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Systemic Review & Analysis of the Current and Future State of NFT as an Artwork

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Abstract: ***The paper analyzes the NFTs as an artwork and shows various examples of NFTs in this area. The paper mentions some high valuable project in this space and explains their use-cases. This paper aims to review the top NFTs and shows their price fluctuation over a period of time highlighting the risks associated with NFTs as an asset class. The paper will cite examples of some rare NFTs sold for over millions of dollars. The goal of this paper is to analyze the top NFTs in this space and present a review of the same.***
Keywords: NFT, Artwork, Blockchain, Bored Ape, Profile Photo

I. INTRODUCTION

NFTs, or non-fungible tokens, are digital assets that are unique and cannot be replaced. Unlike cryptocurrencies, which are interchangeable, NFTs are each one of a kind. This makes them ideal for representing items that are collectibles or have other value that comes from their uniqueness. Some examples of NFTs include virtual world items, digital art, and in-game items. NFTs can also be used to represent physical assets, such as property titles or tickets to events. The key feature of an NFT is that it is stored on a blockchain. This provides immutability and trustless ownership. It also means that NFTs can be traded or sold peer-to-peer, without the need for a central authority. The use of NFTs is still in its early stages, but there is a lot of potential for them to change the way we interact with digital assets. NFTs are stored on a blockchain, just like cryptocurrencies. However, they use a different data structure called an NFT contract. This contract contains the unique identifier for the NFT, as well as any other data that is associated with it. The most common type of NFT contract is the ERC-721 standard [1]. This standard was developed by the Ethereum Foundation and has been adopted by many projects. Other popular standards include ERC-1155 [2,3] and ERC-20 [4,5]. When an NFT is created, its contract is deployed on the blockchain. The creator of the NFT can then mint new tokens and assign them to people or organizations. These minted tokens can be traded or sold on decentralized exchanges. One of the benefits of using NFTs is that they can be easily integrated with existing applications. For example, an art gallery could create an NFT for each piece of artwork in its collection. These NFTs could then be displayed on a website or sold through a marketplace.

The use of NFTs is still in its early stages, but there is a lot of potential for them to change the way we interact with digital assets. With the help of blockchain technology, we can create unique items that are easy to trade and sell. Whether you're a collector, an artist, or just someone who wants to own something unique, NFTs may be the right choice for you.

II. WHAT IS A BLOCKCHAIN?

A blockchain (Mitchell Clark, 2021) is a distributed database that maintains a growing list of records, called blocks. Each block contains a timestamp and a link to the previous block. This makes it tamper-resistant, as any modifications to a block would be immediately evident. Blockchains are often used to power cryptocurrencies, but they can be used for other purposes as well. One example is Ethereum, which allows users to create their own decentralized applications (apps). These dapps run on the Ethereum blockchain and can use its features, such as smart contracts. Blockchain Technology has a lot of use cases and is not limited in crypto. One such research paper tends to bring forth the different industries and use cases of BT project (Leible,et al 2019). Another researcher showed the use case if BT in business processes (Viriyasitavat, W., and Hoonsopon, D, 2019). The authors suggested an architecture of business processes in Blockchain era to overcome the problems of time inconsistency and consensus bias (Stephan et al., 2019). There has been researches and white papers showing how blockchain technology can be used to solve other scientific areas - (Gipp et al., 2015, 2017; Anonymous, 2016; Dhillon, 2016; Golem, 2016; Wolf et al., 2016; Breitinger and Gipp, 2017; van Rossum, 2017; Androulaki et al., 2018; Bartling, 2018; Janowicz et al., 2018). Other research publications have proposed the use of BT in the medical or biological area to provide, among other aspects, transparency and trust (Nugent et al., 2016; Benchoufi and Ravaud, 2017; Ozercan et al., 2018)

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III. WHAT IS THE DIFFERENCE BETWEEN AN NFT AND A TOKEN?

NFTs and tokens are both digital assets that can be stored on a blockchain. However, there are some key differences between them. Tokens are created through a process called Initial Coin Offering (ICO). In an ICO, a project sells tokens to investors in exchange for funding. These tokens can be used to access the project's platform or services. They can also be traded on cryptocurrency exchanges. In contrast, NFTs are not created through an ICO. Instead, they are minted by the owner of the asset that they represent. For example, an artist could mint an NFT that represents their painting. This NFT would then be stored on a blockchain and could be traded like any other asset. Tokens are typically used for utility purposes, such as accessing a platform or service. In contrast, NFTs can be used for a wide range of applications, such as representing collectibles, virtual assets, or physical property.

IV. RESEARCH

In this paper the author will define the basics of NFT to ensure that the readers are aware of the terms that'll be used throughout the paper. The author will go on and define the use cases of NFTs – how they can be helpful and have more utility use case. The paper will also discuss the current use cases of NFTs and how the market has evolved in general. The author will deep-dive into the top NFT Artworks in the industry right now by researching the available information and will analyze the utility value, market value and conduct financial analysis of the different NFTs. It's a qualitative exploratory study conducted to explain the use case of NFTs beyond its current form. The paper will analyze top 10 NFTs focusing on Artworks and PFPs

V. MARKET SIZE AND ANALYSIS

The size of the NFT market is difficult to estimate, with some studies finding that it ranges anywhere between $17 billion and 44 million annually in sales. However there have been recent falls according to the sales volume of NFTs. But the creators are launching new creative projects and engaging buyers in innovative ways. Games and Sports industries are bringing in higher utility-value based NFTs to lure in buyers. Despite this, the NFT market continues to grow at a rapid pace. This is evident from the increasing number of high-profile sales, such as the $69 million sale of an NFT-based artwork by Grimes, and the $1 million sale of an NFT-based NBA Top Shot card. The sales of NFTs broke all records in 2021. The sales hit $19.5B in 2021 alone. This number includes P2P sales. And in 2022, at the time of writing this paper, the NFT sales were $20.8B.

The Ethereum Blockchain is making a strong showing as the most popular blockchain for NFT sales. As per CryptoSlam, the total Sales Volume on Ethereum Network is more than $27B with more than 16.5M transactions. The second spot is far behind with $4B Sales volume and over 18M Transactions on Ronin. The third spot is occupied by Solana with $2.8B Sales Vol and 14M transactions.

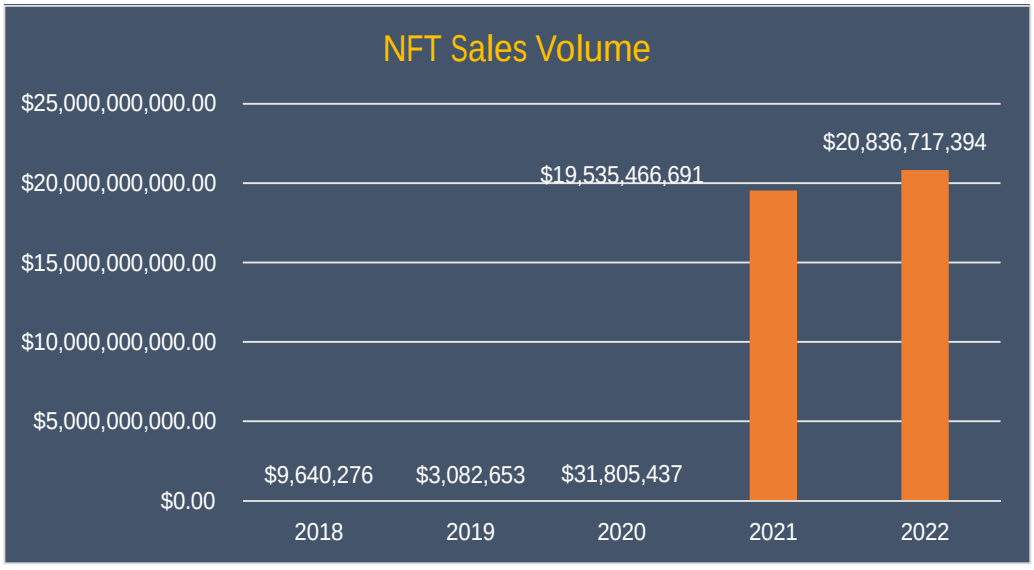

Figure 1 Shows Global NFT Sales Volume
Source: https://cryptoslam.io/nftglobal accessed on Nov 11, 2022

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VI. WHAT ARE NFTS USED FOR?

NFTs have a wide range of potential uses. Some of the most popular ones include: Artwork, Investment Asset, Music, Fashion, Gaming, Contract for physical items, event tickets, etc. With passing days, the use case for NFTs is increasing. This paper will focus on reviewing NFTs as Artwork, analyzing top projects, market analysis and how the market is growing. Importantly, NFTs have found applicability in other domains as well such as real estate, identity management, gaming, etc. The ENS (Ethereum Name Service) project uses NFTs to store digital identity information like email, social media handle, etc. In real estate, developers are looking into NFTs to represent ownership of land or property. Thus, it is important to understand how NFTs work and what problems they are solving. The author will discuss these points in detail in the sections that follow analyzing the top NFTs in artworks space.

A. NFTs as Artwork0

NFTs can be used to represent digital art, such as paintings or 3D models. This allows artists to sell their work in a way that is similar to traditional art. It also gives them the ability to set prices in accordance with the rarity of the piece. Artists can create a digital art and convert it to NFT using available the blockchain technology and digital marketplaces. Artists can even sell the art on their personal website. Digital arts are minted on the blockchain and have a unique code applied to it which make each NFT unique. Whenever an NFT is created it has a ledger entry on the Blockchain ledger and similarly when someone buys it, the ledger reflects that. This creates a series of entries on the chain, stored in a distributed network and readable by anyone. Hence, making it hard and impossible to create a copy or even steal it. Thus, NFTs create unique value for the arts that wasn't available to the artists or general population before this. And it is only made possible because of the underlying Blockchain technology.

NFTs can be bought and sold through digital marketplace or creators' website using crypto currencies. ETH is the widely used currency to trade NFTs. Users need to mint their NFTs and can upload it to any available marketplace for other people to look at it and buy. Each NFT is unique and it has its unique footprint on the blockchain. Even if the same JPEG is uploaded N times, technically each one of them is unique. There have been some major spends in NFT arts. The images in Fig 2 and 3 show the highest priced NFT sold at the time of writing this paper.

The NFT in image 1 was sold for a whopping $91.8M. it's the most expensive NFT sold ever. There are a few more that were sold for multi-million dollars, making NFT marketplace an overnight success. Figure 2 NFT was sold for $69.3M. The author lists the top 10 most expensive NFTs ever sold [Jacob Hale, 2022]. But NFTs are much more than just arts. It could have started with arts but has much more bigger tech functionality in the industry which would touch many services and change the way users will interact and consume digital or physical content.

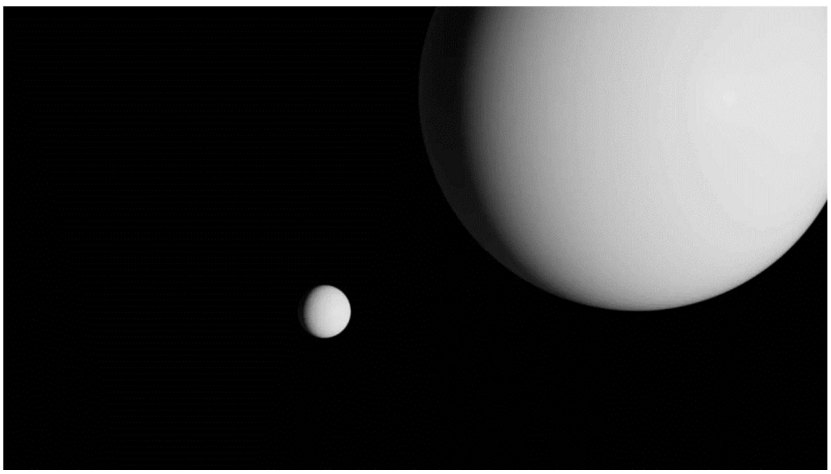

Figure – 2
Source: https://www.dexerto.com/tech/top-10-most-expensive-nfts-ever-sold-1670505/
The Merge was bought by 28,983 collectors for a total of almost $100m.

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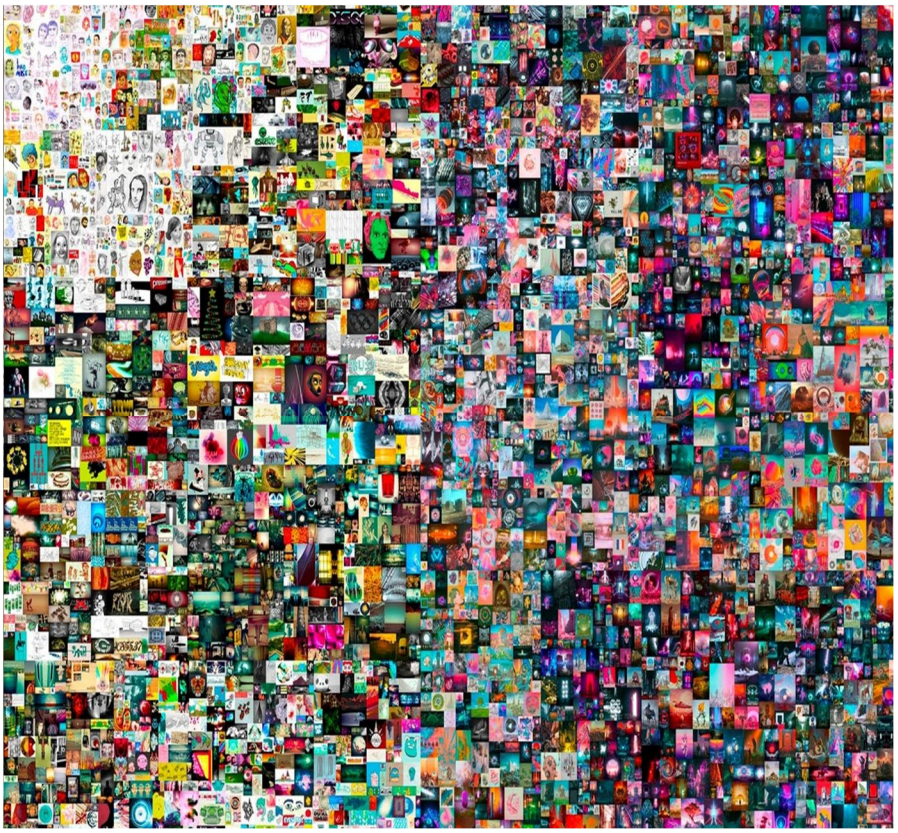

Figure 3
Source: https://www.dexerto.com/tech/top-10-most-expensive-nfts-ever-sold-1670505/
Beeple, Everydays: The First 5000 Days

NFTs can be created by following a few simple steps.

1) *Step 1:* Create a profile on an NFT marketplace
2) *Step 2:* Link crypto wallet to your profile. Because NFT transactions are processed and paid using crypto. Most famous is ETH
3) *Step 3:* Upload an original art on the platform
4) *Step 4:* Create NFT → NFT starts minting on the blockchain technology
5) *Step 4a:* Pay the fee using your crypto wallet
6) *Step 5:* NFT is minted and has a unique blockchain code associated with it
7) *Step 6:* Price your NFT art

NFT as an art has a few unique advantages over the traditional art or digital art –

NFT art can't be replicated. It's unique. Each mint is unique and has an entry on the blockchain which identifies each and every NFT art uniquely. They have a unique identifier which has link on the blockchain. So, unlike the traditional digital art form that can easily be replicated, NFT mints are unique. It serves well the artists. They don't need to worry about the replica or fake copy of their art. They are protected by the blockchain technology. Making art a valuable piece.

Given that the arts are now easily identifiable by unique tokens which make them harder or impossible to replicate, the value of art increases. It can act as an investment asset class. Something which was once thought of lifestyle expense can now be considered an asset class. Gen Zs are more likely to be attracted to this type of investment in the future. NFTs give more control to artists now rather than the middlemen platforms. Artists can control how to sell the NFTs, where to sell them, how much to sell them for and they don't have to give a cut to the middlemen platforms. The artists can also define some unique class or category to the NFT buyers. The arts can be made unique and it restricts duplicity. This is a great way for the artists to make their work available to everyone without losing control over it.

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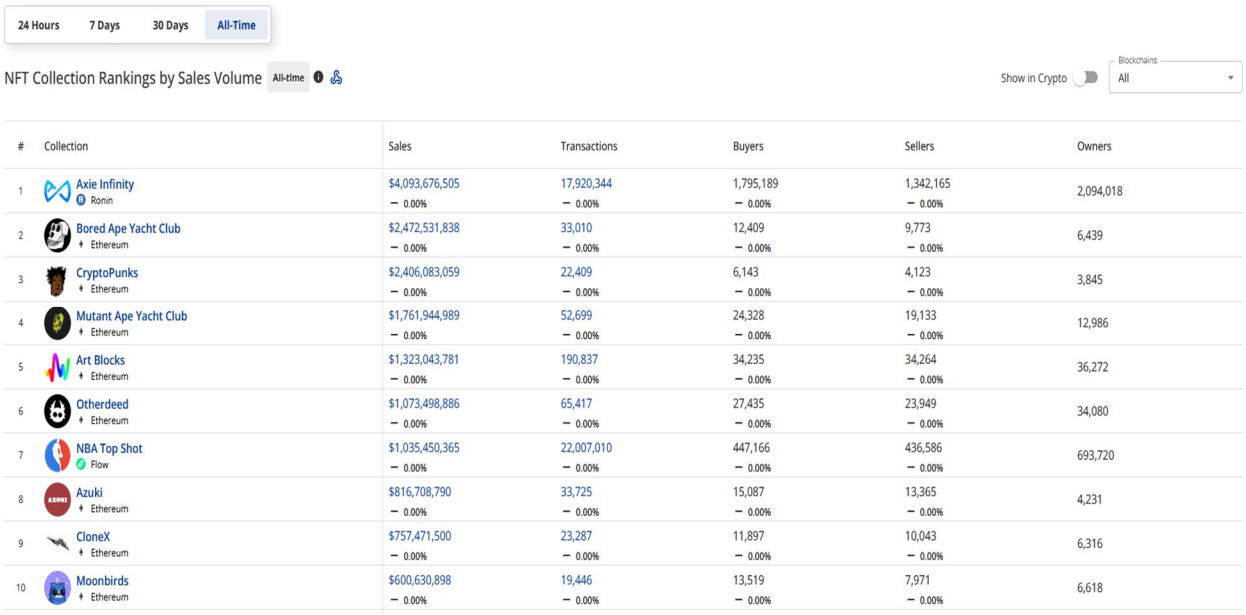

24 Hours | 7 Days | 30 Days | All-Time

NFT Collection Rankings by Sales Volume — All-time — Show in Crypto — Blockchains: All

#	Collection	Sales	Transactions	Buyers	Sellers	Owners
1	Axie Infinity (Ronin)	$4,093,676,505 — 0.00%	17,920,344 — 0.00%	1,795,189 — 0.00%	1,342,165 — 0.00%	2,094,018
2	Bored Ape Yacht Club (Ethereum)	$2,472,531,838 — 0.00%	33,010 — 0.00%	12,409 — 0.00%	9,773 — 0.00%	6,439
3	CryptoPunks (Ethereum)	$2,406,083,059 — 0.00%	22,409 — 0.00%	6,143 — 0.00%	4,123 — 0.00%	3,845
4	Mutant Ape Yacht Club (Ethereum)	$1,761,944,989 — 0.00%	52,699 — 0.00%	24,328 — 0.00%	19,133 — 0.00%	12,986
5	Art Blocks (Ethereum)	$1,323,043,781 — 0.00%	190,837 — 0.00%	34,235 — 0.00%	34,264 — 0.00%	36,272
6	Otherdeed (Ethereum)	$1,073,498,886 — 0.00%	65,417 — 0.00%	27,435 — 0.00%	23,949 — 0.00%	34,080
7	NBA Top Shot (Flow)	$1,035,450,365 — 0.00%	22,007,010 — 0.00%	447,166 — 0.00%	436,586 — 0.00%	693,720
8	Azuki (Ethereum)	$816,708,790 — 0.00%	33,725 — 0.00%	15,087 — 0.00%	13,365 — 0.00%	4,231
9	CloneX (Ethereum)	$757,471,500 — 0.00%	23,287 — 0.00%	11,897 — 0.00%	10,043 — 0.00%	6,316
10	Moonbirds (Ethereum)	$600,630,898 — 0.00%	19,446 — 0.00%	13,519 — 0.00%	7,971 — 0.00%	6,618

Figure 4

Source: https://cryptoslam.io/nfts accessed on Nov 2, 2022

Amounts are calculated from transactions on all marketplaces tracked by CryptoSlam and include owner-to-owner sales only (not initial sales from the product directly to the owners).

According to data extracted from CryptoSlam, a leading NFT analytics platform, the top NFTs collection brought in $16.1 B in all time peer to peer sales tracked across all the platforms. It shows the massive interest of people in buying NFTs and trading it online since the inception of non-fungible tokens. The data includes all the transactions across the different platforms, including decentralized exchanges, marketplaces, and protocols. The report also highlights the top 10 collections in terms of value and the number of transactions. The majority of the collections are related to gaming, digital art, and collectibles. This indicates that people are willing to spend a lot of money on NFTs that offer them unique and valuable experiences. With the increasing popularity of NFTs, it is likely that their value will continue to rise in the future. The paper will look at the top NFTs Artwork collections in more depth.

VII. BORED APE YACHT CLUB:

One of the most popular NFTs in Yuga Land, the company behind Bored Ape Yacht Club (BAYC). The BAYC is a group of digital apes that live on a yacht and can only be accessed by members who have the appropriate NFT. The BAYC was created by Camila Russo and Gustavo Soriano, the founders of Yuga labs, as a way to experiment with NFTs and build a community around digital creature. One of the reasons why Bored Ape Yacht is so popular in Yuga Land may have something to do with its rarity. Each ape features a unique combination or facial expressions, accessories and outfits which makes them all stand out from one another just enough for people looking forward an individualized experience when collecting these creatures. The collection was created by NFT company called "Yuga labs" who put forth this idea after observing how quickly digital currencies were changing over time versus real money.

Founders of the project, Camila Russo and Gustavo Soriano, decided that instead of physical assets, they would focus on building a community and ecosystem around digital creatures that people could own, breed, and trade. The team was drawn to the Ethereum blockchain because of its ability to support non-fungible tokens (NFTs), which are perfect for representing digital assets like in-game items, art, and collectibles. The BAYC is made up of 10,000 digital apes, each of which is unique and has its own set of facial expressions, accessories, and outfits. The BAYC is a closed community, and only members who have the appropriate NFT can access it. Well-known celebrities love their Bored Apes. Madonna owns BAYC No. 4988, Justin Bieber has BAYC No. 3001 and Tom Brady owns BAYC No. 3667, to name just a few.

The overall demand for BAYC has gone down. The hype and the heat around NFTs are settling overall and the same can be seen in the data pulled from cryptoslam.io. The sales are down by 46% and the price has gone down by 19%. The graph below shows how the sales are going down from May '22.

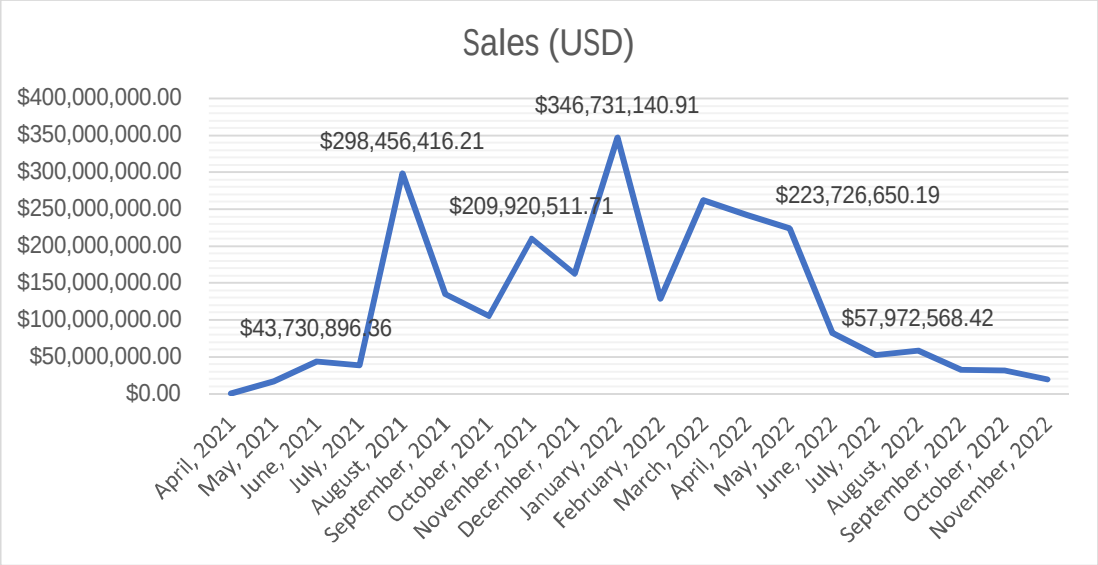

Figure 5A
Data Source: https://cryptoslam.io/bored-ape-yacht-club accessed on Nov 12, 2022

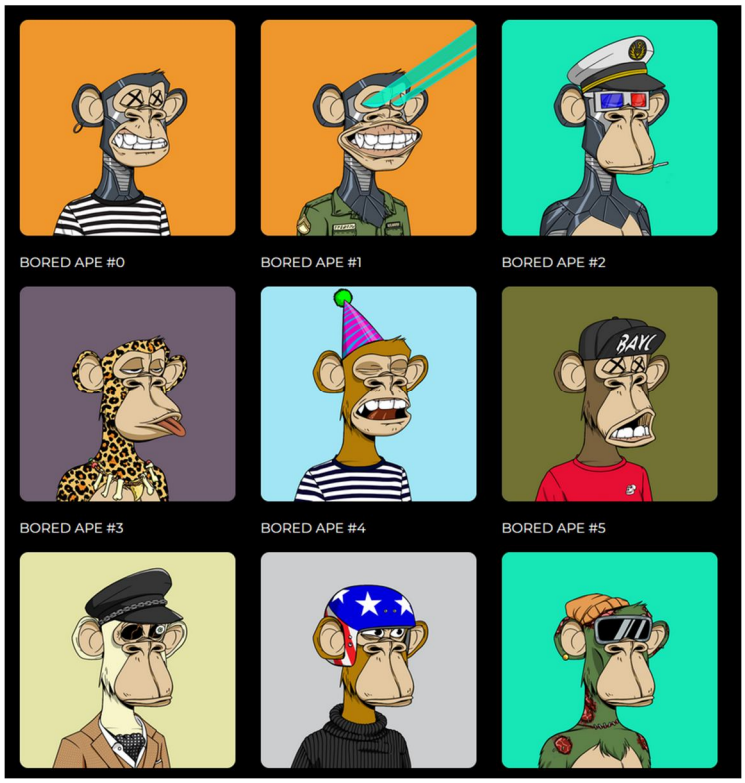

Figure 5B
Source: https://boredapeyachtclub.com/#/gallery

VIII. CRYPTOPUNKS

Cryptopunks is digital art collectibles that exist as non-fungible tokens (NFTs) on the Ethereum blockchain. Cryptopunks was created in 2017 by three artists known as Larva Labs, and they were one of the first NFTs to be generated on Ethereum (Jason Abbruzzesse, 2017). Cryptopunks is unique, numbered digital illustrations of characters with punk-inspired aesthetics. There are 10,000 cryptopunks in total, and each one is stored as an ERC-721 token on the Ethereum blockchain. Cryptopunks can be bought, sold, or traded like any other NFT, and they have been known to sell for large amounts of money. Cryptopunks is popular because they are one of the first NFTs, they are completely unique, and they have a community of passionate collectors. Originally, anyone could claim these tokens for free with an Ethereum wallet but 10K were quickly claimed. Now one has to purchase them from someone via marketplaces that are also embedded in the blockchain-- prices vary depending on type and rarity. The CryptoPunks are 24x24 pixel art images generated algorithmically. Most of what everyone has seen so far looks like punky-looking guys or girls but there is occasional alien (Larva Lab). CryptoPunk #5822 made history by registering a place in Guinness Book of World Records. All time sales from CryptoPunks have accounted to $2B+.

The sales of Cryptopunks have gone down in 2022 when compared to 2021. At the time of writing, the exact fall is 91%, from $1.85B to $174M. This drop is huge and validates the hypothesis that the craze of NFTs is going down. NFTs with all the hype and no utility factor will see a hard time to survive in this crowded space. It might create waves at launch but it'll be hard to sustain without any utility value. The number of buyers has gone down at the similar rate, from 5740 unique buyers to 559, 90% drop.

Figure 6A

Source: https://opensea.io/assets/ethereum/0xb47e3cd837ddf8e4c57f05d70ab865de6e193bbb/5822 accessed on Oct 29, 2022

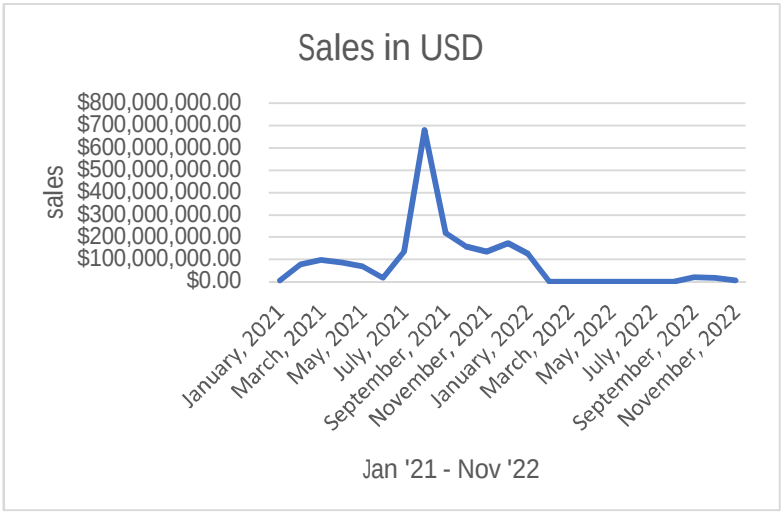

Figure 6B

Data Source: https://cryptoslam.io/cryptopunks/sales/summary accessed on Nov 9, 2022

IX. MUTANT APE YACHT CLUB (MAYC)

Another popular NFT in Yuga Land is the Mutant Ape Yacht Club (MAYC). The MAYC is a group of digital apes that live on a yacht and can only be accessed by members who have BAYC. MAYC NFT is an extension of BAYC. It is a collection of 20,000 unique art image of Mutant Apes. Each Mutant Ape is created from an existing Bored Ape and it shares original's traits, but with mutated variations making it a sequel to BAYC (James Howell, 2022). In a process created by Yuga Labs, holders of Bored Ape NFTs were given the option to pairing their unique tokens with Mutant Serum ones via smart contract integration. This process destroys the serum and create a mutant NFT (Langston Thomas, 2022). This is a unique variation of the NFTs that the paper has researched so far (Kraken Post). Just by awarding free NFTs, it did three things: 1. Increased the value of BAYC; 2. Made the holders part of a valuable community wherein more users will want to be a member of; 3. Created an anticipation for the buyers of MAYC that they might get something similar in the near future.

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Hence, increasing the overall demand and value for this NFT. MAYC is a huge success. It raised $96M within an hour of launch by selling 10,000 NFTs. The remaining were created by the existing BAYC holders using Mutant Serums. It became an overnight success.

The total sales of MAYC have crossed $1B (as of Nov 9, 2022). There has been a total of 18,241 unique buyers. The average hold days has been 30 days. It shows that buyers are selling it to register profit or stop losses. The NFT winter is felt by MAYC as well. The sales are down 95% when compared to Aug '21. As seen in other NFTs trends, the sales are flat and steadily going down since June 2022. The creators have to rethink their strategy to keep the buyers involved and immersed. It has to offer more than just being a profile photo. It'll be interesting to see how Yuga Labs reengage their holders and attract new buyers.

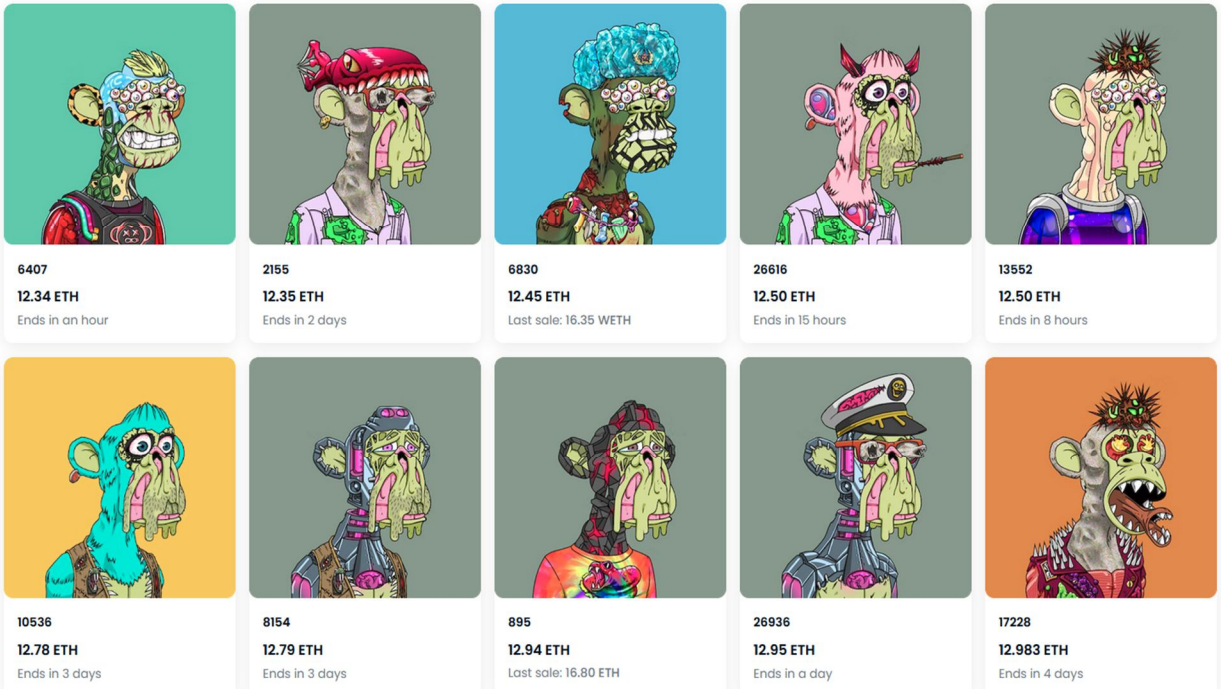

Figure 7A

Source: https://opensea.io/collection/mutant-ape-yacht-club accessed on Nov 2, 2022

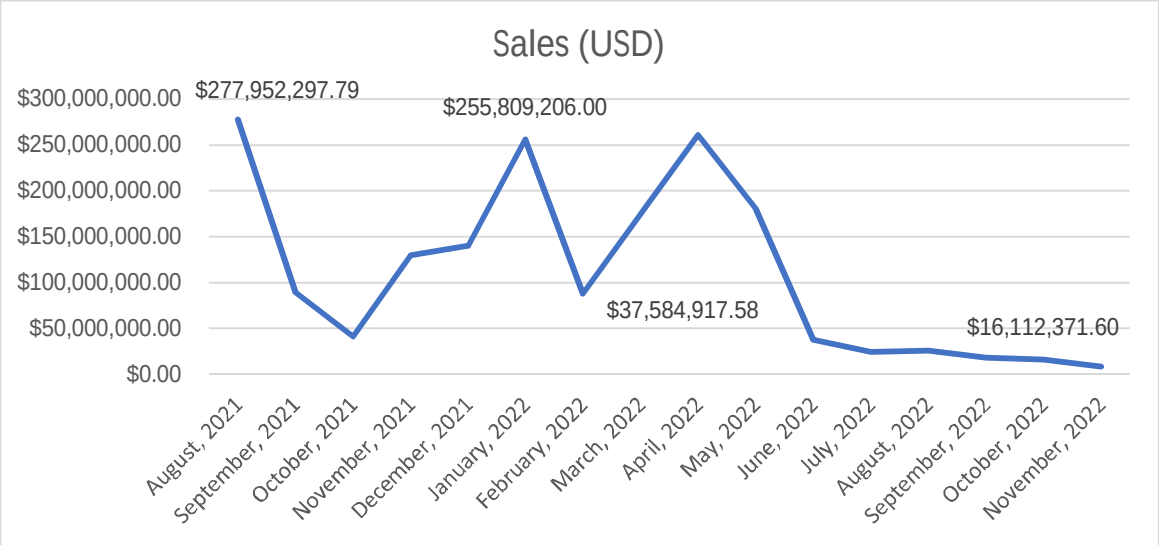

Figure 7B

Data Source: https://cryptoslam.io/mutant-ape-yacht-club/sales/summary accessed on Nov 12, 2022

X. ART BLOCKS

it's an Ethereum based NFT project for artists to publish unique editions of generative art. It's a platform for artists to showcase their unique style that's created by an algorithm created by the artists (Andrew Hayward, 2021). Art Blocks is an innovative platform that brings together creativity and blockchain technology for the first time in history and hosts some exciting projects from today's most cutting-edge digital artists on their site. Collectors can get involved by generating unique algorithmic artwork themselves, realizing artists vision, which they then sell to other members or purchase directly through the store (Alicia Joy, 2022). The shared experience between all participants provides a dynamic community where everyone has something valuable yet different contribute towards building this homes worth.

The site's mission is threefold: to act as a safe space where artists can experiment with blockchain technology, to make it easy and accessible for art enthusiasts of all levels to get involved in the world of NFTs and to build a connection between digital creators and their audience. It achieves this by hosting artwork that is only ever available in one edition and can never be replicated, ensuring that each piece has a unique value. The digital art pieces on Art Blocks are created using algorithms that produce random yet consistent results, meaning that no two pieces are ever the same. This makes them perfect for collectors who appreciate both the beauty of the artwork and the uniqueness of the blockchain technology that it is built on. Even though the concept behind Art Blocks NFTs is super creative, the headwinds in NFTs touched them as well. As can be seen from the Figure 7b, the sales have gone down substantially. The sales volume is down more than 80%, from $1B+ to $190M, at the time of writing this paper. Number of unique buyers is down by 40%. These numbers for NFTs in general don't look very motivating. And if the drought continues then NFTs artwork might just become a meme project.

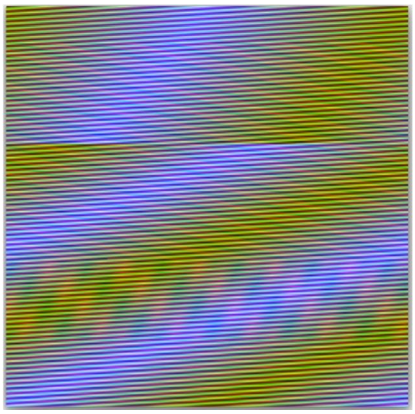

Figure 8A

Source: https://www.artblocks.io/collections/curated/projects/0x99a9b7c1116f9ceeb1652de04d5969cce509b069/376 accessed on Nov 2, 2022

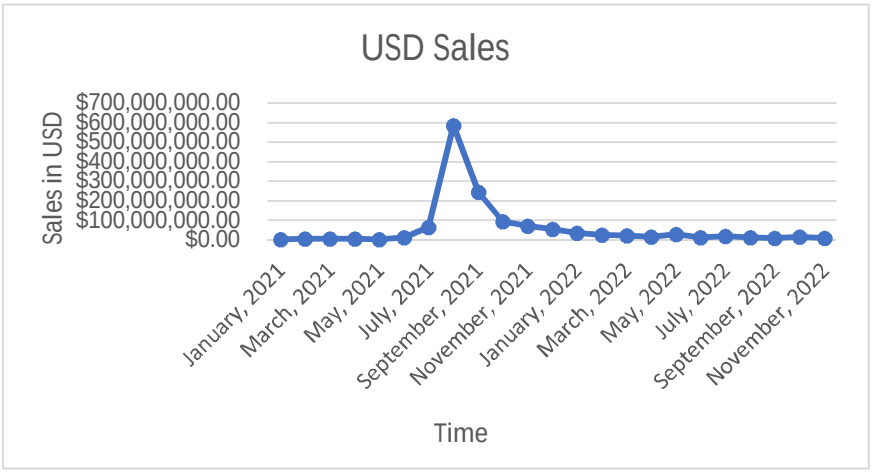

Figure 8B

Data Source: https://cryptoslam.io/art-blocks/sales/summary accessed on Nov 9, 2022

XI. DeGods

The DeGods NFT collection is a unique, deflationary NFT that can be burned and converted into Dead Gods**.** It's a Solana based NFT collection of 10,000 virtual and colorful Gods. Its unique selling point is that it is deflationary. It describes itself as *"deflationary collection of degenerates, punks, and misfits"*. DeGods is a very famous and one of the most hyped NFT collections. Their unique element is the deflationary NFTs – meaning that users can burn the DeGods NFT and convert it into DeadGod. It costs 1000 $DUST to upgrade [7]. Post upgare, the value increases. One might think that it would be best to keep the DeGods NFT, but the developers have stated that *"the more you burn, the more you own"*. The holders can do that using $DUST tokens, a native token for DeGod's collection. Holders can also stake DeGods to earn $DUST. DeGods holders also gain access to the community-owned content platform, de.xyz where they can publish their own content and reach out to the other holders. The holders of DeGods NFT also own a professional basketball team bought by DeGods DAO in the Ice Cube's Big3 League for $625,000 on April 28, 2022.

This is a big deal because it's unheard of for an NFT to be associated with ownership of a professional sports team (Shashank Bhardwaj, 2022). The community is wondering what this could mean for the future of NFTs and DAOs. Could this be a sign that DAOs are becoming more powerful and influential? Or is it simply a way for the DeGods team to add more value to their NFT? This potentially opens up the space for more innovation and research, but one thing is for sure: the DeGods DAO is making waves in the world of NFTs. DAO's are a relatively new phenomenon, but they have been gaining in popularity as a way to invest in and manage projects without the need for a central authority. At the time of writing this paper the total sales for DeGods NFT in 2022 was $52M+. its a positive sign for the NFT. With high utility value, DeGods might be the thing the enthusiasts need. Also, it'll force other NFT communities to explore creative ways to make the NFTs worthwhile for their holders.

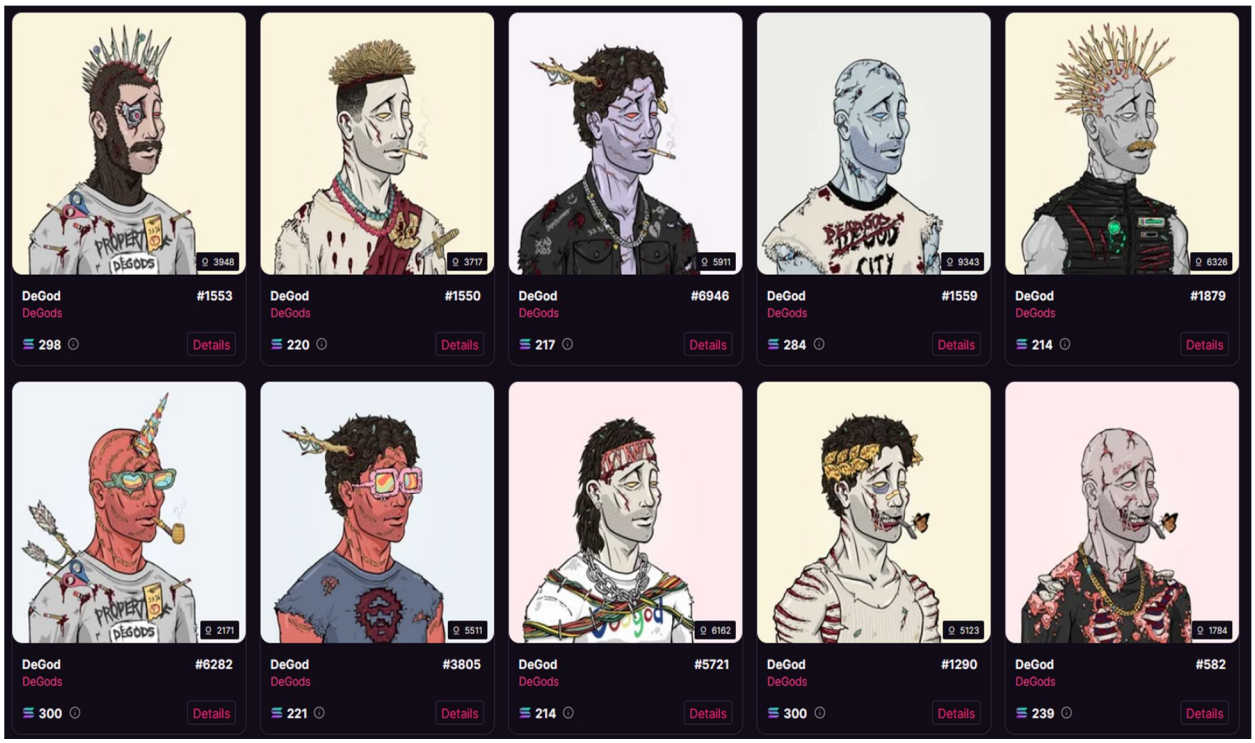

Figure 9
Source: https://magiceden.io/marketplace/degods accessed on Nov 10, 2022

XII. AZUKI

Azuki is a PFP (Profile Picture) NFT that launched on Jan, 2022 and instantly became a massive hit. The creators launched 8700 NFTs priced at 1 ETH ($3400 then) and they sold out in 3 minutes raking in $29M for the creators. It became an overnight sensation. It's a collection of 10,000 NFTs. In 4 weeks, the project did $300 M across several online marketplaces (Jeff Kauflin, 2022). Chiru Labs, the starup behind Azuki NFTs takes 5% royalty from the sales through marketplaces. Azuki success can be attributed to the distinct Anime look which is said to be a mix between the 3D action role-playing game *The World Ends with You* and the stylistic sensibilities of the iconic skateboarding magazine *Thrasher* (Langston Thomas, 2022). The creators have plans to make it utility driven and offer real-world values to the members of The Garden, the holders of the NFT are the members of The Garden. At the time of writing this paper, the all-time sales for the NFT collection is $821M with more than 15,000 buyers across all the marketplaces. It's really impressive to see what the creators have achieved in just 10-11 months. If Azuki continues on this path and hold true to their commitment to the roadmap, it'll be the top PFP NFT in no time. But the industry is going through a rough time and it's evident in the graph shown below. The sales have reduced by more than 90% from the time of launch. The sales are flat from June, 2022. The creators need to think about their strategy of just being a PFP NFT and offer more to the buyers.

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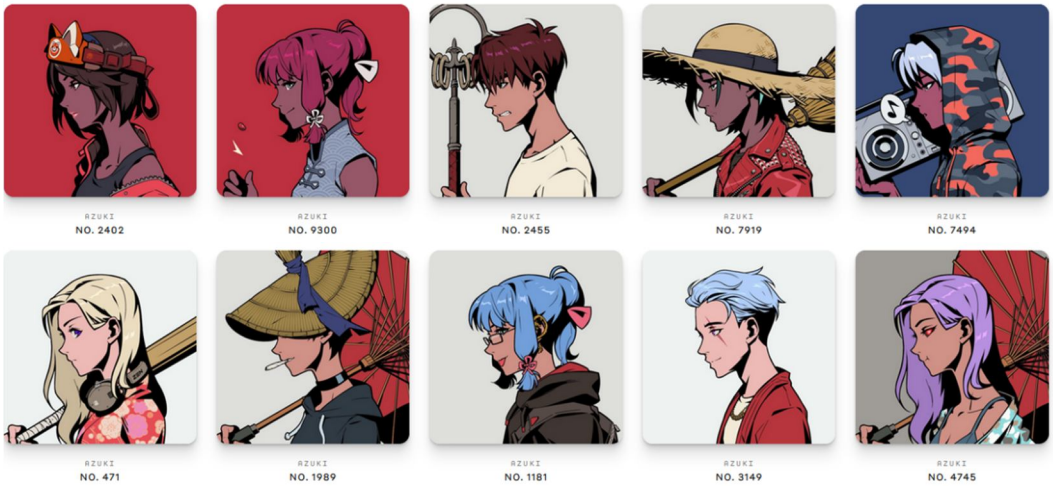

Figure 10A
Source: https://www.azuki.com/gallery accessed on Nov 12, 2022

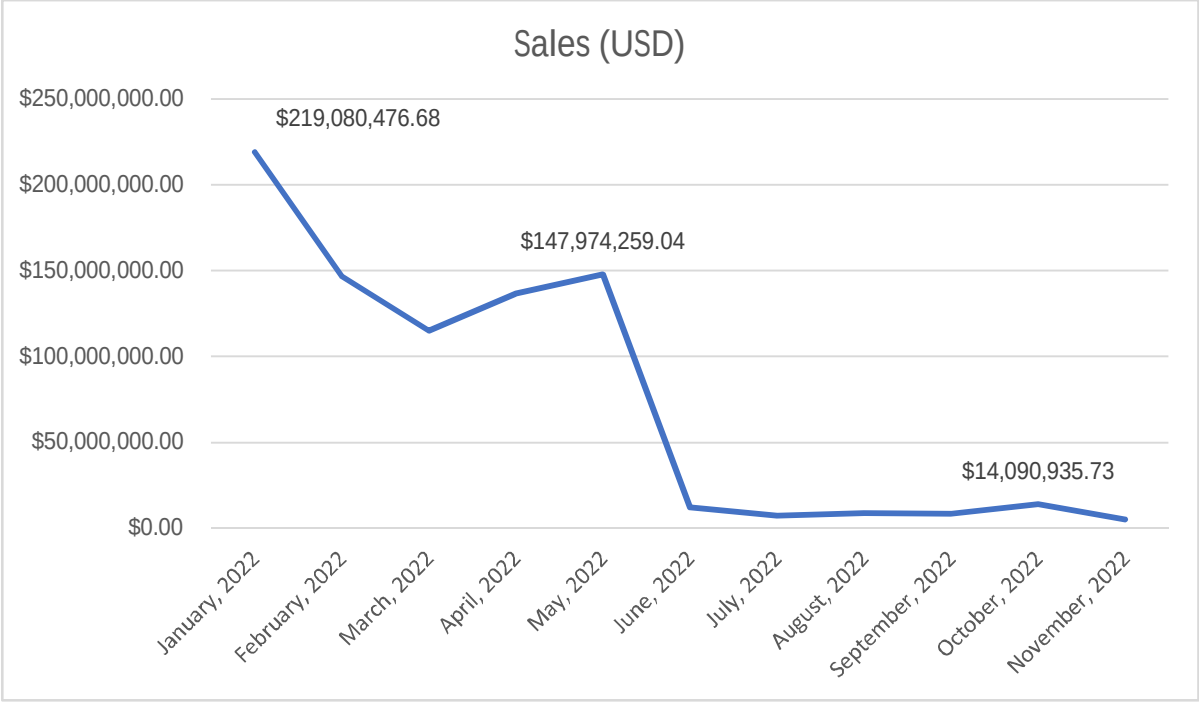

Figure 10B
Data Source: https://cryptoslam.io/azuki/sales/summary accessed on Nov 12, 2022

XIII. MOONBIRDS

Moonbirds launched in April, 2022 quickly became a sensation in the NFT community. It's a collection of 10,000 pixelated owls, created by Kevin Rose. The NFTs are differentiated by unique traits, body types and feathers (Rory Kejzerko, 2022). Within 48 hours of drop, the NFT floor price hit $60,000 (at that time). The NFT holders get Proof's private club membership and other benefits. At the time of launch, 7875 NFTs were launched to the whitelisted members through a raffle. The NFT became an overnight hit. Moonbirds also offers members to Nest NFT to unlock higher tier rewards (Langston Thomas, 2022). All time sales of Moonbirds NFTs have been $600M (at the time of writing this paper) and 80% of which was registered in April, 2022.

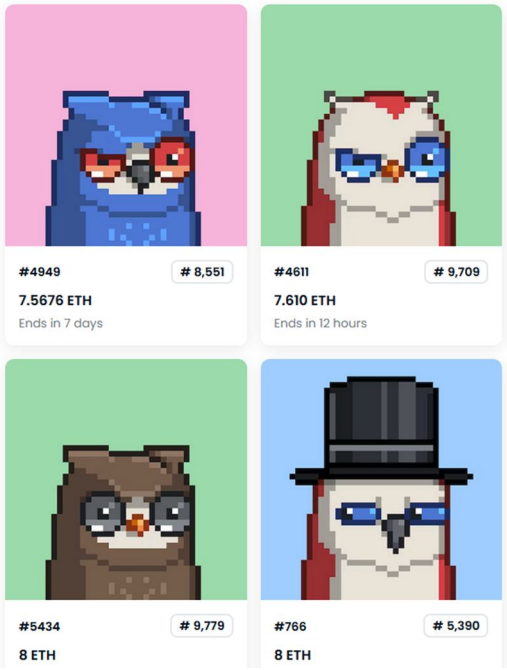

Figure
Source: https://opensea.io/collection/proof-moonbirds
accessed on Nov 13, 2022

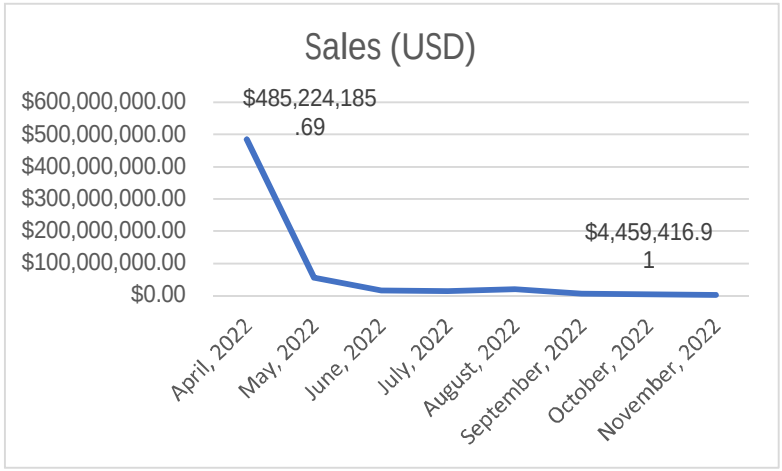

Figure
Data Source:
https://cryptoslam.io/moonbirds/sales/summary
accessed on Nov 13, 2022

XIV. ART GOBBLERS

NFTs have been in the news a lot lately, and for good reason. They're unique, they're valuable, and they're completely digital. One NFT that's been making waves lately is Art Gobblers. Art Gobblers is an art experiment being carried out by hit show Rick and Morty creator Justin Roiland and Web3 venture capitalist company Paradigm (Rupal Sharma, 2022). And that's one of the biggest reasons for its hype.

It has become top 10 NFTs in just a week of its launch and many publishing sites started calling it out as the next Blue Chip NFT. Hence, the author decided to add Art Gobblers in the paper and to provide a summary of what the NFT is about and what does the author think about the future of this NFT. It's a decentralized art factory NFT collection of 10,000 Gobblers of which first 2,000 has been released and the remaining Gobblers will be made available to mint in the next 10 years (Dave White, Frankie, Transmissions11, 2022).

The gobblers eat the arts created by artists who spends Goo, an ERC20 Ethereum token, to unlock a canvas and create any art of their choice. The Gobblers who eat the arts, squirt Goo to pay the artist. This might be the first time when people are excited to collect Goo and then spend it. Gobbler who eats the art, displays the art in their belly for everyone to see and the same is recorded on the chain (Alex White-Gomez, 2022).

The entire minting and gobbling of art have an interesting gamification mechanics to it. The creators have released "Green" paper to emphasize the token color. The mechanism of forming art and gobblers is described in the image below. The project launched on Oct 31, 2022 and shortly after that it became the top 10 NFT projects on Opensea (NFT Trading Marketplace Platform). Within 24 hours of launch, it did more than $12M (Eric James Beyer, 2022). At the time of writing the NFT has done more than $55M in just 10 days. It's a massive hit in this financially uncertain market of 2022. This unique gamified model has definitely attracted NFT enthusiasts.

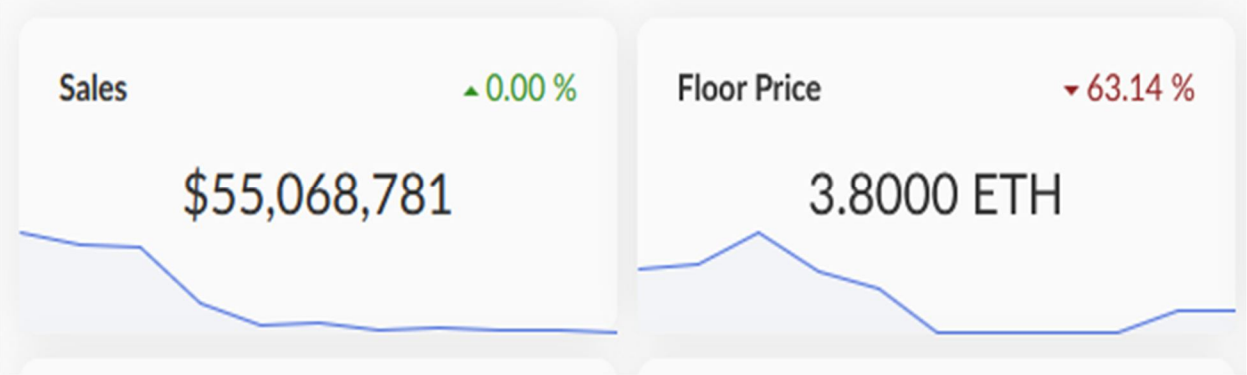

Figure 11A
Source: https://cryptoslam.io/art-gobblers accessed on Nov 10, 2022

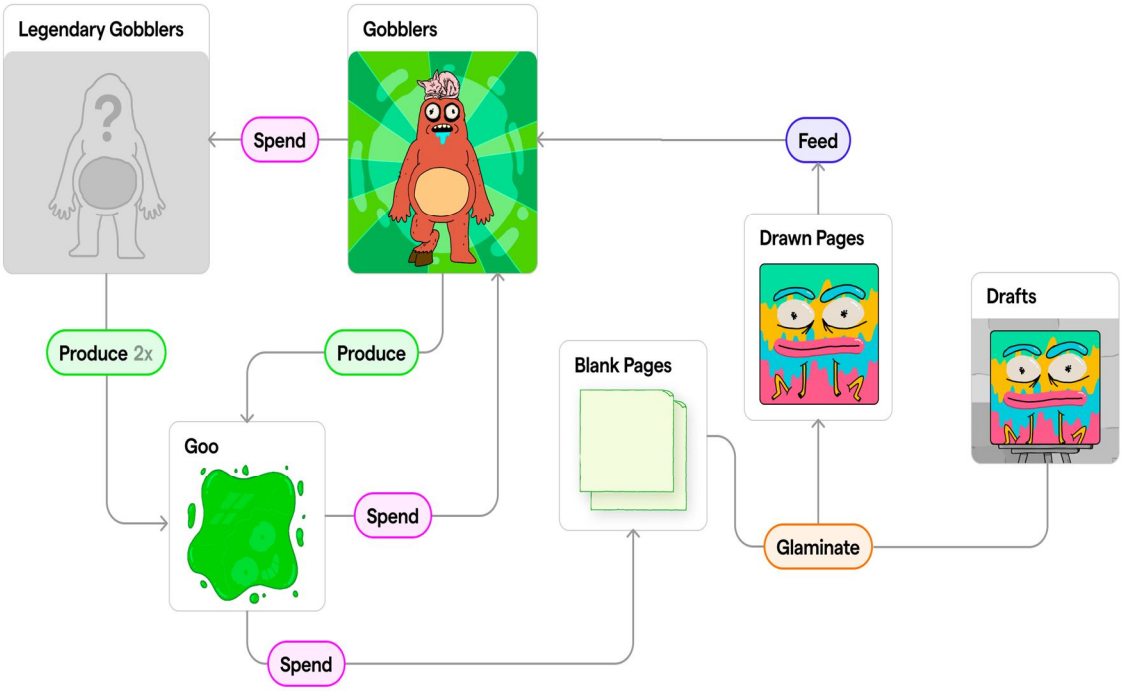

Figure 11B
Source: https://www.paradigm.xyz/2022/09/artgobblers accessed on Nov 10, 2022

XV. META HISTORY

NFTs as an art have made an impact in the social cause space. Meta History has tokenized the Urkraine War and give the proceeds to the ones affected by the war. It has taken a different approach to tokenize the world of NFT artworks (Press Release, 2022). They have tokenized the work of Ukraninans and foreign artists to demonstrate the aristocracy of Russians on the Urkainian people. They have a day-by-day event of the war illustrated in the NFTs. The collection is called Warline. It's not in any top NFT collection but the author wanted to include this to showcase how NFTs are making a dent in the social space and helping those impacted due to the destructions caused by a war.

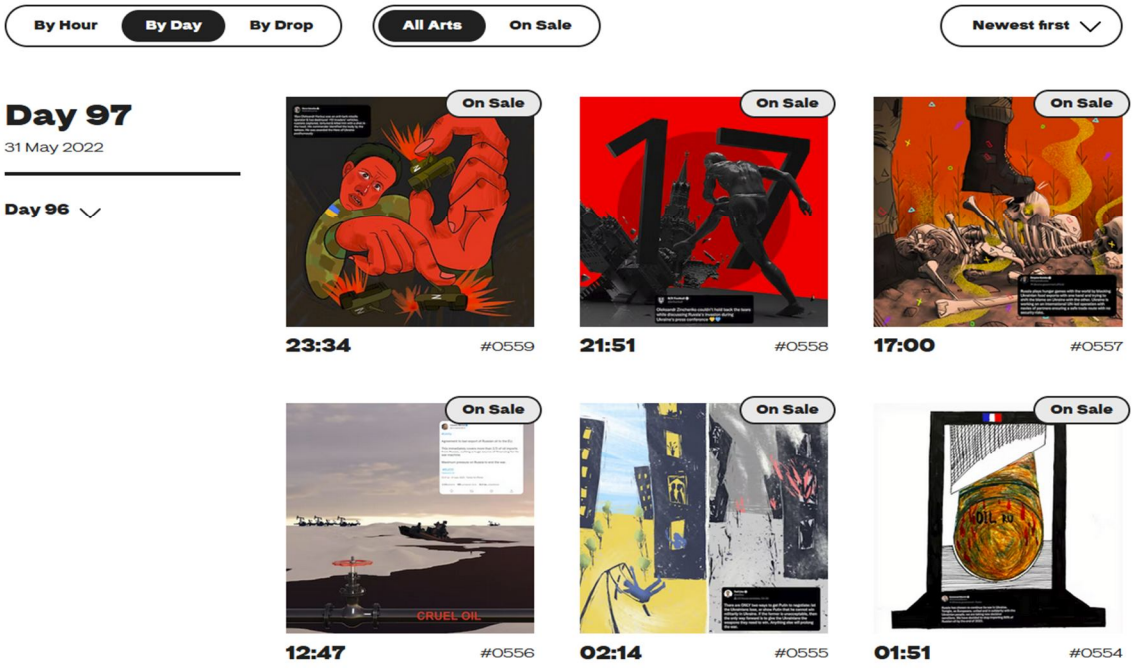

Figure 12
Source: https://metahistory.gallery/collection/warline accessed on Nov 2, 2022

XVI. RISKS

Like any new technology, there are some risks associated with using NFTs. First, they're still in the early stages of development, which means that there's a lot of uncertainty about their future. Second, NFTs are not regulated by any central authority, which could lead to fraud or scams. Third, because they're based on blockchain technology, they're subject to the same volatility as cryptocurrencies. This means that their prices can fluctuate rapidly and unpredictably. Finally, there is also the risk that the underlying blockchain platforms could fail or be subject to hacks. Despite these risks, the NFT market is expected to continue growing in the future as more people and organizations begin to adopt this technology. This will open up new opportunities for artists, content creators, and businesses to monetize their work in a new and innovative way.

The use of NFTs for illegal or restricted activities is likely to continue as the technology becomes more widely adopted. This could pose a risk to the future growth of the NFT market, as governments and regulators could crack down on these activities. However, it is also worth noting that the use of NFTs for illegal or restricted activities is not currently a major issue, and the technology has mostly been used for legal and mainstream purposes.

A. NFT as Financial Asset

NFTs can be used as a Financial Asset class. NFTs can be bought and sold for profits. People have been buying them to sell it for a higher price. In the late 2020s, there was a high volume of NFTs purchased and sold online. The all-time NFT market is $40B, with 6M+ Buyers made more than 113M transactions [6]. But NFTs come with risks. The risk is high and NFTs are unstable with no clear use-case defined. There are two price fluctuations associated with it – the price of NFT arts and the cryptocurrency used to buy it. Crypto currency is not yet acceptable worldwide, nor it is for everyday people. ETH is the widely used crypto to purchase NFTs. The price fluctuation of ETH is yet to be tied to major macroeconomic parameters. Hence, it can't be calculated. Also, as the author (Ariana Schrader-Rank, 2022) pointed out that the availability and accessibility to NFTs aren't equally available to all around the world. This disparity in accessibility will create even further gap in economics around the world. It's important for world leaders to recognize the gap and provide educational opportunity so that the most backward and uneducated part of the world can be brought up to contribute and participate in the newest tech trends that will change the course of digital ownership. Africa is one such country where the world has to come together and bring the country out of their current economic distress (N. Ahern. 2021).

Figure below shows ETH price change over the last one year (2021-22). The price volatility is high: -50% over one year. This is not normal and scary for the common users. This presents an added risk besides the unknown factor of technology. Hence, this volatility makes NFT not only volatile but also a risky asset class.

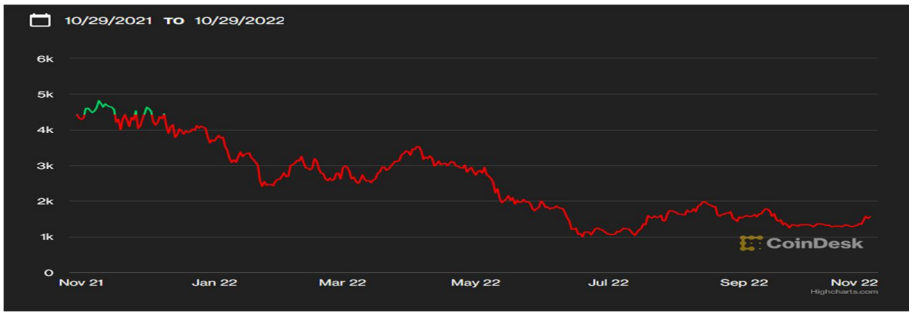

Figure 13
Source: https://www.coindesk.com/price/ethereum/

NFTs lost a massive amount as compared to last year (2021). 7 NFTs alone lost more than $28M in value (Charlie Butler, 2022). It's just because they are no more as valuable as once they were ought to be. The demand and craze have winded down, making them not so cool anymore (Andrew Hayward, 2022). Also, with government regulating cryptos is not helping NFTs volume and demand.

B. Generative AI

AI has been making waves in all sorts of industries, from retail to healthcare. And now, the latest AI trend is generative AI. Generative AI is being used for a variety of purposes, from writing blogs and creating social media posts to generating images and creating short films. While the technology is a huge feat for AI researchers, it's also a risk for artists. Artists who spend hours of their time thinking and creating artworks may find their skills becoming obsolete as anyone with a machine-understandable description of their desired artwork can have it generated for them. This removes the barrier of entry and makes it super easy for anyone to create art. This will implode the art availability, surpassing the demand and buyers' needs. Anything that goes beyond the infliction point of optimal supply-demand leads to devaluation and the AI-generated art industry is no exception. When there's an oversupply of art, the value of each individual piece diminishes. So not only does generative AI poses a threat to artists' livelihoods, but it also threatens to devalue art itself. The creativity will take a hit and it'll get harder to differentiate between the art created by a human versus an AI. However, it's important to remember that generative AI is still in its early stages. The technology is far from perfect and there are many limitations to what it can do.

When it comes to NFTs, generative AI is being used to create images of 3D objects. These images are then turned into NFTs and sold on marketplaces like SuperRare and Foundation. While some people are excited about this use of generative AI, others are worried about the implications. Can generative AI be used to create fake NFTs? And if so, how would we know if an NFT is real or fake? These are all valid concerns that need to be addressed. At the moment, it's hard to say how big of a threat generative AI is to NFTs. The technology is still in its early stages and it's not clear how it will be used in the future. However, if generative AI continues to develop at its current rate, it could pose a serious threat to the NFT market.

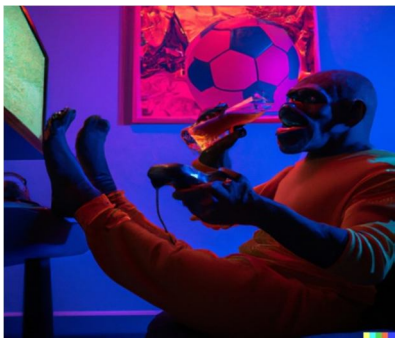

Figure 14
Source: https://labs.openai.com/e/Owy7bPVKdt7gArDpw9nzMMP1/2bu6tVaar5GWV4Gat5F9bThq accessed on Nov 5, 2022

This image was created by Dall-E with the prompt: *A cool and funky ape who is happy while playing fifa and having a beer in his tripping room lit with neon lights and music*

XVII. CONCLUSION

NFTs have a lot of use cases and this is just a start for the technology solution to provide the world with a more private, secured and most advanced way to validate and authenticate tokens. NFTs is much more than art or a mere financial asset. The future will showcase more utility driven use case of NFTs. The current form might be seen as just a get quick rich scheme but the technology behind NFTs is raw and ready to be adopted and scaled. The current form of NFT is controlled by rich people mostly, and the author (A.Book, 2021), cites some examples to bring forward a point that highlights the lingering issue of modern tech availability and accessibility to the already rich of the society. The risk associated with the NFT makes it a risky proposition, especially the volatility around the crypto prices. Generative AI will make it further less valuable if the tech is abused. It'll be interesting to watch how NFTs evolve.

There are many interesting projects being launched and creating waves in the industry. Creators are becoming super creative in the way they are offering NFTs and attaching values to it. Influencers are one of the top most way of launching and creating hype for NFT collections. The overall NFT market is under high stress and the creators are looking at various options to add value to their project. The paper highlighted a few projects where creators are adding unique experiences for the buyers and ensuring that the demand and value for their NFTs sustain. The author thinks, adding value and other utility tokens to the NFTs will lure new users and keep the industry floating. Creators have to find new ways of engaging buyers and retain the holders. The author proposes further research to see how the value and price of NFTs will be impacted with the invention of new technology and increased availability of NFTs around the globe.

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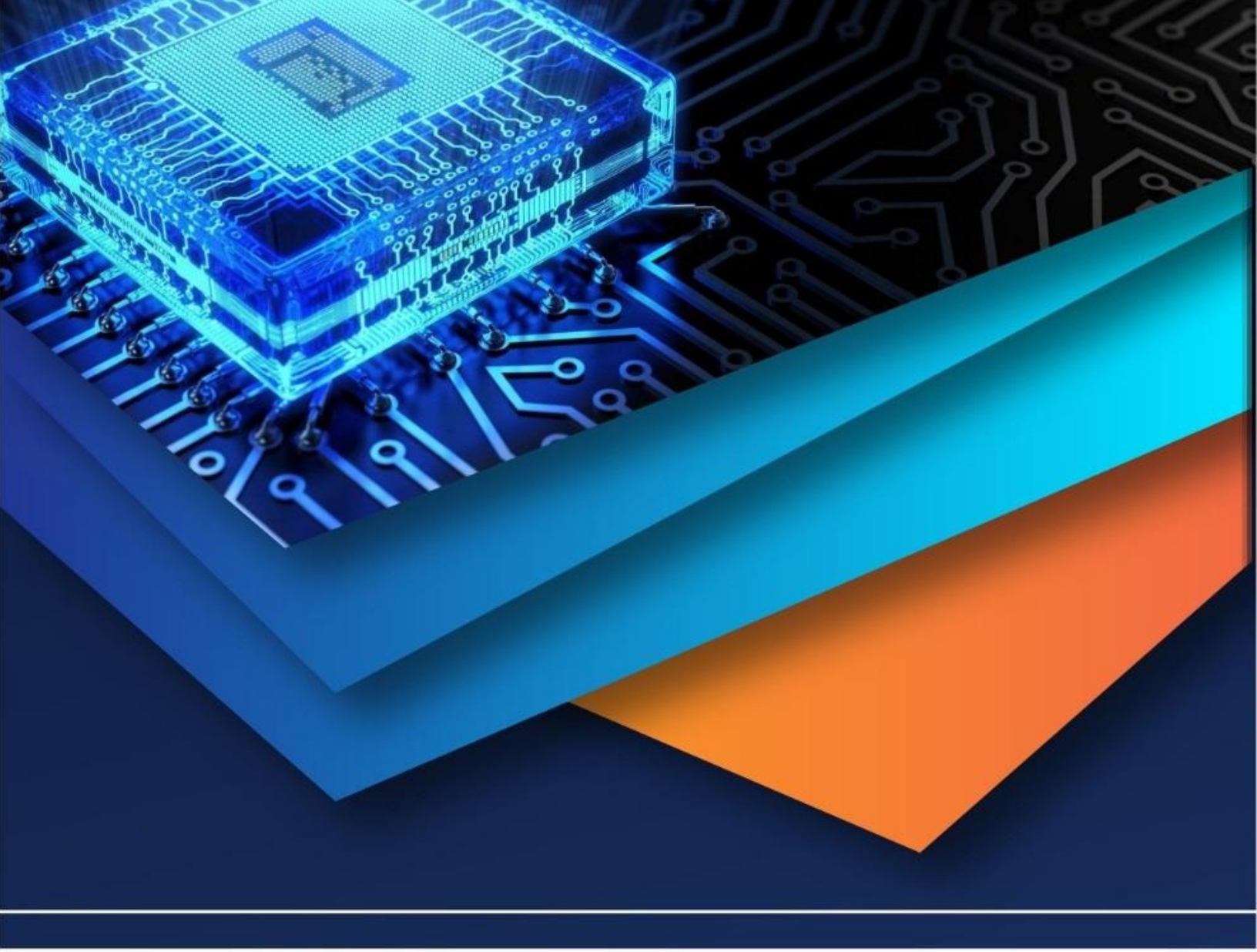

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