Decentralized Virtual Worlds

7/25/2019

INTRODUCTION

Decentral and Cryptovoxels are two virtual worlds that currently exist on the Ethereum blockchain. Anyone can visit these worlds, buy property on open markets, build stores, art galleries, music studio, and many more. Both of these virtual worlds are divided into pieces often referred to as parcels, aligned on a grid to form a city.

Parcels that exist within the Decentraland and Cryptovoxels worlds are denominated as a non-fungible asset maintained in Ethereum ERC-721 smart contracts. Once purchasing a parcel, users in these worlds have absolute ownership of their land.

DECENTRALAND



Decentraland is a bigger project in scale and ambition. Decentraland started in 2017, and it did so with its own initial coin offering in August 2017. The token is called MANA, and it raised \$24M USD worth of Ethereum in 30 seconds from an ICO. Today, MANA has a market capitalization of roughly ~\$50M USD.

Parcels in Decentraland were auctioned December 2017 at prices average around 1000-2000 MANA where a record breaking \$28M was spent on virtual property. All the MANA spent on LAND and staked into Districts (themed areas) was burned after the auction, lowering the overall supply of MANA.

Individual parcels have been sold on the secondary markets for high prices, with some premium lands going for as high as \$32,000 USD value in MANA just this year.

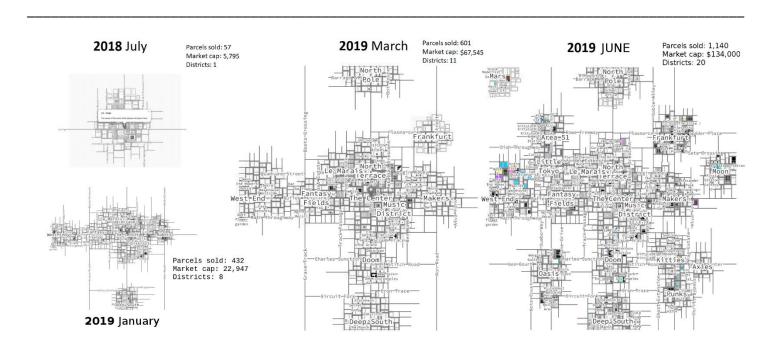
CRYPTOVOXELS



Cryptovoxels was started by Ben Nolan on April 1st, 2018 and has been a side project until June 2019 when he started working full-time on it.

In terms of gameplay, Cryptovoxels is much more similar to Minecraft. You can add or remove different types of blocks to build any shape you want. You can even further decorate it with images, audio, art, texts, hyperlinks, ERC-721s, gifs, and so on, making virtual shopping, art galleries, and advertising possible. The limit is really up to the imagination of the estate owner

There was no massive auction for Cryptovoxels, the project started off as a very small community that grew bigger over time as parcels were minted slowly outwards from The Center. Cryptovoxels has grown very impressively in the last few months, with parcel sells catching up to numbers as high as that of Decentraland.



LAND VALUE

Both Lands on Cryptovoxels and Decentraland becomes exponentially more expensive as one go toward the center of the map. This is because whenever a user enters the world, they spawn in the center.

Current valuations of these premium pieces of land sit at around a thousand dollars for Cryptovoxels, and tens of thousands of dollars for Decentraland at the time of writing. To the right is a price/parcel heat map of decentraland's auction that happened in December. Lands in near central area were sold at a significant premium compared to other lands.

Every piece of Cryptovoxels land have a height limit feature that seem to strongly correlate with land value, the higher the build height limit, the more expensive the value of the land usually trade at.

This is similar to that of Decentraland, where 2x2, 3x3, 4x4, etc Estates are usually more sought after than single parcels since both maximum number of

elements allowed per scene and height limit increases by joining nearby parcels.

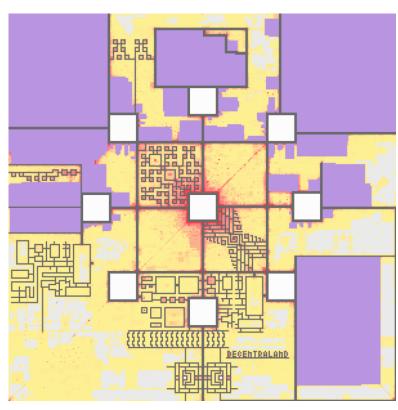


Figure: Number of lands traded per month on Decentraland and Cryptovoxels.

Number of LAND traded per month

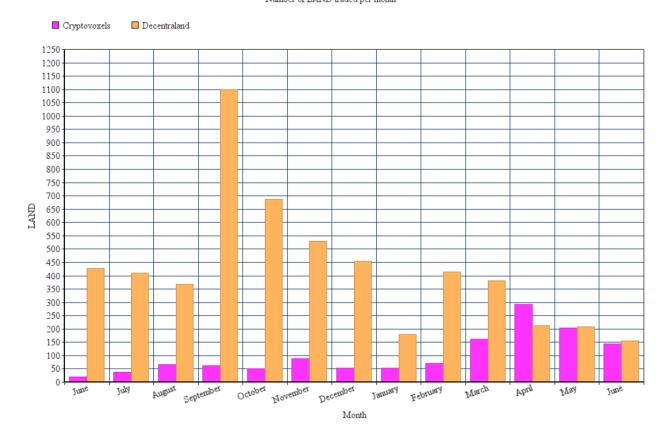
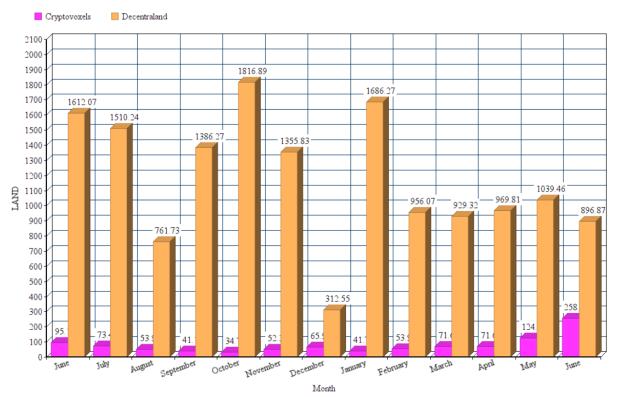


Figure: Monthly average cost per lands traded on Decentraland and Cryptovoxels. Average Cost per LAND

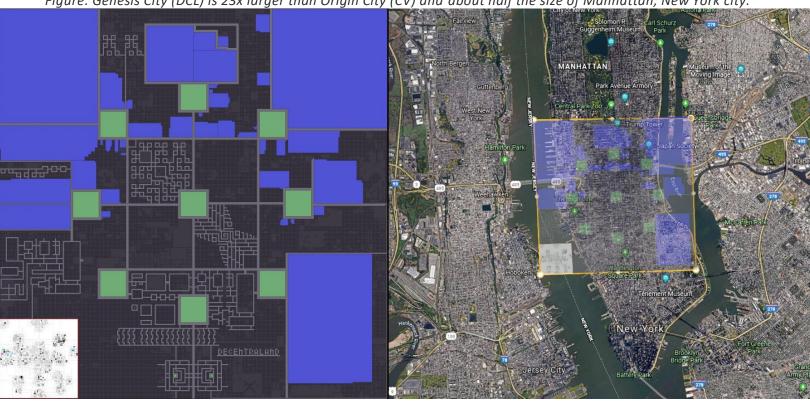


What's more: unlike Decentraland, the virtual world of Cryptovoxels has always open since its launch in July 2018 and anyone can visit Cryptovoxels today here from the main website.

Many artists choose to display their art in the virtual world, sometimes with a price tag on it. NFTs were integrated into Cryptovoxels in April 2019 using Opensea as the backend and many users have been displaying and selling ERC-721 collectibles in the world. These collectible range from <u>Cryptokitties</u>, <u>Superrare</u> artworks, and even <u>ENS</u> domains.

COMPARING CITIES

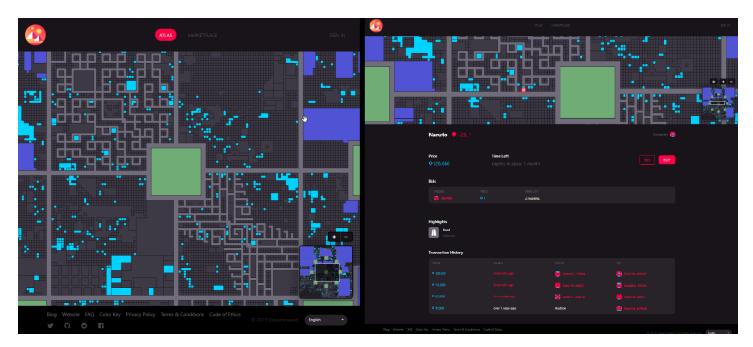
Figure: Genesis City (DCL) is 23x larger than Origin City (CV) and about half the size of Manhattan, New York city.



Another difference between Cryptovoxels and Decentraland is the information the map presents. One can view the current state of the city from the <u>world map</u> in Cryptovoxels and click any parcel to obtain more information about that location.



Decentraland's map is deeply integrated into their marketplace but does not offer visibility into what content is hosted on the parcels.



- Cryptovoxels: Full size map of Origin City
 - Explore the interactive map: https://cryptovoxels.com/map
- Decentraland: Full size map of Genesis City
 - o Explore the interactive map: https://market.decentraland.org/0/0
- Compare: DCL and Cryptovoxels cities

ADDITIONAL INFORMATION

Table: The virtual real estate market:

CRYPTOVOXELS:

Marketcap: \$142,000 Currently supply: 1,246 parcels Total supply: 3,026 parcels

Links:

- https://nonfungible.com/market/history/crypto voxels
- https://opensea.io/assets/cryptovoxels
- https://twitter.com/cryptovoxels

DECENTRALAND:

Marketcap: \$35,800,000 USD Accessible Supply: 45,000 parcels Total Supply: 90,601 parcels

Links:

- https://nonfungible.com/market/history/decentraland
- https://nonfungible.com/market/history/decentraland_estate
- https://opensea.io/assets/decentraland
- https://opensea.io/assets/decentralandestate
- https://twitter.com/decentraland

Decentral and token (MANA): ICO start date: 15 Aug 2017: https://bravenewcoin.com/insights/decentral and-raises-24-million-in-35-seconds-leaving-retail-investors-out-in-the-cold

Decentraland Terraform Auction Time-lapse: h

The current roadmap for Cryptovoxels is outlined here: https://blog.cryptovoxels.com/2019/06/10/roadmap.html

Images: https://imgur.com/a/kOBMjGJ

Public beta of Decentraland is scheduled to launch in Q2 2019.

The roadmap for Decentral and is found here: https://trello.com/b/YZnGNh5z/decentral and-community-roadmap

