

Explore the real-world opportunities in the metaverse

The buzzwords “Web 3.0” and “Metaverse” successfully captured a lot of media and public attention while provoking a worldwide metaverse frenzy since 2021. Beside the popularisation of the Web3 concept, 34,300 Web3 developers joined, and 18,400 active developers committed code in open-source crypto and Web3 projects in 2021 according to Electric Capital.

The rise of blockchain plays as the backbone for Web3 and allows smooth transition from Web2. Meanwhile, Web3 redefined the way we execute transactions via the internet and two people who do not know nor trust each other can be matched and settle agreements from the Web. For instance, creators are able to sell their content as non-fungible token (“NFT”) in OpenSea, the largest NFT marketplace and now this new consumer behaviour has emerged from Web3 initiatives.

There is no doubt that the metaverse will change the way people conduct social and business interaction in the future but in what form it might take and which areas will be benefited most in the initial stage of its master plan?



The buzzwords related to the two themes via Google Trends, NFT, Sandbox and Decentraland are among the most popular searches worldwide. They are all vital elements to the current decentralised world where the creator is the direct interface with followers or customers and the “worlds” such as Sandbox and Decentraland have turned into the new operating system for the public to conduct social interactions and commerce.

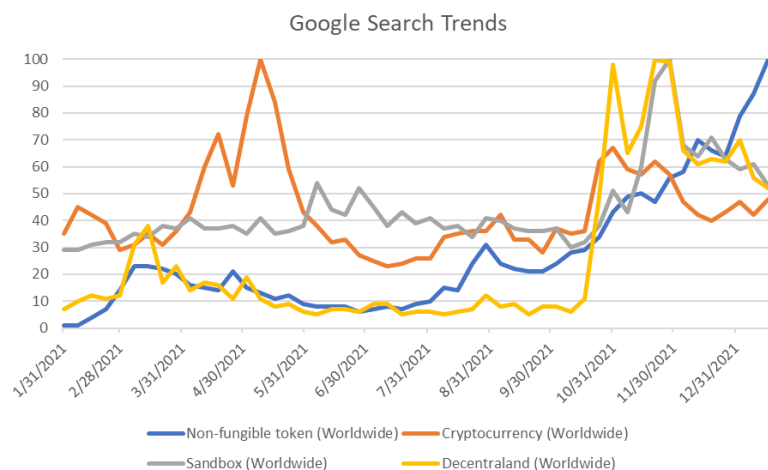
COVID-19 pandemic steered our life towards virtual reality in terms of business operation, events and the list goes on... People start to embrace their virtual existence, the penetration of virtual reality grows while it blurs the line between virtual and reality. Moreover, after Mark Zuckerberg, co-founder of Facebook (Renamed “Meta Platforms”) unveiled his ambitious and visionary plan for the metaverse, which offered a tailwind to all metaverse

“Bloomberg estimated the metaverse total addressable market to reach US\$800 billion in 2024, whilst gaming software, services and advertisement is the single largest component accounting for over one-third of the total market size. The rest include live entertainment, social media and

Among video, medical, education, vocational use, social media and gaming sectors, gaming had the best platform, sustained growth, and earnings compared with other metaverse related applications. Instantaneously, leading tech giants have already tapped into or acquired companies with highest potential to monetise in the early development stage. Most notable merger and acquisition in the past quarter would be the takeover of Activision Blizzard by Microsoft with a price of US\$ 68.7 billion in January 2022. The acquisition of the leader in game development and interactive entertainment content publisher will make Microsoft the world’s third largest gaming company by revenue, right after Tencent and Sony on the leaderboard.

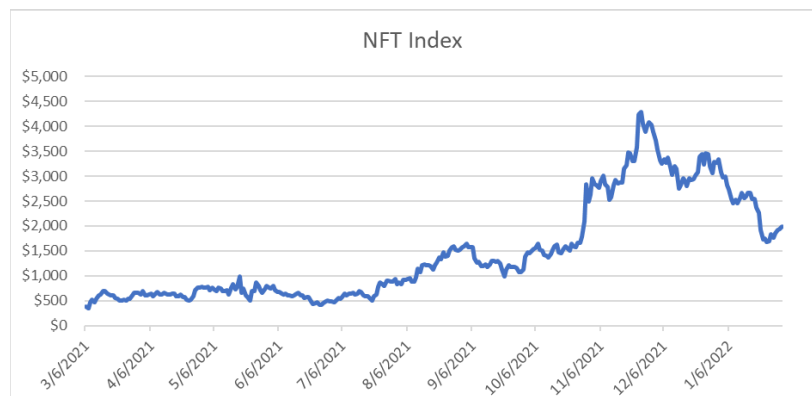


Figure 1: Trending Keywords in Google Trends



Source: Google Trends

Figure 2: NFT Index



Source: Coingecko

“Gaming is the most dynamic and exciting category in entertainment across all platforms today and will play a key role in the development of metaverse platforms,” said Satya Nadella, chairman and CEO, Microsoft in a news release.

Table 1: Selected Gaming M&A in the Past 12 Months

Date	Target	Buyer	Transaction Value (USD in million)
01/18/2022	Activision Blizzard	Microsoft	79,218.1
01/10/2022	Zynga	Take-Two Interactive Software	12,464.3
10/18/2021	GSN Games	Scopely	997.3
03/15/2021	Zhejiang Century Huatong Group	Tencent	428.0
09/08/2021	Jawaker FZ LLC	Stillfront Group	224.3

Source: Capital IQ

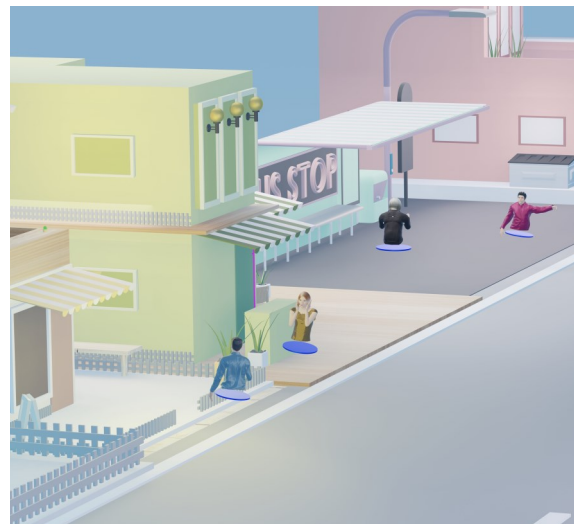
Aside from the M&A deals to finance game and metaverse development, metaverse projects like Sandbox, Decentraland, NFT Worlds are turning the ecosystem upside down with their ability to finance themselves by issuing token, selling virtual lands, enabling players to create as well as accumulate their own wealth simultaneously. The leading metaverse signifies the emergence of play-to-earn, NFT and virtual real estate trends. Sandbox and Decentraland enabled their players to purchase and exchange their native tokens, plots of land. The rationale behind the prosperous in-game economy is the creation of users' virtual experience, players who own "LAND" in Sandbox are allowed to build, play, exercise ownership and monetise visitor's experience by design and create a value-added service within their virtual premises.

In old days, users can only comply with the rules and instructions set by the game developers while the creativity is limited and the single biggest winner who got the profit from the game was the developer/ publisher. Now the disruptive and unconventional metaverse Sandbox is encouraging players to publish user-generated content with a massive player contribution to the game development, meanwhile token holders are at liberty to make a change and influence the decision for the future development of the metaverse.

"Game-changers" are the power delegated to players to influence the whole community in the metaverse, normally it is not favourable for corporate valuation in real world as it may means the earnings and value of token based purely on the continuous growth for the gamer and community base in the future. Nonetheless, it offered a sense of ownership to the players and enhanced players' loyalty whilst radiating to more business sectors in the real world. Interests for metaverse including companies and individuals

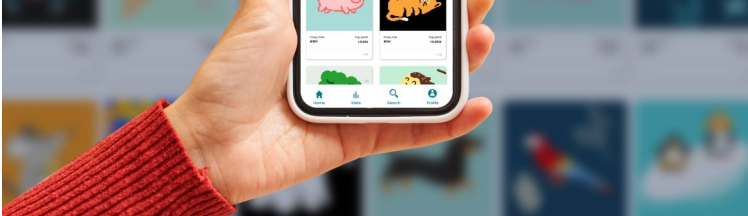
are taking part in the Sandbox as metaverse is replicating the real world's landscape in many ways and allow players to personalise their avatars and LAND to reflect their personality just like who we are in reality.

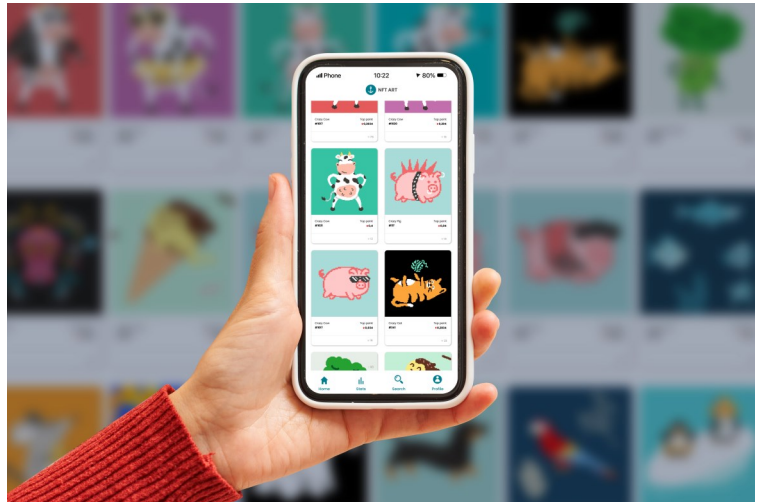
PricewaterhouseCoopers, Sun Hung Kai & Co, Adrian Cheng, the CEO of New World Development acquired LAND in Sandbox's metaverse to show their keen interest and spark off a LAND purchase fever in the past 6 months. Although the virtual real estate speculation and transaction procedure can hardly resemble the property market in the real world, the traditional wisdom seems to be valid when applying in the metaverse LAND. "Location, location, location" principle can still dictate that location does matter the most in terms of their transacted value, the proximity to major partner or celebrity's ESTATE or LAND will translate into a premium in the LAND value.



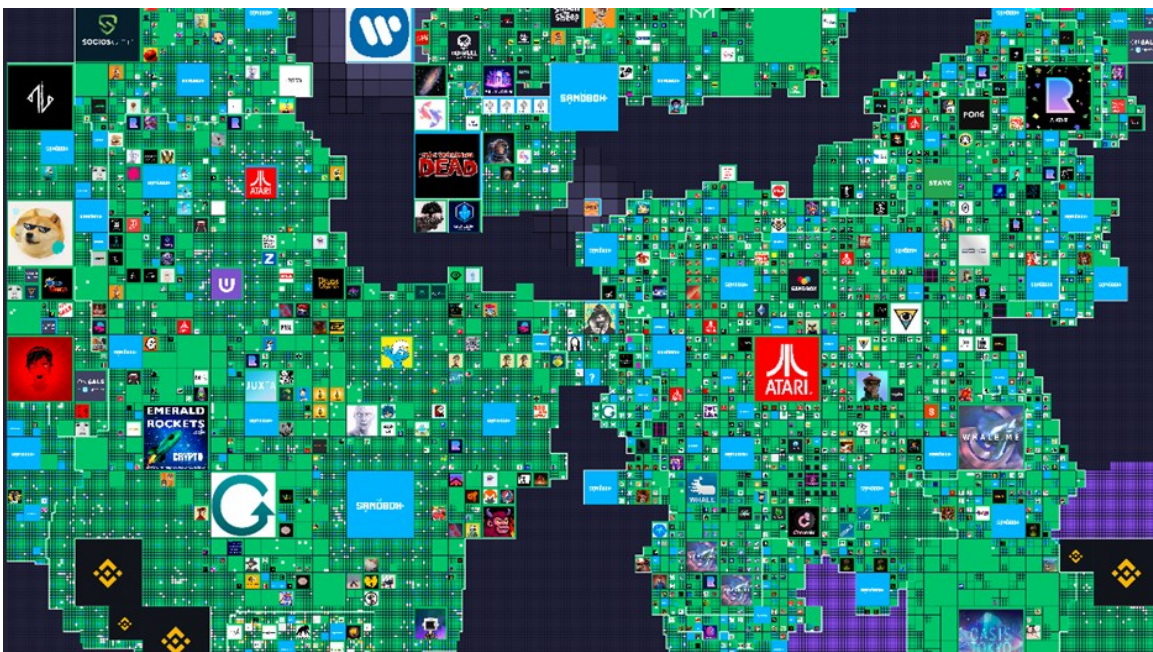
The overall LAND price shot up since 2021Q3, and total available LAND is limited to 166,464 parcels which a finite number of parcels created scarcity which attracts players, speculators to snap up LANDs that are of their interest and risk appetite.

The LAND prices valuation for Sandbox mainly follows the 3 principles as below.

- **Rarity:** Given the limited supply of LAND in Sandbox, some LANDs are rare and difficult to acquire, and owners of the LAND will be reluctant to sell a particular landmark location. While the LAND's intrinsic value is from the blockchain proof of ownership that gives the owner a sense of distinction and therefore offers a premium to a unique LAND and the scarcer and more sizable the LAND is, the more valuable it can potentially be.
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- **Utility:** The LAND can be used to hold events like operating mass games, concerts, exhibitions or the façade and billboard and interior design of the LAND can be used to place advertisements. Therefore, the utility of LAND is derived from application in both the metaverse and real world. With the number of players and traffic increasing over time, players or businesses will be more willing to pay a premium for a LAND.
 - **Tangibility:** Beside the ownership is immutable and the NFT can solidify the rights of the buyers, the value will also depend on how real the virtual experience can be by building and creating value-added products and services to enhance the practicality.



Sandbox Map



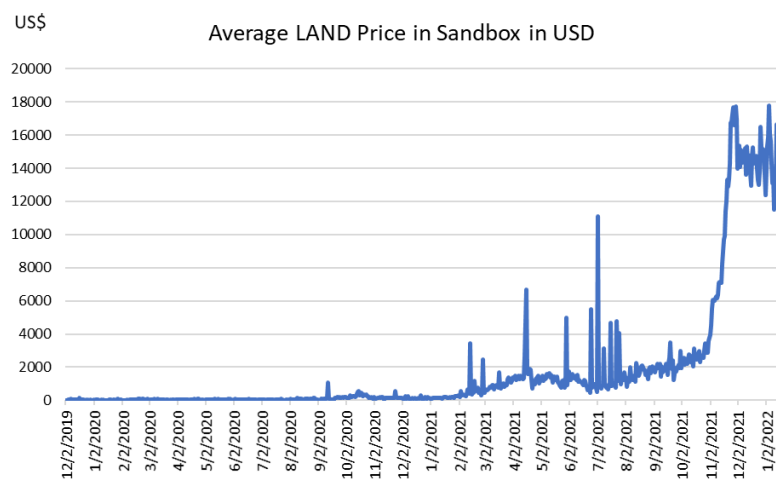
Source: Capital IQ



Although LAND value is largely a matter of public perception towards the 3 aspects, the market price mainly relied on the game's popularity and the short-run market sentiment as well as resale prices. The highly volatile LAND price also coincides with the price movement of public chain cryptocurrencies like Bitcoin, Ethereum, Solana since the secondary LAND market like OpenSea primarily use Ethereum as the medium of exchange.

Perhaps the present virtual worlds are accessed through a computer screen, yet the tech giants like Meta Platforms and Neuralink which co-founded by Mark Zuckerberg and Elon Musk respectively have a visionary plan to upgrade it to a whole new level.

Figure 3: Sandbox Land Historical Average Transacted Price



Source: NFT Stats

Gaming unicorn Animoca Brands Corporation which owns the Sandbox game now valued at US \$5.8 billion, the astonishing high valuation is contributed by the strong growth and uniqueness of the blockchain related business segments. Game publisher, platform developer, and relevant hardware component designer and manufacturer are enjoying a relatively high valuation while their businesses are flourishing given the market is embracing the wave of metaverse development. NVIDIA, the leading graphics processing units (GPUs) designer and creator of Omniverse 3D simulation and design collaboration platform benefited most from the metaverse and Web3 prospects, while the company's revenue reached record high of US\$26.9 billion with a staggering 61% growth rate in 2021. The strong momentum is expected with more demand from various blockchain and virtual world projects in the soon future.



Meta is developing a 360-degree immersive environment where people can engage seamlessly and simulate actual facial expression in the device instantaneously whilst Neuralink aims at developing a microchip to connect between human brain and your tech gadget and operate devices to text, speak and even draw without having to touch them.

After the fear of missing out ("**FOMO**") boom that fuelled the NFT, LAND prices as well as companies changed their names to emphasize their relation to the new business opportunities, the concept and application of virtual world is still captivating for people who are involved, namely developers and investors.

Table 2: Valuation Statistics of Metaverse related Companies by Sector

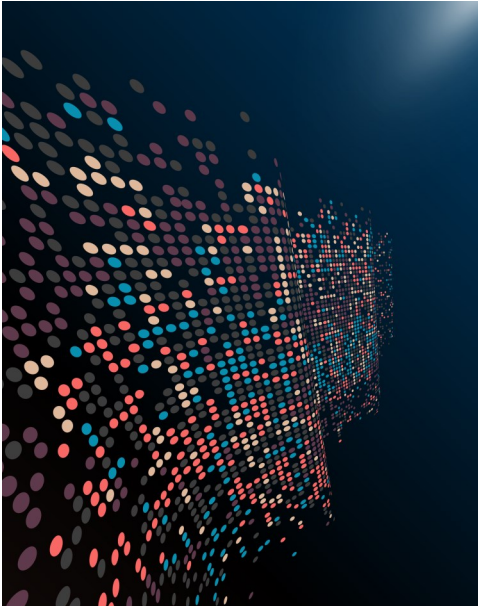
Company	Market Capitalisation (USD in million)	LTM* Total Revenue Growth	LTM EBITDA (USD in million)	LTM Gross Margin	NTM P/E
Game Publisher					
Tencent Holdings Limited	543,192.0	21.0%	28,888.2	45%	24.7x
Roblox Corporation	29,129.9	107.7%	-419.5	22.3%	-
Zynga Inc.	9,993.8	41.8%	466.7	63.8%	22.2x
Take-Two Interactive Software, Inc.	17,344.7	3.7%	838.0	60.8%	24.5x
Electronic Arts Inc.	36,370.5	14.9%	1,371.0	73.0%	17.5x
Activision Blizzard, Inc.	63,142.6	8.9%	3,452.0	73.7%	22.4x
Hardware					
NVIDIA Corporation	584,750.0	61.4%	11,215.0	64.9%	41.8x
Advanced Micro Devices, Inc	188,204.8	68.3%	4,055.0	48.2%	28.9x
Broadcom Inc.	236,535.0	14.9%	14,724.0	73.9%	17.4x
QUALCOMM Incorporated	186,958.0	35.0%	12,751.0	58.2%	13.8x
Potential Platform					
Apple Inc.	2,682,610.5	28.62%	378,323.0	43.0%	26.4x
Alphabet Inc.	1,713,465.5	41.15%	257,637.0	56.9%	22.4x
Microsoft Corporation	2,156,998.4	20.63%	184,903.0	68.8%	29.1x
Meta Platforms Inc.	550,050.0	37.18%	54,720.0	80.8%	16.2x

*LTM: Last Twelve Months

*NTM: Next Twelve Months

Source: Capital IQ, as at 23 Feb 2022





The interconnection between metaverse and real world is expected to increase and give rise to a faster monetisation of game publishers. As adaptation in gaming facilitate a seamless transformation in a more advanced use of the technologies, it also sets the stage for a larger application in the metaverse, such as business operations, working environment, social media functions that becomes the brand-new way to conduct everyone's social and work life. They can all be derived based on the video games and will benefit a number of parties ranging from IT infrastructure, consumer hardware to content creators in the metaverse.

For the general public, NFT arts, collectibles, cryptocurrencies and metaverse LAND are the ways to experiencing the virtual world with low entry barriers. The earlier we get to know about the application of metaverse and Web3, the easier it is to see first then capture the up-and-coming investment opportunities instead of missing out on the next wave of disruptive innovation.

These are just the beginning, we can look forward to more fully-fledged metaverse platforms along with a well-rounded and widely accepted decentralised internet that provide fascinating progress and solutions to make things like transactions, interactions to be better, cheaper, and hustle-free in no time.

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