# MetaEngineers Hub Inc.

# Decentralized Research and Development hub

#### Abstract

The tech-virtual world that is exponentially developing by the day provides no ready access to eager individuals. It requires membership fees and the purchase of programs and products that can be costly to an entrepreneur or freelancer. Yet this tech-virtual world in the metaverse holds ample opportunities for professionals from any given field. MetaEngineers Hub Inc. aims to provide access to these individuals by creating a decentralized hub for engineers, inventors, and entrepreneurs. Offering engineering consulting services to other start-ups and companies, MetaEngineers Hub Inc., a virtual hub for development and collaboration between multiple engineering sectors, is based on the concept of the DAO (decentralized autonomous organization), which allows for complete transparency, unanimous decision making, and peer-to-peer communication by being community-centric.

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# 1 Team

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#### Advisors:

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BlockChain Developer: Jad Adnan, Lebanon

Web Developer: Nourhan Abdi, Canada

# 2 Origin

From a very young age, the founder of MetaEngineers Hub Inc. was interested in pulling apart and reassembling toys his parents bought him. He took advantage of his father's tools-filled-garage to work on any machine he could lay his hands on, which helped him sharpen his solid technical and hands-on skills. As he moved from high-school to higher education, he furthered his knowledge and experience by studying mechanical engineering. But something remained amiss for him. He knew that building bridges between theoretical concepts and applications might be what the abstract tech-virtual world needed.

# 3 Introduction

Developed in 1957 by Morton Heilig, virtual reality was the stepping stone towards the metaverse. Then came the other vertical leap in 2009, the blockchain, which was brought forth by Satoshi Nakamoto, the blockchain patron. But what is "blockchain"?

Blockchain is an immutable and transparent ledger that encourages decentralization in various sectors. The importance of decentralization lies in its ability to diminish the need for single authority. Instead, organizations are run by a holistic ecosystem. This led to the concept of the DAO (decentralized autonomous organization)—a system that is run by a group of people where decisions are made from the bottom up through an immutable binding contract.

The blockchain, Metaverse, and NFT space are rapidly growing to become the most dominant working environments. Being Metaverse's first decentralized engineering company that is fully transparent to the world, MetaEngineers Hub Inc. will be a stepping stone to change how engineering services are currently offered.

# 4 MetaEngineers Hub Inc.

In January 2022, MetaEngineers Hub Inc. came to existence with the goal of creating a decentralized workspace for engineers, inventors, and entrepreneurs. Offering engineering consulting services to other start-ups and companies, MetaEngineers Hub Inc. works on becoming a hub for development and collaboration between multiple engineering sectors. To execute its vision, MetaEngineers Hub Inc. utilizes blockchain security, decentralization efficiency, and the technology behind non-fungible tokens.

Engineers are always searching for a way to improve their technical knowledge. The main question becomes, how can engineers and tech enthusiasts with limited resources, who share a similar vision, work together? The goal of MetaEngineers Hub Inc. is to build a virtual engineering hub/workspace where its adopters can experiment and engage in an immersive artificial environment that facilitates the following:

- 1. Tech-virtual space for research and development
- 2. Technological showcases and collaboration with other tech companies
- 3. DAO

With the metaverse's qualities that include accessibility, transparency and efficiency, MetaEngineers Hub Inc. works in two ways: finding the right channels and resources for engineers (software, tools, licensing, funding, technical knowledge, etc.) and creating a virtual space for these professionals to work with other experts and obtain access to these resources.

# 5 Structuring

MetaEngineers Hub Inc. has two divisions: Engineering hub and DAO (community).

#### 5.1 Engineering Hub

The Engineering sector is a hub for innovation, design, and engineering services. Innovations and services are done by the founders, professionals, and collaborators.

- 1. MetaEngineers Hub Inc. Services
  - (a) R&D hub for product development and virtual prototyping
  - (b) AR/VR environment creation
  - (c) Technological showcases
- 2. Founding team experience
  - (a) AI: Big data and machine learning
  - (b) Industrial maintenance: Vibration analysis, Signal processing and predictive monitoring
  - (c) Automation: Robotics, mechatronics, cognition and control
  - (d) Mechanical: Thermodynamics, fluids and dynamic modeling
- 3. Tech team (future)
  - (a) Web, Game and software developers
  - (b) AR/VR/vfx team
  - (c) Engineers, architects and designers

## 5.2 DAO/NFT

NFTs are non-fungible tokens linked to an immutable smart contract deployed on the blockchain. NFTs can be access keys, either in the physical or virtual worlds. MetaEngineers Hub Inc. is here to merge real-world technology with the freedom provided by the virtual world, and this is what sets this entity apart from other NFT projects. MetaEngineers Hub Inc. holds the DAO/Community as a core value and its NFT is embedded with utilities, and governance.

### 6 The NFT

3333 NFTs-ethereum based tokens will be released as access tokens to the decentralized community. These NFTs are both genderless and raceless, providing equal opportunities for all as a crucial marker of the inclusivity of this startup.

These NFTs are digitally hand-drawn and timestamped: None of the art is computer-generated, and each NFT's timestamp represents the exact moment the NFT was finalized (Triplet number, version, year, month, day, hour, minute, and second). Timestamps are ordered as follows:

#### XXXX\_V\_YYYYMMDD\_HHMMSS

Since each NFT is digitally hand-drawn and timestamped, it follows a MetaEngineers Hub Inc. novel rarity system that deviates from the standard rarity procedure.

The NFTs are divided into 1111 Triplets: Three NFTs that share common features and patterns.

The 1111 Triplets will be divided into categories:

- 1. The first 33 NFT Triplets are labeled as The Genesis Category.
- 2. Further information will be released regarding the other categories.

### 7 Governance

Minimum requirement to access the DAO is to be a holder of 1 NFT

### 7.1 Virtual Space

- 1. MetaEngineers Hub Inc.' Virtual Hub (Accessible by Holders)
  - (a) MetaEngineers Hub Inc.' private R&D hub
  - (b) Exclusive gatherings/events and DAO meetings
  - (c) Private space for holders to utilize
- 2. Public HQ (situated in a public verse): Gallery and access point to the MetaEngineers Hub Inc. decentralized environment
  - (a) Spaces are offered for collaborations
  - (b) Public gatherings, showcases, and events

#### 7.2 Mint distribution

- 1. 70%: Startup Investment Public wallet
  - (a) 65% Startup development
  - (b) 5% DAO activation
- 2. 30%: MetaEngineers Hub Inc. Team

#### 7.3 DAO

- Community unanimous decision making and voting. Procedure is governed by the following rules:
  - (a) Each member can submit his/her vote or proposal
  - (b) A standard format will be set as a guideline
- 2. DAO Dashboard (web 3.0) developed after full mint
  - (a) Access point to the virtual worlds and DAO
  - (b) Governance and voting
  - (c) DAO private transaction ledger (MetaEngineers Hub Inc. own blockchain)
- 3. Collaboration and partnership: MetaEngineers Hub Inc. are here to encourage a collaborative ecosystem. The following are options that MetaEngineers Hub Inc. provide:
  - (a) Collaborating with other web 3.0 projects that are related to our vision and expertise
  - (b) Launchpad: tech related start-ups

# 8 RoadMap

#### 8.1 Phase 1: launch to mint day

- 1. Organic marketing
- 2. Community building
  - (a) Discord
  - (b) AMA sessions with the team
  - (c) 333 out of the 3333 NFTs will be left for giveaways, competitions and collaborations

#### 3. NFT

- (a) Mint date and price to be set later
  - i. Expected mint date: 6 9 months post whitepaper reveal
  - ii. Expected min price: 0.2 0.4 ETH
- 4. Exclusive virtual space (proof of concept POC). The POC will be operating within 10% capacity; it will be released in stages and will remain public until the mint date.
  - (a) Space details
    - i. Lobby
    - ii. NFT Gallery
    - iii. Community space: Movies, events, and exhibitions
    - iv. Engineering Hub
    - v. Augmented reality testing through mobile phones
  - (b) Phases
    - i. Web version
      - A. Phase 1.1: single player
      - B. Phase 1.2: multiplayer

### 8.2 Phase 2: start of mint to full mint

- 1. DAO and metaverse
  - (a) 75% of mint
    - i. Land is bought in a public verse to build the Public HQ
    - ii. Build the DAO dashboard
  - (b) 100% of mint: start building public HQ
  - (c) Remodeling of MetaEngineers Hub Inc.' private hub

### 8.3 Phase 3: post full mint

- 1. Public HQ is built
- 2. DAO dashboard and private hub
  - (a) Phase 3.1: upgraded beta testing
  - (b) Phase 3.2 and beyond
    - i. Virtual hub operating at full capacity
    - ii. Continuous upgrades & maintenance

### 9 Conclusion

MetaEngineers Hub Inc. offers opportunities to engage in the tech-virtual world with NFT access tokens. It provides engineers, inventors, and entrepreneurs with a virtual tech-workspace. Its approach is framed by its commitment to the decentralization of the space allowing for unanimous decision making and transparent communication. The objective is not to disrupt the status quo but endure the challenges/obstacles and to continue providing an accessible virtual working environment.

# 10 Appendix

#### 10.1 Documentation

This version of the white-paper was an introduction to MetaEngineers Hub Inc.' vision, two other versions will be released before mint date:

- 1. Version 2: Detailed review of MetaEngineers Hub Inc. startup
- 2. Version 3: Detailed review of NFT/DAO section

### 10.2 Hub development

The beta version of the virtual space is built using:

- 1. Unity: verse development
- 2. Playfab, AWS and github: dedicated servers and hosting
- 3. Educational AR experiences: zapper, sparkAR

## 10.3 Virtual hub challenges

- 1. Real time
  - (a) Server communication
  - (b) Peer-to-peer communication and visualization
  - (c) Latency
- 2. Coding and developing
  - (a) API configuration to facilitate a fluid experience between multiple software
  - (b) Security breaches

#### 10.4 Document Edits

Document last modified on March 26, 2023

- 1. Updated on 14/10/2022: team members, hub development software, DAO activation
- 2. Updated on 05/11/2022: team members
- 3. Updated on 26/03/2023: company name