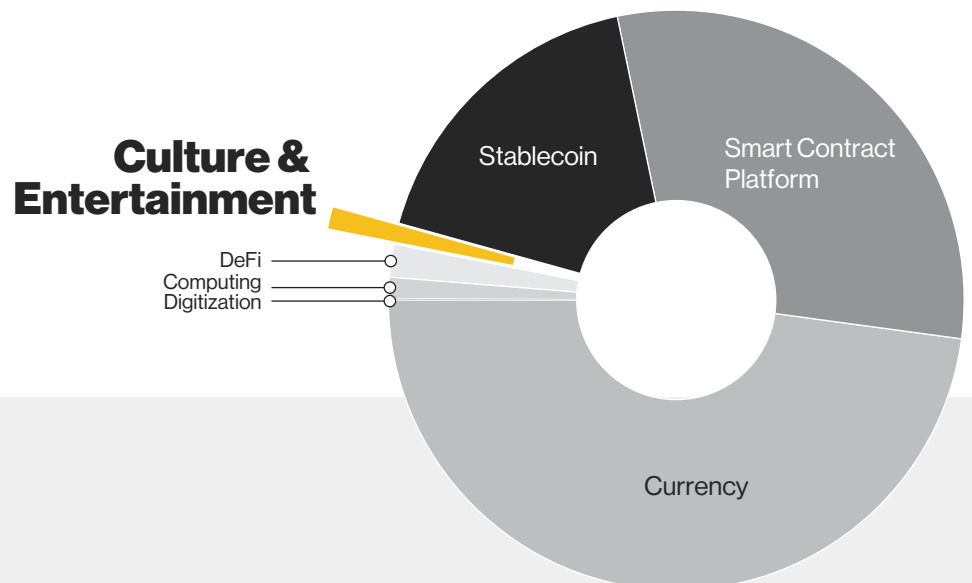


January 2023

Why Decentralization Cultivates Community

A Primer on the Culture & Entertainment Sector



Jodie Gunzberg, CFA
Managing Director

Max Good
Senior Index Research Analyst

Reilly Decker
Index Research Analyst

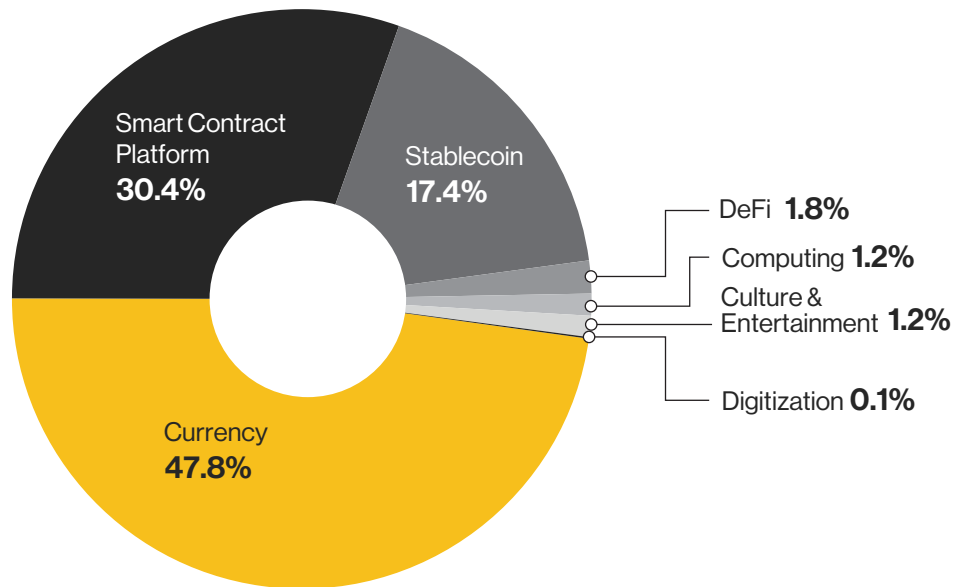
Introduction

In December 2021, CoinDesk Indices launched its [Digital Asset Classification Standard \(DACS\)](#) to set the standard for defining the industries of digital assets. Every one of the top 500 digital assets by market capitalization is assigned to an industry, defined by DACS; then at least one industry is assigned to an industry group, and finally, at least one industry group is assigned to a sector.

Currently, there are seven sectors defined by DACS including Currency, Computing, DeFi (Decentralized Finance), Digitization, Culture & Entertainment, Smart Contract Platform, and Stablecoin. The Culture & Entertainment sector is the sixth largest sector in DACS with 96 assets representing 1.2% of the digital asset market, worth approximately \$9.4 billion in market capitalization as of 12/31/2022.

Exhibit 1

CoinDesk Indices DACS



Source: CoinDesk Indices. 1/13/2023. Market capitalization data is based on 12/31/2022.

In this paper, we describe the Culture & Entertainment sector in further detail by discussing its definition, constituents and significance in the broader digital asset space.

Defining the Culture & Entertainment Sector

Culture & Entertainment is a relatively young and growing sector in the digital asset industry, particularly since the beginning of 2021. As it is defined by DACS, this sector represents a wide range of digital assets, spanning seven different industries. As blockchain technology branches beyond payments and decentralized finance, it continues to gain new adoption in the realms of art, media, and gaming. At the same time, blockchain technology and digital assets are becoming an integral component of the rapidly expanding Metaverse. The latter aims to validate a work of art's ownership, intellectual property,

and authenticity. This ensures one's ownership over their online possessions and identities.

The [DACS Glossary](#) defines the Culture & Entertainment sector as follows:

Culture & Entertainment includes all projects that aim to decentralize social media platforms, create decentralized gaming worlds, and increase direct peer-to-peer interaction between content creators and their audience, while at the same time maintain user privacy, security and ownership of data and digital assets.

Industry Groups Inside the Culture & Entertainment Sector

The industry assignments of digital assets in the Culture & Entertainment sector can be consolidated into three industry groups: Metaverse, Media and Art.

Metaverse is a rapidly growing industry group that includes gaming realms, GameFi and virtual worlds. Based on blockchain technology, metaverse projects allow users to play games, build social interactions and tokenize and trade digital assets in the virtual world.

Media is comprised of projects that aim to decentralize social media platforms, including broadcast streaming and video sharing. These projects create direct links among content creators, consumers, and

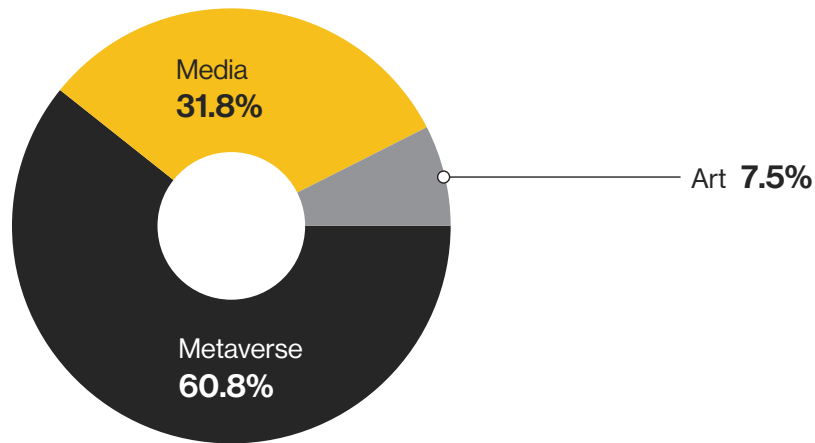
advertisers, thus removing the need for a centralized intermediary.

Lastly, Art comprises all digital assets directly associated with digital art-focused Non-Fungible Tokens (NFTs). This can include platforms for artists to mint NFTs, NFT marketplaces and NFT-related governance tokens.

Within the Culture & Entertainment sector, Metaverse is the largest industry group, representing 60.8% of the sector, followed by Media and Art, each representing 31.8% and 7.5% of the sector, respectively.

Exhibit 2

Culture & Entertainment Sector
breakdown by Industry Group



Source: CoinDesk Indices. 1/13/2023. Market capitalization data is based on 12/31/2022.

Exhibit 3

Industry Groups under Culture
& Entertainment Sector

Industry Group	Market Cap (\$)	No. of Assets	% of Market Cap
Metaverse	5,729,220,997	50	60.8%
Media	2,995,079,821	36	31.8%
Art	702,294,656	10	7.5%

Source: CoinDesk Indices. 1/13/2023. Market capitalization data is based on 12/31/2022.

Industries Inside the Culture & Entertainment Sector

Each one of 96 digital assets inside Culture & Entertainment is assigned to a single industry before the industry is assigned to an industry group in the sector. There are seven industries that feed into the three industry groups mentioned previously: Gaming, Virtual World, and the Metaverse Platform are the three industries assigned to the Metaverse industry group; Broadcast, Social, and Media (Other) are the three industries assigned to the Media industry group; and Art is the only industry assigned to the Art industry group.

The Metaverse industry group is comprised of three industries: Metaverse Platform, Virtual World and Gaming. As its name implies, Gaming consists of games that either have a narrative, or a strong focus on gameplay. The assets

in the Gaming industry may be used as part of in-game reward systems, or for purchasing in-game assets. Virtual World refers to open-sourced virtual worlds that allow creators and builders to design their own experiences and games. Virtual World features marketplaces for the decentralized trading of scarce land and other digital assets such as clothing and accessories. Metaverse Platforms are online stores or developer products that host a range of games or marketplaces that allow for the trading of virtual assets such as NFTs, in-game items and land.

As of December 31, 2022, Metaverse Platform was the largest industry by market capitalization under the Metaverse industry group, with 17 assets totaling \$2.5 billion in market capitalization.

Exhibit 4

Industries under Metaverse Industry Group

Industry Group	Market Cap (\$)	No. of Assets	% of Market Cap
Metaverse Platform	2,483,376,279	17	43.3%
Gaming	1,956,561,854	7	34.2%
Virtual World	1,289,282,864	26	22.5%

Source: CoinDesk Indices. 1/13/2023. Market capitalization data is based on 12/31/2022.

Within the Media industry group, Social encompasses platforms that share the characteristics of traditional social media applications, but with an emphasis on Web3 qualities: decentralization, censorship resistance and validation of an individual's ownership over his/her avatars, data and information. Social also includes fan tokens that enable more direct interaction between supporters and the entities they support, such as sports teams. Broadcast consists of decentralized platforms whose primary function is to facilitate audio and/or

video content creation, while typically incentivizing frictionless exchange between creators, advertisers and consumers. Media (Other) is made up of all digital assets that fall into the Media industry group but could not be further classified.

As of December 31, 2022, Social was the largest industry by market capitalization under the Media industry group, with 24 assets totaling \$1.8 billion in market capitalization, followed by Broadcast and Media (Other).

Exhibit 5

Industries under Media Industry Group

Industry Group	Market Cap (\$)	No. of Assets	% of Market Cap
Social	1,787,345,918	24	59.7%
Broadcast	1,108,344,135	10	37.0%
Media (Other)	99,389,768	3	3.3%

Source: CoinDesk Indices. 1/13/2023. Market capitalization data is based on 12/31/2022.

Again, Art encapsulates all digital assets directly associated with digital art-focused Non-Fungible Tokens (NFTs). This can include platforms for artists to mint NFTs, NFT marketplaces and NFT-related governance tokens.

Major Assets Inside the Culture & Entertainment Sector

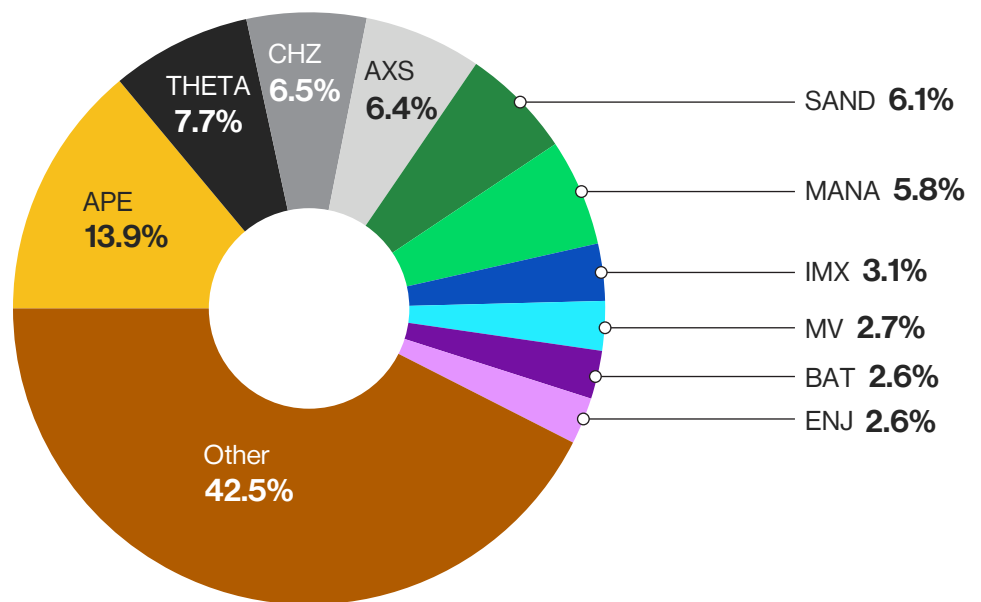
There are 96 digital assets inside the Culture & Entertainment Sector with the top assets, APE¹, representing 13.9% of the sector, and the top ten assets representing 57.5% of the sector. There are 50 assets in the Metaverse industry group, totaling around \$5.7 billion in market cap, with ApeCoin (APE)¹ being

the largest. In the Media industry group, there are 36 assets totaling around \$3.0 billion in market cap, with Theta Network (THETA)² being the largest. There are currently 10 assets in the Art industry group, totaling \$0.7 billion in market cap, with Immutable X (IMX)³ being the largest.

Exhibit 6

Top 10 Assets inside the DACS Culture & Entertainment Sector

CoinDesk Indices DACS Culture & Entertainment Sector Top 10 Assets
January 2023



Source: CoinDesk Indices. 1/13/2023. Market capitalization data is based on 12/31/2022.

Conclusion

The Culture & Entertainment Sector is relatively small but contains many tokens representing a variety of use cases. The assets within this sector are wide-ranging in functions and users, but together they embody the creativity of Web3. Within this sector, artists have the luxury of monetizing their work directly from consumers and gamers can possibly earn and spend money for their activities,

and virtual real estate can be purchased and sold.

As Culture & Entertainment as a sector continues to grow, collaborations and interoperability between different ecosystems will likely evolve into a greater web of interconnected virtual worlds with an interdependence of ownership among diverse consumers and users.

Relevant Indices

CoinDesk Basic Attention Token Price Index ([BTX](#))

CoinDesk Market Index ([CMI](#))

CoinDesk Market Plus Stablecoin Index ([CMIP](#))

CoinDesk Market Select Index ([CMIS](#))

CoinDesk Culture & Entertainment Index ([CNE](#))

CoinDesk Culture & Entertainment Select Index ([CNES](#))

CoinDesk Metaverse Select Index ([MTVS](#))

CoinDesk Industry Group Select Equal Weight Index ([DIGS](#))

References

- 1 ApeCoin (APE) is the governance and utility token for APECoin DAO, a decentralized community of Web3 builders. Token holders can participate in governance activities, purchase products, access exclusive games, merch, events and services. ApeCoin also serves as a tool to incentivize third-party developers to participate in the ecosystem by incorporating APE into services, games and other projects.
- 2 Theta Network (THETA) is an open-source protocol that provides dapp infrastructure with a focus on broadcasting, eSports, VR, music, peer-to-peer streaming, distance learning and e-conferencing. Theta's vision is to empower creators and users to build and consume content by leveraging their decentralized structure, thus eliminating the value extraction of the traditional corporate model.
- 3 Immutable X (IMX) is a Layer 2 scaling solution for Ethereum, focused on the minting, buying, and selling of NFTs. As NFTs have surged in popularity, they have burdened the Ethereum network with particularly high transaction fees. By moving the ecosystem to an Ethereum Layer 2, Immutable X hopes to drastically reduce the costs associated with minting, buying and selling NFTs. IMX is the utility token on the platform, simultaneously serving gas, staking rewards and governance functions.



Important Notices and Disclosures

CoinDesk Indices, Inc. (“CDI”) does not sponsor, endorse, sell, promote or manage any investment offered by any third party that seeks to provide an investment return based on the performance of any index.

CDI is neither an investment adviser nor a commodity trading advisor and makes no representation regarding the advisability of making an investment linked to any CDI index. CDI does not act as a fiduciary. A decision to invest in any asset linked to a CDI index should not be made in reliance on any of the statements set forth in this document or elsewhere by CDI.

All content contained or used in any CDI index (the “Content”) is owned by CDI and/or its third-party data providers and licensors, unless stated otherwise by CDI. CDI does not guarantee the accuracy, completeness, timeliness, adequacy, validity or availability of any of the Content. CDI is not responsible for any errors or omissions, regardless of the cause, in the results obtained from the use of any of the Content. CDI does not assume any obligation to update the Content following publication in any form or format.

© 2023 CoinDesk Indices, Inc. All rights reserved.