Doing Business in the Metaverse

Everything Your Other CLEs Didn't Tell You

Agenda

- What is the Metaverse and Web3?
- Why Do Business in the Metaverse?
- How Do We Design Our Metaverse Strategy?
- How Do We Choose Our Metaverse Business Partners?
- How Do You Transact in the Metaverse?
- What Legal Issues Will We Face Once We're Up and Running?
- Other Questions?

KILPATRICK TOWNSEND

How does this Stuff Work Again?

A quick refresher on blockchain, metaverse, and web3

What’s a Blockchain? Asking for a Friend

Traditional data systems = data is CENTRALIZED

- Your checking account
- Data on webpage
- Search engine results
- Deeds and land records

Single, Centralized Source of “Truth”

- What’s my account balance?
- Who holds deed to this property?

PROS

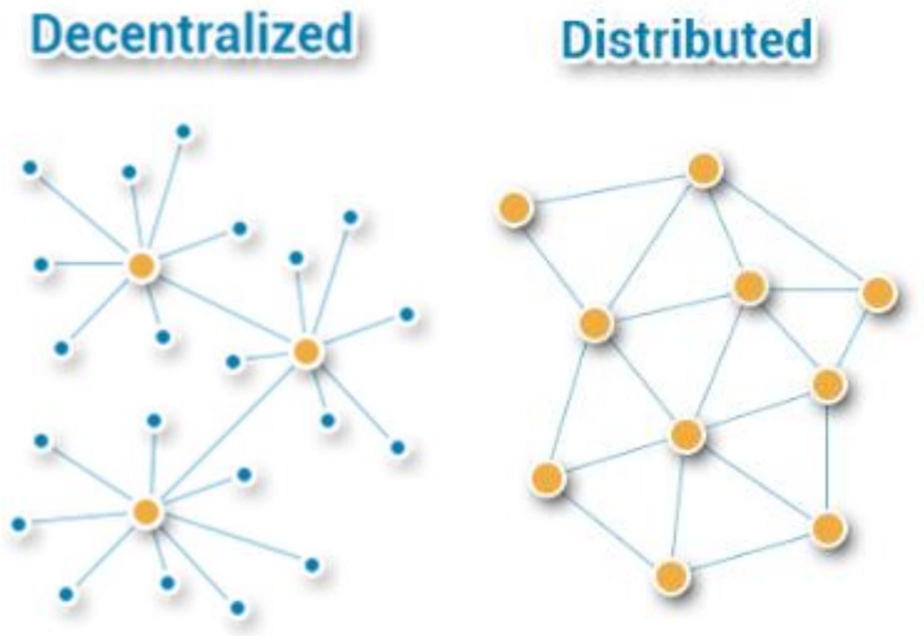
- Simple
- Finality – single, central authority (CA)
- Lower maintenance

CONS

- Single point of failure
- CA dictates terms
- Rely on CA (or intermediary) to process, keep accurate, and current

What’s a Blockchain? Asking for a Friend

Blockchain: data is DECENTRALIZED or DISTRIBUTED



<u>“Distributed Ledger” Architecture</u>

Benefits

- No single or centralized source of “truth”
- Immediate access to data
- Transactions automatically updated and distributed

Problems addressed

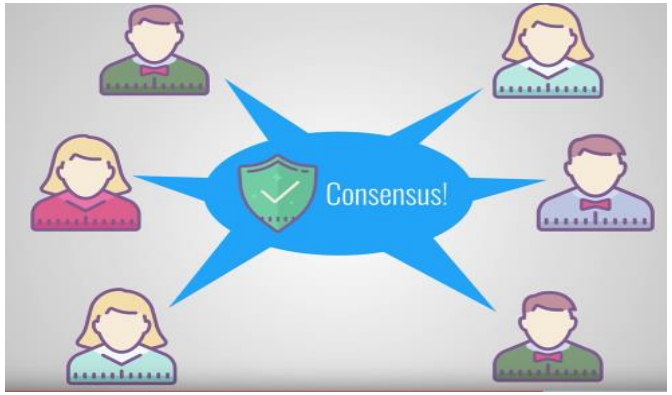
- No reliance on CA
- No single point of failure
- Data transparency

What's a Blockchain? Asking for a Friend

What makes blockchain work?

- *Inherent problem with distributed ledgers:* too many cooks in the kitchen
- *Solution:* replicate the benefits of a centralized system

1. Consensus



- Order
- Finality

2. Cryptography

- No data tampering

What’s a Blockchain? Asking for a Friend

Behind the Scenes: Validating the Ledger

- **Consensus Mechanisms**
  - Achieve order: agreement on the next set of transactions that will be published to shared ledger
- Proof of Work (PoW)
  - Competition to solve cryptographic math problem, using “mining rigs”
  - Winner publishes next block of transactions
  - “Cryptocurrency Mining”
- Proof of Stake (PoS)
  - Users can deposit or “stake” their cryptocurrency
  - “Validator” chosen based on algorithm

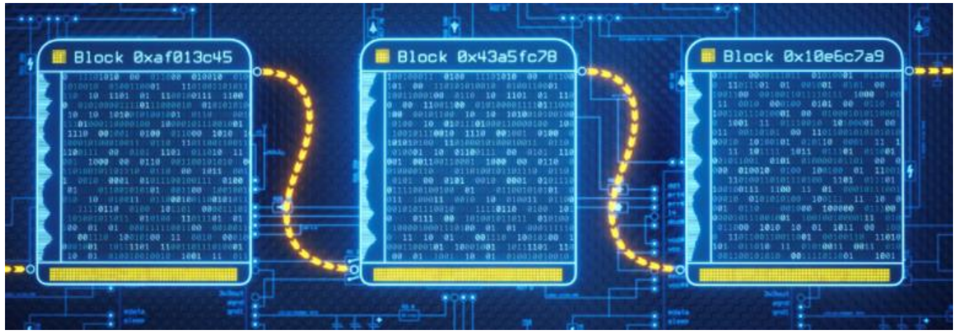
<u>Bitcoin & Ethereum Use PoW</u>

- PoW consumes ***massive*** amounts of energy
- Many **green initiatives** are in place to restrict / replace PoW
- Ethereum foundation working on ETH 2.0 that will use PoS

What's a Blockchain? Asking for a Friend

How does blockchain work?

- **Cryptography**
  - Ensures immediate detection of attempts to tamper with existing records
  - Each block of transaction data is run through a cryptographic algorithm
  - Resulting "hash" is series of characters
  - Any change in data results in completely different hash



1/22/2018 8:05 AM Flight 85 lands

1/22/2018 8:49 AM Flight 47 leaves

1/22/2018 9:12 AM Flight 168 lands

1/22/2018 9:23 AM Flight 12 lands

1/22/2018 9:47 AM Flight 92 leaves

[HASH] 31f0b299cc29720300c3a388364be0ca

31f0b299cc29720300c3a388364be0ca

1/22/2018 10:05 AM Flight 111 lands

1/22/2018 10:15 AM Flight 97 leaves

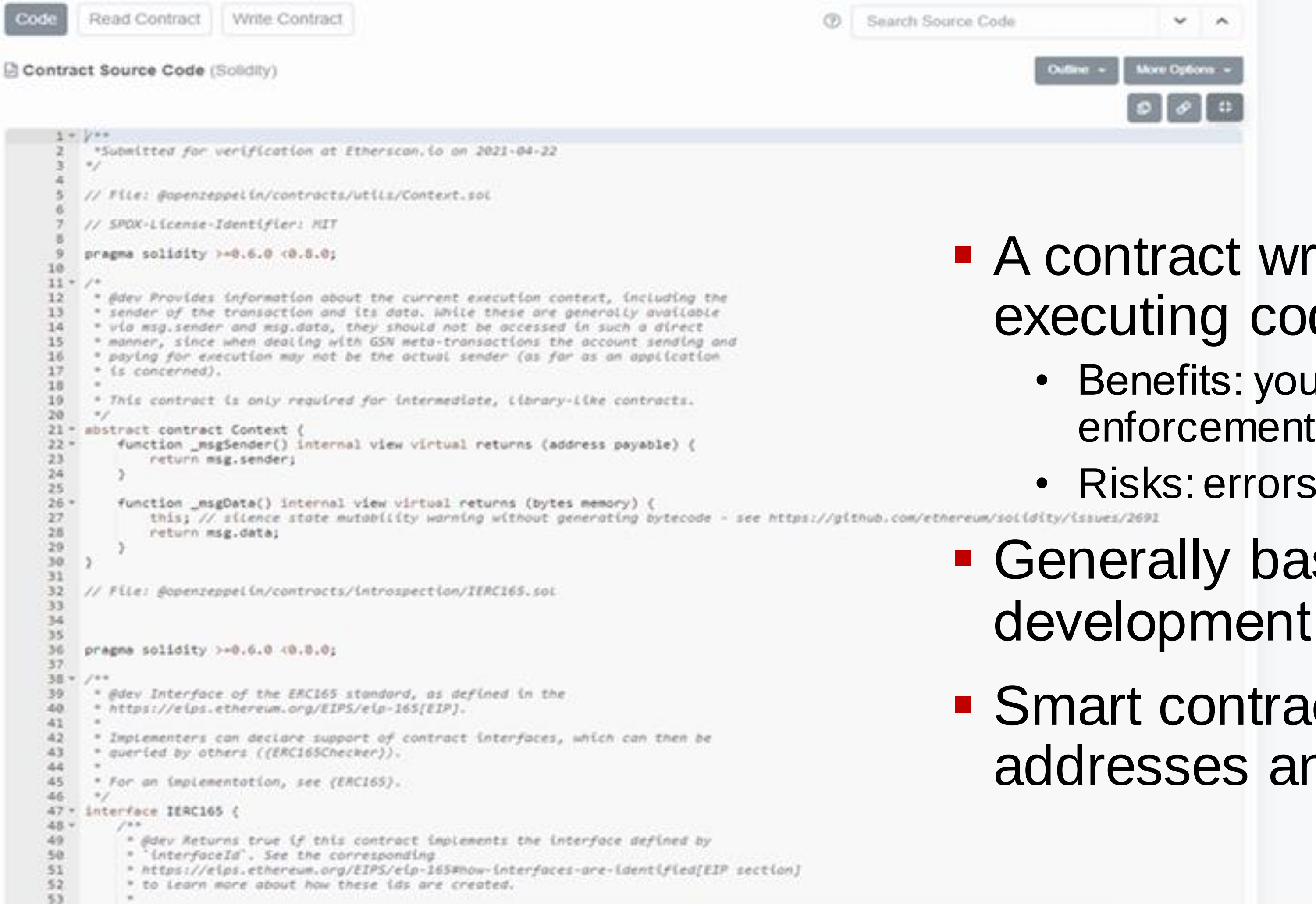
1/22/2018 10:27 AM Flight 204 lands

1/22/2018 10:41 AM Flight 80 leaves

1/22/2018 11:03 AM Flight 92 leaves

[HASH] 57ghsy200u4y78c001p09fs214k012

“Smart Contract” Means No Lawyers, Right?




```
/**
 *Submitted for verification at Etherscan.io on 2021-04-22
*/

// File: @openzeppelin/contracts/utils/Context.sol

// SPDX-License-Identifier: MIT

pragma solidity >=0.6.0 <0.8.0;

/*
 * @dev Provides information about the current execution context, including the
 * sender of the transaction and its data. While these are generally available
 * via msg.sender and msg.data, they should not be accessed in such a direct
 * manner, since when dealing with GSN meta-transactions the account sending and
 * paying for execution may not be the actual sender (as far as an application
 * is concerned).
 *
 * This contract is only required for intermediate, library-like contracts.
 */
abstract contract Context {
    function _msgSender() internal view virtual returns (address payable) {
        return msg.sender;
    }

    function _msgData() internal view virtual returns (bytes memory) {
        this; // silence state mutability warning without generating bytecode - see https://github.com/ethereum/solidity/issues/2691
        return msg.data;
    }
}

// File: @openzeppelin/contracts/introspection/IERC165.sol



pragma solidity >=0.6.0 <0.8.0;

/**
 * @dev Interface of the ERC165 standard, as defined in the
 * https://eips.ethereum.org/EIPS/eip-165[EIP].
 *
 * Implementers can declare support of contract interfaces, which can then be
 * queried by others ({ERC165Checker}).
 *
 * For an implementation, see {ERC165}.
 */
interface IERC165 {
    /**
     * @dev Returns true if this contract implements the interface defined by
     * `interfaceId`. See the corresponding
     * https://eips.ethereum.org/EIPS/eip-165#how-interfaces-are-identified[EIP section]
     * to learn more about how these ids are created.
     *
```

- A contract written (programmed) into self-executing code
  - Benefits: you don’t have to rely on a post-hoc enforcement mechanism
  - Risks: errors in the code; post-hoc enforceability
- Generally based on community-accepted development standards (“ERC-721”)
- Smart contracts, like individual wallets, have addresses and can hold funds

“Smart Contract” Means No Lawyers, Right?

- NFT transactions are based on smart contracts
- Like cryptocurrencies, non-fungible tokens can be purchased, traded, gifted, etc.
- Unlike cryptocurrencies, NFTs are tied to a specific, (theoretically) unique digital asset – a piece of art, video, music, in-game object, skill or asset, etc.
- Individual writing the smart contract gets to set the rules: you could permit any number of NFTs to be minted to the same smart contract; require royalties, etc.
- ***Ownership of an NFT can, but does not need to, include ownership of any IP rights***

```
contract NFT is ERC721 {
  address public artist;
  address public txFeeToken;
  uint public txFeeAmount;
  mapping(address => bool) public excludedList;
```

```
uint public constant MAX_SUPPLY = 100;
uint public constant PRICE = 0.01 ether;
uint public constant MAX_PER_MINT = 5;

string public baseTokenURI;
```

What Does “NFT” Stand For, Anyway?

- Like cryptocurrencies, non-fungible tokens can be purchased, traded, gifted, etc.
- Unlike cryptocurrencies, NFTs are tied to a specific, (theoretically) unique digital asset – a piece of art, video, music, in-game object, skill or asset, etc.
- Individual writing the smart contract gets to set the rules: you could permit any number of NFTs to be minted to the same smart contract; require royalties, etc.
- Metaverse assets are represented by NFTs and ownership is reflected by a user’s blockchain address, managed by a digital wallet
- Transfers of metaverse assets, like other NFTs, often require “gas” fees paid to the transaction validators
- Metaverse features and functionalities are often written into smart contracts

What Does "NFT" Stand For, Anyway?

- An entirely unique piece of code (data) written on a blockchain.
- *Typically* associated with a digital asset (the asset is <u>not</u> the NFT)
- Authenticity: Similar to a deed to a house
- Access**:** Like a concert ticket
- Scarcity**:** Like a baseball card
- Can be bought and sold through various public marketplaces (e.g. OpenSea, Rarible) or private (brand-specific)
- Increasingly available on closed branded platforms via credit card without requiring cryptocurrency
- Excellent for customer loyalty rewards

And I should care about NFTs because?

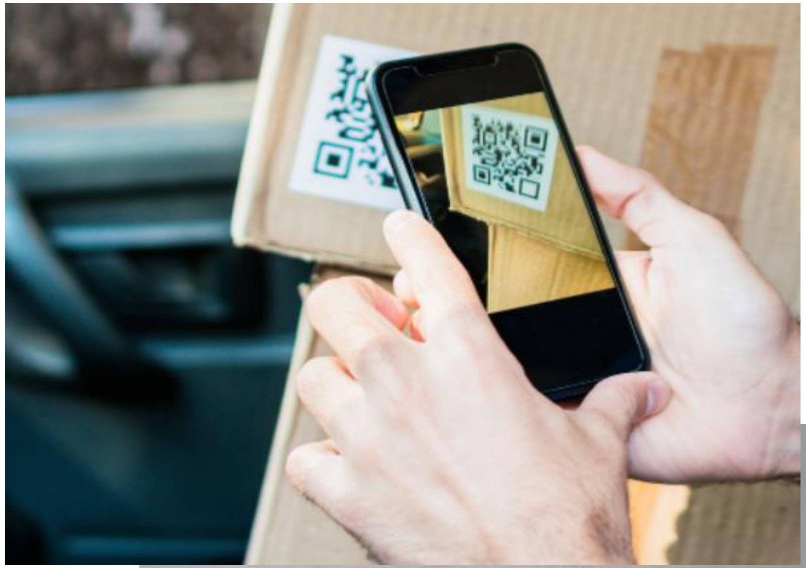
NFTs are likely to become ubiquitous in the future both in the “metaverse” and IRL

- **Digital Goods**
  - Purely for online use, increasingly as “wearable” designs
- **“Phygital” Goods (aka “Digital Twinning”)**
  - NFT digital goods offered with physical “twins”
- **Customer Loyalty / “Superfans”**
  - D&G sells 9-piece NFT Genesis Collection of clothing and crowns for approximately $6 million; comes with physical items and special experiences
  - Prada offers collectible NFTs to purchasers from its monthly Time Capsule Collection offering ultra-limited edition physical Prada products

D&G’s *The Impossible Tiara*
Source: Vogue UK

And I should care about NFTs because?

- **Physical Goods**
  - "Smart tags" applied to genuine goods
  - Unique coding (NFT) on blockchain creates immutable and updated record of product's origin, travel, purchase, etc.
  - Allows for instantaneous identification of counterfeit/stolen/grey goods
  - Associated with a QR or RFID "smart tag" on product; removal and/or sale of tagless goods likely trademark infringement
  - *e.g.,* Overpriced.™ debuted NFT-linked hoodie, which sold for a record $26,000 USD at auction

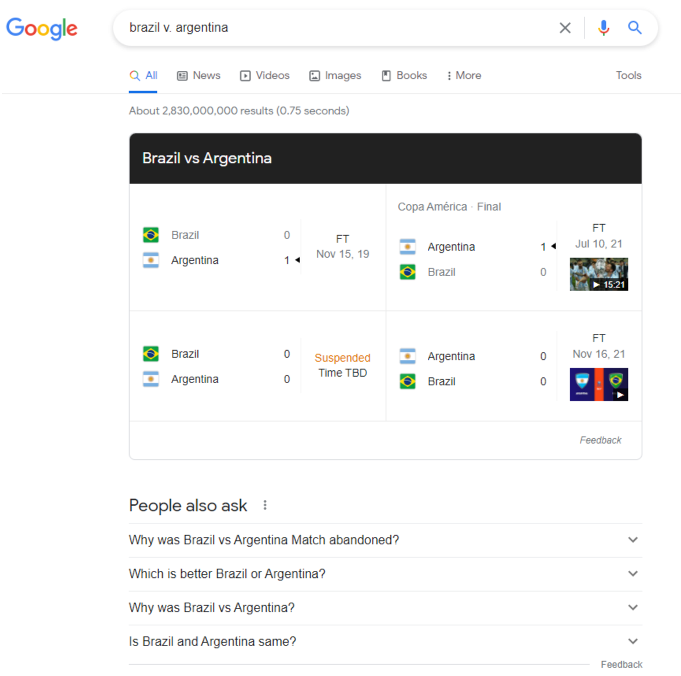


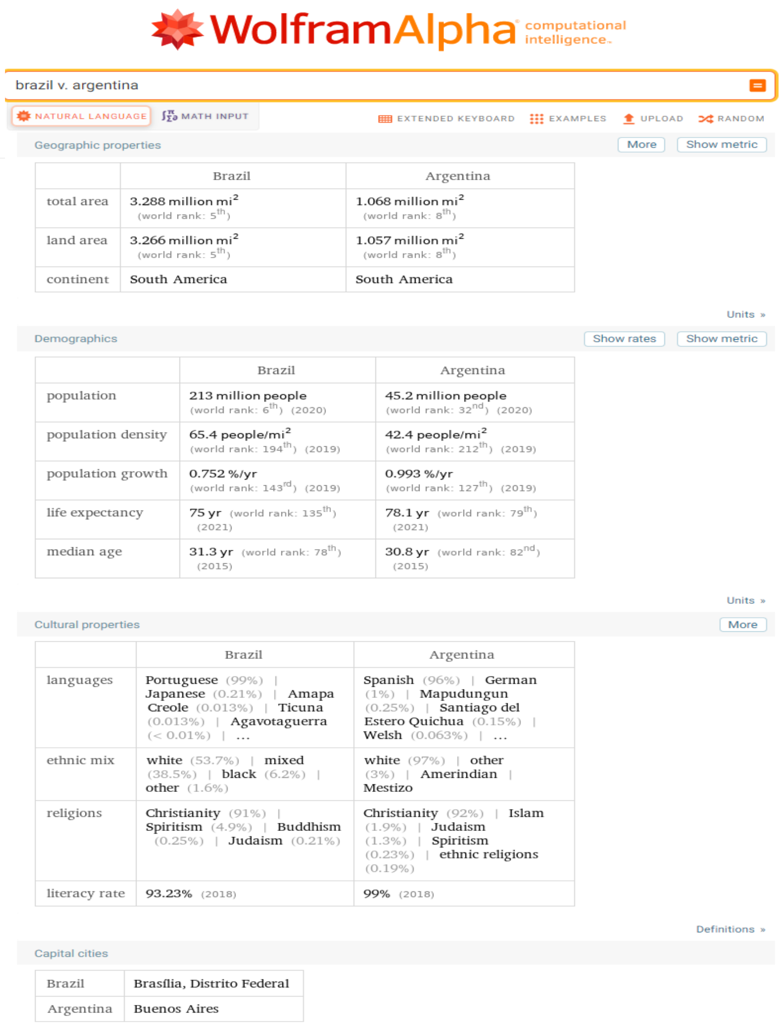
You Keep Saying Web3, Is That Like “WWW.”?

- Web2 (current) – most applications are centralized and operated by dominant companies providing services in exchange for something, often personal data and PII
- Web3 – decentralizing the internet systems through which we act and interact
  - Core concepts: value exchange between applications; self-sovereign identities
    - User-created content, features, items, identities no longer stored/owned on a centralized server
    - Owned by the users, who act as shareholders by owning the tokens or crypto of the blockchain protocol empowering the underlying application
      - Shifts power away from centralized Web2 companies
      - Tokens, crypto & NFTs will power the business models and economics of Web3
      - Crypto payments made to nodes and validators that execute the blockchain transactions
  - What we do in the Metaverse will depend on these decentralized protocols and the tech stack Web3 will provide to enable new virtual communities and economies

You Keep Saying Web3, Is That Like “WWW.”?

- Semantic web
  - Decentralized knowledge engines that leverage data from multiple sources across the internet
  - Content ubiquity: multiple applications and connected devices hosting, sharing, and updating content
  - By democratizing the internet’s resources, better AI, better language recognition, better results
    - Rather than searching for key words you type, understanding the question you’re asking
    - WolframAlpha.com
    - Siri



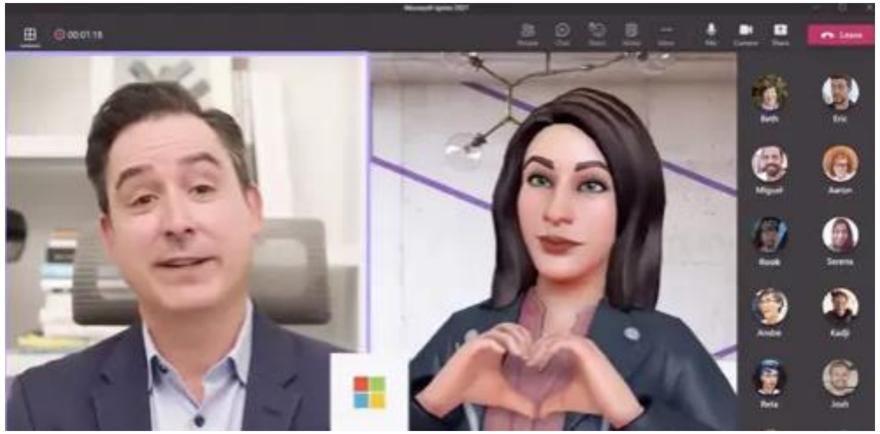


You Keep Saying Web3, Is That Like "WWW."?

- Remember, Web3 is still largely conceptual: a big concept premised on a lot of smaller ideas:
  - Decentralization
  - Ownership of your own online identities and content
  - Protection of your personal data
  - Democratization of resources
- These concepts mesh with the underpinnings of what we envision for the metaverse: a series of open worlds where users can transact and exchange content directly without going through a central authority
- For the metaverse to reach its full potential, the prevailing belief is there must be a fundamental change in the way the internet operates

“Metaverse?” That Sounds Made-up…

- A series of persistent, sometimes interconnected virtual and augmented realities where users can interact, create, exchange, attend events, and mimic many other real life activities
- Accessible via phone, tablet, laptop, headsets, and other wearables
- Personal experiences largely defined by the world you choose to go to and the channel you use to access it



“Metaverse?” That Sounds Made-up…

Enough Already: What's the Bottom Line Here?

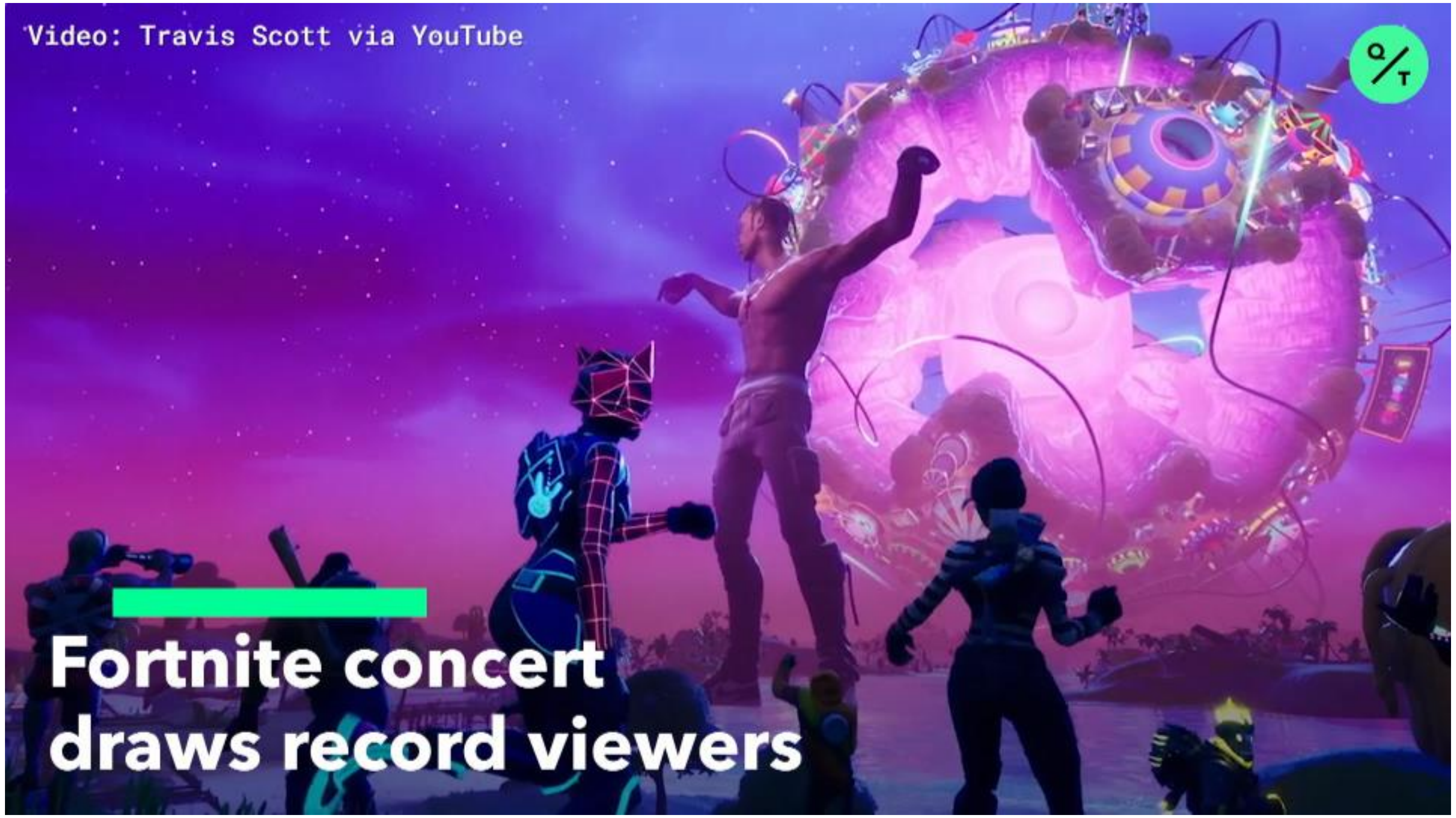
- Blockchain enables a verified and immutable (tamper-proof) record of transactions
  - Cryptocurrency: wallet balances, what transactions happened, between whom, and when.
  - NFTs: what address first created the NFT (*authenticity?*), how it was bought and sold
- Smart contracts automatically execute transactions upon the occurrence of predetermined events and in accordance with predetermined terms.
- NFTs can represent rights associated with specific physical or digital assets.
- The metaverse allows users and brands to interact in a virtual world built on cryptography.
- Web3 refers to the suite of technologies that tie all of the above together.

So What's In It For Us, Exactly?

Why do business in this "metaverse" anyway?

Recent highlights

- 2020: 27M people attended five concerts by Travis Scott in Fortnite
- The concerts were viewed over 45 million times



Recent highlights

- May 2021:
  - For one hour only, Gucci sold digital versions of its Dyonysus handbag in Roblox for 475 Robux (~$6)
  - Resale value in game exceeded $4000, or $800 > price of real world bag
  - These are not NFTs; no value outside Roblox

Recent highlights

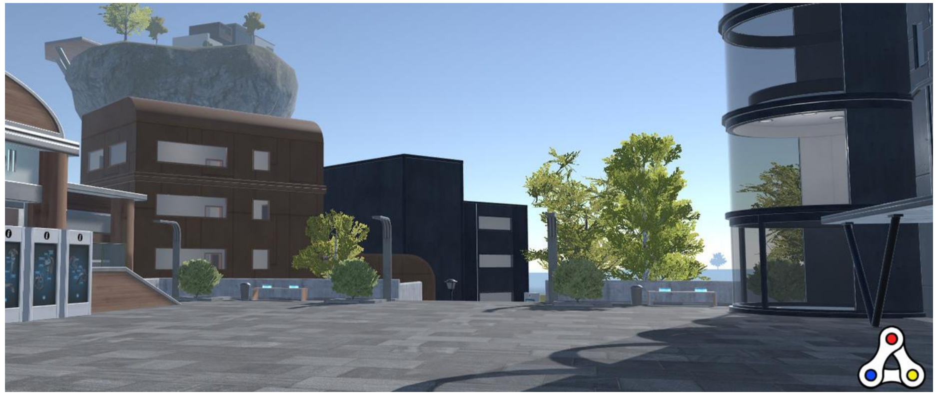
- 2021: virtual real estate sales in metaverse exceeded $500M
- “Big four” platforms:
  - Sandbox
  - Decentraland
  - Cryptovoxels
  - Somnium

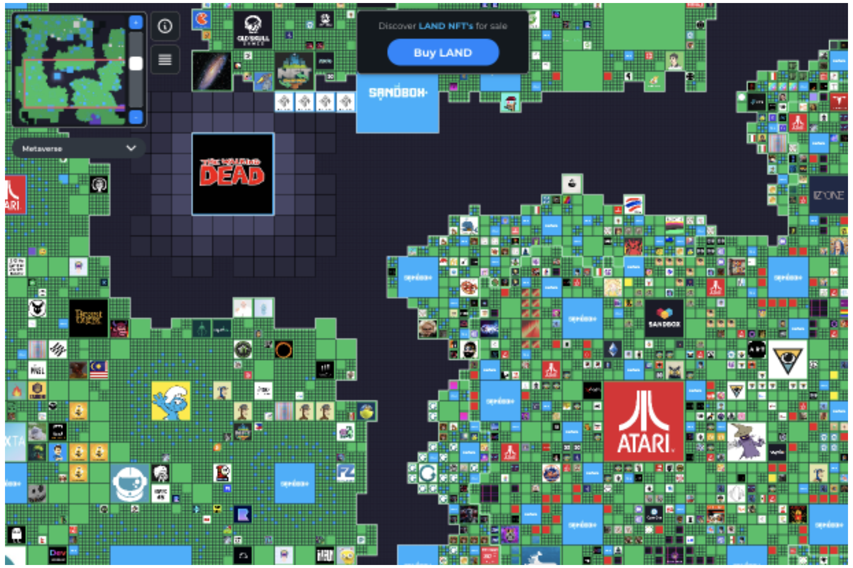
Metaverse real estate sales top $500 million, and are projected to double this year

PUBLISHED TUE, FEB 1 2022•8:12 AM EST | UPDATED TUE, FEB 1 2022•6:42 PM EST

Robert Frank
@ROBTFRANK

SHARE





Recent highlights

- Earlier this year, McDonald’s filed 10 trademark applications for virtual offerings
- Including:
    - Virtual cafes
    - NFT based virtual food & beverage products
    - Online virtual concerts and events
    - Operating a virtual restaurant ***that features real world home delivery***

Recent highlights

- Balmain x Barbie
  - Even more advanced than previous use cases because it specifically links metaverse assets with real world goods.
- Professional service firms getting in on the action
  - Prager Metis
  - ArentFox

ESSENCE

SUBSCRIBE

CELEBRITY FASHION BEAUTY HAIR LOVE LIFESTYLE NEWS VIDEOS FESTIVAL EVENTS STUDIOS GIRLS UNITED

HOME · FASHION

Barbie Enters The Metaverse With Balmain x Barbie NFTs

THE CAPSULE INCLUDES THREE UNIQUE NFT BARBIE X KEN AVATARS WEARING EXCLUSIVE OUTFITS.

PragerMetis CERTIFIED PUBLIC ACCOUNTANTS CHARTERED ACCOUNTANTS

Prager Metis Opens First-Ever CPA Firm in the Metaverse

COMPANY NEWS | GLENN L. FRIEDMAN | JERRY EITEL | BRIAN GOLDBLATT | JAN 07, 2022

ABAJOURNAL

NEWS LATEST ISSUE PODCASTS COLUMNISTS MEMBERS WHO INSPIRE

Home / Daily News / Major law firm buys property in the metaverse...

LAW FIRMS

Major law firm buys property in the metaverse and opens virtual office

BY DEBRA CASSENS WEISS

FEBRUARY 17, 2022, 9:38 AM CST

Business Drivers & Key Players

- Media & Entertainment Industry
  - Two key offerings
    - Content – has been going digital for decades
    - Experiences – only recently began migrating
  - Live Virtual Events & Experiences
    - Concerts
    - Sports (and betting)
    - Theme Parks
  - Video Games
    - Epic Games – Fortnite
    - Sky Mavis – Axie Infinity
    - Roblox
  - Supporting Roles
    - E.g., MetaVRse and Unity
    - Developing engines to help brand and game teams create AR and VR content faster.


Business

Warner Music Group to Launch 'Concert Theme Park' in Sandbox Metaverse

The deal could bring big name stars like Ed Sheeran, Bruno Mars and Dua Lipa to the metaverse for the first time.

Disney has been granted a patent that will enable it to create virtual reality experiences for its theme parks.

Business Drivers & Key Players

- Retail / Branding
  - Opportunities
    - Immersive narrative
    - World-building
      - Hyundai, Gucci, Louis Vuitton
    - Empowering consumer creativity
  - NFTs
    - Coca-cola, Nike, etc.
  - In game offerings
    - Balenciaga – Fortnite
  - Opportunistic campaigns
    - Wendy's: Keep Fortnite Fresh

So, Are You Convinced Yet To License Or Franchise Your Brand In The Metaverse?

- Here's what you need to consider (hint, its really not much different from the real world):
  - ✓ Can your brand/franchise pivot? Does it fit?
  - ✓ Do you have the right partner/franchisee?
  - ✓ What's your business objective for going to the metaverse?
  - ✓ Can you and your partner deliver (quality control/supply chain)?
  - ✓ What are your privacy/security risks? Compliance is crucial.

Okay KTS Nerds, We’re In… Now What?

Hatching your plot to take the metaverse by storm

Choosing Your Blockchain

Blockchain moving away from PoW

- Bitcoin mining uses roughly 0.5% of all energy consumption worldwide
  - More than Finland
  - More than 7x of Google (Business Insider, Sept. 6, 2021)
- Subject of recent congressional investigations

▪ Private or public blockchain?

- Most NFTs currently based on Ethereum
- Certain proprietary use cases require private blockchains
  - E.g., NBA Topshot and the Flow blockchain

NB: Vetting new blockchain and crypto network is essential – c.f. ongoing CTR Token litigation, Rensel v. Centra Tech, Inc., No. 17-24500-CIV, 2021 WL 4134984 (S.D. Fla. Sept. 10, 2021)

Centra Tech's initial coin offering (ICO) allegedly leveraged fraudulent claims about payment card network integrations, among others. This decision certified a class.

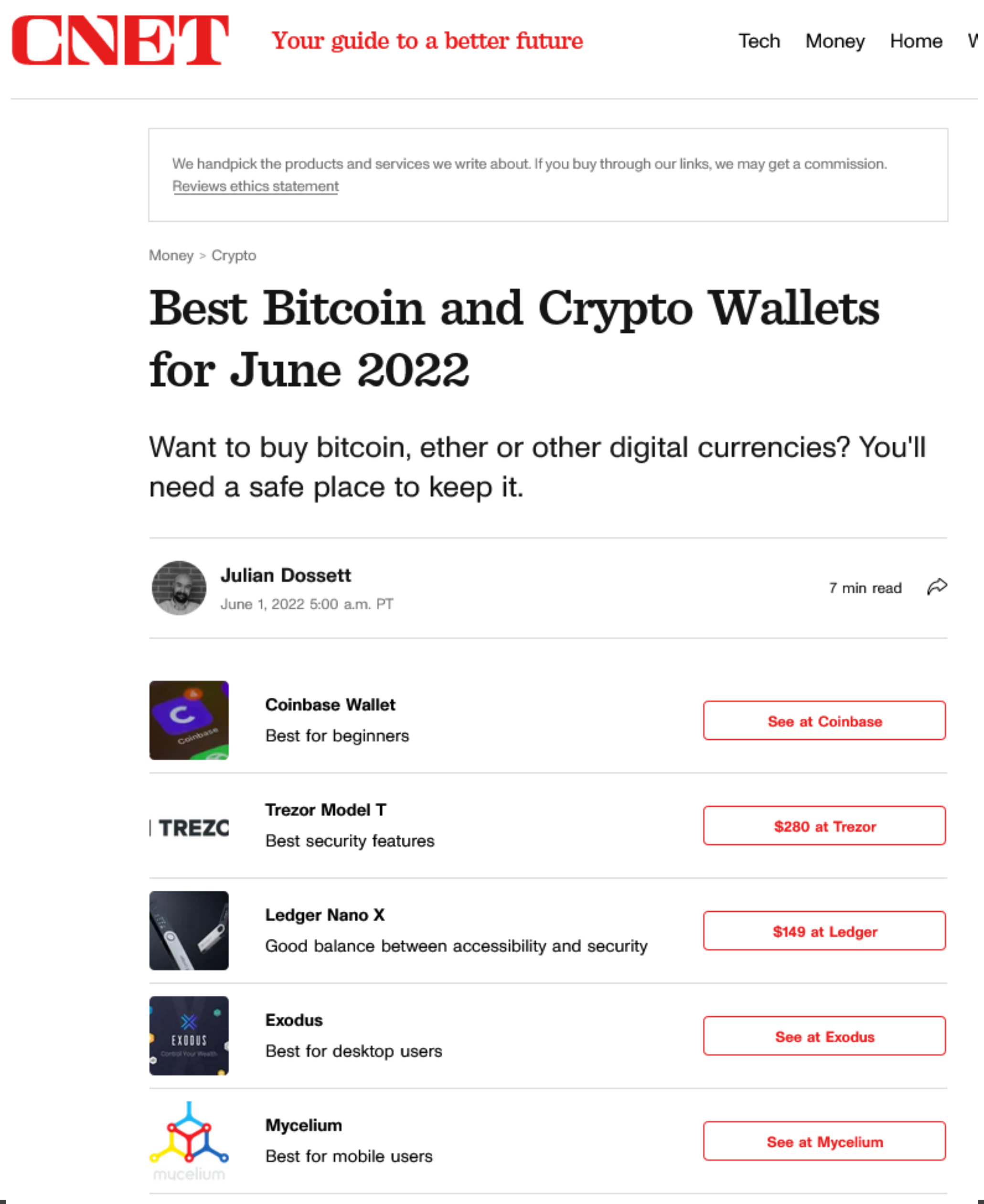
TechCrunch+

NBA Top Shot creator on the NFT craze and why Ethereum still isn't consumer friendly

Lucas Matney @lucasmtny / 5:59 PM EDT • September 28, 2021

Choosing Your Wallet

- Key distinction: blockchain vs. software used to interact with blockchain
- Wallet enables access to account(s) on the blockchain
- Blockchain ledger includes the creation/transfer/ownership history of tokens.
- “Public key” vs “Private key”
- Wallets can “hold” – i.e., reflect ownership of – both *fungible* and *non-fungible* tokens


CNET Your guide to a better future

Tech Money Home

We handpick the products and services we write about. If you buy through our links, we may get a commission. Reviews ethics statement

Money > Crypto

Best Bitcoin and Crypto Wallets for June 2022

Want to buy bitcoin, ether or other digital currencies? You'll need a safe place to keep it.

Julian Dossett
June 1, 2022 5:00 a.m. PT
7 min read

Coinbase Wallet	Best for beginners	See at Coinbase
Trezor Model T	Best security features	$280 at Trezor
Ledger Nano X	Good balance between accessibility and security	$149 at Ledger
Exodus	Best for desktop users	See at Exodus
Mycelium	Best for mobile users	See at Mycelium

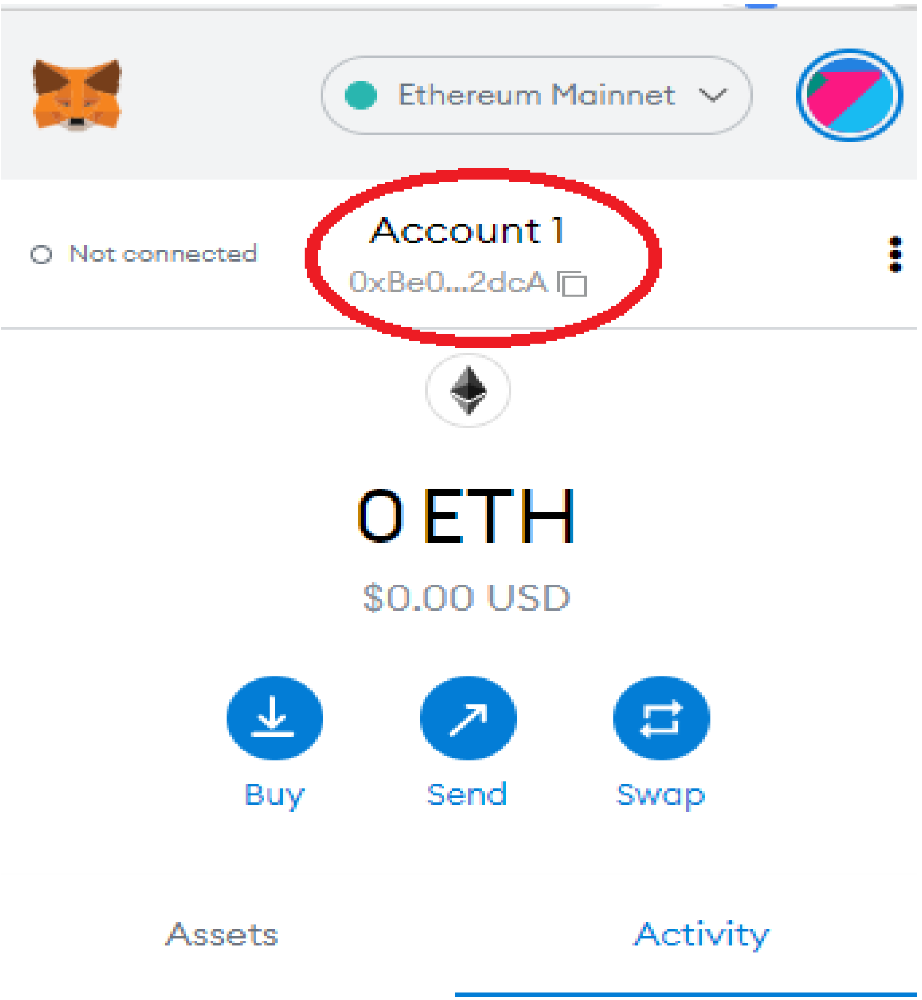
Portfolio balance

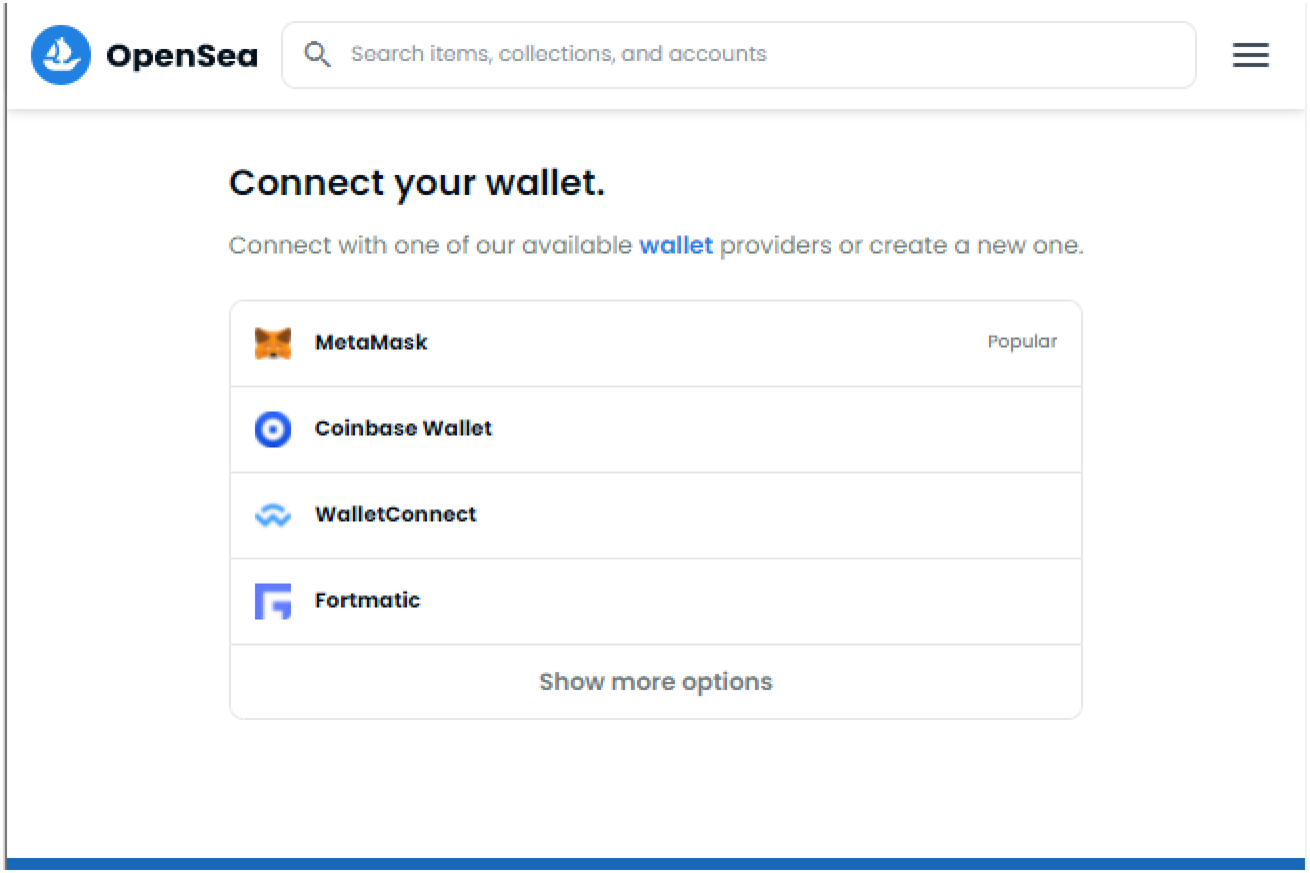
$92.94

+$57.61 All time

Your assets

Bitcoin	BTC	$58.57 0.00143016 BTC
Bitcoin Cash	BCH	$0.45 0.00143016 BCH
Bitcoin SV	BSV	$0.13 0.00143016 BSV
US Dollar	USD	$0.00


Ethereum Mainnet
Not connected
Account 1
0xBe0...2dcA
0 ETH
$0.00 USD
Buy
Send
Swap
Assets
Activity


OpenSea
Search items, collections, and accounts
Connect your wallet.
Connect with one of our available wallet providers or create a new one.
MetaMask
Popular
Coinbase Wallet
WalletConnect
Fortmatic
Show more options

This All Seems Kinda Complicated, Maybe I'll Outsource It to My Vendors

Good idea, but…

Choosing Your Vendor: Wallets

- Custodial wallet services
  - Less user complexity; merely a username and password instead of public/private keys
  - Third party management of your wallet
  - Additional layer of risk: cf. hacks of Mt. Gox, QuadrigaCX, BTC-e and Bitstamp.
  - Redress may be limited for breaches. See <u>Baton v. Ledger SAS</u>, No. 21-CV-02470-EMC, 2021 WL 5226315 (N.D. Cal. Nov. 9, 2021), plaintiffs' data breach action dismissed for lack of personal jurisdiction
- User managed wallets
  - Possibility of loss of access
  - Internalized risks and liabilities
  - "Hot" vs "cold" ("hardware") wallets – Age-old tradeoff: Security vs. convenience/recoverability

Choosing Your Vendor: Smart Contracts & Minting

POLICY \ TECH \ CYBERSECURITY

$1.7 million in NFTs stolen in apparent phishing attack on OpenSea users

Two hundred and fifty-four tokens were stolen over roughly three hours

By Russell Brandom | Feb 20, 2022, 9:37am EST

https://opensea.io

We're continuing to investigate rumors of a phishing attack originating outside of OpenSea. Do not click links outside of opensea.io.

OpenSea Search OpenSea

Cybercrime

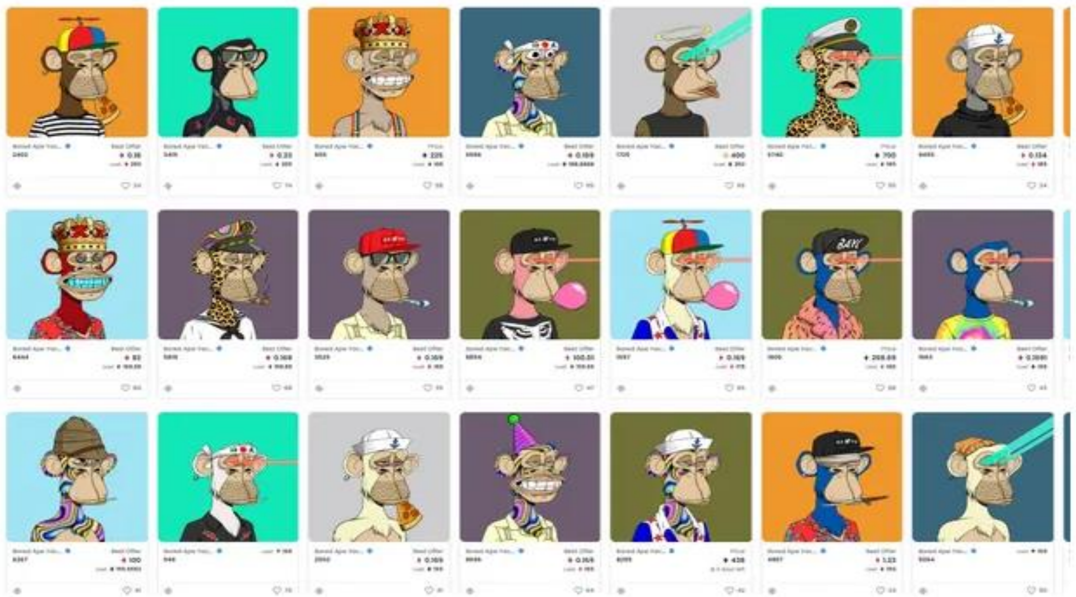
Hack on Bored Ape Yacht Club NFTs leads to $3m simian oblivion

Latest mass theft of digital art assets is carried out by phishing post on Instagram

Alex Hern *UK technology editor*

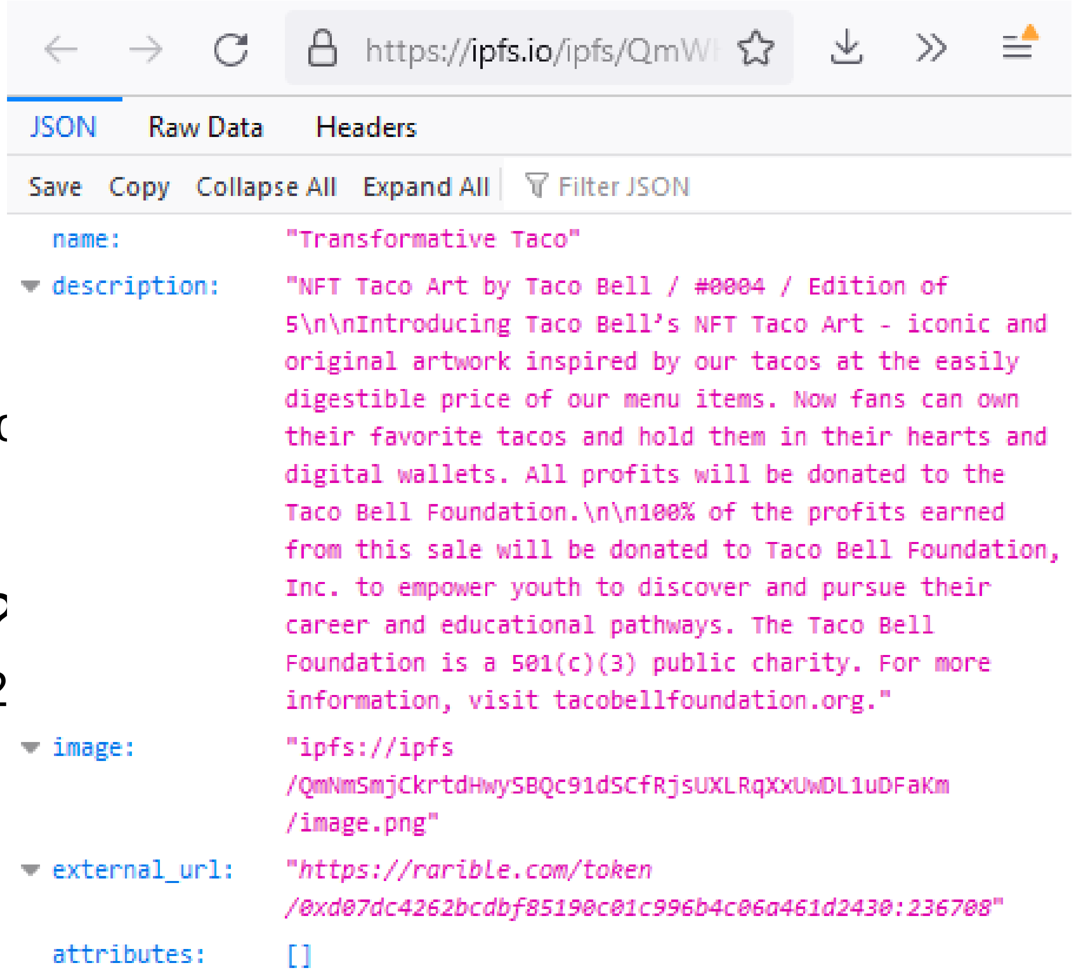
@alexhern

Tue 26 Apr 2022 10.54 EDT



Choosing Your Vendor: Smart Contracts & Minting

- NFTs are not art; they are "directions to the museum where the art is stored"
  - InterPlanetary File System ("IPFS") helps resolve this problem, but it has trade-offs
- Anyone can mint an NFT using any digital asset
  - Ownership of an NFT only represents ownership of that specific smart contract instance, and not a guarantee that no one else owns an NFT associated with an identical digital asset
- Did the originator have the right to mint an NFT?
  - E.g., <u>Hermes Int'l v. Rothschild</u>, No. 22-CV-384 (JSR), 2022 WL 1564597 (S.D.N.Y. May 18, 2022): D's MTD denied because P properly alleged that D's use of trademark was not artistically relevant and was intentionally misleading.
- You may owe royalties upon transfer



Choosing Your Vendor: Smart Contracts & Minting

b) *[Vendor]*. [Vendor] represents, warrants and covenants that:

(i) the Project Works, including, without limitation, the Deliverables (including, without limitation, the Content), will conform to and operate in accordance with this LOI;

(ii) all [Client] NFTs will be minted in strict compliance with all applicable industry standards and customary practices, including, without limitation, in strict compliance with the ERC-721 standard, the ERC-1155 standard, or, if approved in advance in writing by [Client], another comparable widely-recognized standard governing Ethereum-based non-fungible tokens;

(iii) all smart contracts for the [Client] NFTs shall be configured in implementations requiring safe transfers;

(iv) [Vendor] will ensure that all [Client] NFTs remain operational at all times for a period of not less than ten (10) years following the end of the term of this LOI. Without limiting the generality of the foregoing:

1. if [Vendor] uses IPFS-based URIs, [Vendor] will maintain or cause to be maintained at least one (1) operational node hosting a true and accurate reference copy of the relevant resource(s) at all times for at least such ten (10) year period, including, without limitation, mirrored hosts to the extent necessary to ensure uninterrupted availability and 100% uptime;
2. if [Vendor] does not use IPFS-based URIs, [Vendor] shall ensure the security, availability, and integrity of the system(s) hosting the reference copy of the relevant resource(s) such that a true and accurate copy is publicly accessible at all times for at least such ten (10) year period, including, without limitation, mirrored hosts to the extent necessary to ensure uninterrupted availability and 100% uptime;
3. [Vendor] will ensure that each [Client] NFT is minted to a URI that at all times for at least such ten (10) year period remains unique to that [Client] NFT; and
4. without limiting any other rights of [Client] hereunder, [Vendor] will not mint more than one (1) copy of any NFT hereunder except pursuant to [Client]'s prior express written instructions.

Choosing Your Vendor: Smart Contracts & Minting

(v) each [Client] NFT shall be fully compatible with OpenSea and other open Ethereum-based marketplaces;

(vi) it shall ensure that all token holders and prospective purchasers of the tokens are clearly and conspicuously notified of the terms of use associated with the [Client] NFTs as drafted and determined by [Client] in its sole discretion (the "[Client] NFT Terms");

(vii) none of the Deliverables (nor the Content therein) nor any other Project Works, Materials or other items that it provides under this LOI infringes, misappropriates or violates the rights (including, without limitation, Intellectual Property Rights) of any third party;

(viii) it will not use any Materials to which it does not have the rights and will not violate Section 5(c);

(ix) it shall provide competent assistance in registering social media pages and profiles, cryptocurrency wallets, NFT marketplace accounts and NFT mintings, and other online accounts in [Client]'s name and otherwise as appropriate in connection with the Deliverables and other Project Works; provided, however, that [Vendor] shall not register any such accounts or execute such mintings without [Client]'s prior express written consent;

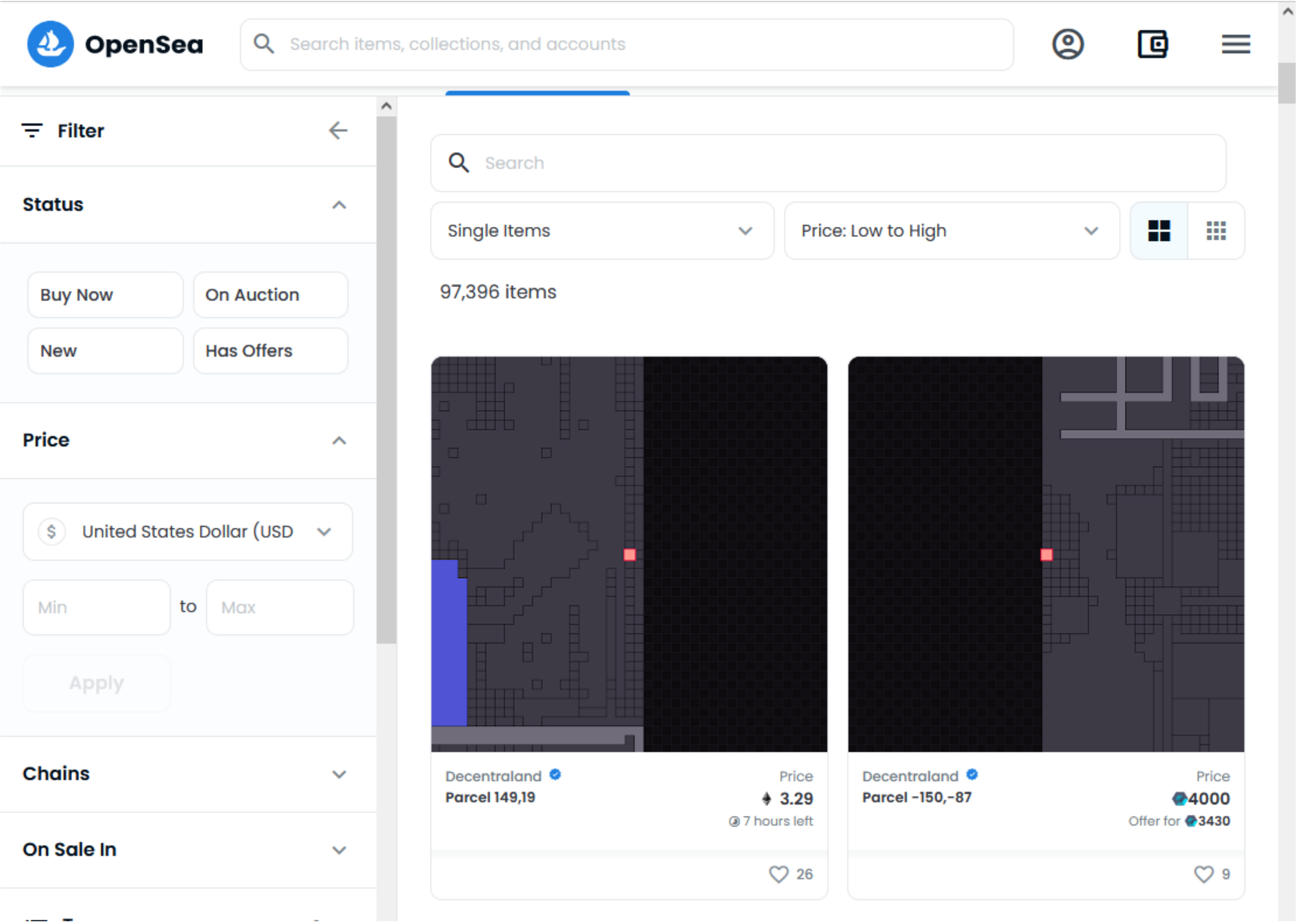
(x) it will, and will ensure that all Project Works, comply with all applicable ordinances, codes, standards, laws, rules, regulations, and orders of any governmental authority having jurisdiction in its performance under this LOI including, without limitation, any applicable laws governing data protection, cybersecurity, cryptocurrencies, and anti-money laundering matters.

You Promised Me Metaverse; Enough With the Bored Apes

Fair enough – let's talk metaverse transactions

Metaverse Universes and NFTs

- OpenSea works not just for basic collectible/avatar NFTs; but also digital metaverse assets
- Available NFTs include plots/estates and virtual experiences in Decentraland
- Transactions occur in MANA
- Other metaverses feature different capabilities; e.g., incorporation of third party NFTs into virtual experience

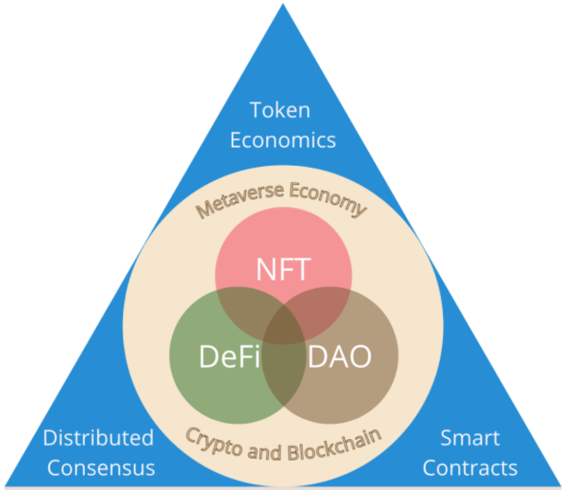


True Economies

- In-game currencies vs. true cryptocurrencies
  - Decentraland – MANA coin
  - Sandbox – Sand coin
  - Axie Infinity – AXS coin

# ▲	Name	Price	24h %	7d %	Market Cap
32	Decentraland MANA	$2.46	▲3.80%	▲8.31%	$4,523,479,419
37	The Sandbox SAND	$3.16	▲4.21%	▲16.34%	$3,580,205,098
44	Axie Infinity AXS	$51.57	▲3.71%	▲9.17%	$3,130,156,185

- NFTs with virtual applications can be bought, sold & traded in real world
  - In-game assets, abilities, features
  - Access to virtual events and restricted areas
  - Virtual real estate



Metaverse Economy vs. Crypto and Blockchain (2022) by Dr. Charles Shen @ inWeb3.com

Case Study: Decentraland

- Decentraland is a decentralized virtual reality platform powered by the Ethereum blockchain
- Finite, traversable, 3D virtual space within Decentraland is called LAND
- LAND is a non-fungible digital asset maintained in an Ethereum smart contract.
- Owning LAND gives users full control over the environments and applications that they create, ranging from static 3D scenes to interactive applications or games
- Some parcels are organized into themed communities, called Districts, enabling the creation of shared spaces with common interests and uses

Real Estate In The Metaverse

Does My Metaverse Avatar Need A Last Will & Testament?

And other pressing legal issues for your brand

Legal Considerations – Metaverse Governance

- User & platform governance: 3 big cylinders
  - Identity
  - Access
  - Property/content
- Most legal issues will arise from how decisions on two of these impact the third

Legal Considerations – Metaverse Governance

- Identity
  - Each metaverse platform must decide: are you “you”?
    - Are you anonymous, or are you identifiable so that your conduct and assets can be tied back to you?
      - If truly anonymous, expect toxic culture problems – ability of offenders to create new accounts and continue
      - If you’re uniquely identified, everything you say/do will likely follow you forever
        - Similar to social media today but if you’re banned from Facebook you aren’t automatically banned from Twitter; metaverse platform interoperability could be very different
        - Also much more direct and personal interaction in meta-space, so heightened potential for more aggravated harassment conduct
    - Work v. personal profiles
      - Consider impacts of employee virtual conduct; vicarious liability
      - Can you be disciplined by employer for what you say while using your work avatar? Your personal avatar?

Legal Considerations – Metaverse Governance

- Access
  - User created content is foundational component of metaverse and web3
  - Who owns the content a user creates?
    - Does it matter what platform they used to create it?
    - Can the owner block others from viewing it?
  - Account takeovers & theft
    - Consider largely irreversible nature of blockchain transactions
    - Does the platform have a mechanism for reversing fraudulent or theft transactions?
    - Circling back to identity: if you are in anonymous environment, how would you prove you are rightful owner?
  - What safeguards are in place for account access?
    - Are email & password still "reasonable security measures," given unique risks of virtual identity takeovers and irreversible blockchain transactions?

Legal Considerations – Metaverse Governance

- Content / Property
  - Transferability
    - Between a user's multiple accounts? If yes, then governance becomes very difficult and users can easily launder assets and currency, especially if some accounts are anonymous.
    - What if the law requires you to give users their data in easily portable format? What does that look like in a world where users can move seamlessly from one metaverse space to another?
  - Terms & Conditions of Platform
    - To what extent do the platform's T&Cs limit or restrict user's rights to property or means of legal redress?
  - Application of traditional laws to metaverse property
    - Eminent domain
    - First Amendment rights – *e.g.*, common space of virtual shopping mall
    - What country's data collection rules apply? Based on server location? Platform affiliation?

Legal Considerations – IP & Brand Protection

- **Policing user generated content**
  - Traditional methods of policing of IP
  - What jurisdiction's rules apply?
  - How do you prove the jurisdiction(s) where the infringement is taking place?
  - What mechanisms are built in for "takedown" notices or cease & desist requests?
  - Do T&Cs address any of these?

- **Terms and Conditions**
  - Ensure that limited IP rights are licensed
  - License should be terminable upon any breach
  - Communicate rights clearly, including scope afforded to secondary purchasers

Legal Considerations – IP & Brand Protection

- **License Agreements**
  - Evaluate whether existing license agreements contemplate NFTs as drafted, as they likely do not specifically address use in the metaverse
  - Consider jurisdictional splits – Trademark owners or licensees may have rights only in specific jurisdictions, requiring determination of “where” an NFT officially drops.

- **Vendor Agreements**
  - Data privacy issues
    - Data protection matters are much the same in the metaverse as in other contexts
    - If collecting information from consumers, consider CCPA/CPRA and other state laws, GDPR, etc.
  - Know Your Customer/Anti-Money Laundering laws
  - Push risk to vendor
  - Credit cards vs. cryptocurrency

Legal Considerations – IP & Brand Protection

- **Trademark Registration**
  - 20 trademark applications in 2020 vs 1400+ in 2021
  - Most on intent-to-use basis, covering Classes 9, 35, 41 ("downloadable virtual goods"; "retail store services featuring virtual goods"; "providing online, non-downloadable virtual goods for use in virtual environments"). Some also filed in Class 42 if they develop software-as-a-service
  - Use evidence supporting the successful registrations
  - Necessary?
- **Example of Goods in Class 9:**
  - IC 009. Downloadable virtual goods, namely, computer programs featuring footwear, clothing, headwear, eyewear, bags, sports bags, backpacks, sports equipment, art, toys and accessories for use online and in online virtual worlds

Pending NFT / IP Litigation

Nike Inc. v. STOCKX LLC, 1:22-cv-00883 (SDNY 2/3/22)

- StockX LLC operates an online retail platform for the resale of collectable goods, including sneakers
- Nike alleges that StockX has created customer confusion through its launch of its Vault NFT program
- StockX argues, among other things, that its use of images of Nike sneakers for Vault NFTs *"is nominative fair use. "StockX is no different than major e-commerce retailers and marketplaces who use images and descriptions of products to sell physical sneakers and other goods online, and which consumers see (and are not confused by) every single day"* Dkt. 41, June 6, 2022 Answer to First Amended Complaint
- ***Disclosure: We are co-counsel for StockX***

Pending NFT / IP Litigation

Hermes v. Mason Rothschild, 1:22-cv-00384 (SDNY)

- Art or commerce?
  - Mason Rothschild created a line of "MetaBirkin" NFTs and alleges they are artistic expression Hermes sued for trademark and trade dress infringement
  - "Rogers Test" – Lawful "unless the use of the mark has no artistic relevance to the underlying work whatsoever, or, if it has some artistic relevance, unless it explicitly misleads as to the source or the content of the work."
  - *Order Denying Motion to Dismiss*: "[U]sing NFTs to authenticate an image and allow for tradeable subsequent resale and transfer does not make the image a commodity without First Amendment protection any more than selling numbered copies of physical paintings would make [them] commodities for the purposes of *Rogers*."

KILPATRICK TOWNSEND

Framework for Spotting Emerging Web3 Legal Issues

1 Less Simple = Less Secure
- The more features and complexity in a distributed application, the more potential vulnerabilities
- Ask: What is our strategic goal? What functionality is necessary vs. just desirable?

2 Jurisdiction issues
- Consider cross-border transactions, different laws (privacy / GDPR) and regulatory schemes
- Ensure clear and comprehensive choice of law, venue and jurisdiction provisions for resolving any disputes

3 Vendor issues
- Blockchain vendors will want to disclaim as much risk and liability as possible
- Consider necessary service levels and performance required for business application in determining when to walk away

4 Testing / Liability
- Robust testing environment to validate and debug application before launch
- Consider risk of improperly settled transactions, network failures, and other risks inherent to business application
- In customer and vendor agreements, clearly allocate risks and liabilities – particularly for lost/stolen crypto or NFT assets

5 Privacy / Customer Data
- Understand benefits and need for comprehensive permission-based structure
- Verify identification of participants and set access levels to ensure compliance with all applicable privacy and security regulations

6 Intellectual Property
- Ensure appropriate user permissions and access limitations to prevent harvesting of proprietary business data or trade secret information
- Vendor and customer agreements should address ownership of existing IP, later-developed IP, and comprehensive restrictions on use / disclosure
- NFTs: consider counterfeit & licensing risks

7 Enforceability / Dispute Resolution of Smart Contracts
- Allocate liability & risks, and outline procedures for enforcement / dispute resolution
- Have "in case of fire" plan – may need to unwind transactions or manually evaluate and create corrective entries.
- Consider including real-time monitoring and auditing functionality

8 Regulatory Compliance
- Same rules, different game
- Critical to understand technology, what processes it is supplanting, and how does it coordinate and update compliance regimes
- NFTs/Crypto – what is the substance of the underlying asset and what regulations typically apply to transactions for such assets?

9 Transaction Due Diligence
- Ownership of data / property on Blockchain
- NFT minting & sales: carefully review what rights are granted / retained on initial purchase and implications of any resales

Locations

Counsel to innovative companies and brands around the world

We help leaders create, expand, and protect the value of their companies and most prized assets by bringing an equal balance of business acumen, technical skill, and creative thinking to the opportunities and challenges they face.

Anchorage
Atlanta
Augusta
Beijing
Charlotte
Dallas
Denver
Houston
Los Angeles
New York
Raleigh
San Diego
San Francisco
Seattle
Shanghai
Silicon Valley
Stockholm
Tokyo
Walnut Creek
Washington DC
Winston-Salem