

ILLUminate Blog Transcript: Andrew Ward Explains NFTs

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- ANNOUNCER: 00:01 This podcast is brought to you by ILLUminate, the Lehigh Business blog. To learn more, please visit us at business.lehigh.edu/news.
- JACK CROFT: 00:12 Welcome. I'm Jack Croft, host of the ILLUminate podcast for Lehigh University's College of Business. Today is September 14th, 2021, and we're talking with Andrew Ward about NFTs, or non-fungible tokens, which have been much in the news of late. Dr. Ward holds the Charlot and Dennis E. Singleton '66 chair and is chair of the Department of Management in Lehigh's College of Business. He also teaches courses on societal shifts and the way that the world is changing. He conducts research on issues related to corporate governance, including CEO successions, CEO compensation, the roles and concerns of the chief executive officer, and CEO board relations, reputation, and leadership. He has published articles in several leading academic journals, including Administrative Science Quarterly and Organization Science. His website, thegreatdivides.com, examines how societal megatrends will cause future disruption. Today's topic NFTs, which fall under the blockchain megatrend, are causing considerable disruption in the art and entertainment worlds already. So thank you for being with us today, Dr. Ward.
- ANDREW WARD: 01:28 Thank you for having me. This will be fun.
- CROFT: 01:31 It should be. First, to set this up, at Sotheby's auction house in early September, a set of 101 non-fungible tokens, or NFTs as we'll call them the rest of the way here, representing images of computer-generated cartoon apes sold for a whopping \$24.4 million. The set was just a small part of the limited 10,000 NFT collection known as the Bored Ape Yacht Club. The sale came after two-time NBA MVP Stephen Curry in August paid \$180,000 for an NFT from the Bored Ape collection and made the image of a blue monkey wearing a tan suit his Twitter avatar. So how do we begin to make sense of this? I guess the best place to start is, what is an NFT?
- WARD: 02:26 Well, as you said, NFT stands for non-fungible token, and so really the first thing to understand is what is meant by fungible or non-fungible. So fungibility is whether something is completely substitutable for something else. We often think of this in terms of form and function. However, often people think that something has to be identical in form to be fungible. That's not actually true. For example, think of money—the U.S. dollar, right? This is completely fungible despite having multiple forms. I might have five \$1 bills in my wallet. You might have a \$5 bill. We both have exactly the same value and would be willing to trade without any friction. And if you needed five \$1s for a vending machine, say, I'd be quite happy to trade with you. And it doesn't have to even be in a physical form. You might just need two \$1 bills for that vending machine, and I could give them to you and you could Venmo me \$2. That's still the same value to me, even in a totally non-material or digital form.
- WARD: 03:38 So money is totally fungible. It doesn't need to have the same form, it just needs to be identical in function. Whereas on the other side, something is non-fungible. It has a different value in its function, even if not necessarily in form. For instance, you can buy an NFT of a play in the NBA, and it's one of the sort of popular NFTs that are around now. And even though you could watch that same play as many times as you

want to on YouTube, but there's a different function in owning the NFT, in that case, sort of very similar to collectible trading cards, baseball cards as many people collect, which then can be owned and traded with other collectors, for example.

CROFT: 04:28

And I had mentioned up top that this falls under the broader category of blockchain. And can you explain how NFTs fit into the world of blockchain and their relationship to cryptocurrencies?

WARD: 04:42

Yeah. So NFTs are housed on blockchains. Right? The blockchain is what records and verifies your ownership of a particular digital sort of NFT. And an NFT is just like any form of physical property, but it's not physical, it's purely in digital form. And so you need to be able to establish who owns that NFT at any given point in time. So a blockchain is the secure way in which those are recorded, verifies ownership, and therefore facilitates the transactions or the trading of those NFTs. Cryptocurrencies are actually completely fungible tokens. So these non-fungible tokens are these unique forms like a piece of art or something, but a cryptocurrency is another form of token, a digital token, but those are completely fungible. So a bitcoin is a bitcoin is a bitcoin, and the differences between them—the fact that they have different serial numbers—doesn't matter. They're just something that is also sort of tradable, also kept on a blockchain that records and sort of verifies ownership, but is something that people will trade on a one-for-- always trade on a one-for-one basis. One bitcoin is all- - your bitcoin is the same as my bitcoin. We can trade them back and forth and it doesn't matter.

CROFT: 06:24

Now, if I wanted to buy an NFT, how would I go about that?

WARD: 06:30

So the first thing you'd need is a wallet, and a digital wallet is like a bank for your digital assets. So just as there are many different physical banks out there, there are also many different wallets out there. And so there's these companies that have set these wallets up. Examples: MetaMask, or Coinbase, or Bitski, or Trust Wallet. There's lots of these around. Some have very obscure names to them, but there are some that are being set up from perhaps more familiar names like PayPal or Robinhood. And probably down the road, probably not far down the road, you'll also start seeing these digital wallets from even more familiar names, like sort of regular banks like Wells Fargo, JP Morgan, sort of places like that. And so these digital wallets are basically spaces or wallets where you can keep these intangible, these digital forms that you have, whether that's bitcoins or whether that's non-fungible tokens.

CROFT: 07:39

And so then once you have a wallet and somewhere to store these digital assets?

WARD: 07:46

Then there are different marketplaces. So marketplaces like OpenSea, obviously, as you mentioned, Sotheby's auction houses have sort of become places where you can buy some of these NFTs. But there are also other organizations. For example, just last week was the US Open tennis tournament, and the US Open had some NFTs on their website that you could buy of various moments in US Open history. And the NBA has its own site, Top Shot, which is where you can buy highlights from NBA games and things like that. And so there are many different places to buy an NFT, and you do these transactions through websites like OpenSea or these specialized things like the US Open or the NBA Top Shot. But then you buy them through these sites and it transfers the digital key to your wallet, and so they then get stored in your individual wallet.

CROFT: 08:57

Okay. Now I know quite a few people who have trouble wrapping their head around this concept. So when you do buy an NFT, what exactly are you getting for your money? And to use an example, the Twitter founder and CEO Jack Dorsey auctioned off his first tweet for \$2.9 million. In what sense does the buyer own that tweet, which I assume probably still exists on the internet for anybody who wants to look at it, look at it?

WARD: 09:31

Right. Yeah. So you own it, right, just as you own any piece of art or other collectible in the physical world, which means basically that Jack Dorsey, having created it, can't sell it again to anyone else. The buyer, who I'm not sure who bought it, but whoever bought it, could resell it again and therefore has the sort of ownership with a provenance that it came from Jack Dorsey. All of that information is stored on the blockchain. So interestingly, though, one sort of additional function really with NFTs is that at the outset, the person who creates the NFT can specify in the original sale that the creator themselves gets a certain percentage, typically between 0 and 10 percent of the gains of any future resale. So if, say, for example, Jack Dorsey had specified 10% and the buyer who bought it for 2.9 million then would resell it for \$4.9 million let's say, then Jack himself would get \$200,000 of that. And that would happen automatically, with what's called a smart contract built into this original transaction.

WARD: 10:55

And then if that buyer who bought it for \$4.9 million sold it again for \$5.9 million, then Jack would get another \$100,000 and so on. So creators can retain some benefit, even once they've sold the original work. Also, with some NFTs, you get other benefits. Right? So, for example, you started off talking about the Bored Ape Yacht Club, and if you own one of these Ape NFTs, that also then acts as your membership to this Bored Ape Yacht Club, which gives you access to a website that co-creates new art and has other features to it and is growing all the time and is an exclusive club because there was only 10,000 of these NFTs created and so only 10,000 people could sort of be members of this particular club. And so NFTs can give you other digital and actually other physical benefits. For example, in the US Open NFTs which were just sold over the last couple of weeks when the US Open was on, some of them also gave real-world benefits like tickets to next year's US Open finals or meet-and-greets with players.

WARD: 12:17

And you go back to saying, well, you could go and see Jack Dorsey's original tweet on the internet, and that gets back to the whole notion of form versus function that in this digital world, those forms can actually be identical. Right? And that tweet, because it's a digital creation, can be recreated exactly and seen elsewhere. And so in that respect, it's different from the real world art world in that if you go to the Louvre and go and see the Mona Lisa, for example, you could go in the gift shop and buy a poster of the Mona Lisa, but it's not the same. It's not identical, even though it may look similar. Whereas in the digital world you can have assets which are digitally exactly the same, but the difference being this sort of ownership, this NFT ownership, which then sort of gives you often other benefits. But even within this digital world, this kind of collectible benefit just like, as I said, the NBA, you could buy one of these sort of digital collector cards, essentially, which are video clips of a play in the NBA. You could still go and watch it on YouTube, it looks exactly the same, but you have this sort of tradable form where people sort of will then sort of collect these things just as people collect baseball cards, for example.

CROFT: 14:03

Now you had mentioned OpenSea as one of the platforms where you can go and buy these, and indeed it's, as I understand it, the largest platform for buying and selling NFTs. And just in August, the monthly sales topped \$3 billion on OpenSea alone, which represented a mind-boggling 900% increase over the July sales volume of \$325 million, going from millions to billions. That's the kind of money that is bound to attract the attention of government officials, I would think. So, currently, NFTs are largely unregulated as I understand it. So the question is, should they be, and do you expect they will continue to be unregulated?

WARD: 14:53

Well, in this respect, I see that NFTs are really no different from any other form of art or collectibles. And in these markets, the art market is a big market, collectible markets are big markets. They're not really regulated in any restrictive sense, so I wouldn't think really there's a need or likelihood for NFTs to attract any regulation in that sense. Of course, they are, however, subject to taxes like capital gains tax, just like art, collectibles, or any other tangible property. So I suspect that the taxing authorities will be paying attention to these sales, but I think you'll just see these being markets just like the art market. So I don't foresee any particularly unique regulation around NFTs.

CROFT: 15:57

And as you were just saying, the collectors, at least, I think the majority of them do consider NFTs like the Bored Ape collection or even Jack Dorsey's tweet to be works of art. And there's no question that NFTs have had a hugely disrupting effect on art and entertainment in particular. For example, in March, Mike Winkelmann, who's the digital artist known as Beeple, sold an online auction at Christie's for \$69.3 million with fees. One of his NFTs that he had created, as I recall I believe it was a combination of all of the previous NFTs he had done all in one, and that was the third-highest auction price achieved for a living artist. And I guess I should distinguish for physical painters Jeff Koons and David Hockney. Obviously, though, the overwhelming majority of digital art is selling in the hundreds or low thousands of dollars. So I'm wondering if NFTs are changing the way we value art, even what we consider art. And is there a sense that NFTs are actually democratizing the art marketplace by creating this world in which people who may not be dealing in the hundreds of thousands or millions or billions have access to art that they cherish and value?

WARD: 17:36

Yeah. And I think in that respect, the broader market has always been democratized in that sense of the word democracy. So people from all backgrounds are artists. There are many different forms of art. There are no barriers to entry to becoming an artist. And so NFTs add another form of art, and in that respect, may attract a different sort of person to consider themselves artists. I think this is why many of the big sales in NFT so far, as you mentioned, are actually not from artists that the public recognize from other platforms. They're not the Jeff Koons or David Hockneys of the world, but they are well known in digital worlds. And in terms of value - you asked about value - value is always particularly difficult to assess in aesthetic things. Right? So beauty is truly in the eye of the beholder. So it's interesting, though, that most of these big-money NFTs are being bought by people who also made their money in other digital spheres, whether it's cryptocurrencies or otherwise. And so their perception of the value of these digital assets is likely to be sort of greatly skewed from how most people currently value these assets. So, yeah, I think it's having somewhat of a disruptive effect, but I think it's really not that different from the broader art market and that anybody can participate in it. And so there's no real barriers to entry besides the sort of taste of your patron. Right? So if you're making

something that somebody else enjoys and likes and desires, then you'll find a market for it.

CROFT: 19:41

And not surprisingly, you had mentioned the NBA and professional tennis and others have found their way into this, and I would think maybe that has something to do with so many of their fans these days having grown up playing video games and being that that's not an uncommon world for them. But of course, now we're getting the leading retail and business brands moving in, including Coca-Cola, Dolce & Gabbana, Taco Bell, Charmin toilet paper, Nike, to name just a few. They've all taken a plunge into the NFT marketing pool. And from a business standpoint, what do you think they're hoping to get out of it?

WARD: 20:32

Yeah, I think it's different things. Right? So for some brands like Coca-Cola, there's already a long-established history of collectibles. People have collected and traded Coca-Cola memorabilia for a very long time. And so Coca-Cola's entry into NFTs just allows them to bring in a new form of collectible memorabilia. And so it's also interesting they auctioned all of their initial NFTs to raise money for the Special Olympics, which, of course, they've long supported. So this definitely works for them in a dual way really to continue to strengthen their brand, to continue to sort of engage people who are already sort of deep into a world of sort of collectibles within that Coca-Cola sphere. For a company like Nike, sneakers have taken on a whole new dimension in recent times, with huge and growing resale markets like StockX and GOAT, where these increasingly frequent limited-edition drops of sneakers by Nike and others - Yeezys and others - get resold for hundreds, if not thousands, of dollars.

WARD: 21:53

And so sneakers have moved from being functional footwear to a collectible item, and so NFTs can serve a similar purpose for Nike in terms of sort of building that brand, I think. For a company like Dolce & Gabbana, being on the cutting edge of fashion, the newness of NFTs, the demographics of the people that NFTs are appealing to, there's a strong overlap with the customers that Dolce & Gabbana want, and so this also kind of helps to build their brand. But for companies like Charmin toilet paper, well, that's a little bit more of a mystery to me. Who knows how they benefit? I'm not sure exactly what Charmin is doing in the sort of NFT game. Sort of interesting, though. They do say that they can give you a little display to sort of hang in your bathroom to display your NFT digitally and enhances your overall bathroom atmosphere, but that seems a bit more of a stretch to me.

CROFT: 23:01

Yeah, I think so. Finally, there doesn't seem to be a consensus yet on whether NFTs represent a sound investment strategy. I mean, certainly, we've talked about enough examples here of things being sold and resold for great gains, but as recently as March, I believe it was, the NFT prices took a pretty steep dip and a lot of people said, "Well, OK. That's it. It was a bubble, it burst." And of course, as I mentioned earlier, you had August where sales topped \$3 billion, a new record by far. So what's your take on that? Is it a trend that will pass or a bubble or? Yeah. And maybe the question a lot of people would have is would you invest in an NFT at this stage?

WARD: 24:01

Well, I think we're definitely moving upwards on the hype cycle for NFTs. And so as a result, no doubt there'll be some people who make a lot of money. But I think a lot of those will be these creators of this art, such as people as you mentioned, or content generated such as the NBA as we've already seen. You could also see content creators like The Walt Disney Company, for example, getting in on the action and being very successful. But to make money as a collector, you need, I think, either deep expertise

or great luck. As this market explodes, it will certainly sort of take the dispersion of outcomes to extremes as well. And just think about other art and collectible markets. 99% of art that artists sell actually has little to no value on the secondary market, but a very small percentage—the Renoirs, the Monets, the Picassos, the Hockneys, the Koons of the world—do extraordinarily well, both for the artist and in particular, the collector. And I think the same is true in other collectible marketplaces. Right?

WARD: 25:21

99.99% of cars end up on the scrap heap after a couple of decades, but very few become highly valuable cars and make their owners a lot of money. So I would say generally, if you're not an expert or don't have extraordinary luck, I would treat this market like the regular art market just in that sort of turbocharged fashion. Only buy something that you're going to enjoy having and looking at for your own pleasure, that you get the value out of for the money you spend and not as an investment to fund your retirement or your kid's college education, because that's more of a crapshoot than many other markets are in. But at the same time, NFTs are going through this hype cycle. You are going to see these massive booms and massive bursts that come with it, and so some people are going to be winners, some people are going to be losers in it. And so, yeah, if you don't have the expertise and you're not really lucky, then I would just do it for sort of fun, rather than the expectation that you're going to make a lot of money out of it.

CROFT: 26:36

Well, thank you, Dr. Ward. This has been fascinating, as usual. I'd like to thank you again for being with us today. And I'll mention again his website, thegreatdivides.com, looks at eight societal shifts that will profoundly impact society over the next 10 to 15 years. Those shifts or megatrends, in combination, are driving what he sees as the three great divides: the wealth divide, the health divide, and the technology divide. And you can find out more about that by going to thegreatdivides.com. This podcast is brought to you by ILLUminate, the Lehigh Business blog. To hear more podcasts featuring Lehigh Business thought leaders, please visit us at business.lehigh.edu/news, and don't forget to follow us on Twitter [@LehighBusiness](https://twitter.com/LehighBusiness). This is Jack Croft, host of the ILLUminate podcast. Thanks for listening.