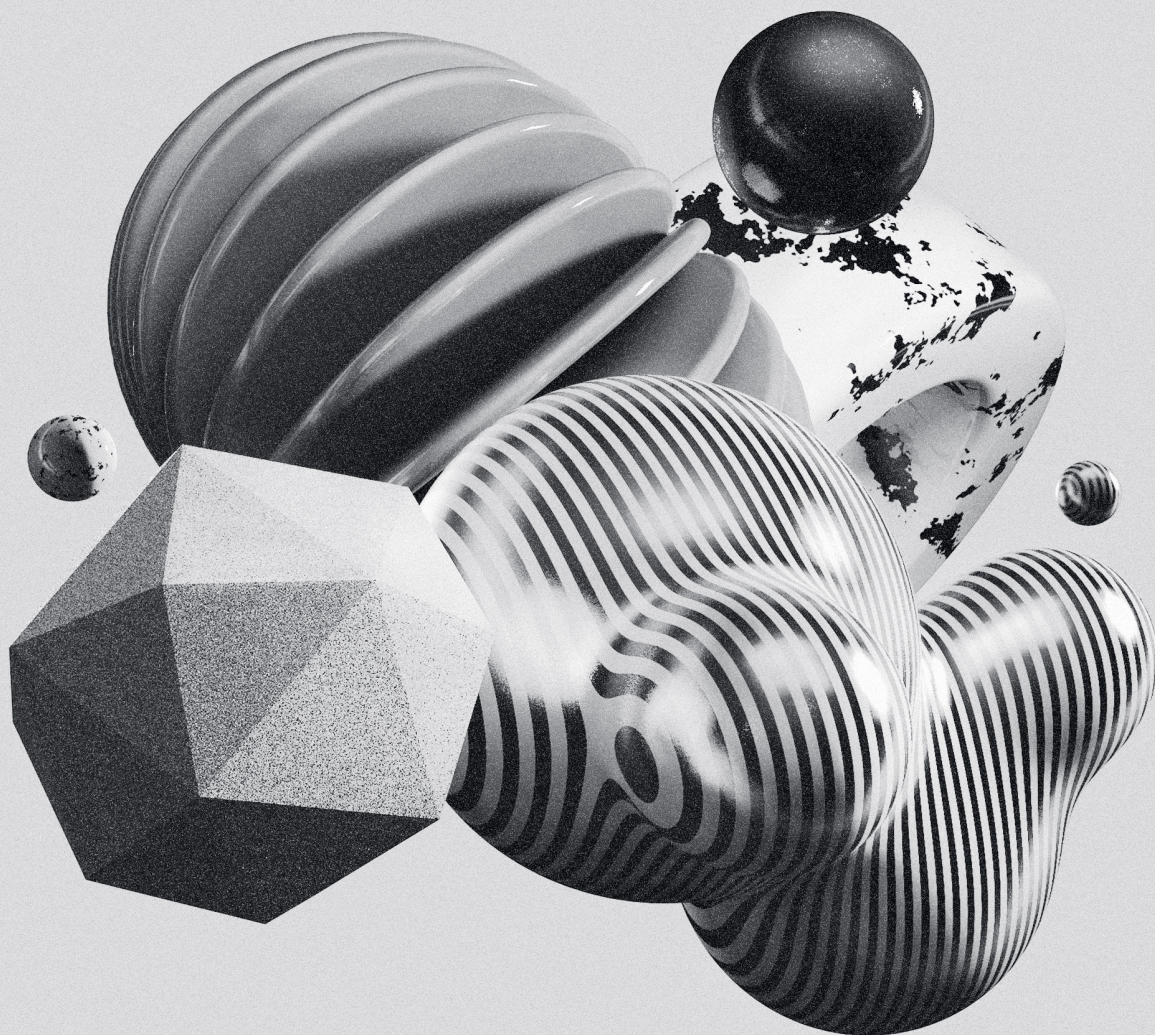


The Metaverse and Beyond

Exploring the opportunities of the
MarketVector™ Media & Entertainment category



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Introduction

The media and entertainment industry is facing several challenges in the current digital landscape. From a lack of transparency in revenue split to high fees for content creators, the traditional industry models are struggling to adapt to the digital age.

However, the rise of blockchain technology offers a new solution to these problems, providing opportunities for the media and entertainment industry to create, distribute and monetize content in new and innovative ways. By leveraging non-fungible tokens (NFTs) and decentralized platforms, the industry can establish more equitable economic conditions for creators and provide a more direct connection between creators and their audience¹.

To better understand the potential of blockchain technology in the media and entertainment industry, it is important to first examine the current challenges facing the industry. In this whitepaper, we will delve into the problems facing the media and entertainment industry and explore how blockchain technology can be leveraged to overcome these challenges and create new opportunities.

The problem of the Media & Entertainment Industry

The media and entertainment landscape are vast and diverse, encompassing many sub-categories such as music, film, and gaming. Each sub-category has its own unique revenue models, challenges, and trends.

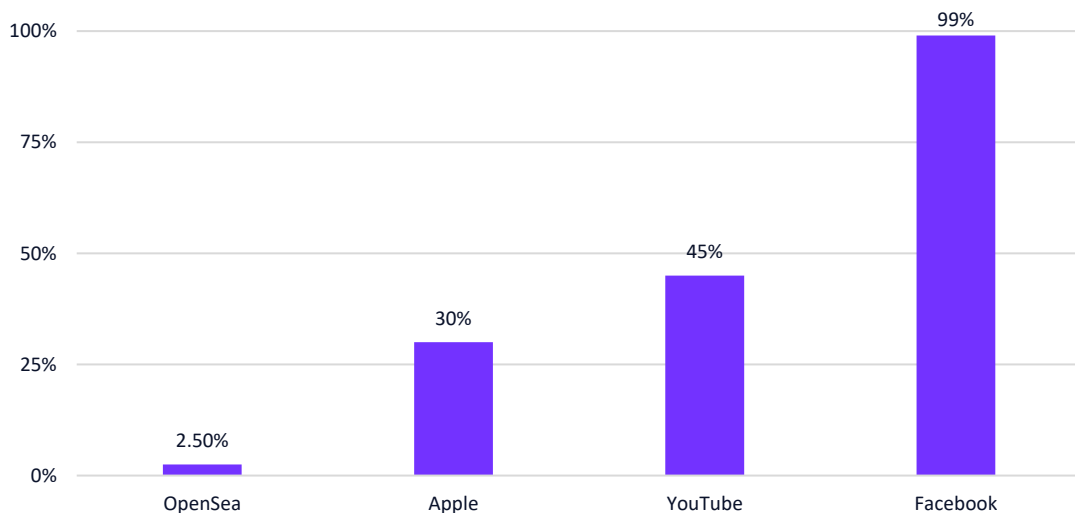
Music, for example, is a billion-dollar industry that has traditionally relied on album and concert ticket sales, as well as royalties from streaming platforms. However, the rise of streaming services has led to a decline in album sales and revenue for musicians. Additionally, the music industry has long struggled with copyright infringement and lack of transparency in royalty payments. Film, on the other hand, is a highly centralized industry, with large studios and theaters controlling distribution and exhibition. The COVID-19 pandemic has accelerated the shift towards streaming platforms, but independent filmmakers still face challenges in distribution and monetization.

¹ Non-fungible tokens (NFTs) are a type of digital asset that proves ownership or authenticity of a unique item or piece of content, like a digital artwork, song, or video. They are created with blockchain technology, and because they are unique, they can't be replaced or traded for something else. NFTs are unique digital assets that can be bought, sold, and traded like traditional collectibles. This is different from crypto assets, which are all the same. NFTs are made and kept on a blockchain, which makes it possible to create a digital record of ownership and origin that can't be changed. This makes blockchain a popular technology in the gaming, music, virtual reality, and art industries.

Blockchain Technology as a Solution

There are several advantages that blockchain technology can provide the media and entertainment sector. The opportunity to establish more equitable economic conditions for creators is one of the key benefits. In typical Web2 platforms, creators frequently have limited control over how their work is distributed or how much money they receive from the site. While offering substantially lower take-rates, Web3 platforms utilizing blockchain technology, such as NFT markets, give producers more control over their work and income. The stark contrast in take-rates between Meta (almost 100%) and NFT marketplace OpenSea (2.5%) serves as an illustration of this.

Exhibit 1: Take rates of popular creator platforms



Source: a16zcrypto, 2022 State of Crypto Report

The capacity to appropriately compensate producers is another advantage of blockchain technology in the media and entertainment sector. In its 2022 state of crypto report, the venture capital firm Andreessen Horowitz talks in depth about how creators are paid (State of Crypto 2022). According to data research, the main sales of Ethereum-based NFTs in 2021 generated USD 3.9 billion in revenue in addition to royalties given to inventors on secondary sales. While Spotify and YouTube paid out more to creators in absolute terms, the "per capita" disparity is astonishing. When you consider that Web3 paid out USD 174,000 to each creator while Meta paid out USD 0.10 per user, you can see that Web3 platforms provide more equitable economic terms.

Table: Estimated Creator Revenues by Source (2021):

	Total Revenue distributed	Revenue per Creator
NFTs	USD 3,900,000,000	USD 174,000.00
Spotify	USD 7,000,000,000	USD 636.00
YouTube	USD 15,000,000,000	USD 405.00
Facebook	USD 300,000,000	USD 0.10

Source: a16zcrypto, 2022 State of Crypto Report

Defining the Web3 Media & Entertainment Category

Media and Entertainment is a category of blockchain projects that aim to decentralize traditional media and entertainment platforms, such as social media, gaming, and content creation. The goal is to increase direct peer-to-peer interaction between content creators and audiences, while also maintaining user privacy, security, and ownership of data and digital assets.

The Media and Entertainment category can be divided into the following industry groups:

- **Art** (Rarible, SuperRare) Platforms focused on non-fungible tokens (NFTs) and their use in the digital art space. This includes platforms that allow for the creation, buying, and selling of NFTs, which are unique digital assets that represent ownership of a specific item such as a piece of art or collectible. These marketplaces are decentralized and non-custodial, meaning users have full control and access to their cryptocurrency wallets. They also allow for direct peer-to-peer interaction between buyers and sellers. The industry group also includes decentralized marketplaces for trading NFT artwork and native tokens for these marketplaces.
- **Social** (Chiliz): Social tokens are a type of token that is used to support social platforms and communities that don't have a central authority. They are used to make it easier for users, content creators, and sponsors to communicate to each other and do business. You can also use these tokens for other things, like decentralized government. The value of social tokens comes from how much the community and creators they represent grow and work together. By turning these communities into tokens, it creates ecosystems that are more interesting and rewarding than traditional advertising and subscription models.
- **Content & Advertising** (BAT, Theta): Projects that aim to decentralize social media platforms, such as broadcast streaming and video sharing, and enable it for content creators, consumers, and advertisers to connect directly with each other. This industry group also includes platforms for peer-to-peer sales and content distribution, as well as royalty payments and usage-based billing models. This means that advertisers, content creators, and audiences can connect directly with each other instead of using the traditional advertiser-to-consumer model.

- **Metaverse** (Decentraland, Sand): The Metaverse includes a network of virtual worlds that are based on blockchain technology. These virtual worlds are characterized by their social connections and interactions, and they include gaming realms, GameFi and virtual land. The virtual worlds within the metaverse have a decentralized marketplace and allow for the tokenization and trading of digital assets. The open metaverse is a highly scaled, interoperable network of real-time, rendered 3D virtual worlds that may be experienced by an infinite number of people while maintaining data continuity such as identity, history, entitlements, items, conversations, and payments. It provides consumers with a unique experience of presence and has the potential to disrupt the gaming, advertising, payments, and lending industries.

Impact of Blockchain on the Economics of Media & Entertainment

Web 3 protocols in the media and entertainment category provide new revenue streams for creators, increase transparency and ownership for consumers, and create more engaging and rewarding user experiences.

One example of this is in the music industry, where web 3 protocols allow for musicians to directly connect with and monetize their fanbase through tokenization of their music and merchandise. Musicians can tokenize their album releases and sell them as NFTs, giving fans ownership of a unique and scarce digital asset. Additionally, through smart contract-based platforms, musicians can receive royalties directly from streaming services, bypassing intermediaries and increasing their revenue.

In the Art industry, Web3 protocols enable creators to mint and trade unique digital artworks as NFTs, which can be bought, sold and collected by art enthusiasts. This creates a new market for digital art and allows for a more efficient and secure way for creators to monetize their work.

The open metaverse has the potential to revolutionize industries such as advertising, gaming, conferences, payments, and the internet itself. The total addressable market (TAM) for the metaverse is estimated to be USD 8 trillion of U.S. consumer spending that is increasingly moving to digital. PwC predicts that the metaverse market size will reach USD 783 billion by 2024, with a compound annual growth rate of 13% (Metaverse may be USD 800 billion market, next tech platform 2021).

The growth of the gaming market can be attributed to the rise of interest in video games and NFTs in recent years. The number of video gamers is projected to reach 3 billion with a projected 5-7% CAGR in the next few years. Additionally, NFT sales surpassed USD 15 billion in 2021, with secondary sales of NFTs in blockchain games accounting for 20% of total NFT sales. Virtual world games like Decentraland and The Sandbox have also generated nearly USD 500 million in cumulative NFT sales.

Challenges of Web 3 Media & Entertainment: Product-Market-Fit & Valuation

Blockchain technology and digital assets are being used by Web3 metaverse developers to make more immersive and meaningful virtual worlds, but the industry is still in its early stages. The infrastructure isn't quite ready yet, there isn't enough interesting content, and it can be hard to get into these virtual worlds. Even among early adopters, this has made people less likely to adopt.

The lack of a clear product-market fit is one of the biggest problems facing the metaverse industry. Social and gaming are the two main types of Web3 metaverse. Social metaverses, like Decentraland and Voxels, are virtual worlds that look like the real world and are mostly used for socializing. These metaverses have "soft benefits" like better looks and status symbols that don't change the way a player plays. On the other hand, gaming metaverses like The Sandbox offer "hard benefits" like in-game rewards that have a direct effect on how the player feels.

The problem is that land speculation is more likely to happen in social metaverses than in gaming metaverses. For example, many of Decentraland's lands haven't been built on for years. This is why The Sandbox is curating its content experience by partnering with big brands. They want to get people to explore and take part in their virtual world by making it more interesting.

Valuation is another problem that the metaverse industry has to deal with. In 2021 and the beginning of 2022, a lot of social and gaming-focused metaverse platforms popped up. These platforms were valued at between USD 230 million and USD 340 million. But these prices seem to be based on guesswork, since these metaverses are still in the process of being built.

The metaverse is still very much a work in progress, and that's the bottom line. The industry is still trying to find its footing, and it will take time to work out the bugs and make a virtual experience that is truly immersive and meaningful. But like any worthwhile journey, the end result is worth the trouble.

Adoption is promising amongst Big Brand Names

Despite all these challenges, adoption amongst corporates is increasing. Big brands in many different industries have started NFT collections as a way to keep marketing themselves or to add to what they already have.

Players in the collectibles industry quickly saw that pairing NFTs with unique physical collectibles made a good product-market fit. For example, high-end retailers like Gucci started giving out digital collectibles that were the same as their unique physical assets.

The collectibles industry can reach more people around the world thanks to NFTs, which also make transactions clear, make it impossible to fake a product, and guarantee quality.

Direct-to-consumer NFT platforms like BlockBar have made it easier for people to get into the collectibles business. Their partnerships with high-end alcohol brands like Glenfiddich, Dalmores, and Dictador have helped them make millions of dollars in sales.

Over the next ten years, the NFT market is expected to bring in 50% more money for the sector as a whole, mostly because of new e-commerce technologies like NFT marketplaces.

Additionally, the NBA and Dapper Labs launched Top Shots, a trading card-based NFT collection that showcases influential "Moments" from games, solidifying major plays to the blockchain in real-time. These examples show how brands from various industries are using NFTs as a source of continued marketing or to supplement their existing business infrastructure.

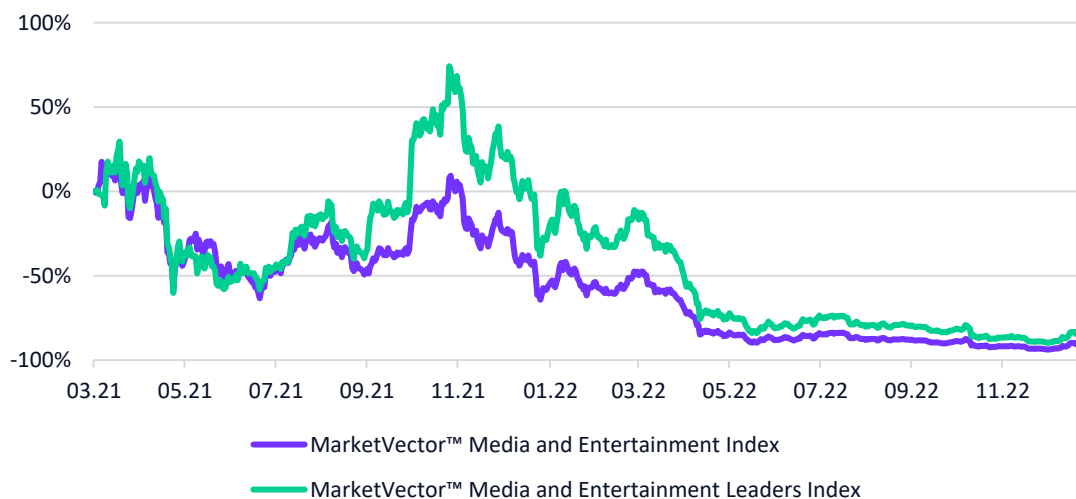
Media & Entertainment Methodology & Performance

MarketVector Indexes™ ("MarketVector") categorizes Media & Entertainment tokens in different indexes according to size and liquidity criteria. Broad indexes will capture the performance of coins with USD 250mn market cap and USD 10mn average daily transaction volume (ADTV). Leader indexes capture the performance of coins with USD 1bn market cap and USD 25mn ADTV, and introduces additional screening requiring the coins to be traded on a major US exchange and supported by a reputable crypto custodian.

To increase diversification, the [MarketVector™ Media & Entertainment Leaders Index \(Leaders Index\)](#) has a maximum cap per token of 30%. Importantly, MarketVector places a strong emphasis on investability. The market capitalization and liquidity requirements ensure that our clients can replicate the index.

The categorization is split into 3 layers: Category, Industry Group and Industry. MarketVector differentiates platforms by their use case. For example, Media & Entertainment is the category, Metaverse an industry group and Gaming is an industry.

Exhibit 2: Cumulative Performance of the MarketVector Decentralized Finance Indexes since April 2021



	Leaders	Broad
Annualized Return	-0.4707	-0.5615
Annualized Vola	0.9229	0.8609
Market Cap bn USD	6.61	6.61
# Constituents	5	5

Source: MarketVector, data as of Jan 23, 2023

The media and entertainment sector crashed hard, as Exhibit 2 shows, and some of the tokens lost more than 90% of their respective highs. You can also see that the change from Facebook to Meta had a big impact on prices in the fourth quarter of 2021. Another sign that the crypto space is driven by narratives. Due to a questionable tokenomic design and a lack of sustainable user attraction, the sector subsequently collapsed.

Also, the number of people actively using metaverse and gaming tokens has gone down because many of them just wanted to speculate and weren't using the protocols because they enjoyed them. Still, token designs can be changed, the user experience can be improved, and it should be clear that gaming, for example, needs blockchain and NFTs to prove ownership of assets and make them tradeable. We shouldn't ignore the future of the whole media & entertainment category.

Conclusion

In conclusion, the development of blockchain technology and non-fungible tokens has resulted in a huge change in the media and entertainment sector in recent years. This technology has the ability to upend established business structures and open up new possibilities for consumers and producers. One of the first sectors to use NFTs was the gaming sector, which uses them as in-game items that can be exchanged for cryptocurrencies or fiat money on the blockchain. Due to this, play-to-earn and GameFi models have become increasingly popular, where players are rewarded for their in-game accomplishments and can make money off of them through NFT sales. The use of NFTs for digital rights management, fan engagement, and fundraising is also being investigated by the music and film industries.

The ability for creators to commercialize their work through royalties and resales provided by NFTs has also assisted in the creation of new revenue streams for them. Additionally, the deployment of NFTs on the blockchain guarantees the validity and transparency of digital assets, adding value for investors and collectors.

Even though the metaverse and virtual worlds are still in their infancy, it is certain that the gaming sector will be crucial to their development. Blockchain technology is projected to become a crucial component of the metaverse's infrastructure as virtual world NFT sales rise, enabling safe and transparent transactions and the ownership of digital assets.

Overall, with the adoption of blockchain technology and NFTs, the media and entertainment sector are poised for a significant transition that will present new opportunities for producers, consumers, and investors.

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