

EUME TOKEN

Create, Trade and Play in the blockchain-based
NFT Metaverse owned by EU Metaverse
members.

Whitepaper, ver. 2.0

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EU METAVERSE

Contents



1. Preface	3
2. Introduction	5
2.1. Metaverse and Virtual Reality	5
2.1.1. Metaverse	5
2.1.2. Virtual Reality	5
2.2. Market Size	7
2.2.1. Metaverse Market.....	7
2.2.2. Virtual Reality Market	8
2.3. Market Issues	10
2.3.1. Proof of Ownership	10
2.3.2. Absence of Content Integration Platform	10
2.3.3. Unfair Profit Allocation Structure	11
2.4. EU Metaverse Team Mission	12
3. EU Metaverse VR Network	13
3.1. Why Blockchain?.....	13
3.1.1. Global Payment System	13
3.1.2. Ecosystem Transparency.....	13
3.1.3. Ownership Protection	13
3.2. EU Metaverse Platform	14
3.2.1. NFT Market	15
(a) NFT Item Market.....	15
(b) NFT Item Customization	15
(c) Item Ownership	16
3.2.2. Meta-Space	17
(a) Space Acquisition	17
(b) Item Purchases and Utilization	17
3.2.3. Meta-City	18
(a) Content Provision	19
(b) Virtual Space Advertisements.....	20
3.2.4. Architecture.....	21
(a) Client Presentation Layer	21
(b) Network Transaction Layer	22
(c) Asset Layer.....	22
(d) Blockchain Layer	22
3.3. EUME (EU Metaverse Token)	23
3.3.1. Token Model.....	23
3.3.2. Token Economy	25

3.3.3. Business Model	26
(a) Space Acquisition Fee.....	26
(b) NFT Item Fee	26
(c) Content Payment Fee.....	26
(d) Advertisement Fee	26
4. Product.....	27
4.1. VR Game	27
4.2. VR Theme Park	28
4.2.1. VR Shooting Adventure.....	28
4.2.2. VR Jurassic World	29
4.2.3. VR Aquarium	29
4.2.4. VR Space	29
4.3. Military Education.....	30
4.3.1. Weapon Assembly/Disassembly	30
4.3.2. Shooting Drill.....	30
4.3.3. Simulated Battle Drill (Virtual Field Training)	31
4.3.4. Military Fire-Fighting & Rescue Simulation Drill	31
4.3.5. Military Medical Treatment Simulation Drill.....	31
4.4. Metaverse-based MICE Industry	32
4.4.1. Post COVID-19 Era, MICE Industry	32
5. Token Distribution	34
5.1. EUME Token Issuance Plan	34
6. Roadmap.....	35
7. Disclaimer	37
7.1. Risks.....	39
7.2. References.....	40

1

Preface

EU Metaverse VR Network is an ultimate blockchain-based NFT metaverse platform. EU Metaverse VR Network establishes a cutting-edge metaverse ecosystem, by utilizing its own VR technology, that helps to lower the entry barriers for all types of users across the globe. Therefore, it allows designers, enterprises and general users to dive into the most advanced metaverse experience.

It is predicted that the Metaverse Industry is bound to expand further provided the growth in the NFT and VR sectors in the aftermath of the COVID-19 and the acceleration of the blockchain adoption across the globe. According to Strategy Analytics, (Global Market Research Company), the Global Metaverse market is projected to reach a \$280 billion valuation by 2025. To further support this observation, the South Korean Kyobo Securities stated that the Global Metaverse & VR Market are expected to witness a tenfold surge from the valuation of 33 billion USD in 2020 to a whopping 338.1 billion USD by 2025 and eventually becoming a 2 trillion USD worth industry by 2030.

Metaverse is now essentially becoming an innovative tool and platform, where users tend to conduct most of their social activities through the usage of deep and diverse virtual worlds. In fact, Metaverse is a more advanced concept than simple Virtual Reality (VR), as it goes beyond the fundamental concept of the VR. Metaverse is not just seeing virtual reality on screen, but directly participating in the virtual world, enabling value creation and exchange in the real world. In particular, it is adopted as a space where the MZ generation (born between the early 1980s and early 2000s) can express the diversity and inclusiveness that they consider important.

However, behind the spectacular growth of the Metaverse & VR markets exists the shadow that pinpoints to the lack of solid proof of ownership practices, the absence of an integrated platform for VR & Metaverse and also the unfair profit allocation structure in the content side of the industry. The Proof of Ownership becomes a vital component in order to capture the value increase of the item in the period of liquidating it in the relevant Metaverse Marketplace. On top of that, there is still a lack of a proper integrated platform that can bring Virtual Reality & Metaverse pieces of content together to allow users to enjoy it to the full extent. Last but not least, the content creators (developers) should be able to receive a fair portion of their legitimate profits from the content sale process, which they produce inside of the Metaverse ecosystem.

To address the above-mentioned issues, the EU Metaverse VR Network team proposes a block- chain-based NFT metaverse platform. The EU Metaverse VR Network team aims to solve the problems that arise in the Metaverse & VR industries, creating an efficient Virtual World of a new concept. The development direction of the blockchain-based Metaverse industry presented by EU Metaverse VR Network is as follows.

High-Quality Content:

Meta-City

Meta-City is a public space, where you can experience various metaverse content, such as gaming, shopping, education and you can even visit different exhibitions here.

Tailored Virtual Space:

Meta-Space

Meta-Space is a feature, where business owners, designers, store owners, and other regular users can create a personalized virtual space according to their own preferences.

Ecosystem Expansion:

NFT Market

NFT Market is a platform, where various items are traded. Those items are developed directly by the user or designed by the third-party designers, if requested

01 High-Quality Content: Meta-City

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Meta-Space is a feature, where business owners, designers, store owners, and other regular users can create a personalized virtual space according to their own preferences.

03 Ecosystem Expansion: NFT Market

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In regards to the aforementioned, EU Metaverse VR Network proposes a system in which the platform's participants can receive rewards by simply performing their roles in the platform. The participants in the EU Metaverse Network's new VR Metaverse ecosystem can contribute to the expansion of this ecosystem by experiencing it through the content production & provision, thereby earning rewards for their activities in the platform.

EU Metaverse VR Network team will leverage the 4 years of experience gained throughout the Metaverse Business Franchise operations, where they managed to become a No. 1 VR franchise in South Korea. Upon the establishment of the EU Metaverse VR Network, the EU

Metaverse team has received two patent registrations for its original VR technology and space production methodologies. The team is dedicated to the expansion of partnerships with companies offering existing VR and Metaverse services, as well as blockchain project teams to achieve the above-mentioned objectives. In order to build up a favorable and progressive ecosystem, the Division team will provide a sustainable infrastructure in order to integrate a diversified portfolio of content and will also present VR and Metaverse implementation technologies.

2

Introduction

2.1. Metaverse and Virtual Reality

2.1.1. Metaverse

Metaverse is the combination of the words “Meta”, which is a prefix meaning more comprehensive or abstract, and Universe, which basically implies going beyond the realities of our real world, and diving into a new life in a virtual space, which may or may not be different from reality. In the Metaverse, users can interact with each other, earn and spend digital currency, play, work, and perform real-life activities in the online 3D Virtual World through the usage of their avatars. Currently, the metaverse concept is widely used in games, entertainment, and business environments by some companies that are trying to somehow replicate daily activities in a virtual space.

The Metaverse concept is gradually expanding because of the non-face-to-face environment in the aftermath of the COVID-19 and the accelerated development of 5G mobile communication technologies across the globe.

As ultra-low delay, ultra-wide bandwidth, and ultra-connectivity are realized through 5G, services such as real-time streaming, autonomous driving, and IoT (Internet of Things) are becoming more relevant nowadays. On top of that, the development of Artificial Intelligence (AI) and Big Data further help to materialize the Metaverse Worlds. In addition, Blockchain Technology is also utilized as a primary tool that creates the connection between the real and the virtual world in a stronger manner.

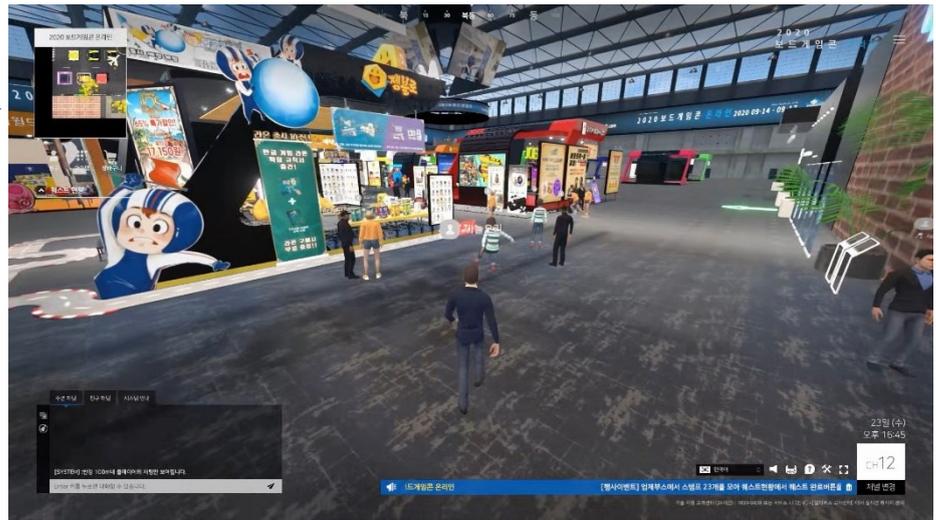
2.1.2. Virtual Reality

In the background of bringing the metaverse to reality, there is a rapid development of virtual reality (VR) technology occurring across the globe. In fact, for the Metaverse Market to grow further, VR is an essential tool that needs to grow as well, as it is the primary technology to minimize the confusion gap between Virtual and Reality. Users can experience a deeper dive in the metaverse similar to reality by combining with advanced VR technology.

Virtual Reality (VR) refers to a specific environment or situation, or technology itself created by Artificial Technology, which is a mere simulated and virtual experience that can be similar to or completely different from the real world. Here, the created virtual environment or situation stimulates the user’s five senses, allowing them to have a real-life, spatial and temporal experience, freely moving in and out of the boundary between reality and imagination. In addition, users can not only immerse themselves in virtual reality, but also interact with elements implemented in VR, such as operating or issuing commands, using real devices. VR is distinct from unilaterally implemented simulations in that it allows interaction with other users and creates user experience.

The core ideology of VR technology is to implement perfect imaginary reality in the eyes and minds of people and to give them a sense of immersion to that extent so that they feel almost no difference in virtual and actual reality. Thus, EU Metaverse VR Network aims to provide them an unprecedented experience, making users feel like they are in a new world, where they can experience a variety of content

Figure 1.
EU Metaverse VR Network



2.2. Market Size

2.2.1. Metaverse Market

It is predicted that the Metaverse Industry is bound to expand further provided the growth in the NFT and VR sectors in the aftermath of the COVID-19 and the acceleration of the blockchain adoption across the globe. According to Strategy Analytics, (Global Market Research Company), the Global Metaverse market is projected to reach a \$280 billion valuation by 2025. To further support this observation, the South Korean Kyobo Securities stated that the Global Metaverse & VR Market are expected to witness a tenfold surge from the valuation of 33 billion USD in 2020 to a whopping 338.1 billion USD by 2025 and eventually becoming a 2 trillion USD worth industry by 2030.

Major tech companies are simultaneously defining Metaverse as a land of future opportunities and launching various platforms and products in this area. As of January 2021, MS (Microsoft) recently acquired ZeniMax Media and launched a virtual reality-related device 'Holo Lens 2'. NVIDIA has launched a collaboration platform called "Omniverse," where people can work together in a virtual office. Facebook also announced 'Facebook Space' and 'Horizon', which are virtual space social communities. In South Korea, Naver recently introduced a platform called "ZEPETO," which not only creates avatars and virtual worlds using facial recognition and augmented reality, but also creates and trades items such as clothing.

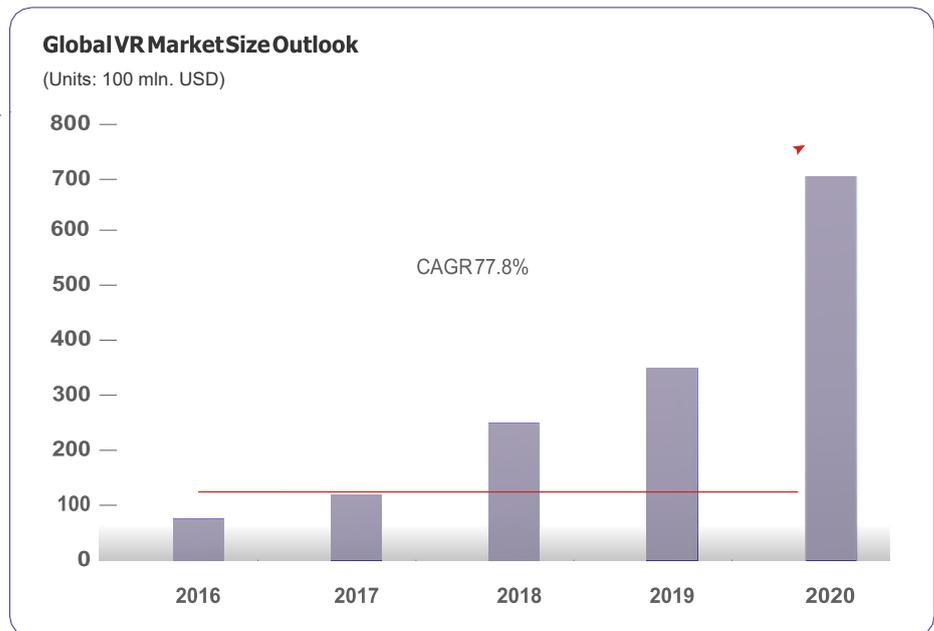
Among them, the most representative metaverse platform is Roblox, an American online game company. Roblox is a virtual world game platform. Lego-shaped personal avatars allow users to chat and make calls as well as create games. As of the end of last year, Roblox has gained great popularity among students and children under the age of 16 in the United States, with 32.6 million active users per day and 50 million games created within Roblox. Roblox debuted on the New York Stock Exchange in March 2021. With the listing, Roblox became a company with a market capitalization of \$44.5 billion (about 51.32 trillion won).

2.2.2. Virtual Reality Market

The VR industry is going through significant positive changes as domestic and foreign IT companies are expanding their investments in VR tech in response to the evolution of the 5G and arrival of the cloud era. According to a report by the ITP, the big IT enterprises like Facebook, Microsoft, Sony, and HTC commenced investing a lot in VR technologies. However, in the Korean market, the VR is mainly being developed by three primary telecommunication companies (SK, KT, LG U+).

- Facebook acquired Oculus, a VR headset company, in 2014 and made its debut in the VR market
- Sony is planning to strengthen its dominance in the VR market by utilizing its presence in the video game market by Q2 of 2020
- HTC plans to reduce investment in its smartphone business in October 2019 and focus on both human resources and investment funds on VR
- Republic of Korea is going to create VR market environment based on 5G infrastructure.

Figure 2.
Global VR Market Size



Given the fact that VR devices are continuously developing and progressing, the VR-related content market is also exhibiting an upward sloping trend. Encompassing from mere small VR configured rooms up to the VR theme parks (large complex cultural spaces), the new VR pieces of content are continuously emerging, thus market research institutes are accordingly predicting that the size of VR industry will develop and increase exponentially. According to TrendForce, a global market research company, in 2018, the Global VR market was estimated to be approximately 20 billion USD (24 trillion KRW) based on the software and hardware market valuation, and last year's market size was expected to illustrate 1.5x growth pattern, raising from 20 billion roughly to 30 billion USD (36 trillion KRW) and eventually reach 70 billion USD (84 trillion won) by 2020. Furthermore, the VR industry is currently facing huge positive changes given both domestic and foreign IT companies are expanding their investments in VR technologies following the trends in 5G and cloud era.

2.3. Market Issues

2.3.1. Proof of Ownership

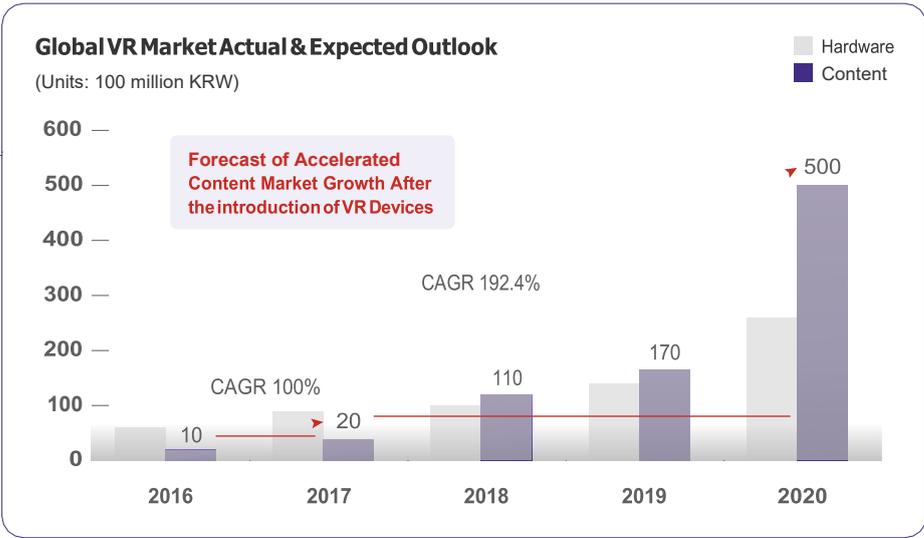
In fact, there are very robust game economies in the Metaverses. For instance, US Metaverse Game platform Roblox sells their own virtual currency 'Robux' to the users. Users can buy various items, express emotions, and purchase different pieces of content with Robux and make profits while working as creators who produce content in Roblox. However, when the value of the goods being traded increases, it is essential to prove the ownership of the item. The Proof of Ownership becomes a vital component in order to capture the value increase of the item in the period of liquidating it in the relevant Metaverse Marketplace. For example, let's assume that you need to buy a building or land of great value inside of a virtual world. In the virtual world, the building was purchased for real currency, but there is no way to prove that someone holds that building or land.

Users must trust the centralized platform. Proof of ownership of the goods purchased by oneself emerges as an important issue as the actual transaction amount increases across the virtual realities.

2.3.2. Absence of Content Integration Platform

Since 2018, VR markets have changed from VR device (hardware) distribution to content distribution. In the case of South Korea, with global companies such as Oculus, Sony, and HTC building their own content platforms to attract users and content, there is still a lack of a proper integration platform to bring together a growing number of virtual reality users and metaverse content applied to virtual reality. In addition, in the reality that most service apps are provided by individual operators sporadically, Korean consumers are flocking to large global platforms to experience more diverse virtual reality metaverse contents. In view of this trend, it is urgent to establish a metaverse content integration platform that can be applied with virtual reality in order not to lose the virtual reality market and the metaverse market, which are called next-generation media, to global companies.

Figure 3.
Global VR Market Current Status
and Future Prospect



2.3.3. Unfair Profit Allocation Structure

Existing content distribution platforms have proven to possess an unfair profit allocation structure that sets a high margin rate and fails to provide actual added value to the content developers. For instance, representative game distribution platforms, such as Steam, Epic Games, and Xbox are also making revenue through those thick fees. In 2019, when global game distributors were fiercely competitive, Steam maintained 30% of its distribution fees. Whereas, the developers have to take care of both development and operation with the remaining 70%. These problems in the distribution market can lead to difficulties in content development and may shrink the entire Metaverse Content Market from a macro perspective. In order to solve this problem, developers should be able to utilize economic profits using the robust economic ecosystem within the metaverse in order to claim the larger portion of their content sales revenue. Therefore, in order to create a virtuous cycle in the market in which attractive contents for users to enjoy are abundantly supplied and new users are introduced, the Metaverse platform must establish a network that allows content creators to own and control their creations as much as possible.

2.4. EU Metaverse Team Mission

The EU Metaverse team aims to inspire innovation in the Metaverse Market by providing an ultimate blockchain-based NFT metaverse platform, thereby addressing the problems mentioned above. The EU Metaverse team has more than 4 years of experience in metaverse business and software & hardware development side, and presents the following directions based on the previous experience of launching the No. 1 VR franchise business in South Korea.

01 High-Quality Content: Meta-City

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02 Tailored Virtual Space: Meta-Space

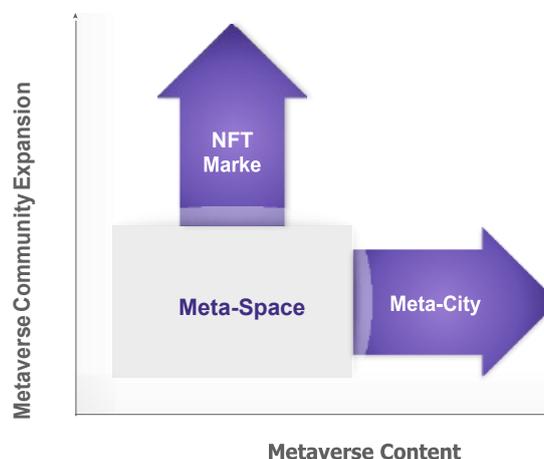
Meta-Space is a feature, where business owners, designers, store owners, and other regular users can create a personalized virtual space according to their own preferences.

03 Ecosystem Expansion: NFT Market

NFT Market is a platform, where various items are traded. Those items are developed directly by the user or designed by the third-party designers, if requested.

To achieve its mission, EU Metaverse team proposes EU Metaverse VR Network platform, a new Virtual Reality Metaverse Content Ecosystem that is based on the blockchain technology. The EU Metaverse team will establish EU Metaverse VR Network and provide reliable VR Metaverse content payment data through EU Metaverse VR Network to (a) developers, (b) consumers, and (c) advertisers, so that they will grasp and opportunity to build an efficient ecosystem to collaborate with each other. In fact, the blockchain network eliminates the risk of data tampering (forgery) due to the presence of smart contracts, thus EU Metaverse VR Network participants are enabled to gain their rewards according to their contributions, without necessity of going through the complicated processes, which certainly lays out a solid foundation for the formation of a healthy ecosystem. By implementing this, EU Metaverse VR Network forms an environment where each participant can focus on his or her purpose and build a new interconnected virtual reality world.

Figure 4.
EU Metaverse VR Network
Value Proposition



3

EU Metaverse VR Network

3.1. Why Blockchain?

3.1.1. Global Payment System

EU Metaverse VR Network is an ultimate blockchain-based NFT metaverse platform. EU Metaverse VR Network provides a global payment system for participants to engage in robust economic activities in the new virtual world. Here, participants can participate in EU Metaverse VR Network anywhere in the real world and receive nationwide services. In the EU Metaverse ecosystem, crypto assets are issued through the usage of blockchain technology to mainly overcome shortcomings such as changes in exchange rates between key currencies of different countries, slow transmission speeds and burdensome commission fees paid to intermediaries. The crypto assets address the issues mentioned above, and reduce payment procedures for those developers and partners who will participate in the token ecosystem built on a single blockchain network. By utilizing blockchain technology, EU Metaverse VR Network is expected to reduce entry barriers for potential global partners, which will result in corresponding outcomes.

3.1.2. Ecosystem Transparency

EU Metaverse VR Network is the underlying network that creates the EU Metaverse platform ecosystem entails a payment system that maintains safety and transparency of token transactions occurring in the virtual reality world of EU Metaverse VR Network. Participants can use the system to register and create content, and set up the reward ratio and economy of tokens. In the Virtual World of EU Metaverse VR Network, participants cannot forge or falsify the data, when content operations compensation is being paid, this in turn guarantees the safety and transparency of the system. Through a network utilizing blockchain, EU Metaverse VR Network eliminates the risk of data falsification, and utilizes smart contracts to enable EU Metaverse VR Network participants to earn corresponding rewards for their contributions without complicated processes.

3.1.3. Ownership Protection

The ownership of content and item copyrights, created and used in EU Metaverse VR Network's new Virtual Reality Metaverse ecosystem, is protected by the utilization of smart contract protocols. EU Metaverse VR Network allows anyone to become a content developer inside of its metaverse, thereby allowing them to monetize their creations freely settling the profits through the smart contracts. On top of that, consumers can rent or purchase the piece of any content permanently for EUME tokens. The EU Metaverse VR Network uses blockchain mainly to protect the ownership copyrights related to content creation for the sound creation of a market ecosystem related to virtual reality, while encouraging content producers to produce more vibrant content, leading to a virtuous cycle throughout the entire metaverse industry.

3.2. EU Metaverse Platform

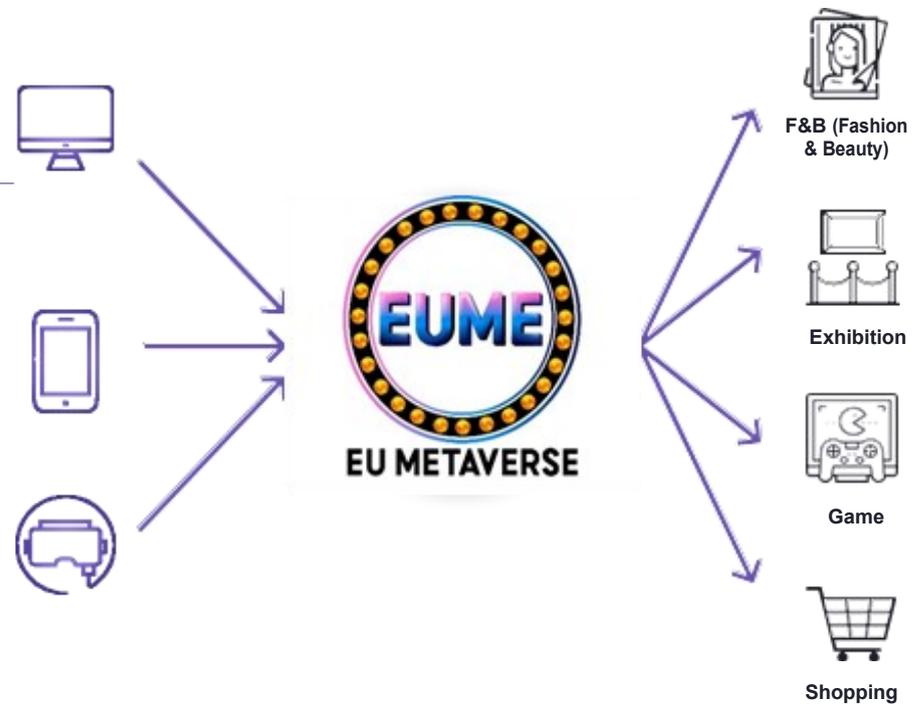
EU Metaverse VR Network is an ultimate blockchain-based NFT metaverse platform that extracts an established synergy as a result of the VR Metaverse & Blockchain technology convergence in order to enable O2O services in various industries. It serves as a catalyst in various industrial fields by allowing anyone to participate in F&B, exhibitions, fairs, games, and other content industries within the virtual space.

Blockchain is a decentralized network that enables P2P value exchange. The recorded data on the blockchain will be decentralized and controlled, making it impossible for any given person to take operating possession, which in turn ensures the transparency and reliability of the platform. By utilizing the advantages of blockchains and VR technologies, EU Metaverse VR Network is designed to lower entry barriers and protect the interests of participants so that users can easily experience the VR world.

EU Metaverse VR Network consists of three main functions: 1) Meta-Space, 2) Meta-City, 3) NFT Market which are the three key functions that make up the ecosystem of EU Metaverse VR Network comprised of convenient UI technology and will be an essential element for establishing a VR Metaverse ecosystem in which members, including users, various businesses and developers will form a virtuous cycle, collaborating with each other.

EU Metaverse VR Network will be accessible through various devices. In order to experience the Metaverse to the fullest extent, the VR equipment must be used, but as shown in the Figure below, it will be possible to connect to PCs and mobile devices so that users who are not supplied with VR equipment can also participate without any restrictions.

Figure 5.
EU Metaverse Platform



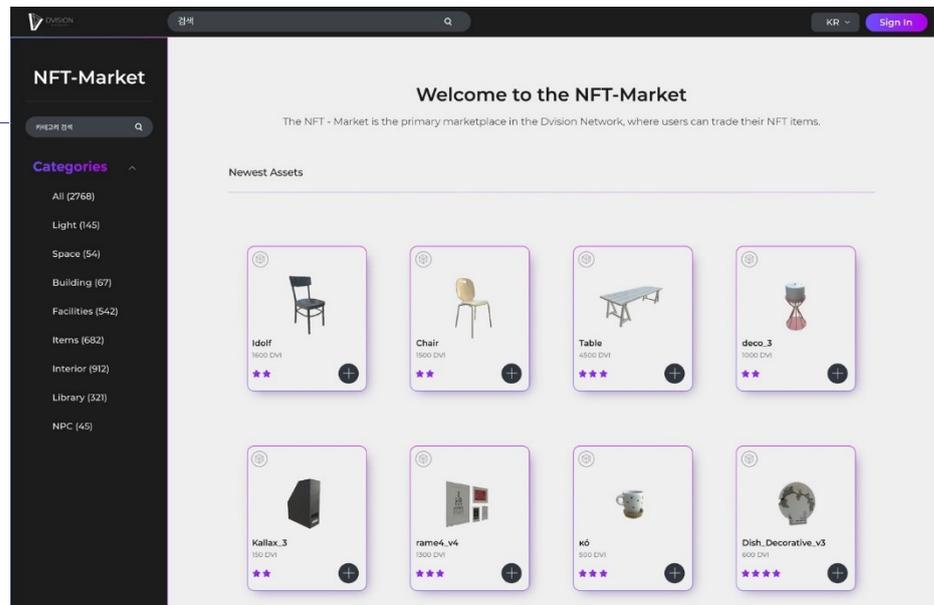
3.2.1. NFT Market

NFT Market is a platform where various items are traded inside of the Virtual Reality Metaverse. There are fundamental items that are provided by the EU Metaverse Team, yet developers can also produce and sell unique 3D items. Users can also request developers to create items according to their own preferences providing the commission fees for their work. Here, Non-Fungible Tokens (NFT) are used in the NFT Market to protect the value and ownership of both basic and customized items inside of the EU Metaverse.

(a) NFT Item Market

The NFT Item Market is a space where basic items provided by the EU Metaverse team are traded and P2P transactions are carried out between users. The EU Metaverse team will provide basic items for free or at a low price so that users can freely use them inside of the Meta-Space. Since all of these items can be used by anyone, the number of items will be limited, and it will be developed in a way that further transactions will not be possible once they are purchased.

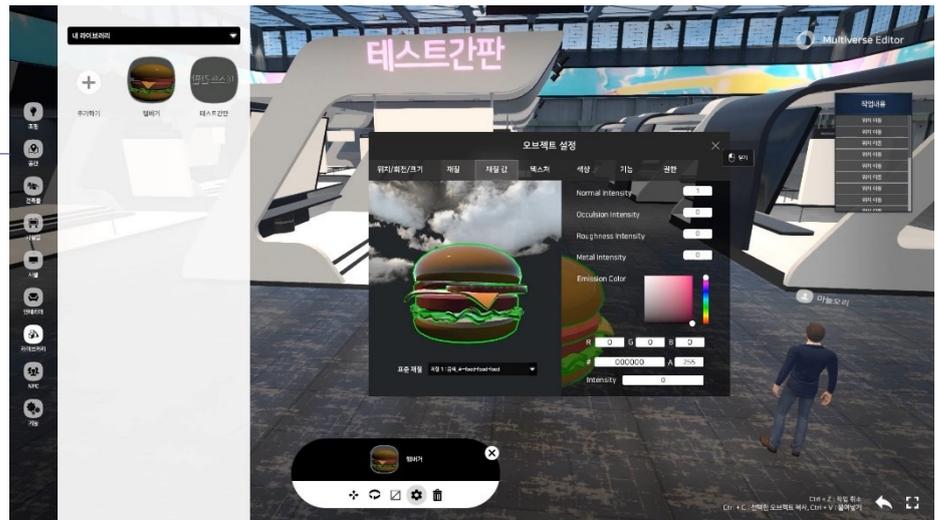
Figure 6.
NFT Market



(b) NFT Item Customization

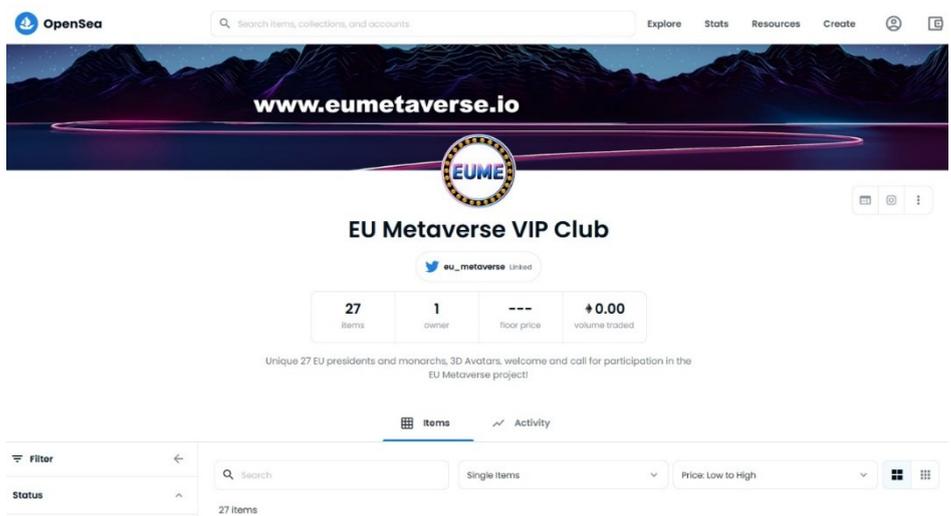
As it has been mentioned, there are items that can be customized, produced and traded within the platform, which are different from the fundamental items provided in the NFT Item Market by the EU Metaverse team. Here developers, such as front-end developers or startup developers, can produce items used in EU Metaverse VR Network, thus generate revenue and make stable income. Developers can either comprehend the users' needs, then produce necessary items in advance, register them as sales products in the market, or produce customized items upon user's custom-made request.

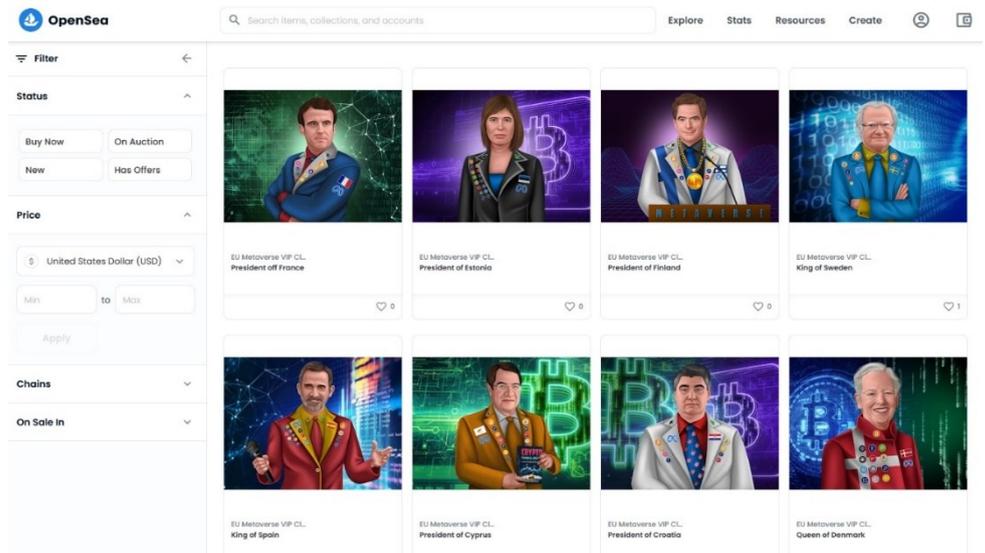
Figure 7.
NFT Item
Customization Process



(c) *Item Ownership*

NFT (Non-Fungible Token) means that certain unique items are tokenized to protect the value and ownership rights of the items attributable to its developers. Each item has different attributes, making it an unchangeable (non-fungible) token, proving ownership and enabling its further trading on primary and secondary marketplaces. If you refer to Figure 8, you may notice the customized NFT Avatar that has been auctioned on other platforms (OpenSea). All the attributes of the item are recorded in the blockchain, and the transaction history of the item and its owner are recorded in the blockchain, respectively. EU Metaverse provides convenient UI/UX for tokenizing items developed by the users.





3.2.2. *Meta-Space*

Meta-Space is a unit component of Meta-City, which is the open public virtual reality world of the EU Metaverse VR Network, in which participants of the EU Metaverse VR Network are assigned with a virtual space called Meta-Space acquired for the EUME tokens. This Virtual Space (Meta-Space) can be accessed only by the individuals or others who have obtained access to it, and they can personalize the interior of the space according to their preferences.

(a) *Space Acquisition*

In order to be allocated with the personal virtual space in the Meta-Space, a certain number of tokens should be expended to acquire it. Although the Meta-Space has its spatial limitations, by further using EUME token, the area and range of the space can still be extended to a certain extent. The Meta-Space utility cases are limitless, as it can be used for lots of different activities to be conducted inside of the metaverse. Content providers can further utilize it in order to drive sales and use it as a space for providing various unique pieces of content. Thus, content providers can add various functions to their Meta-Spaces and use them as shopping malls, exhibition halls, fairs and museums, which will be applied later in the Meta-City.

(b) *Item Purchases and Utilization*

In order to decorate and utilize the Meta-Space, the users must purchase various items for their EUME tokens. The types of customizable items include interior design, background music, furniture, and items that can be purchased at the NFT Market. Each item is traded and priced in EUME token according to type, design, color, size, attributes and other factors.

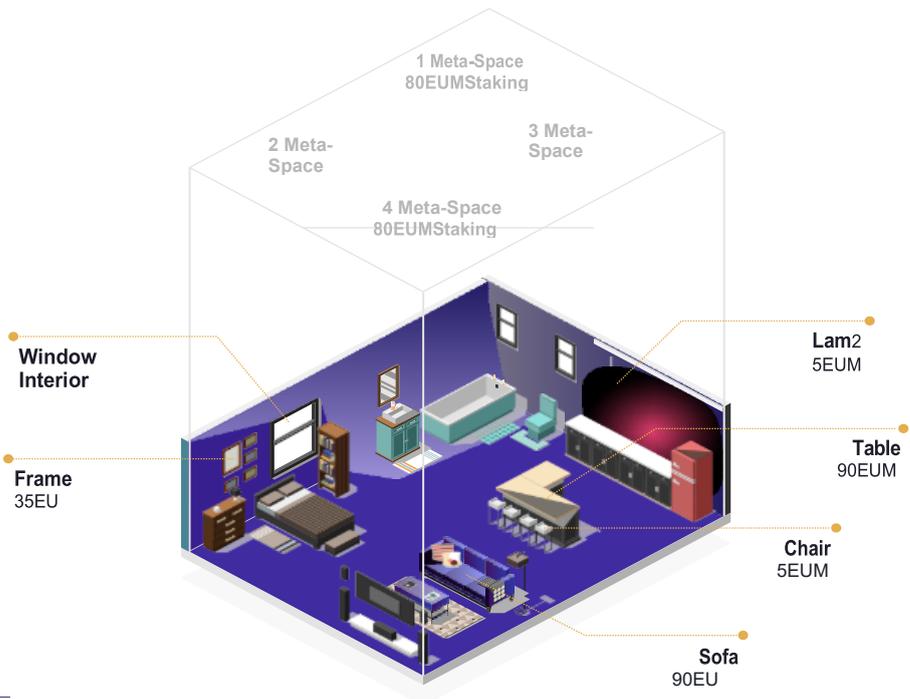


Figure 9.
Meta-Space Usage illustration

3.2.3. Meta-City

Meta-City is a collection of numerous Meta-Spaces. It is an open VR world where members of the ecosystem of EU Metaverse VR Network can freely participate. Various VR content providers will participate in Meta-City to provide content for the users. Many existing offline operators, including education, games, entertainment, F&B, medical care and cultural life, will become VR content providers to Meta-City. Initially, the EU Metaverse VR Network team will take the initiative in attracting and developing various pieces of content, and in the future, it will add several development tools and create an environment where developers can participate by creating various contents and services to be registered, thus contributing to the expansion of the entire ecosystem.

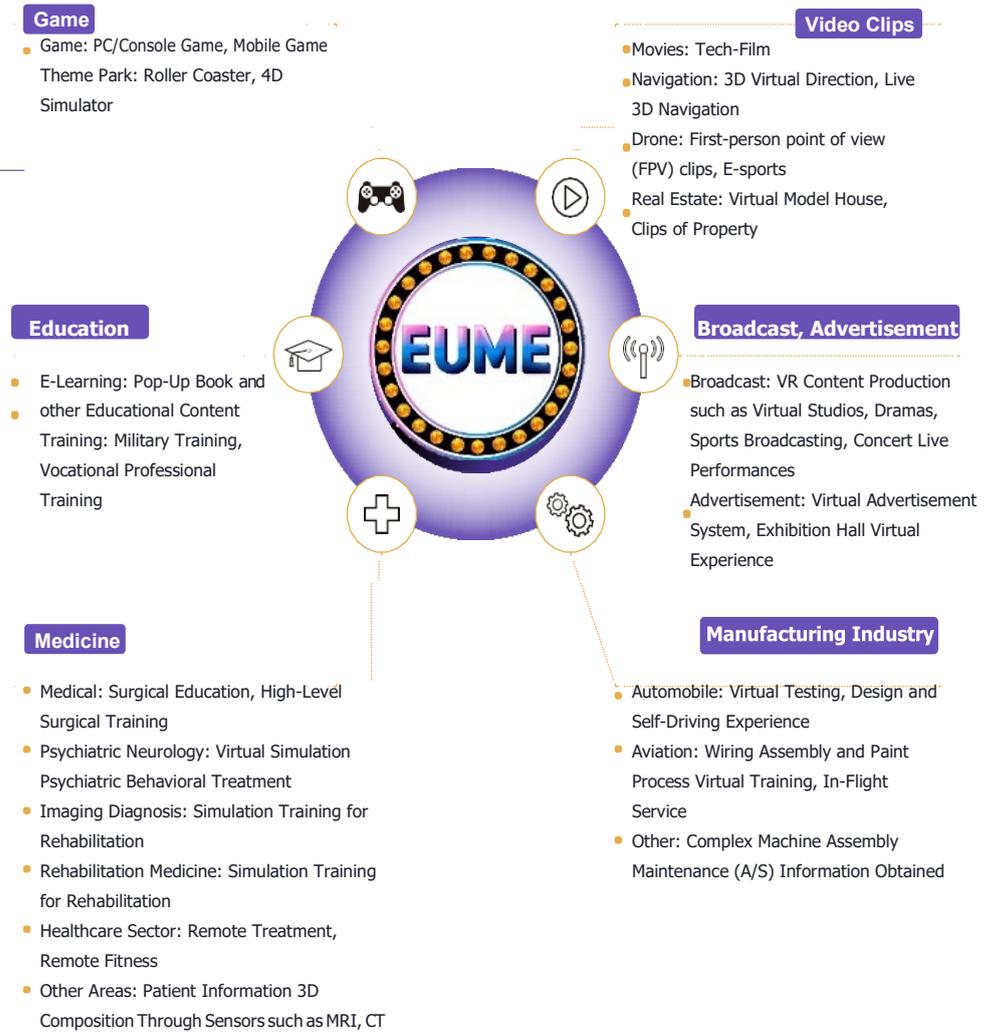


Figure 10.
Meta-City Use Cases

(a) Content Provision

VR technology can be applied to any field that can increase immersion; thus various operators can provide content in Meta-City. Meta-City allows participants to shift to content in any area of their choice. You can get various game education and create wealth in line with reality. Meta-City can be largely applied to content in gaming, education, medical care, video, broadcasting, advertisement and manufacturing/industry sectors with details in the following way:

Figure 11.
Meta-City Fields of Application



Furthermore, various fields such as exhibitions, museums, and shopping can be applied at Meta-City. In fact, it will actually be implemented in the early stage of Meta-City of the EU Metaverse platform. Details will be provided later.

(b) Virtual Space Advertisements

In the EU Metaverse Network VR world, advertisers can directly advertise through their Meta-Space. Anyone who owns his or her own Meta-Space in the Meta-City can generate revenue by receiving advertisement requests from the interested parties. Thus, the advertiser must obtain approval from the owner before it publishes its advertising. The advertisement on EU Metaverse VR Network is priced based on consumer behavior, that advertisers are looking for and when the consumer performs it, and the payment is incurred according to CPA principle (Cost-Per-Acquisition). The pricing criteria could include factors like views, clicks, visits and purchases. Advertising fees are paid to Meta-Space owners and to the participants of the ecosystem who have watched the ads, whereas some of the revenue portion is charged in the form of commission fees. Participants of the EU Metaverse VR Network can earn advertising rewards simply by working in the VR world. The advertising structure in the Meta-City is shown below.

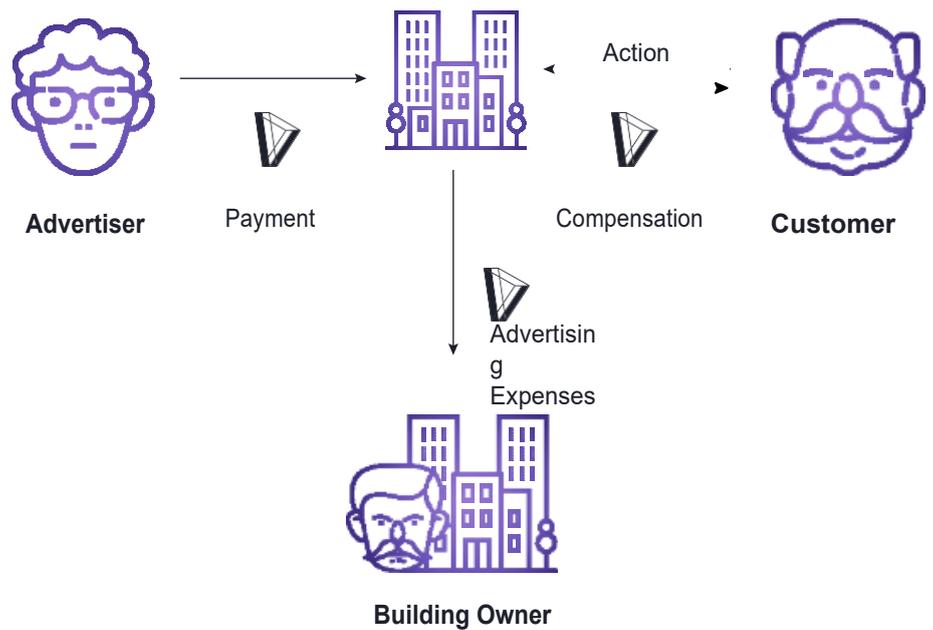
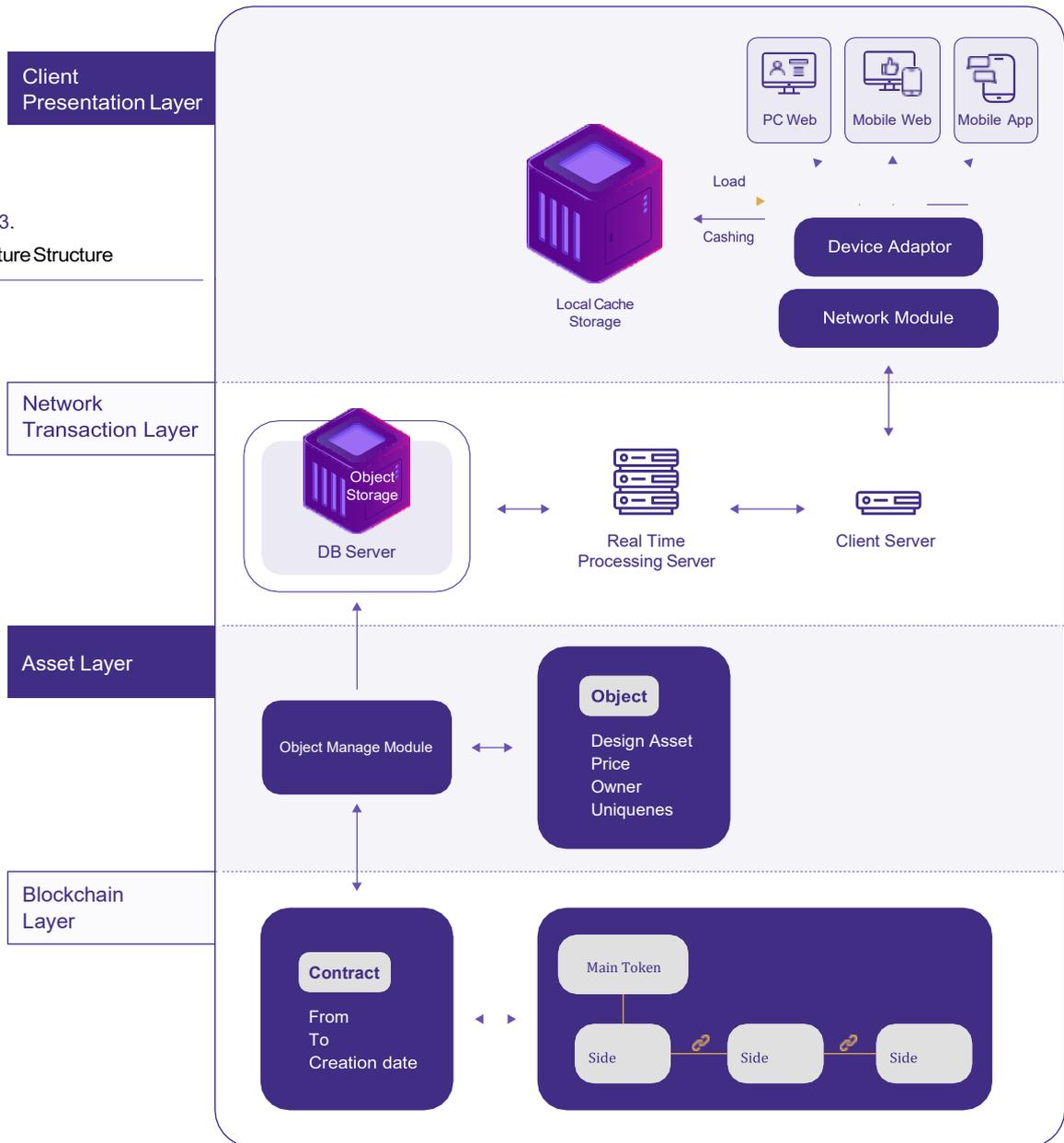


Figure 12.
Meta-City Advertising Structure

3.2.4. Architecture

Figure 13.
Architecture Structure



(a) Client Presentation Layer

Client Presentation Layer is the module, which is responsible for the actual visual functions illustrated to the users. It obtains the Object List & Object Data within the EU Metaverse VR Network directly from the server on the time of initial access. The objects collected for the purpose of smooth EU Metaverse exploration are then stored in the Local Cache repository. Here, the Device Adapter module performs Display Quality Control (3D/2D, VR Supply/Unsupported, Video Resolution) depending on the user's device to provide a favorable user experience, where users can explore the Division Network without any limitations and high performing device requirements.

(b) Network Transaction Layer

The servers inside of the EU Metaverse VR Network can be classified into three main categories. The Client Server is a server that processes requests to acquire objects from the Client and collects actions, occurring when users perform certain actions in the Client. And there is also a Real Time Processing Server, which is a server dedicated per handling the interaction of users connected within the EU Metaverse platform, consisting of a group of servers with the highest Processing Power, and there is finally a DB Server that manages CRUDs of all Object Data within the EU Metaverse platform and delivers this Object Data to the Real Time Processing Server consistently.

The communication between the Servers was constructed using the technologies mentioned below.

- REST API: To reduce the Communication Cost
- SHA256 Hashing algorithm
- Data Encryption https protocol
- Secure Communication Protocol OAuth 2.0:
- Bi-directional Authentication Key

(c) Asset Layer

The objects within the EU Metaverse platform are all managed and treated as independent assets. Each object has a Design Asset, represented within the platform, and a Price Value used for trading within the platform, and all of the objects are marked with its owners, including NPC and Base Object. NPC, Base Objects are marked by its primary owner, which is the EU Metaverse, which in theory can also be negotiable and the switch of ownership is possible. Finally, the NFT concept is applicable in the EU Metaverse platform, and Uniqueness for this is described within the Object.

(d) Blockchain Layer

In fact, all objects within the Division platform are eligible for trading. All transactions are managed inside of the Smart Contract, thus in the blockchain, in order to ensure reliability of owner transfers and transactions. Due to the nature of Smart Contract, all transactions incur gas fees, and all transactions within the platform are created using Private Blockchain Side Token to avoid incurring high fees for frequent transactions. Main Token for reliability of Side Token is linked to the Public Blockchain and provides solutions that secure both reliability and transaction fee savings to help users perform safe and affordable transactions within the platform.

3.3. EUME (EU Metaverse Token)

3.3.1. Token Model

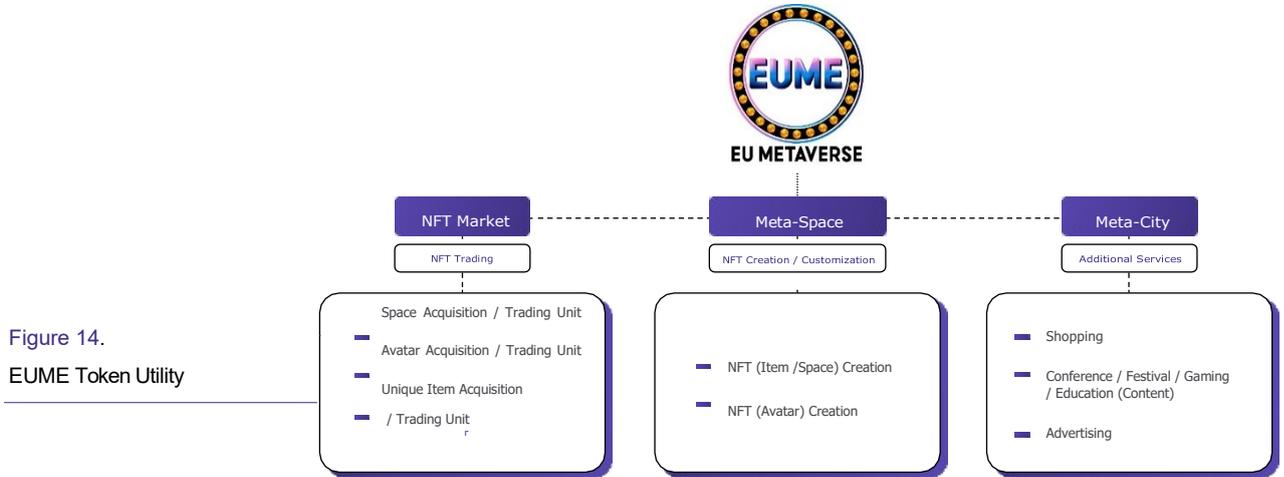


Figure 14.
EUME Token Utility

EUME is an Ethereum-based utility token and a crypto asset that can be utilized within EU Metaverse Network’s new VR content ecosystem. EUME tokens can be purchased on the cryptocurrency exchange and can also be obtained in a form of compensation within the EU Metaverse VR Network.

Participants of EU Metaverse VR Network ecosystem must purchase and utilize their EUME tokens in order to secure a personal Meta-Space in the VR world. The EUME tokens are used in order to incur payments for purchasing new pieces of content or per purchasing NFT Items, that are exchanged between participants. Besides, participants can be rewarded with EUME tokens for their advertisement contributions. In addition, EUME tokens can be sent and received by P2P transfers between participants.

Participants of EU Metaverse VR Network ecosystem can receive various benefits by holding EUME tokens. Content providers, consumers, advertisers and developers will contribute to the rise and maintenance of the value of EUME tokens and form a virtuous cycle structure through economic activities, such as content production, provision, advertisement and participation in advertising affairs within EU Metaverse Network’s VR ecosystem.

Figure 15.

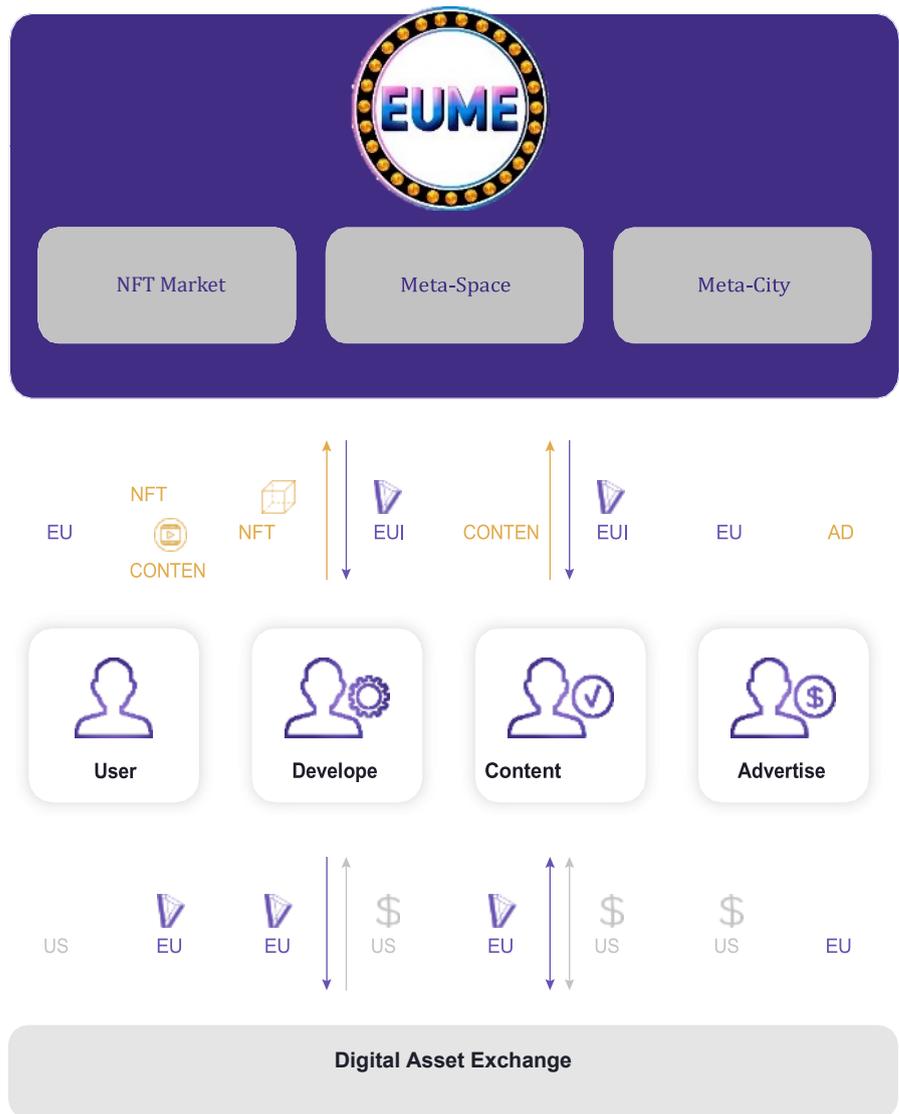
EUME Main Tokens

EUME	Space	Avatar	Item
ERC-20	ERC-721	ERC-1155	ERC-1155
			
EUME is the primary utility token in EUMEsion Metaverse.	Space is the virtual real estate obtainable and EUME EUMEsion Metaverse.	Avatars are the user-owned representative personal avatars, that help them to excel from the crowd inside of the EUMEsion Metaverse.	Items are the non-fungible -tokens created by the users themselves, that are purported to be deployed inside of the Meta-Space.

3.3.2. Token Economy

EUME is a utility token that is distributed and used for NFT Item purchases, Avatar creation, Virtual Space acquisition and Content payments within the EU Metaverse platform. Participants in the EU Metaverse VR Network ecosystem must purchase EUME from the cryptocurrency exchange in order to make use of it. It can also be acquired in the form of compensation or revenue generation through ecosystem contributions and activities within the EU Metaverse VR Network. In order to participate in the EU Metaverse VR Network, the participant must hold a certain number of EUMEs, and holders are given the opportunity to participate in various events. As ecosystems and platforms are expanded and various contents are consumed, a virtuous cycle of EUME will be formed.

Figure 16.
Token Economy



3.3.3. Business Model

(a) Space Acquisition Fee

In order to be allocated with a virtual space in the Meta-Space and Meta-City, you must sink a certain amount of EUME tokens to acquire it. Once you spend a certain amount of EUME tokens and officially acquire the space, you will be able to use the virtual space, and you can further resell the space for EUME tokens and a certain percentile will be charged as a commission fee.

(b) NFT Item Fee

The basic items offered by the EU Metaverse team will be sold at NFT Market. This package of items consists of essential items that early users will need to use. The 80% of the NFT Items' sales revenue will be paid as commission to EU Metaverse VR Network, with the remaining 20% to be used for the maintenance of the ecosystem.

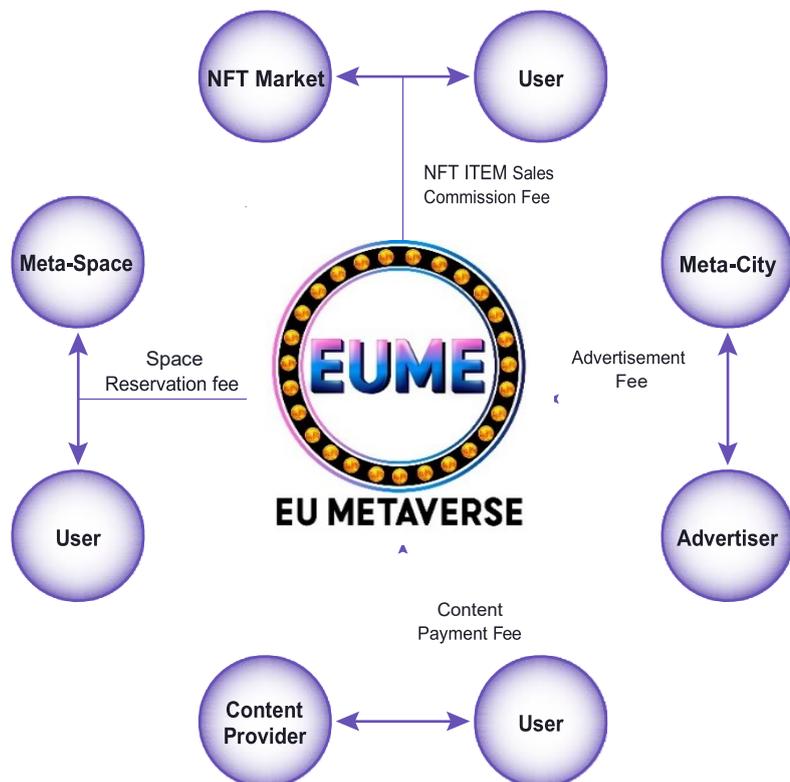
(c) Content Payment Fee

Content providers will provide a variety of pieces of content on Meta-City. In return, users will have to pay EUME tokens to gain access to the content, whereas a certain portion of the payment will be used as payment fee receivable by the EU Metaverse VR Network.

(d) Advertisement Fee

In order to conduct marketing campaigns in Meta-City, advertisers must pay advertising fees in the form of EUME Tokens. Advertising fees vary depending on the number of advertising exposures, location of exposure, and number of views. Advertisers will pay advertising fees to Meta-City's space owners, where advertising fees are paid to the consumers and Meta-Space owners, excluding the EU Metaverse VR Network fees.

Figure 17.
Business Model



4

Product

EU Metaverse VR Network presents the following use cases where VR can be applied with infinite virtual possibilities in the Metaverse Industry. These pieces of content are actually being utilized and will play an important role in the initial stage of the VR Metaverse content ecosystem of EU Metaverse VR Network.

4.1. VR Game

Among VR games, BAD TOWN is a first-person shooter (FPS) game that allows up to eight players to play together simultaneously both in PVE (Story Mode) or PVP (Battle Mode). In fact, we can provide diverse game contents inside of the EU Metaverse VR Network ecosystem through direct game development, and that will allow anyone to enjoy it easily and interestingly in a very familiar space. Furthermore, leveraging the experience in hosting national competitions, using game contents, will hugely contribute to the growth of the VR contents market.

Figure 18.
VR Game



4.2. VR Theme Park

VR theme park is a virtual space where you can enjoy VR-based contents such as adventure shooting games, aquariums, space or even Jurassic World themes, which are on VR technology called Blockbuster VR. In addition, families can also enjoy informative and educational content such as Attraction or Kids Content.

Figure 19.
VR Theme Park



4.2.1. VR Shooting Adventure

The use of wireless vibration PP GUN allows users to enjoy realistic FPS, with 0 limitations and restrictions, since it is easy to move through the lines. It consists of three episodes that allows you to experience various stories.

Figure 20.
VR Shooting Adventure



4.2.2. *VR Jurassic World*

It is a content that allows visitors to enter the virtual space that dispatch the visitors to the times when dinosaurs lived. It allows them to walk around the theme park and feel like they are communicating with the artificial dinosaurs. It features a variety of thrilling contents that allow visitors to touch, feed, and pet dinosaurs, express affection, and even cross the single-wood bridge over lava cliffs. It is absolutely safe for users in the game to see and recognize each other. It is also equipped with educational programs that allow people of different demographics to enjoy games and learn the names and characteristics of dinosaurs.

Figure 21.
VR JurassicWorld



4.2.3. *VR Aquarium*

VR Aquarium is a VR experience content that allows visitors to feel as if they are experiencing the aquarium from the inner side, rather than just observing it from outside.

4.2.4. *VR Space*

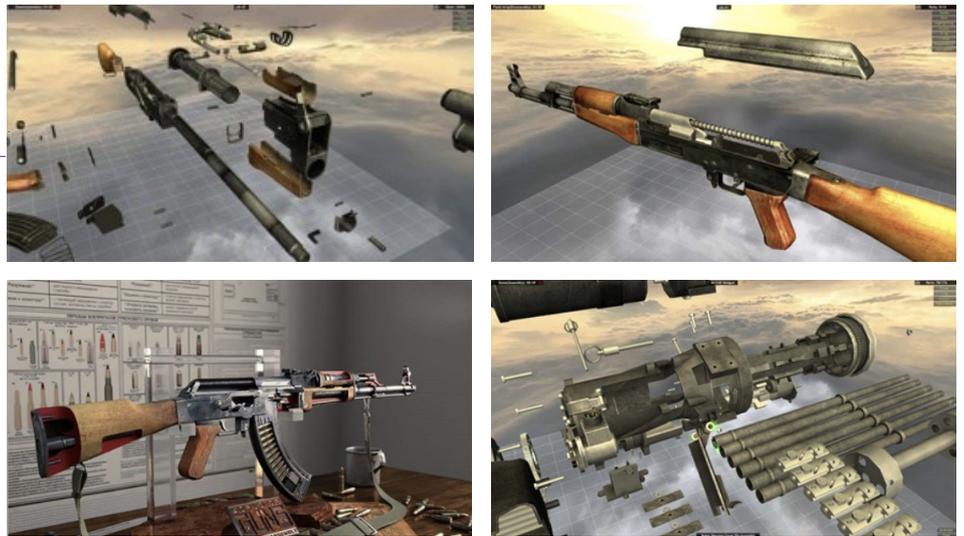
VR Space is a VR content that allows people to jump right into the space and feel the whole mysteriousness of our universe.

4.3. Military Education

4.3.1. Weapon Assembly/Disassembly

Wireless VR drilling system contents can increase overall competitiveness of the military system and contribute to a better understanding according to troop specialty. This will further bestow an access to efficient education by reduction of drill preparation time.

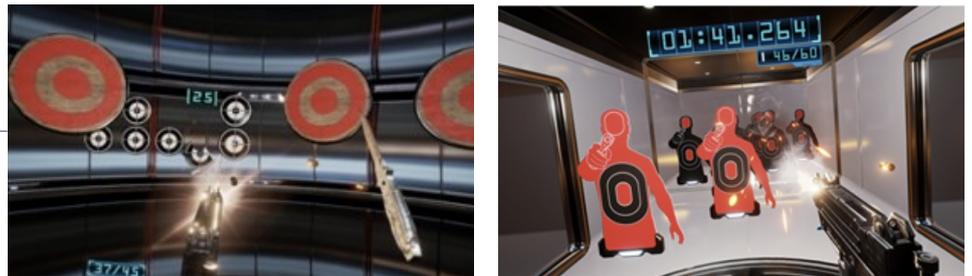
Figure 22.
VR Military Education:
Weapon Assembly/
Disassembly



4.3.2. Shooting Drill

Through various shooting drills, the users can improve their concentration skills and maximize training effect in preparation for actual combat.

Figure 23.
VR Military Training Education
- Shooting Drill



4.3.3. Simulated Battle Drill (Virtual Field Training)

It is a virtual training that can maximize the military troop's adaptability to the actual battlefield, through pre-training drills such as weapon assembly/disassembly, shooting drills, and individual combat drills. Although there is a high monetary and timely expenditure associated with the space creation process, facility investments and military movement issues, the existing simulated combat drills and street battles are considered to be quite expensive practices. On the opposite, VR technology that enables various tactical and spatial training with relatively lower CAPEX, will contribute to the establishment of a unique system.

Figure 24.
VR Military Training Education
- Simulated Battle Drill



4.3.4. Military Fire-Fighting & Rescue Simulation Drill

With VR technology, it will be possible to simulate situations that are limited to implementation (fire accidents, etc.) and fire-fighting equipment related to firefighting can be trained in close proximity to real situations without any direct experience, time, or space restrictions

Figure 25.
VR Military Training Education
- Military Fire-Fighting &
Rescue Simulation Drill



4.3.5. Military Medical Treatment Simulation Drill

In fact, VR can produce a virtual scenario of the emergency cases, where the utilization of the medical treatment will be required. The medical institution develops expertise by applying it to the medical disease education system, such as developing the ability to deal with trauma given the anatomical data.

4.4. Metaverse-based MICE Industry

4.4.1. Post COVID-19 Era, MICE Industry

The impact of the COVID-19 on the MICE industry has been greatly acknowledged after the World Health Organization (WHO) made the COVID-19 pandemic declaration. Recently, global IT companies such as IBM and Oracle have reduced large scale corporate meetings to non-face-to-face video conferences. Both Facebook and Google have cancelled online developer meetings that used to take place between January and March annually. In fact, South Korea is going through the same situation. Not only public convention centers across the country such as COEX and KINTX, but also professional exhibition organizers and convention planners like PEOs are cancelling events on a constant basis due to the ongoing pandemic. Except for some exhibitions and conventions run by private organizers, there are barely any exhibitions taking place. In addition, the entire industry is on the verge of collapsing as the "cancellation" situation continues with indefinite extension. Thus, EU Metaverse strongly believe, that It is time for the MICE industry to overcome the crisis and secure a sustainable growth with legitimate solutions in the current post COVID-19 era.

In order to revolutionize the offline MICE Industry, the EU Metaverse VR Network team proposes an online version, to be precise a Metaverse-based MICE industry that combines the VR and Metaverse technologies with the offline MICE industry, in order to provide the best experience for the end users, at a time experiencing a vicious cycle not only in South Korea, but also globally in the aftermath of the COVID-19. EU Metaverse VR Network provides the construction and content of VR fair for the world's first virtual 3D modeling base in a new VR world built on EU Metaverse VR Network. 360° due diligence scanning 3D modeling, advanced art and character implementation methods will show high quality in implementing corporate information and products. EU Metaverse VR Network's MICE online exhibition, which minimizes time and space constraints, will be implemented in the Meta-City of the initial EU Metaverse platform.

Figure 26.
Online Metaverse-based
(MICE) Conference





Figure 27.
Due Diligence
Scanning 3D Modeling



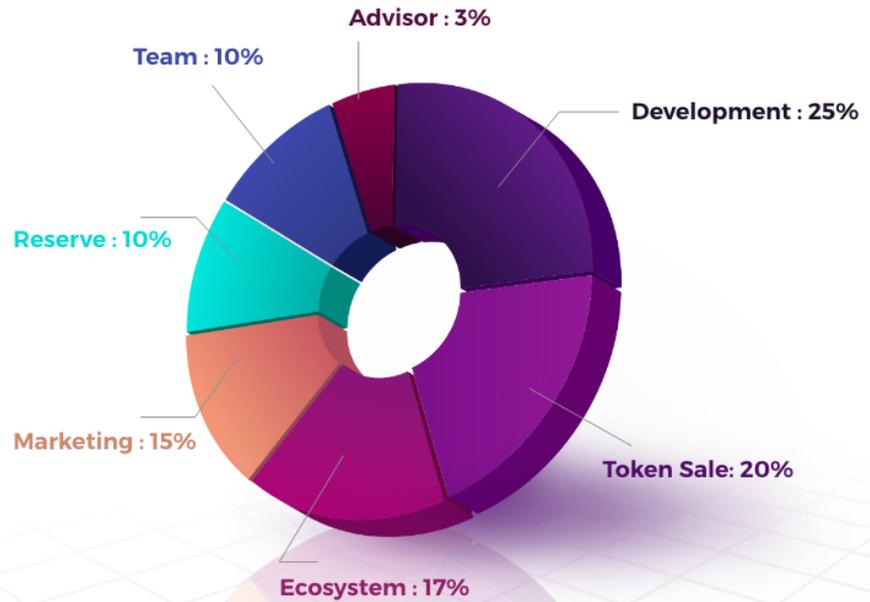
5

Token Distribution

5.1. EUME Token Issuance Plan

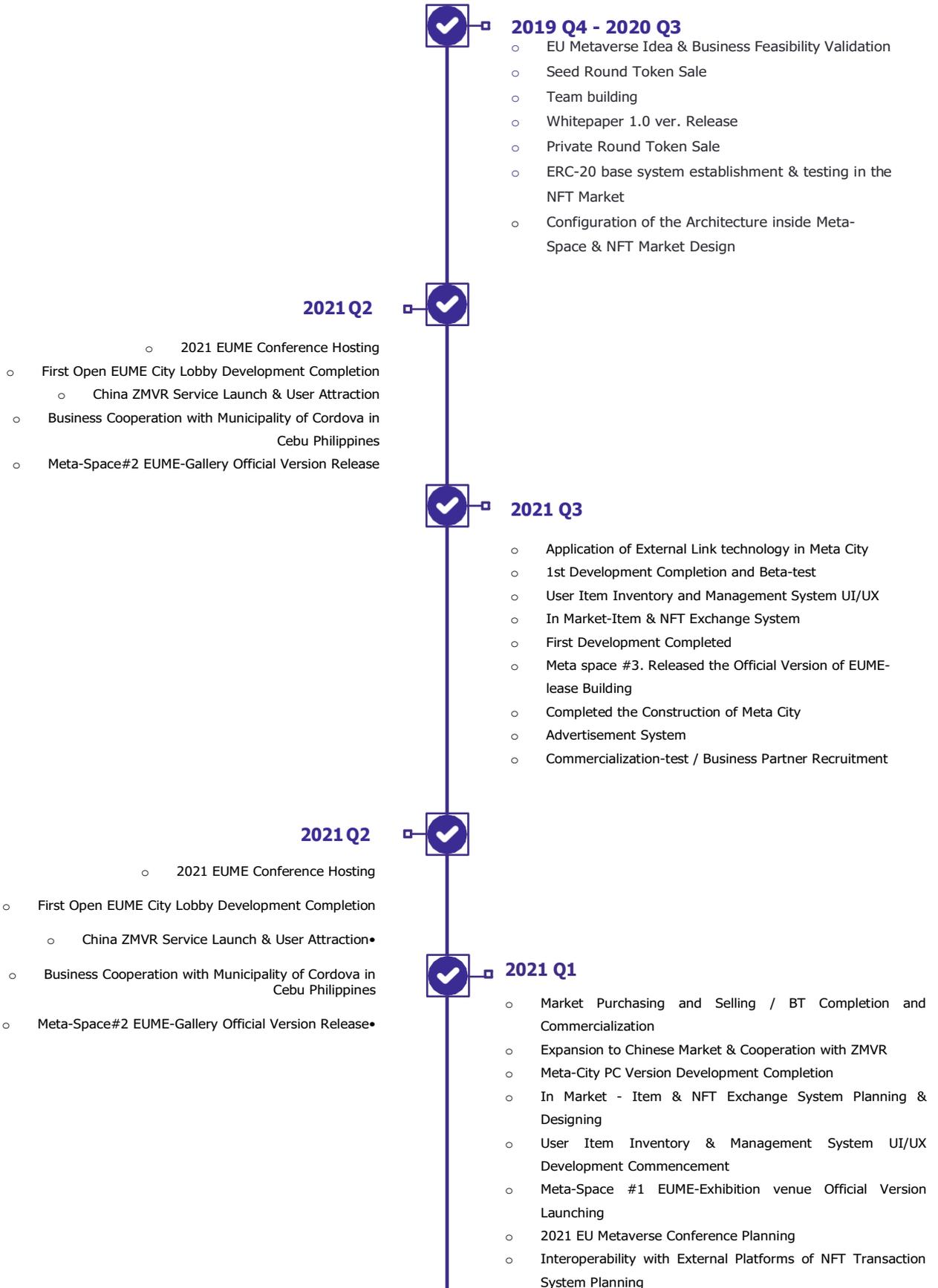
A total amount of 1 billion of EUME tokens is planned to be issued. The issued EUME tokens will be allocated in the following way:

Figure 28. EUME Token Metrics



6

Roadmap



2021 Q4

- Meta space #4. EUME-Book Cafe Construction
- E-Book System development User Item Inventory & Management System Official Release
- In Market - Item & NFT Exchange System Official Release
- Character Customizing ITEM Installation Function System Planning & Development
 - Commencement Meta space #4.
 - EUME-Book Cafe Official Version Release
- Interoperability with External Platforms of NFT Transaction System Development Completion
 - Meta space #5. EUME-pet System Development Commencement
 - Meta space #5. EUME-pet System Beta Testing Phase
 - Attraction of app. 10 million users from Chinese Service Industry



2022 Q1

- Meta Space #5. EUME-pet System 1-Round Market Application
- EUME-pet type & Evolution Function Development Completion
- Meta Space #5. EUME-pet System 2-Round Market Application
- EUME-pet type & Compose Function Development Completion
- Meta space #6. EUME-flea market Development (P2P-trading Application)
- Meta space #6. EUME-flea market 1-Round Open



2022 Q2

- Meta Space #7. EUME Department Store Development
- Meta Space #7. EUME -Department Store 1-Round Open
- Meta Space #6. EUME-Flea Market Official Version Release
 - Meta Space #8. EUME Landmark-EUME Park Planning & Development Commencement
 - EUME -Department Store Official Version Open



2022 Q3

- Meta Space #8. EUME Landmark -EUME Park Beta Service Release
- Meta Space #9. EUME-Academy Development / Sales System Construction
- Meta Space #8. EUME Landmark pen



2022 Q4

- Meta Space #9. EUME-Academy Official Version Open
- Character customizing ITEM Installation Function Release
 - Meta City Mobile Version Development Completion
 - Meta City VR Version Development Completion
- Attraction of app. 30 million users from Chinese Service Industry



7

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Purchasers are deemed to have consented to the purchase and sale of a EUME token to be aware of and purchasing a EUME token as is, without any warranties of any kind whatsoever.

- 1) **Blockchain Risk:** Blockchain system congestion may cause transactions to be processed late or invalidate. In particular, smart contracts responsible for issuing and distributing EUME tokens are based on the technology known as Ethereum Blockchain. The Ethereum protocol may have weaknesses and vulnerabilities, and also may cause various bugs, including bugs where EUME tokens are lost. Also, monetary damage may occur to EUME team and EUME ICO participants due to those problems of the Ethereum Blockchain.
- 2) **Transaction privacy leakage:** Your personal information is required to distribute and control EUME tokens in the purchasers' electronic wallet. EUME token stored in the wallet may be changed or lost due to an internal or external factor such as attack from malicious code, software bugs, blockchain networks error, and more. Transaction privacy leakage can facilitate the leakage of confidential information, theft of cryptographic keys and therefore cause EUME token leakage from the purchasers' e-wallet.
- 3) **Security vulnerabilities:** Like all other cryptocurrencies, Ethereum blockchain faces its security flaws as hackers can exploit these systems by 'Double-spending' or '51% attack'. These vulnerabilities in Ethereum blockchain thus may lead hackers to attack EUME team or EUME and steal millions and billions of EUME tokens in one go.
- 4) **E-Wallet compatibility risk:** Participants must use an electronic wallet that is technically compatible with the EUME token to purchase or store a EUME token. If a participant is using a different wallet, the participant may not be able to access the purchased EUME token.
- 5) **Force majeure:** EUME is now under development process, and EUME team makes every attempt to ensure to develop and maintain the EUME as it is described on this Whitepaper. However, the policy and regulatory framework around blockchain is in its infancy and therefore there is a risk that EUME team either failed to adhere to regulatory requirements for the specific use case and technology, or new laws or regulation may conflict with current EUME project functioning. EUME team will be exempted from any liability for damages and losses of value and/or liquidity of EUME token subject to force majeure factors such as changes in regulatory frames required licenses and taxation policies, the emergence of platforms or open source that adversely affect the EUME team or EUME, the lack of market interest, or others.

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2022 Initial EUME Token Price: \$1.15 USD

Expected Price in 2023: over \$150 USD

Comparison with Metis-DAO currency, which has a similar blockchain, the same campaign, which had the same financial start and which does not have application and vision as our currency. The chart says more of a thousand words. Start: \$1 USD, now: \$ 132 USD. Time period 2021-2022.

