

@DANIELDIEMERS

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SNGLR.NFT



NFT – MORE  
THAN JUST  
HYPE? HOW THE  
ART MARKET IS  
ADAPTING  
BLOCKCHAIN  
TECHNOLOGY

24<sup>th</sup> August, 2021

X DAYS





**1.**  
**What are**  
**NFT**

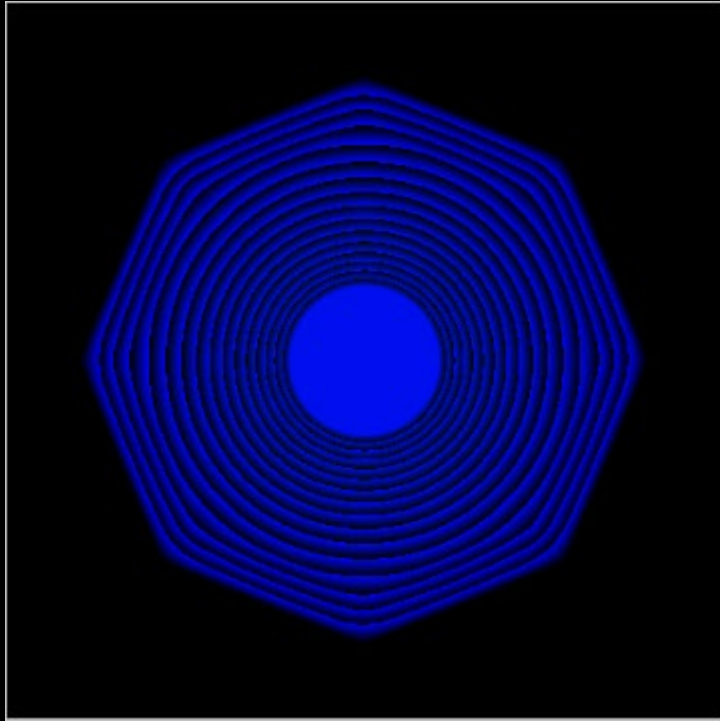
**2.**  
**The**  
**Tech**

**3.**  
**The**  
**Market**



# The First NFT: McKoy's Quantum 03.05.2014

## CryptoKitties & Cryptopunks 2017

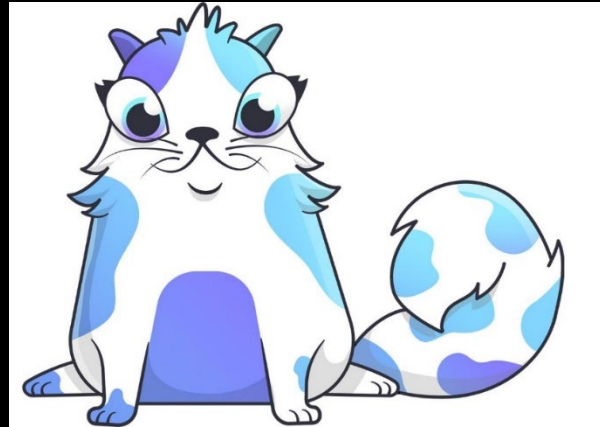


2014  
Kevin McKoy: Quantum

Source: Kevin McKoy, Sotheby's, Artnet [ [LINK](#) ]

Source: CryptoKitties, Larva Labs, Kate Vass Gallery

### CryptoKitties



Nov 2017  
Dapper Labs  
(Vancouver, Canada)

### Cryptopunks



June 2017  
Larva Labs  
(Brooklyn, NYC, US)

# Andy Warhol's "Machine Made"

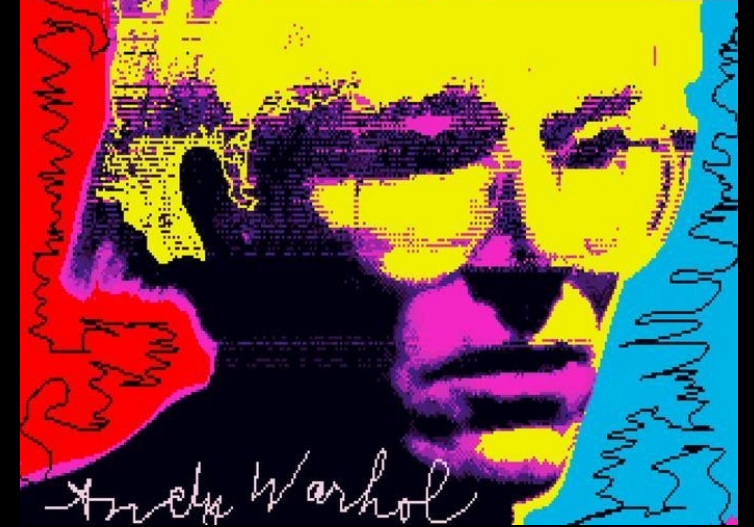
GraphiCraft V27 Release 06



GraphiCraft V27 Release 06



GraphiCraft V27 Release 06



# NFT in the Metaverse







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# What you need (NFT starter kit)



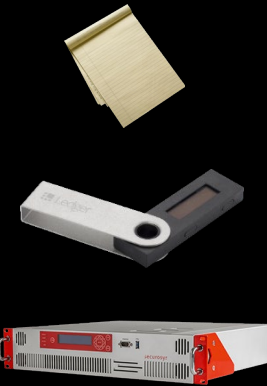
Laptop + WiFi



Crypto Wallet



Ethers (ETH)



Custody Solution

```
1 pragma solidity 0.6.11;
2
3 contract VendingMachine {
4
5     // Declare state variables of the contract
6     address public owner;
7     mapping (address => uint) public cupcakeBalances;
8
9     // When 'VendingMachine' contract is deployed:
10    // 1. set the deploying address as the owner of the contract
11    // 2. set the deployed smart contract's cupcake balance to 100
12    constructor() public {
13        owner = msg.sender;
14        cupcakeBalances[address(this)] = 100;
15    }
16
17    // Allow the owner to increase the smart contract's cupcake balance
18    function refill(uint amount) public {
19        require(msg.sender == owner, "Only the owner can refill.");
20        cupcakeBalances[address(this)] += amount;
21    }
22
23    // Allow anyone to purchase cupcakes
24    function purchase(uint amount) public payable {
25        require(msg.value >= amount * 1 ether, "You must pay at least 1
26    ETH per cupcake");
27        require(cupcakeBalances[address(this)] >= amount, "Not enough
28    cupcakes in stock to complete this purchase");
29        cupcakeBalances[address(this)] -= amount;
30        cupcakeBalances[msg.sender] += amount;
31    }
32 }
```

"Smart Contract"





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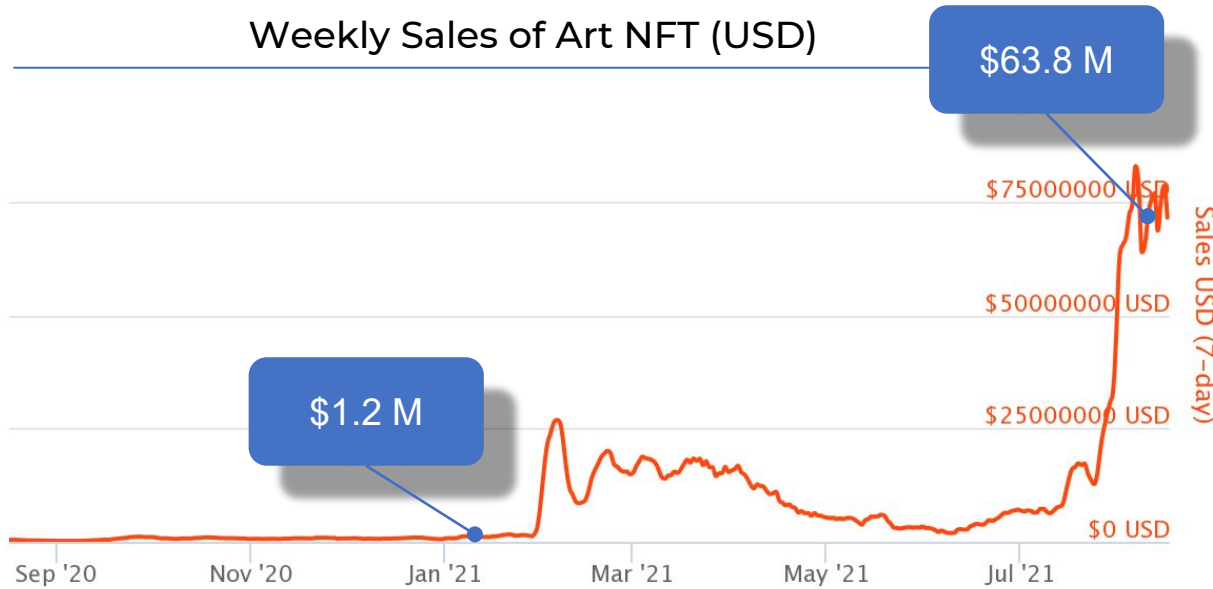
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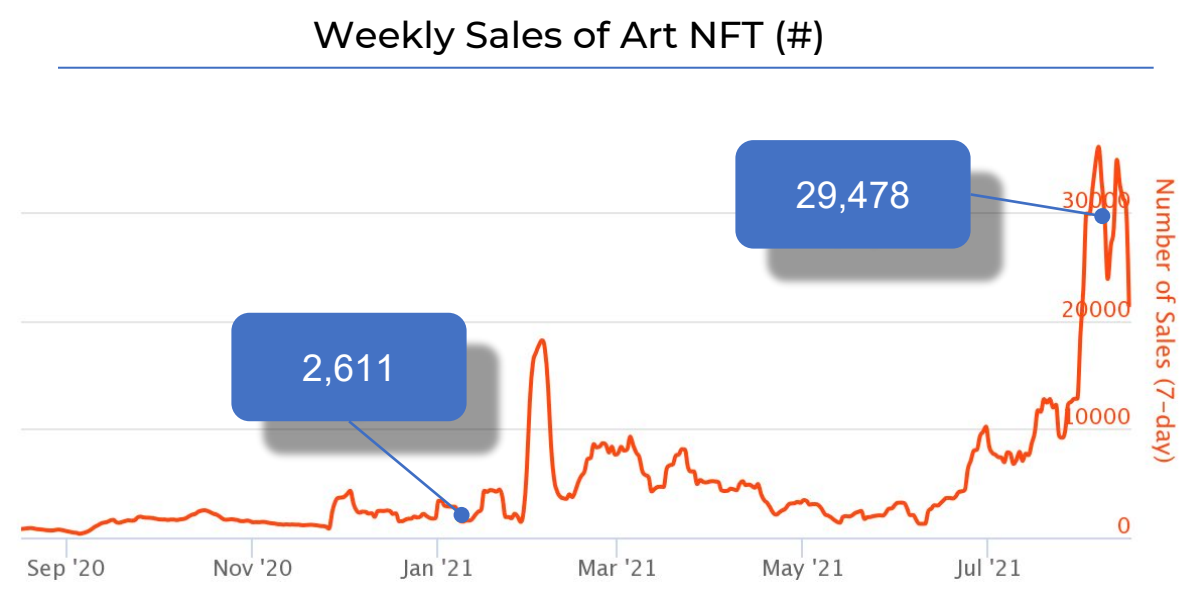


# NFT market kicked-off over last 10 months

Weekly Sales of Art NFT (USD)

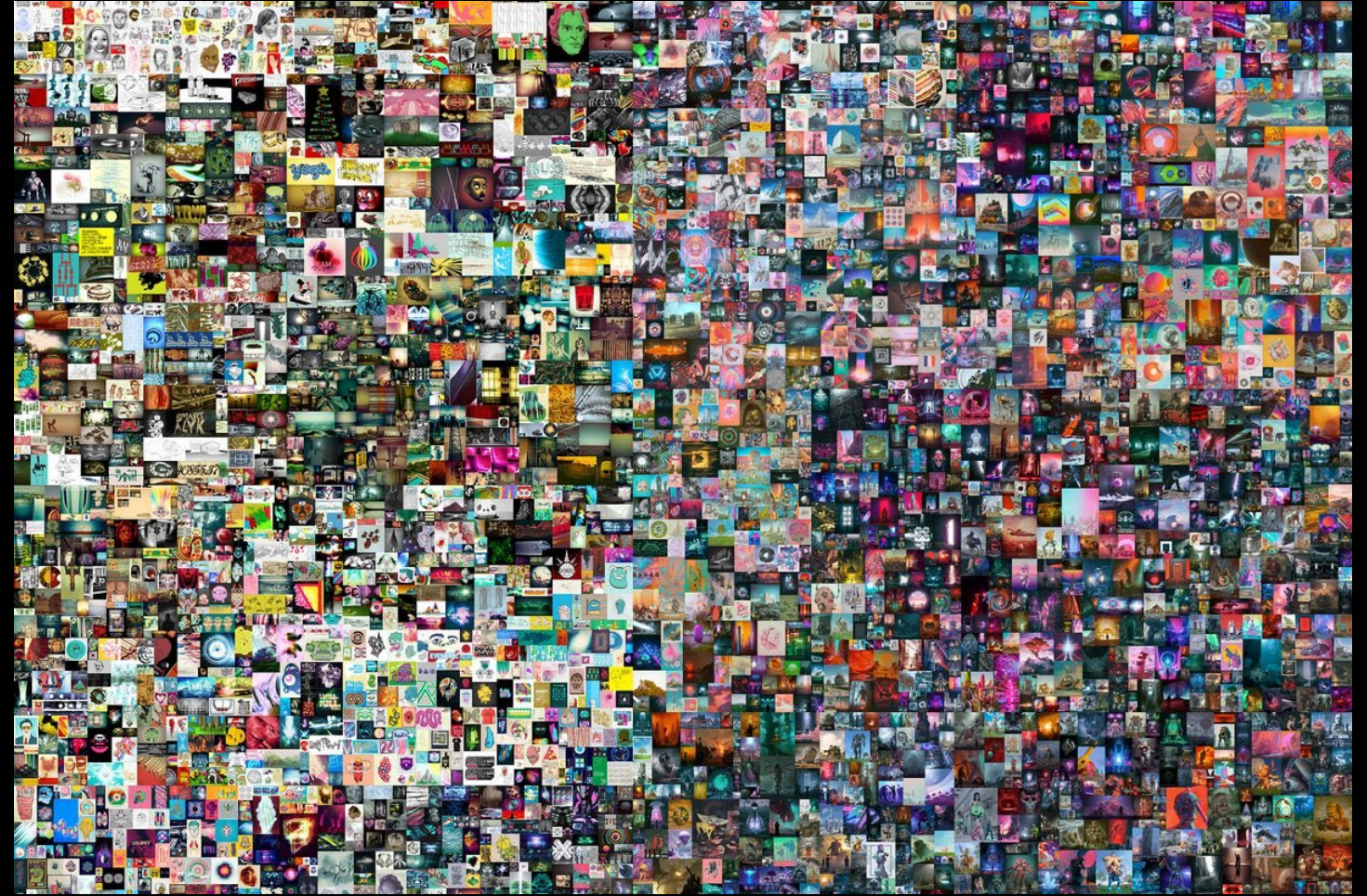


Weekly Sales of Art NFT (#)





# Most valuable NFT: Mike “Beeple” Winkelmann’s “First 5000 Days”



Source: Mike Winkelmann aka Beeple’s “the first 5000 Days” as sold on Christie’s for \$69m



# THANK YOU

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Dr. Daniel Diemers  
SNGLR Group  
daniel@snglr.group  
<https://snglr.group>  
<https://nft.snglr.tech>



# Backup

## More Tech: The NFT “layer cake”

IPFS (interplanetary file system) as decentralized cloud

The Metaverse (VR enabled NFT spaces)

DeFi and DAO

Marketplaces (built on World Wide Web)

Created NFT, linked to blockchain wallet address

Smart Contract enabled Blockchain protocols  
(ERC-20; ERC-721; ERC-1155; ...)

Cryptography (Algorithms such as SHA-256, KECCAK-256, ...)

World Wide Web (HTML; XML)

TCP/IP Protocol

### Comments:

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- ▶ 3D VR worlds, where avatars & objects correspond to NFTs
- ▶ Decentralized finance builds investment products based on NFT; DAO's are smart-contract “governed” decentralized organizations
- ▶ Many marketplaces have sprung up, where NFTs can be listed & traded
- ▶ Each NFT has a unique address on the underlying blockchain
- ▶ Protocol that enable NFT are different from “traditional” blockchain protocols in that a generated token can't be split into sub-units, i.e., is non-fungible
- ▶ Cryptography (hash algorithms) is an elementary part of blockchain technology, without it a blockchain would be a mere database