to be a balance between the state and society, right?

If the state gets too powerful, as in China, you get this despotic Leviathan, if the state gets incredibly weak, then you get like an absent Leviathan, and anything goes, you have clans, and he talks about how America and Western Europe got lucky in a sense that they found this balance of power between state and society, where institutions are strong, that trusted.

And, and society keeps government in check. And, and, and vice versa. So there's this sort of delicate balance that we strike in, in, in these free and open democracy. That makes a lot of sense, but I don't think I did envision big tech assuming this role of big brother. So, and that's, what's really happened.

And now we find ourselves in a situation where there's this third actor that's emerged and that's a big tech and, we don't have the sort of conceptual tools to deal with it because we've always worried about the state, assuming too much power. And now suddenly big tech has assumed tremendous amount of power, and big tech isn't going away anytime soon, the incredibly powerful well-entrenched what they do is incredibly complex, right? There's no upstart that's going to come and dislodge Google, it knows anywhere in the short term, right? These are like powerful enterprises that have built their digital railroad.

And now the question is, what do we do? What do we do about them? Because they've become incredibly powerful. And we need ways to think about striking the right balance of power between the state society and big tech, this third active. And so that's a long answer to a short question, but I just wanted to lay the foundations for what we're talking about, which is that with big tech, we have implicitly this sort of public private partnership where the government said, all right, build a railroad and use the data you know, build the infrastructure and they built it.

And to some extent they've almost become public goods now. Facebook's sort of become the town square, right? They've turned into public goods, and they have tremendous amount of power. So you have these public goods being run by private enterprises. So we're in completely uncharted waters here where we want to be careful about.

Not allowing government to overstep the authority on private enterprise, but at the same time, government has been incredibly slow to act. And you know, and that's where your question started, which is, are they prepared? And the answer is, yeah, they're prepared, but they've been incredibly slow to act.

We know the problems we're facing, we I think we all realize that section two 30 must go or must be radically amended, but how that's done, isn't entirely clear. And I draw this analogy to financial services, which we can explore if you want. But so that's the way I see things, right?

There's been no KYC, with social media platforms that have, billions of users, arguably don't even know who their customers are. They don't, they're not motivated to know that there's bots. You know, rural governments, manipulating us elections, right? All kinds of crap going on here.

And clearly we need to do something you know; this is not a situation that can continue for a long time without other stuff happening. That's going to be bad for us. So what I see happening on Capitol hill is this some movement, but it's still a show, you that, that there hasn't been sufficient concrete action coming out of lawmakers.

And that's a little frustrating, right? And that's, what's got to change so sorry for that long-winded answer, but I just needed to set the stage.

Eric: Well, to, to pull on that thread a little bit, you have the big texts use of data and all the privacy concerns. You have the algorithms that, that basically in, I guess there's an open question.

It's you want to have full and free speech, but yet when algorithms direct people toward their own particular views, Unbiased search, that potentially raises questions, whether those questions need to be regulated or not, or just people need to be made aware. I guess that's a different question.

And then there's even things like the advertising market and the way that the big tech like Google and you know, Facebook will sell their, or create their own secondary advertisement market where they control all different segments of the you know, they're the buyer, the seller they're the market.

And that is basically unregulated. So within those ecosystems there's multiple areas that not only two 30 where they've been given immunity, but they've been given functional immunity because of all the other things that they do that in the financial market would be more regulated or other markets might find it all regulated, like in health care, even for personal identifiable information, they are lesser regulated in these ecosystems.

Vasant: Yeah. You know, you talked about free speech. Free speech. And the physical world means people know who you are. Yes. You can speak freely, but you're not speaking from behind a billboard, but no one can see you. It's free speech, but Hey, Eric has said, I think we should do this while everyone knows that Eric has said that.

I'm all for that. That's free speech, but, and that's what sort of Facebook hides behind, but that's our free speech. It's not free speech when you've got, some bot out of Russia saying something and then another bot saying, yeah. And then you know an army of trolls saying something and then Facebook's algorithm picking that up and amplifying it because it generates engagement.

That's not free speech. That is anything but free speech. It's very opaque speech. And it might maximize engagement, but that's bad for everyone. That's bad for society as bad for us. Any rate may be great for Russia. You don't maybe great for Facebook because you know this, vitriolic content generates engagement, but it's not good for society.

So I don't buy this free speech argument. I've proposed for a long time that social media platforms be subject to KYC requirements. They should know their users, just like other businesses banks, right? You open a bank account; they want to know everything about you. They want to know you.

I think the same thing needs to apply on social media, right? I mean on the internet. And I think we're kidding ourselves. If we think that the internet is this anonymous space, it cannot be that way. The potential for destructive harm is just too great, to allow people. Do you know, speak from behind billboards and stuff like that in the name of free speech, that eight free speech.

Eric: So I, I have a confession to make I've never made this confession so people can start throwing eggs at me. So I had a cybersecurity company and along the way, I wanted to have a, I wanted to deploy different people to help market my company. So I briefly retain somebody who was supposed to promote my profile on Instagram and various.

And I just couldn't, I couldn't continue because he, the profiles that were utilized were, and this was somebody who was in a Bangladesh. I had an office in Bangladesh. But it was, I just seem to do a lot of work in that region for a while, but the, he was going out as an American housewife, different profile, and she was holding a baby and I'm just like, I can't, I just can't do this, this this is so bad.

I know it's just a picture, but come on. It's just, and, and it wasn't like he was saying. In my hometown, I listened to the, it didn't even make any sense on some level, but it was, it definitely gave a different stature to this person. And for somebody who is unsophisticated they may think that's actually who the person they're dealing with.

But in fact, they're not now, should that be regulated, or should people just demand that social media do that? It's a tricky question. You know, we can spend a lot of time debating it, but that's just like one example. And there's the other point that you made just to continue on that thread is this notion of taking an identity, presuming to be an actual human being with a different background, with a different profile that actually isn't yours and that's one.

And the other one is this notion of a bot where the bot, just to assume this identity and a bot assumes another level of discourse. And it all seemed like a genuine discussion with opinions going back and forth and formulating a view or a perspective, but it's all designed to Manipur.

To make it appear that there's this other conversation going on. You know, and it yeah,

Vasant: yeah, no, exactly. I Americans um, sort of recoil at the word regulation, right? So there's this instinct sort of recall. And I remember when I first, and it was 2016 or 2017, but I first proposed that social media platforms would be subject to KYC regulation, there was, and, and my uh, post rent on zero hedge, and all kinds of things. And I got all of this hate mail saying, you I think you should go to China, or I think you should go to England or, countries where you don't have you know, freedom of speech and all that kind of stuff.

You know, but I think, what Americans don't realize often is that our financial system is trusted. For one reason. And that is that it is the most highly regulated system in the world. You deposit your money in the bank, right? You can be reasonably sure. Almost entirely sure that someone's going to, isn't going to walk away with it.

I mean, these things, so we, the, the trust and the financial system is there because we've gone through this painstaking process of figuring out, how things can be manipulated, how people can favor one customer over another. And by the way, I worked on wall street and wall street was full of these kinds of conflicts of interest.

And they eventually got regulated. And, with, with the intention of creating a more level playing field, and this is something we forget oftentimes is that we have the most trusted financial system in the world because. We feel that our money is safe, right.

That there isn't going to be wrongdoing, et cetera, et cetera. It still happens. But it's because it's regulated. So I understand the sort of visceral reaction to the word regulation, the other side to it is that it's meant to protect people. And that's where you know, that's what the, where the trick is.

How do you have the right level of regulation? It's not like regulation is bad, right? Oftentimes regulation has unintended sort of consequences. We can see that. So that certainly happened. But that's the challenge for lawmakers is, to, to, to find that right balance.

And you know, while I might criticize them for acting too slowly, I appreciate the fact that they have to tread carefully because of unintended consequences of regulation as well. So I sort have a somewhat balanced I, I try and have a balanced view towards regulation because I think on balance, we're looking for regulation that protects us and avoids this kind of fraudulent dialogue, that you were talking about because that's what we've been seeing on the internet.

That's what we've been seeing with social media platforms. You know, I you know, when I went to, when I talked to Sonata row, that was the first question I asked him, is, are we being manipulated by algorithms? And the answer is, yes, we are.

Eric: So I, but when we talk about KYC, and I know you don't mean necessarily.

You know, give me your utility bill, and prove that you've been a resident for the last three months and send me a copy of your passport and all these things. But nonetheless, even the act of proving that you're, that person, you would have to, if let's say it was required, you would have to prove this even more personal information to Facebook or Google or whomever.

And presumably they would be the ones taking it in, unless you created some sort of singular, fully encrypted repository, but you ultimately are now sharing more personal information with presumably a technology company that has been exploiting that information all along. So isn't there an inherent conflict in that.

Vasant: What's the difference between sharing your, showing your bank that you're a legit that who you are, who you say you are and a social media platform that you're required to. I mean, we beat the backs, right? Why can't we require, what's wrong with? Authentication, I mean, it doesn't mean you are not like use a pseudonym. Sure. You can. But as long as Facebook knows you're Eric has. And that, you're a resident of whatever it is. That's, you that's K Y C. Now that doesn't mean that they're allowed to use your information for all kinds of nefarious purposes, but they should be required to use it for authenticating people.

I don't think there's anything wrong with that.

Eric: I think the issue would be to the extent that they actually had the information in an unencrypted format. You could do a zero knowledge proof. The other thing that's curious is, cause we, we just did an episode with Victor from a Humannode, founder of Humanode. Humanode's proof of human existence algorithm, it's really contemplated more for governance to make sure that you don't have a civil attack in a voting mechanism. And what they basically do is they have to, there's a liveliness detection mechanism for a particular voter so that that you're a human as opposed to a bot.

And it avoids the risk of multiple bots voting to create this, you because if you have one, one Token holder one vote, then somebody could presumably just create a ton of, bots holding, small token, one token and then they would all have the equivalent vote and then they could basically still manipulate.

So the notion of human existence for verification, and to make sure that it's unique that's something that would be built into it. And then there's this periodic method of where you'd have to verify. Now, imposing this on like a Google or Facebook's probably ridiculous, but could you envision a world where there is a distinction between a user on a social media platform that chooses to be verified or unverified?

Like you could still be a bit, you could still be a criminal actor posing to be as you know, an American housewife when you're really, a prison guard and, some despotic country. But, but at least it the person who is ingesting the information reviewing it would know that this was unverified and thus potentially not worthy of the same level of trust as something that has been verified.

Vasant: Oh that's a, that's a really interesting question. You know, and I think you answered the question you'll sell, right? Yeah. You're basically saying, okay, they're verified that you're a human, but beyond that, you don't want to say anything about your identity. I think that's fair enough.

But in that case, maybe you should be prevented from posting anything, or be hardened, like pictures to show your, making pizza or you have to restaurant or something like that. So I, you maybe there's a way to assign you know, different levels of permission depending on how to the degree to which you've been authenticated.

I mean, I haven't really thought about this before, but that certainly seems like a possibility, so if you don't want to say who you are then you're assigned a minimum level of you know, capability on that platform, your level one. But if you really want to post opinions and start sort influencing people, which is perfectly legitimate, right.

That there's nothing wrong, but people wanting to influence people, but then you authenticate yourself. I don't think that's unreasonable

Eric: or do you think maybe it's something that private industry, all, ultimately deals with themselves, like certain forums are the ones that are potentially verified because ultimately if it's like children, cause there's a lot of children on these platforms, whether or not they should be, I guess there's a different question depending on how old they are, but, if you're like 15 years old and you're posting on, I don't know, 15 year old posts on Facebook.

I don't even know. I think they are these Instagram, but they're not going to go through, they're, they're just kids, but by the same token, you, and I think maybe, this becomes even

more of an issue when you deal with platform where it is completely unedited, and you have a lot more kids on it.

Vasant: Look, I, you're, you're raising something that is incredibly important, right? Kids on the internet. We know that. We can be manipulated by algorithms. We know that that train has left the station, right? I think the same kind of laws that applied to tobacco and alcohol.

I mean, the last time I checked you couldn't buy alcohol. If you're under what,

Eric: 2 21, 18

Vasant: 21, tobacco, I thought, I don't think you can buy cigarettes, as a kid. Um and, and one of my guests in a recent part, Dina Srinivas and reminded me that cigarette companies used to hand out cigarettes for free right.

To create addiction. Because the new tobacco was addicted. So, so they were truly evil. So for decades, they denied that tobacco had any kind of addictive properties. When did you that it did right now? I'm not accusing social media platforms of being evil. Some people do, I'm not accusing them the evil eye.

There are unintended consequences that happen. But I think that you know, until we have the smoking gun, 40, 50 years later, every study showed, the, the harmful effects of smoking. And now you've got cigarette packets with skulls and crossbones, saying this is poison, it'll kill you.

And if you still want to consume it, be my guest. You know, when we're not in that dissimilar situation with some of these social media platforms, they can cause tremendous amount of harm to kids. So and this is you know, rural for government to protect kids, because you know, now, social media platforms will hide behind we don't have enough data.

Show me the site. That shows that kids are affected unless we have a sample size of 2 million and a longitudinal study over 20 years, this is improvable, right. Same thing with tobacco, right? The risks of that are way too high, by the time we get that smoking gun, it'll be too late, or it could be too late.

So I think we have to like tread really carefully here when it comes to, social media platforms. So kids, Instagram for kids and all this kind of stuff, it's, it's wrapped up in nice looking rappers, but you really need to be careful. So I think we need to think about like minimum age before you can be on these platforms.

And so we need to think of laws similar to what, how we think of alcohol tobacco, because the, the similar kinds of impacts that can occur on kids, you're talking about advertising.

Same thing right after the digital advertising market completely befuddled me because we've got the financial market you know, in front of us, we can see what happens, right?

You can't have someone operating an exchange and being a buyer's broker or a seller's broker at the same time. Not possible yet. It's free for all in the digital space, and to some extent it's the tech language and office location that some are tech is different. Uh, and the fact that lawmakers are maybe in their fifties and sixties and seventies, and more, and grew up without the tech, don't understand the language.

So we've had all of this stuff happened and you know big tech Scott from the free pass, but I think it's time to wait.

Eric: But let me ask this question though, because of the global nature of it, and certainly the digital asset space itself also sees this to the extent you regulate it and make it difficult for some of these practices to occur on shore.

Does that just encourage offshore marketplaces that you know, to do the same thing? Absent the great firewall like they have in China. How, how do you actually prevent, platforms from becoming popular that don't have all these controls and they actually might be more enticing still to different groups of society.

It if you're talking about children, but even outside, there's parents, there's the schools, there's education you know, is it something that the governments really can ultimately.

Vasant: You know, I cringe at the term control, right? Control is a bad thing because that's a bad word.

That's just like smells of you know, you're infringing on people's rights. And so I try,

Eric: Question withdrawn. I will go with the effectively regulate.

Vasant: Yeah. Uh to me that is much more palatable, but I think there is some role for government to ensure that, the right kinds of incentives are in place, know, that you know, that, that you know, that there's a level playing field that people don't get manipulated.

You know, that the that they're protected that there isn't, right fraud, because that just undermines trust and it, undermines institutions that you need in order to have an effectively functioning. Free market democracy, right? You need some sort of trust in institutions now.

You know, and, and this might be a good segue into the whole world of crypto and all of that. But I think that viewing crypto in terms of counterculture and I don't trust the government, isn't the right way to look at crypto.

I think there's some tremendous benefits to crypto and the underlying technology, that doesn't but that doesn't get you away from, the need to protect investors, to protect people who you know, from being defrauded and things like that, which are ultimately the goals of regulation and.

You know, with crypto, it's sort somewhat in its wild west days. But I don't think that necessarily needs to be this adversarial kind of situation between crypto and institutions. I think, the two need to exist in a way that promotes trust. You know, it is the simplest way I can put it.

Eric: Yeah. The U S has certainly a little challenge when it comes to thinking, figuring out how they're going to regulate it despite all the activity you know, there's, there's a press to, to be regulated as a security. But that may or may not, they may not always be possible depending on the interaction of programmable money with utility or the, the, the, a lot of these platforms may actually legitimately be decentralized.

So how do you impose a whole registration regime, but you may find, even with the big social media companies and trying to figure out that right mix you know, it's really what the outcome is, because certainly at the end of the day, you don't want like an off shore, social media platform, somehow taking arbitraging, all the advantages that gets by not being in a regulated jurisdiction, but you're getting all the traffic, all the people flocking there for it.

Vasant: Yeah. You know you, I, I think, um, a lot more about the crypto space denied. Um, but I certainly see the need for a lot of, or rather the scope for like tremendous efficiencies being realized you know, through different payment mechanisms, we still use sort of antiquated networks, like swift to settle transactions that, take five days and have, incredible error rates and stuff like that.

You know, so I, I see a lot of that stuff being replaced by, know, these you know cleanup protocols, that, you that these proprietary protocols where you don't need intermediaries. So, so I, I totally get the need for that. And there's tremendous efficiencies in order to be realized in that space.

Um, And yeah, I, I realized that there's tremendous confusion at the moment around, what's the security, or it isn't the security and all that kinda stuff. But you know, assuming that you know, Gensler get some clarity on this uh sooner, rather than later, maybe we'll begin to make some progress, where you there can be more trust and transparency in this crypto space as well.

Eric: Yeah. You know, w with all these things, there's always a danger of political politicization as well, where it starts to become a Republican Democrat type thing. And

that's probably one of the more concerning aspects of digital asset regulation is to see it start to take on private party lines.

Do you think there's a risk of that when it comes to social media, big tech, do you think there's going to be a one side picks its battle on the other side, just opposes it, or do you think it's going to be more bipartisan and how it.

Vasant: I, I think it'll eventually become more bi-partisan, but at the moment that's show you're seeing on Capitol hill, as all these platforms, do the lean red, do the re lean blue, and as my friend, Scott Galloway said, Adilene green you know what, I'm going to make some money.

They lean that way. So really it, it is a bi-partisan thing. And I, and I think eventually we'll get our act together.

Eric: Good to hear. So let's shift gears a little bit just to, to web three O is that something where in your view, is that something where there should be regulation or do you think it pretty much, the that one of the primary benefits of web three O is that it, I guess it disentangled some of the big tech companies control over the data.

You w what are your thoughts on that?

Vasant: I don't know, so let's define web three. Three-year-old right. So how do you look at web three? Oh, because I look at it as an extension of web tool but with you know, to, to borrow sort of the bill gates sort of information at your fingertips, but then you're also at everyone else's fingertips So it, it, it, to me, it seems like this internet with more intelligence, more stuff on the cloud you know, more fluidity in terms of data, just point intelligence about things but how do how do you view it?

What's, how do you define the web three O before we go into it implications and risks and opportunities?

Eric: I think one of the core things, and I recognize that web trio has become sort of a catch term for the, the next stage of the internet and, somewhat defined it as the ability to bring your own wallet with you online now, wallet, that could be associated with programmable money, but even in a, in a simpler context, in terms of your own identity, your own data, so where the user has You would argue more control, like for example in, in brave, you can choose to be open to different advertisements.

You can sort of moderate what you want to expose yourself to, or how you want to monetize your own activity and you get rewarded for doing so, but it recognizes that the user has you know, and I, fundamentally the user has an identity that identity captured inside of a wallet that wallet can contain both pro programmable money, but more fundamentally it's digital identity and the ability to better manage the digital identity or to

program that digital identity, to interact with the internet, as opposed to just being a surfer of hopping from site to site and pot potentially being tracked by a large company, but not having all those tools or abilities yourself, whether yourself directly or through a third party.

Vasant: Yeah. You know, it's interesting. I'm, I'm talking to you from Switzerland. I came here last week. And you know, I was just thinking, I went to JFK and, spent like two and a half hours in various lines before boarding the plane. And that just seems incredibly inefficient. Um, and I could just you know, envision a few years from now where you just you know, walk right through, maybe something scans your Iris and, boom, boom, boom. You're on the plane, in your bags get checked in. To me, that's you know, smells like web three O now.

Um, I'll, I'll, I'll go take this example of India, India doesn't often get things. But it's, it's interesting to see what's happening there in terms of how, some of the thinking about. The, the, the internet and data and privacy and empowering the user. So 2009 India started this Aadhaar project, which is you can be authenticated in real time, only country in the world where this sort of capability exists, where you can authenticate uh, which essentially are you who you say you are right in real time, biometric. And it sounds creepy and, controlled and all that kind of stuff. But in India,

Eric: And notably government administered government, private

Vasant: Government administered, but there's no data about you recorded by the government, such as other than the biometrics, they, they don't know where you live or, what you do for a living.

There's no other data. The only thing that platform does is one simple thing, which is authentication right now in India. It was driven by the need for people to have identity, right? Because you're talking about digital identity now in the west were used to, birth certificates or social security numbers.

So things like that have been used as an identity. But now, uh, in India you had 600 million people who didn't have an identity, they, the government, and even though these people are. Okay. And so these people couldn't really participate in the sort of economic sort of mainstream, right?

They didn't have identity; they didn't have a bank account. And pretty much overnight that was transformed. You know, that, that platform now has 1.3 billion users. Like it's the largest authentication platform on the planet. And people are authenticated real time. Now, what did it do? Well the guy who sells coconuts on the street right earlier, he'd get a loan at a hundred percent interest rate from a loan shark right now the guy accepts Google pay.

And he can go to a platform. So India has introduced this notion of a data fiduciary, right? Just like you have a fiduciary and finance, so there's a platform which is a data fiduciary, and that coconut vendor can go to this platform. Make my transactions, all my Google pay transactions available to access bank for one month.

And, because I want a loan, that thing is reviewed, and the guy gets a loan in 10 minutes. Boom. It's deposited into his account right now. That's happening in a place like India. You know, w you don't tend to think of India as being innovative in both things, but this was a late mover advantage.

And it came from the need for inclusion, which required people to have a digital identity. And now the digital identity can be used for all kinds of purposes. That actually benefit the individual who previously was completely out of the economic mainstream. So the same thing has happened with payments, right?

So payments are now a platform that isn't run by government. That's regulated by copper, right? The same way with these data fiduciaries. They're not run by the government, but they're regularly. By the government. And it's a sort of new way of thinking about, and they call it the data empowerment and protection architecture.

I think that's what it's called. But the basic idea is that users are in control of their data. And in a sense, it's the first information market in the world, right? Where you don't have this notion of information markets has been around for a long time. My late colleague Ken Loudon actually first proposed it, I think in 1996 or something, that there should be information markets, but people are able to transact and, you sell the information. People put a value on it, he proposed this notion of information markets that was actually picked up by people like Hal Varian, who was the chief economist of Google several years later. And um, uh, this data and apartment architecture is the first, information market.

I see. And that's an interesting way to go where you put users in charge and in control of their data and they can monetize it, right? People are willing to pay for that data to make you a loan because they're going to make money off that loan. So it's an interesting idea and that's the way I look at, as web trio is this, uh, very fluid, uh, an architecture where sort of physical collateral has been replaced by information collateral, right?

Um banks use a lot of proxies to figure out whether you're risky, what do you own? Do you own a house? They could, if they could look at your transactions, they could maybe assess your credit risk even better. But they can't because we don't have the systems in place.

To do that in a really fluid kind of way because systems have evolved piecemeal, from a different era. I still write checks by the way; I still write five or six checks a month. You know, in Europe that's you know, that seems like a Neanderthal kind of age right.

So, so in the U S we've got this patchwork of systems and in a sense we're cursed with first mover advantage and, and, and now forced to try and integrate all of these different patchworks of systems into something more coherent.

Eric: And so you'd be raised the point about a marketplace for data, which is one of the things that.

Brave is also based on, which is the notion that you make your data available, and you get paid for others using your data. Number of years ago, somebody had come to me and asked me to work with them, represent them in my legal capacity and creating a company where people would put their data up for it.

Like they would same thing they would elect. And they would, that, that data would be monetized. I'd get a check into their wallet, not a check, but they'd get paid. And, and did a marketplace could develop over time. Certain people could make more money. Like for example, presumably I'm, my data would be more valuable than somebody who was like 18 and had a lower income just unless that person was a spendthrift or whatever but potentially I'm a better whatever, or I could be worse than somebody else.

That's I'm not, there's no elite isn't there. But the point being is that you did have different value metrics, but I, my, one of my points was always that the people who don't value their data generally, aren't the ones whose data is all that. Whereas those who do value their data are much less likely to offer their data up, to be monetized, to be harvested as part of a data aggregation, to figure out how to better position products for them.

What are your, is that what you were talking about when you talked about the data marketplace? So you just mean it more in the context of financial transactions or things like,

Vasant: No, I, I do mean that in fact, in, I think it was like 2013, I wrote an article in wired which, which said get paid for your data on Facebook.

So actually, and I went on CNBC, and it was Brian Sullivan and Henry Blodget and, know, we uh maybe Becky quick, if I remember correctly. So we discussed this idea, and. Um, and they said you know, is this a crazy idea or does it make sense? And actually proposed that Facebook should actually create an information market where they pay people for data if that data leads to a transaction.

So if you're into running, and they connect you with Nike and you buy a pair of shoes maybe Facebook should get a piece of the action. So I'd propose that. But I think the idea was too early for its time. And I think the mentality at that point in Facebook was more along the lines of rural Zuckerberg's earlier comment about people being dumped, fucks for sharing that data.

Excuse the French. But I think at that time the thinking was, are you crazy? What else should we pay people for anything they're providing it to us for free, hey, like, are you crazy? That's the craziest idea. But I think that we may be, we may have been at a very different place now you know, Facebook had actually gone down that path of saying, you know what, we're monetizing this data.

We're making a ton of money. Let's share it. And I remember in the late nineties asking the head of credit card operations at city bank saying, you're making money off these people, wouldn't it be nice to share it? And he said would be a great thing to do, but the infrastructure doesn't exist in order to do that.

And this was like nineties. So I think it's a good idea, but it would be like too messy to be able to do that. I think Facebook could have done it I think these digital platforms could have done it, but I think they were just too greedy. And they, and they just went down a path, a darker path of just exploitation of data, manipulation through algorithms and look where it's gotten them.

Eric: Well, and where do you think it, where do you think it ultimately really goes? Is it, is it window dressing? I know that Google and Facebook and some of the big tech companies are now engaged in, in, they certainly have more privacy controls that they're implementing. They say that you know, about specific human data, right?

You know, a specific individual data. They say they won't sell the individual data. And they're also exploring web three O but here's the thing. They don't even need the individual data anymore. They have all this data. All they have to do is create a composite I D personally identifiable information for a large tech.

Becomes actually less important. They can extract all the same data that is similarly intrusive on, you could say privacy without even necessarily having the individually identifiable information that's right.

Vasant: In fact, that's exactly what they've done. I mean, the, the acquisition of DoubleClick by Google was, exactly, you motivated by exactly that kind of stuff.

I mean, you they, they cookie the most people you know, and eventually you know, triangulated on the identity. Now they can connect your online behavior with your offline behavior, the ability to get into your home. I mean, in a sense you know, you're right that, that that's already happened.

But I think going forward, it's still important to you know, put the. Checks and balances in place, because I think over time, that information will absolutely part of it has already game over, but that doesn't mean that it should continue to be that way. Um, uh, yeah I, I think that it's still important to you know, put into place the right kind of regulation going forward.

You know, recognizing that you know, a lot of this is in some sense already, too late. In fact, that's one of the reasons I guess, Facebook is concerned about, Apple's new you know, policies around privacy and clamping down because it suddenly turns off the, one of the spigots.

So it makes things more difficult for them. But I think that's a step in the

Eric: right. And so do you think ultimately it's really more about how people become more educated and they're more educated preferences go migrate towards systems where their data isn't going to be exploited in the same way or at least on its face.

And, and then there's still people who just don't care you know, to, what you talked about, the market barks, Zuckerberg you know, dumb persons who just don't care enough about their data. Is that ultimately where we go or should go? Or do you think the notion of effective regulation in that context still makes sense?

Vasant: No, I, I think you know, I think effective regulations still make sense. I think we need to, think seriously about, um, uh each, uh, it's hard to like. Characterize all of big tech with the same broad brush, because the issues are different for Google than they are for Facebook.

And I think we can tackle them in a one at a time, for Google it's that they basically are dominating the largest dealer digital market in the world, the digital advertising market, because they're on the exchange brokers on both sides. So for Google, it's a separate set of issues than is, for Facebook.

So I think each one of these uh, uh, companies require a different approach. It's hard to uh, characterize them with the same broad brush. But I think it is possible to deal with each of them separately. But with Facebook and social media platforms above a certain size, I think it should be KYC.

I think there should be more transparency, but I also think it requires. The definition of laws. One of the things we have in finances clearly defined laws. You can't manipulate the marketplace, you can't favor customers, we've defined these laws. What are these laws when it comes to, society?

So on the one hand I say, yeah, we should have transparency, but transparency to what end. I think the transparency should have an end, namely you know, the mental health of the population, right? You don't want to be, having algorithms leading to teen depression.

So I think we can broadly define. You know, what we want to accomplish, right? So mental health of the population, let's say you know, not manipulating the democratic process at the moment, we don't even have rules around this. There are no laws that say that your model has to subvert the democratic process.

There's no laws around that. There are no laws around you know, that, you could have algorithms that lead to, mass scale depression. There are no laws, right? So I think lawmakers need to sit down and define rule in broad brush strokes, what are the laws and then define transparency and regulation around those laws.

So both of those things have to come simultaneously. It doesn't make sense to talk about transparency without an idea about, transparency towards what end. So we need to define the ends, which is, the laws and then craft the regulation accordingly, just like we've done in financial services where things seem to work pretty darn good.

I know we've defined the laws; the regulators know what they're looking for. You know, my hedge fund has been, regulators have shown up twice, and they've said, oh, show us that your trades are not favoring clients. And that's okay for work periods. Do you want them? We want them for these years, show us what prices different people got and show us that you're not favoring clients.

I can show them that. So they know what they're looking for. We need similar kinds of laws when it comes to these large scale platforms, what are we concerned about? What are the fears? What are the risks? Once we define that, then we can start crafting sensible regulation around that at the moment, lawmakers are you know, they've got two left feet in terms of like even trying to define these

Eric: laws.

And so do you envision um, Maybe advertisers or those who are leveraging the data sets that we have, like one, we have KYC potentially on the user issue. And maybe when they start posting beyond a certain point, it requires a different level of, assuring that they are, who they claim to be, or that they're not a bot.

Do you also envision a similar regulation maybe like a conflicts within, or conflicts of interest or the, where, where advertisers are paying for access to these platforms or people are paying for access to these platforms that there's a better understanding of you know, who they are, similar KYC requirements on that side where they're actually paying to promote?

Exactly.

Vasant: Yeah. This isn't rocket science, right? The financial industry isn't rocket science. It's very simple objectives, right? Protecting customers level, playing field. No market manipulation, very simple objectives.

Eric: I can find some not simple rules.

Vasant: The objectives are separate, but in fact, you're raising a really good point, right?

What this means changes according to the technology, even in fi even though the financial services, protecting customers meant something different 30 years ago than it does now because of the technology. So, uh, you're exactly right. I think the objectives can stay the same, but the methods have to keep up with the technology and adapt that there's nothing wrong with that.

That's, that's just natural.

Eric: Excellent. Excellent. So the sun we're pretty much closing in on the end of our time. Here has been phenomenal. I feel like we could keep going. Anything that, that you want to close with that, you don't feel like you're starting to get to in this conversation.

No, I,

Vasant: I you know, thank you for having me on the part. I really enjoyed it. And I would ask you a list of those to tune into my podcast, baby world. It's a great new podcast.com. Um, I have you know, like I said, tremendous set of guests, invigorating conversations, and my only promise is I will make it worth your while for that 60 minutes, you'll come away with something to you.

Eric: Yeah. I, I had the brave new world on, on, on my pie, on my playlist now. And I've, I think I've listened to every single one and maybe a couple twice uh, it's been great. So again, thanks so much for coming on the podcast. It was great to have you, and so people can find brave new world, I guess it's like the encrypted economy it's on every player.

It's very easy to pull up. You type in a brave new world. Where can they find out about other things that you've written or published or about.

Vasant: Oh I'm very easy to find you just type my name into Google and everything comes up. Some of the things that even, I don't want people to know. So it's,

Eric: that's why he's all in favor.

That's why he's in favor of regulation. Just kidding. Okay. Anyway, thanks so much. It was great to have you,

Vasant: Likewise, a pleasure, Eric. Thanks. .