

Networked

Create a living metaverse

WHITE PAPER

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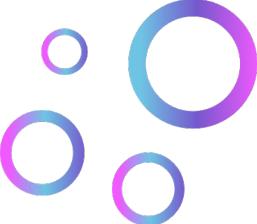
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EXECUTIVE SUMMARY

Humankind is on a quest to digitize the whole world, but we do not know how long this process will take. Blockchain, artificial intelligence, and the metaverse are the hottest topics in the tech world at the dawn of 2022.

The term metaverse is all over the internet nowadays and the demand for metaverse-related content is going to skyrocket now. Deep learning can help a lot in metaverse content creation.

The content of the meta-universe is created artificially or copied from the real world to the meta-universe through digital twin technology currently.

Networked is building a metaverse with high-level artificial intelligence. We hope to help metaverse truly realize eternal and infinite exploration.

The essential thing is to recognize the self-creation of content (based on solid self-learning ability). Let's go from "what you see is what you get" to "what you think is what you see."

This lite paper outlines the current situation of the metaverse content creation market, followed by a detailed discussion about the 'Networked' project.



MARKET BACKGROUND

International Data Corporation (IDC) reports that 64.2 zettabytes of data were created globally last year, enough to fill approximately one trillion 64GB flash drives.

The total amount of digital data created over the next five years will double the amount of information developed since the birth of digital storage.

The size of the internet is rising fast and the metaverse boom will grow its size even faster over the next few years. The metaverse will change content creation forever.

Synthetic data is expected to completely overshadow real data in AI models by 2030. Metaverse content creation has emerged as an important need recently.

The rising value of personalized content is no secret. Due to an enormous rise in data production, data storage is going to be a challenge in the years to come.

Understanding the Metaverse

The word "metaverse" refers to a (virtual) parallel universe with countless possibilities for its users. It is essentially a digital world that's based on a combination of different technologies including blockchain, virtual reality, and Web 3.0.

The prefix "meta" is of Greek origin and means "beyond," while "verse" is derived from the term "universe". The word was first coined in Neal Stephenson's 1992 novel "Snow Crash" and became the most trending subject when Facebook rebranded itself as "Meta."



Features of Metaverse

The list of metaverse features is long, and let's highlight the notable ones below:

Gaming: Now, you can play and experience your favorite games like never before. The most immersive and realistic way of playing games is here.

Learning: Are you ready to experience yet the most effective way to learn? Understanding complex subjects became easy thanks to the metaverse.

Training: A metaverse-based training will be totally based on reality, and people will actually learn the skill. So there will be no room for any guesswork.

Digital Twin: The metaverse offers a second life where people can meet their digital twins at any time – a virtual character controlled by a particular person.

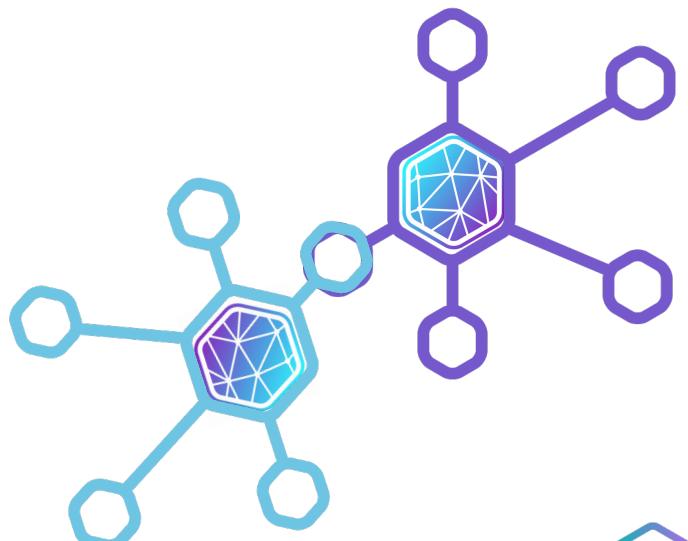
Digital Assets: People will be able to buy and sell digital assets of their choice with the help of revolutionary blockchain and non-fungible tokens (NFTs) technology.

Metaverse Development

The metaverse won't be built in one day by one company. Organizations of all sizes will collaborate with enthusiasts, policymakers, experts, and industry partners to bring the metaverse to life.

Big technology companies such as Microsoft, Meta (formerly Facebook), and plenty of other organizations such as startups are investing millions of dollars in the research and development of metaverse.

Artificial intelligence (AI), virtual reality (VR), augmented reality (AR), blockchain, data science, 3D reconstruction, the internet of Things (IoT), and many other advanced disciplines will empower the metaverse.





2.14T

The global crypto market cap is \$2.14 trillion as of December 20, 2021.



272B

The global metaverse market size is expected to be \$872 billion in 2028

MARKET SIZE

Metaverse Market Size

Virtual reality and augmented reality systems have been around for some time, but the metaverse concept is relatively new. Though some big tech companies have been working on this concept for years, Mark Zuckerberg recently popularized it.

According to Emergen Research, the global metaverse market size was \$47.69 billion in 2020 [2]. The Metaverse Market Size was valued at \$209.77 billion in 2021 according to Brand Essence Research [1]. It is growing at an astounding pace.

Metaverse Market Growth

The metaverse market is expected to reach \$828.95 billion in 2028 and register a revenue compound annual

growth rate (CAGR) of 43.3% during the forecast period, 2021-2028 [2]. The market is growing even faster in 2022 as its popularity is at an all-time high level.

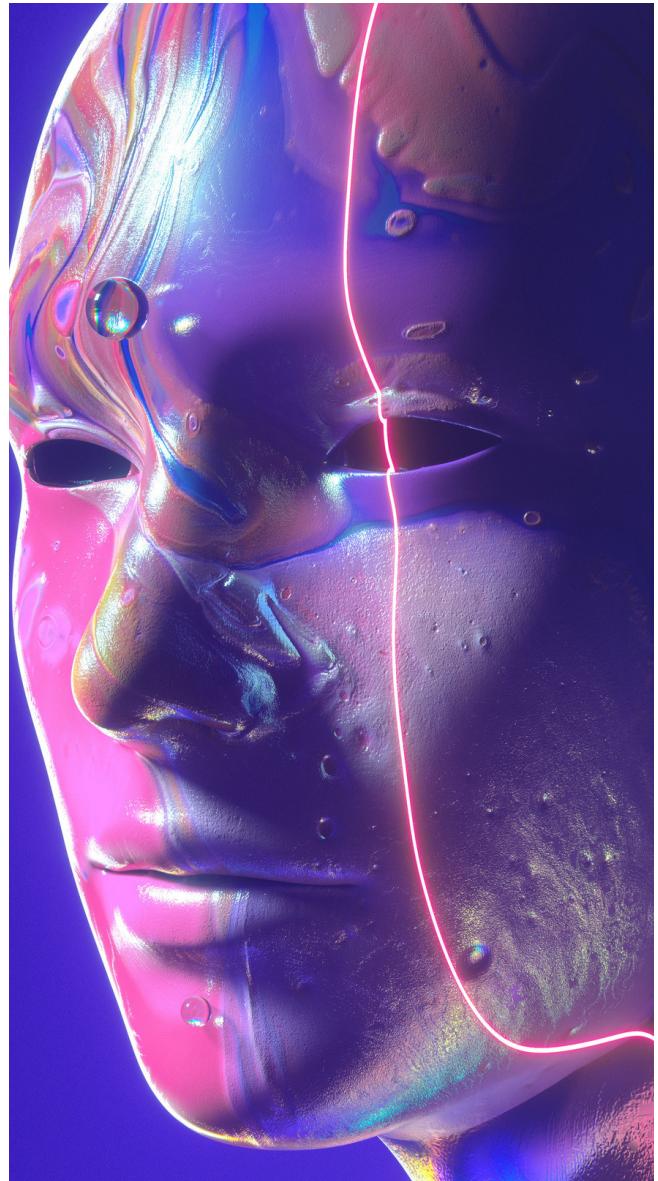
The metaverse is a \$1 trillion revenue opportunity, according to technology leaders, and there are plenty of investment opportunities in it. Some people term it as the next iteration of the internet. This nascent market is facing some challenges that need to be addressed.



Metaverse Market Opportunities

The metaverse is not just limited to gaming and other forms of entertainment. It has opened a world of possibilities for all humans. Every human and organization can benefit from it whether they belong to the technology world or not. It will soon become a trillion-dollar market.

For example, a large company can offer metaverse-based training to its employees to ensure it achieves all training objectives. Another example is the possibility for humans to live another life in the metaverse where a person can do many things as a digital twin.



INDUSTRY PROPOSITION

"Achieving fully automated AI content creation is the core of the metaverse that needs to work out. Such a metaverse is the most advanced content creation and will create an AI-driven virtual world with an almost unlimited abundant content supply. The virtual social activities are transformed from purposeful to human-centered and realize free exploration. We can truly experience the infinity of spontaneous universe by using AI to fill up the world."

Metaverse Content Creation Methods

The Metaverse is a virtual world that is built on top of the internet. It can be accessed through a VR headset. In this world, you can buy and sell

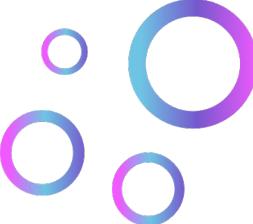
items, create content and hang out with other people. People create content using different methods.

Most people use content creation tools to create content, and not many people have the expertise to use such content creation tools. Some people take ready-made elements to create content for the metaverse. Most content creation methods are slow and require human efforts.

Metaverse Content Creation Limitations

The demand for metaverse content grew dramatically in 2021 and 2022, and static content creation methods cannot fulfill the current needs. The content created for the metaverse





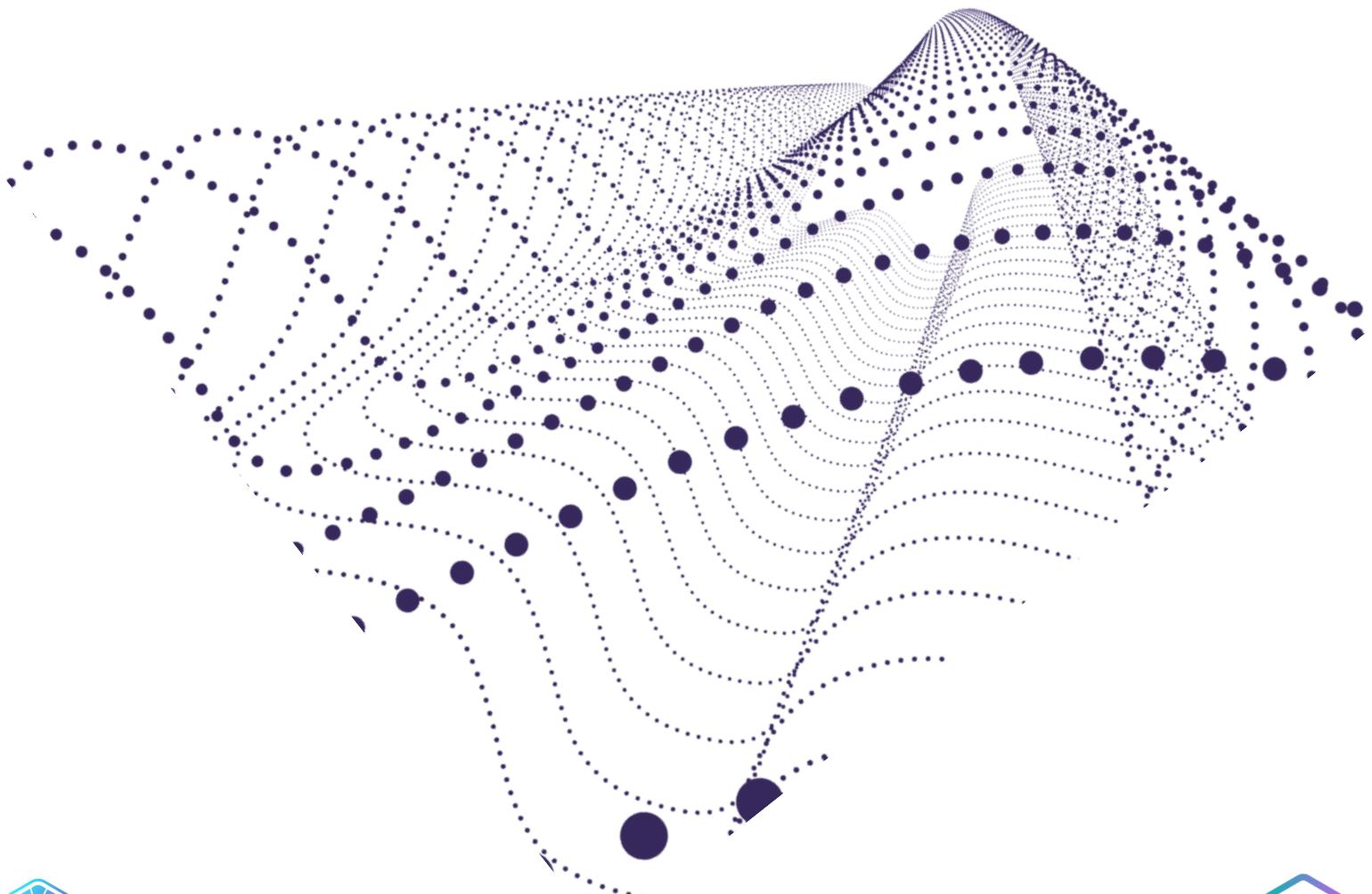
projects involves various challenges.

Metaverse requires 3D content, and creating 3D content takes plenty of time. The world does not have too many 3D artists (and other experts) to fulfill the market demand. Due to this issue, the development of the metaverse is slow.

Importance of AI-Driven Automated Content Creation

AI has revolutionized many industries, and metaverse content creation is the next target. According to Forbes Magazine, the metaverse is a \$1 trillion revenue opportunity, and content creation is one of the leading opportunities here[3].

Automated content creation is the most significant trend in metaverse content creation. AI-based systems can help create useful content with great ease. This way, we can meet the market's content needs.



ABOUT NETWORKED

Networked, an intelligence decentralized autonomous organization (DAO), aims to realize an AI-driven virtual world with unlimited content creation to bring the metaverse to life.

Networked is committed to building a decentralized autonomous organization to bring the metaverse to life. We are building a metaverse using advanced artificial intelligence.

Digital twin technology helps create data for the metaverse currently. Over the next few years, the Networked project is going to push the limits of metaverse exploration. Unlimited possibilities are awaiting

us in the metaverse. How are we going to achieve ultimate automated AI content creation? Networked has tried to answer this.

Our mission is to build an advanced metaverse with independent learning, computation, and creativity by creating a super ecosystem based on a decentralized community.

This metaverse is equipped with the most advanced content creation and will truly realize an AI-driven virtual world. Let's go through some of its cool features.

Networked			
Deep Learning	MetaLab	MetaFi	DeepFund



CORE TECHNOLOGY

The Rise of Deep Learning

Deep learning emerged as a game-changer discipline for neural network research back in the 2000s due to the invention of core elements that helped train networks to a deeper level.

The availability of large datasets and graphics processing units (GPUs) played a key role in advancing deep learning 20 years ago. Further, the ability of GPUs and large datasets grew bigger due to the rise of open source and flexible software platforms (Theano, Torch, Caffe, TensorFlow, and PyTorch) equipped with automatic differentiation.

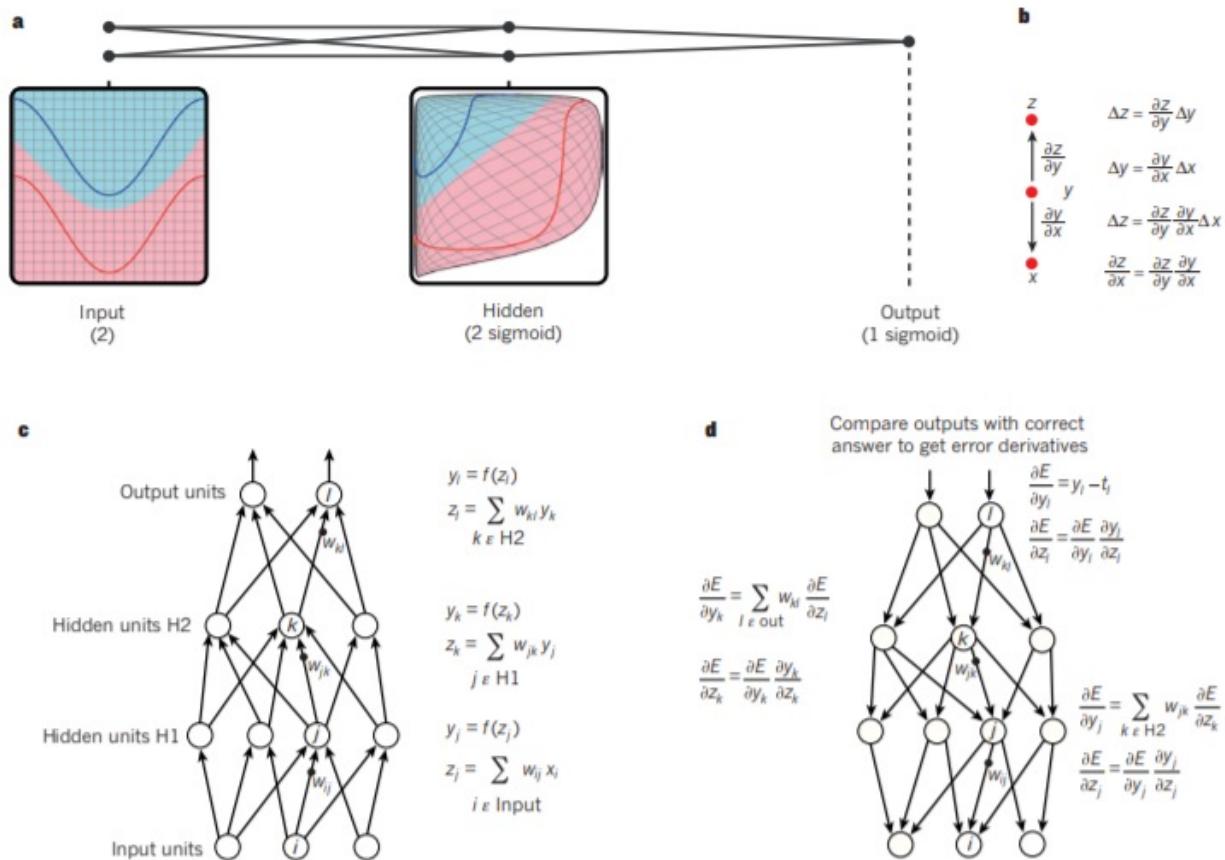
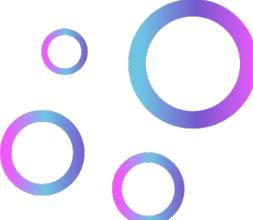
The advancement in different flexible and open source software

platforms enhanced the ability to train complicated deep networks and to reuse the latest models and their building blocks. Besides these breakthroughs, carefully combining additional layers allowed more complex non-linearities and achieved surprising results in perception tasks.

Supervised Learning

Whether deep or not, supervised learning is the most common form of machine learning. For example, when it comes to developing a system that can recognize different things such as a pet, a car, or a house. We will first have to connect this system with a large database containing the images of pets, cars, and houses that have category labeling done. While training such systems, we show images to the





machine to produce an output in a vector of scores (one for each category). We want the preferred category to have the greatest score compared to other categories, but proper training is not possible.

We use an objective function to measure the level of errors between the preferred score pattern and the machine's output. The machine then modifies its internal adjustable

parameters to reduce this error. Weights is another word we use for these adjustable parameters. These weights are real numbers that can be seen as 'knobs' that define the input-output function of the machine. There can be millions or billions of adjustable weights in a typical deep learning system. Similarly, there can be millions or billions of labeled examples with which we can train the machine.



Unsupervised and Self-Supervised Learning

Supervised learning can be successful in a wide variety of tasks, but it requires a large amount of human-labeled data which comes at a high cost. Reinforcement learning requires a very large number of interactions when reinforcement learning is based only on rewards.

Self-supervised and supervised learning systems can only work in a niche area for which they were trained. These systems need to become broad to conduct medical image analysis, low-resource language translation, content filtering, and autonomous driving.

The Future of Deep Learning

Unsupervised learning was used to improve deep learning technology but supervised learning has taken its place because supervised learning is better. We are of the view that unsupervised learning will become more critical in the long term. Behind this, though is the fact that animals and humans use unsupervised learning methods. Mean to say, humans and animals discover the structure of the world by observing it, not by asking for the name of every object. We want to use unsupervised learning models in our technology so that machines can learn like humans.



INNOVATIVE PRODUCTS

MetaLab

MetaLab is an application scenario ecosystem project based on Binance Smart Chain. Its main products include GameFi, SocialFi, and MetaHuman. MetaLab will cooperate with well-known IPs or reappear nostalgic scenes to create popular GameFi. GameFi will have a scenario with unlimited self-created content by applying AI technologies. Users can participate in the game and enjoy the P2E (Play-to-Earn) dividends of the closed-loop economy model forever.

SocialFi will provide users with virtual reality scenarios for studying and working. It will establish intelligent connections with

Youtube, Twitter, Telegram, and other social media networking and offer a 3D information presentation. Users can have their own virtual offices and meeting rooms and even invite Vitalik Buterin to come to the conference room to offer lectures.

MetaLab consists of MetaHuman, GameFi, and SocialFi. It will launch the first product Shrek which is a famous animated film star. The reason behind this is that Shrek is a virtual character but has a human prototype. Shrek-related content has existed in the form of movies and games, and it has a worldwide fan following. MetaLab works with Dreamworks to create an AI MetaHuman.





GameFi

The GameFi market is on a rise and it will keep growing for years to come. It is a profitable niche where people can make good profits. Networked DAO's MetaLab is going to launch a new GameFi in February 2022. There are many other options but this offering is different as it is based on advanced deep learning models to generate automated content (game scenes, characters, and even new game rules). Here, Shrek can be chosen as the protagonist.

SocialFi

The future belongs to SocialFi and it is offering great opportunities. SocialFi products launched by MetaLab will be one of a kind. There will be an interactive scene with MetaHuman. It is also developed based on AI technology and can generate automated content for MetaHuman, such as social circles, skills, etc.

MetaHuman

There are plenty of reasons we are excited about the metaverse. The concept behind it has been around for quite some time but now is the time to make it happen. Microsoft, Meta, and other organizations are investing heavily in this space.

The idea of a metaverse is incomplete without Metahumans. Just like non-playable characters (NPCs) in video games, MetaHumans will be the personas you interact with throughout the metaverse. These characters will help us live and breathe the metaverse.

In a digital world where we can be and do virtually anything we want, who'll want to do the always-on roles that make the metaverse tick? To make the metaverse liveable, We need conversational and experiential AI. We strongly believe that AI will have a human face, body, voice, and personality.



FUTURE DEVELOPMENT

Decentralized finance and non-fungible tokens are presently the two most popular applications in the domain of blockchain technology. Both are important because DeFi offers decentralized access to financial services while non-fungible tokens focus on enabling tokenization of assets. When combined, DeFi and NFTs can provide multiplied benefits for the next version of the internet. That is why we designed MetaFi.

MetaFi

MetaFi is a decentralized financial platform tailored for the Metaverse by MetaLab. MetaFi will provide loan and exchange services of NFT for the metaverse. At the same time, it will conduct data analysis based on AI and create Metaverse avatars and the credit data system. This technology will build a robust ecosystem for the trade of digital assets in the metaverse.



NETWORKED TOKEN



Token Features

Networked Token will be launched on Binance Smart Chain under BEP-20 token standard. The total number of tokens is 10 billion.

DeepFund

DeepFund is an eco-fund. All the income generated from AI applications in Metaverse scenarios will be transferred to the eco fund. The eco fund regularly repurchases and burns the circulating token NET and shares the eco profits to each community member in a deflationary manner.

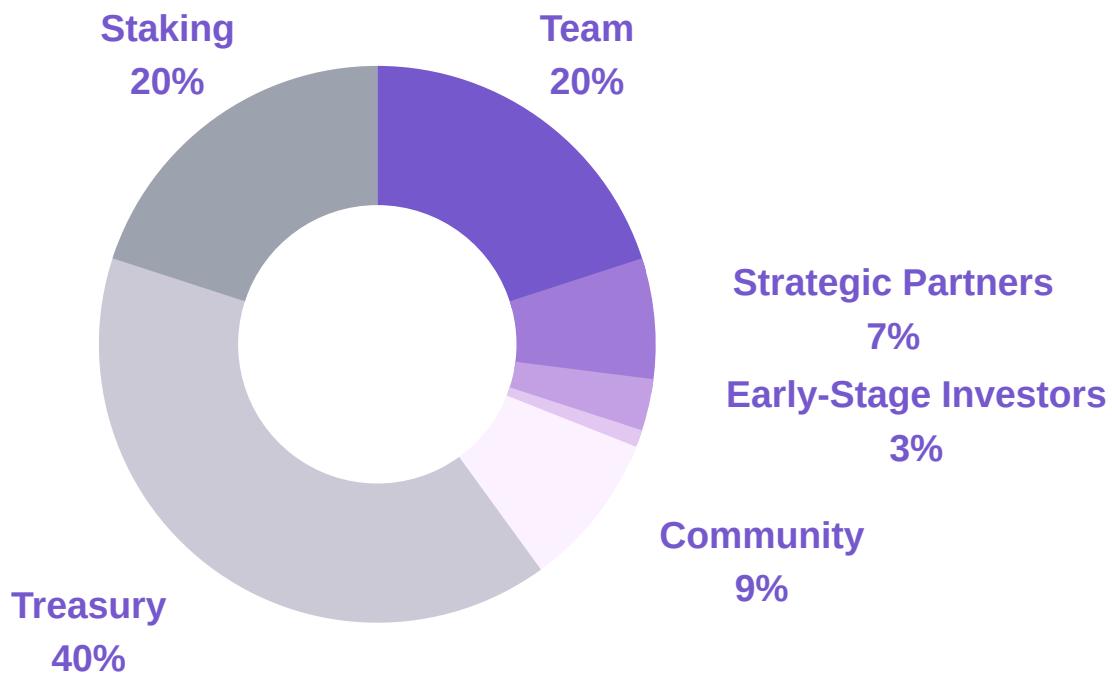
Token Name	Networked
Token Type	BEP-20
Token Symbol	NET



Networked

Token Economics

Team	20%, 2,000,000,000
Strategic Partners	7%, 700,000,000
Early-Stage	3%, 300,000,000
Trading Platform	1%, 100,000,000
Community	9%, 900,000,000
Treasury	40%, 4,000,000,000
Staking	20%, 2,000,000,000



ROADMAP



TEAM MEMBERS

Networked was founded by the well-known French Artificial Intelligence R&D team AI-Verse. AI-Verse is a scientific research partner of INRIA in France (National Institute for Research in Digital Science and Technology). They have comprehensive R&D cooperation

in Deep Learning the technology of and have launched innovative application technologies worldwide multiple times. Networked is the first serious attempt for AI-Verse to apply the Deep Learning technology into the metaverse. Here are some details about the founders:



Benoit Morisset

Co-Founder and CEO



Arnauld Lamorlette

Co-Founder and CTO



AI Verse

Technology Partner



Networked

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