Vault Hill

Enhancing Human Experiences

White Paper

An extended reality Blockchain-based metaverse,
designed to make you feel more human

"Creativity is intelligence having fun"

Albert Einstein

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1 A word from our Founder

The famous words of Deb Schultz – "Technology changes, humans don't". In this world of accelerated technological innovations, the rise of electric vehicles, the advent of commercial trips to space and the massive fight on climate change, these are all indications that we are still humans and evolving our experiences and way of life.

The notion of the virtual worlds became evident to me back in 2017 when the second crypto craze came about; specifically, virtual land was most intriguing. A couple of years later, the inkling of conceptualising virtual land with extended reality technologies came about and birthed the idea of Vault Hill.

Leveraging extended reality, blockchain and artificial intelligence technologies, we aim to create a metaverse that focuses on the principles of create, experience and share which enhances the human experience.

The world is constantly evolving, and the market size for the internet, eXtended reality and metaverse users is growing exponentially. Our metaverse is very community-oriented; as such, we plan on raising funds through an initial decentralised exchange offering to ensure our community takes part at an early stage and benefits from sticking with us on this journey.

I am immensely grateful to lead a diverse and talented team to drive our growth trajectory and impact positive and constructive change globally.

Thank you for taking the time to read our White paper and join us on this journey to be the best human-centric metaverse created.

Jimi Daodu

Founder and CEO

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2 Executive Summary

Vault Hill aims to create a metaverse called Vault Hill City (VHC) – a collection of virtual shared space including the sum of all virtual worlds and the Internet. [1] In VHC, users can interact with computer-generated imagery (CGI) and other users. We believe eXtended reality (XR), a mix of virtual reality, augmented reality, and mixed reality is at the forefront of enhancing human experiences whilst leveraging the power of blockchain, artificial intelligence and cloud computing technologies. This supports the innovation of Web 3.0.

VHC proposes to build the first extended reality metaverse focusing on themes of the basic human instincts, such as curiosity, vision, community, idealism, vitality, romance, and imagination. In building this, we are starting with the infrastructure of the metaverse, which is virtual real estate and a product – Virtual land ($VLAND), a non-fungible token (NFT). The virtual real estate will be designed using urban planning to give developers and users a sustainable and dynamic experience.

Market Conditions:
As more decentralised metaverses are created, standardising the use throughout the Blockchain is imperative. In the current state of play, real estate prices fluctuate, land parcels frequently remain undeveloped, and v-commerce adoption is limited. Furthermore, the XR hardware is not cost-effective, adding to other market factors that challenge the virtual real estate space and widespread adoption.

Problem Assessment:
The key challenges are the lack of intuitive and rich user experience for users, substandard in-built metaverse developer applications for content developers. This is mainly due to poor development as most metaverses leverage open-source applications with poor CGIs and output; coupled with poor mesh optimisation.

Ramifications and Repercussions:
Poor CGIs negatively impact the fully immersed and interactive user experience coupled with several factors that have slowed VR/AR technology adoption rates. Notwithstanding, significant upsides remain for VR/AR technology and the industry as a whole. According to Goldman Sachs, the VR/AR industry had a value of $40.4 billion ($24.1 billion – software and $16.3 billion – hardware) as of 2020 with a predicted value of $80 billion ($35 billion – software and $45 billion – hardware) by 2025.

The promise of a Better Solution: [2]
Vault Hill aims to build an extended reality metaverse that makes us feel a bit more human every time we visit. A limitless world with a guiding principle – to **enhance the human experience.**

1. Cathy Hackl on Forbes
2. Goldman Sachs predicts $80 billion VR industry by 2025

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3 Introduction

3.1 Background

Over the last decade, Blockchain technology has emerged, disrupting the real estate, entertainment, education, and financial services industries. To grasp the potential of Blockchain, think about how foreign and overwhelming the Internet felt in when it first appeared a few decades ago. Now think about about where we are today.

Today, the XR world has begun embracing the possibilities offered by Blockchain technology as an emerging industry that deals with many challenges in the supply chain, payment systems, and transaction tracking. Thus, Blockchain technology is poised to revolutionise innovative start-ups in handling their operations and commercialising their products to consumers.

XR technologies are at the forefront of the high-tech revolution, reshaping how businesses position their offerings to improve their consumer experience. This technology decades ago was pure science fiction but is now made into reality. Virtual reality (VR) is widely used in all spheres of life, from entertainment and education to real estate and travel industries. This growth is reflected in the market value as well - in 2019, the global market value of VR was less than $15 billion. With Covid-19 accelerating innovative technology, by 2023, it is anticipated to surpass $70 billion.

With XR and Blockchain currently being among the most popular topics globally, it is proper to explore how these two forces work together. Furthermore, in examining the current state of the XR industry, it is clear that leveraging Blockchain and cloud computing technologies will resolve the imminent challenges of security and authenticity.

Our Vision
To revolutionise extended reality so that it enhances the human experience.

Our Mission
To create a constructive metaverse that focuses on the basic human instincts which allow for users, content creators, and developers to explore their unrestricted creative freedom whilst monetising their creation in a secure ecosystem.

3. IDC expects AR, VR spending to reach US$70.2 billion in 2023 (theborneopost.com)

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3.2 Problem

We want to transform how people engage with XR. Instead of making us feel less human and less connected, XR technology can be used to make us feel more human, more in tune with our emotions, and ultimately more alive.

To get there, we need to overcome a few functional problems first.

Users
- Lack of intuitive and rich user experience
- Barrier to participation due to access to XR hardware and high costs of acquisition
- Lack of choice - open/closed governance
- Data privacy and sovereignty

Content Creators
- Inability to maximise content creation reward
- Lack of content ownership and lifelong royalties
- Poor in-built software application in current metaverses
- Inadequate high-quality sustainable content

Investors
- Unsustainable economic returns
- Lack of value creation

3.3 Solution

A constructive metaverse that
- Simplifies creator tools with dynamic user interfaces, which increases adoption rates
- Revolutionises XR to enhance the human experience powered by Blockchain and artificial intelligence technology

A marketplace that
- Monetises content created by leveraging smart contracts
- Enables content ownership with appropriate compensation

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4 Market Opportunity

4.1 Market Size

With the fast pace of innovation in technology, extended reality technology is growing significantly. According to Statista, Finances Online, and CCS Insight, the target available market (TAM) for the metaverse and extended reality segment is forecasted to grow at pace over the next four years as depicted in Figure 1.
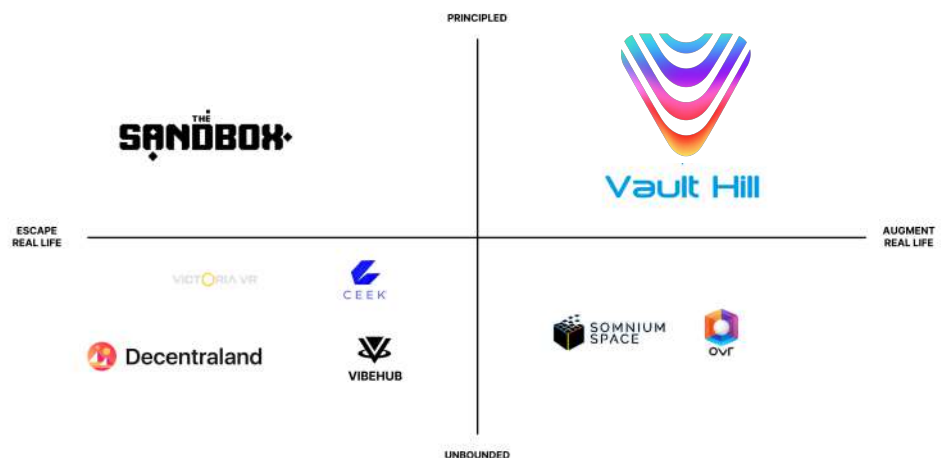
Figure 1
Market size comparison
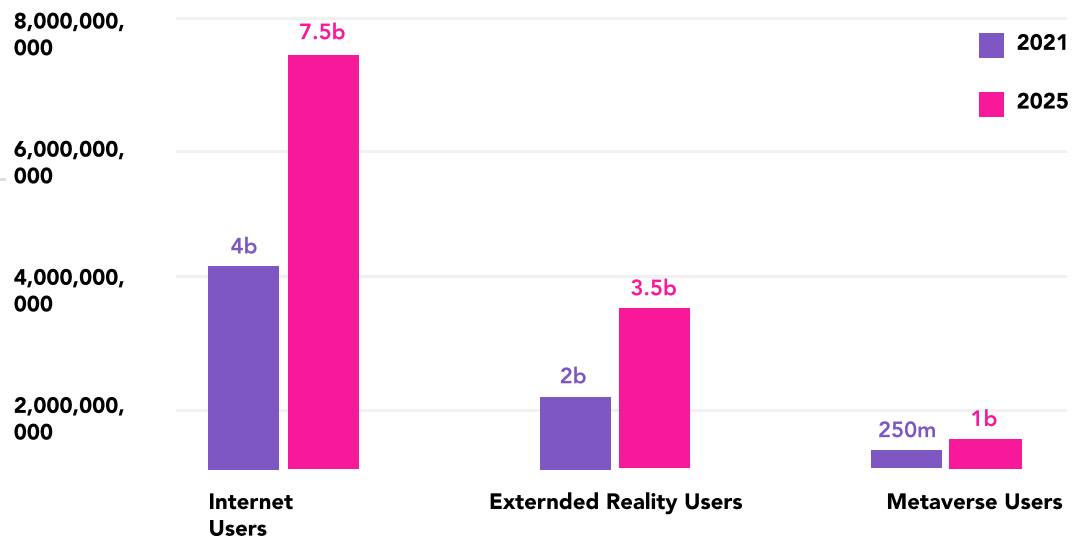
4.2 Competitive Matrix

Vault Hill aims to be positioned in the top right quadrant, meaning a principled metaverse that augments (not replaces) real-life, ensuring every visit to VHC makes users feel more human. Figure 2 depicts the competition and the assumed space they play in.

Figure 2
Competitive Matrix

4.4 Business Model

Vault Hill has a unique business model tailored to business-to-business (B2B) and business-to-consumer (B2C), offering a dynamic yet simplified user experience to access the metaverse and generate income.

Vault Hill City aims to generate revenue by the following:

Sales of VLAND

Developing simulations for users/businesses in VHC

Transaction Fees

Consulting services for users/businesses on various XR simulations tailored to their use case

Advertisement of products/services in VHC

Lifelong royalties from the sale of specific virtual assets built in VHC

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5 How Vault Hill City Works

At VHC, users can explore the virtual world, build edifices, play games, and interact with other users. VHC will have the first virtual world with urban planning and development benefits to ensure users build on their lands respectfully.

The Vault Hill City platform will consist of:
• Vault Hill CIty Ecosystem
• VLAND
• Vault Hill City Marketplace

5.1 Vault Hill City Ecosystem

Ecosystem

VLAND

Marketplace
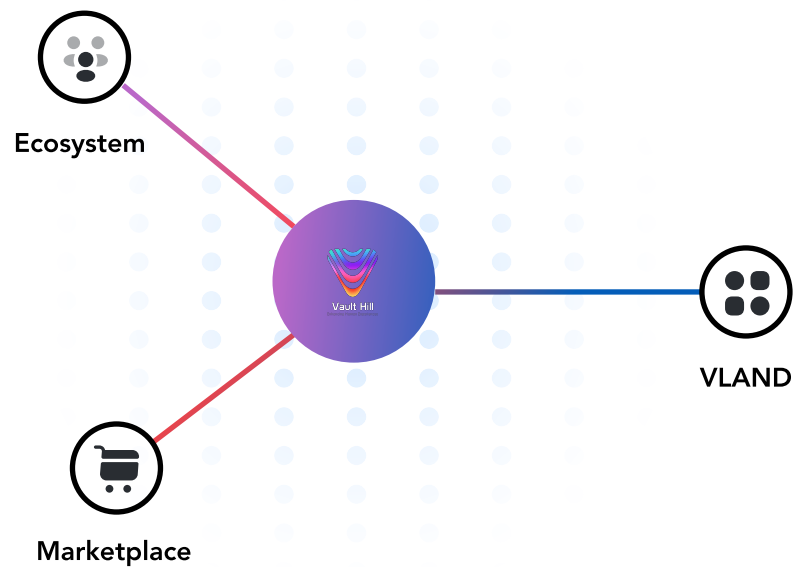
VHC Owner
Users who own virtual land in Vault Hill City. VHC owners have total creative freedom on their parcel to build fitness and wellbeing centres, museums, art galleries, empathy training centres, educational centres, or anything else they can imagine while earning returns as other users interact with the projects on their parcel in line with the urban planning guidelines. These creations can also be simulated with extended reality to enrich the user experience. In addition, VHC owners can choose to hold their VLAND (potentially) to sell later at a higher price in the marketplace.

VHC Creator
Users who possess the original rights to create 3D and XR experiences in VHC leveraging the innovation of non-fungible tokens (NFTs). VHC creators who create in VHC can ascribe some of their content creation as NFTs to ensure authenticity and originality while leveraging Blockchain, artificial intelligence and cloud computing technology to maintain the highest security level.

VHC User
Users who experience the VHC metaverse, pay for products and services in VHC.

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5.2 VLAND

The VHC ecosystem is underpinned by 3D boxes covering the entire VHC metaverse.

VLAND will be unique and scarce; only the VHC owners with their private keys of the Ethereum address owning the VLAND NFT can control it. The safeguarding of private keys is very important, if this is lost, the control of the VLAND will also be lost forever.

There will only be 10,000 VLAND created and split into four islands; these islands are aimed to be developed within a four-year period. This is to ensure scarcity and adequate value creation for users and investors.

Figure 4 shows the VLAND allocation: 70% (7000 VLAND) for sale, 15% (1500 VLAND) for the Vault Hill team, 10% (1000 VLAND) for the community, marketing and promotions and 5% (500 VALND) for reserves.

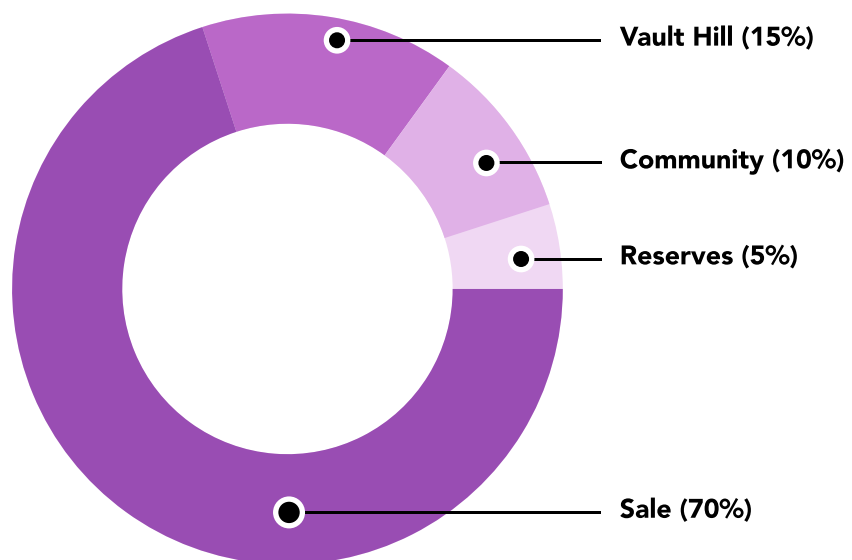*Figure 4*
VLAND Allocation

- Vault Hill (15%)
- Community (10%)
- Reserves (5%)
- Sale (70%)

The base price of VLAND will be determined closer to the release as per the roadmap and effectively communicated as part of our marketing campaign.

5.3 Districts within VHC

VHC is circular and made up of four islands. Each island will comprise of seven districts with different themes based on human instincts and functions, as shown in Figure1 and 2.

District Alpha
Curiosity

Desire to learn, achieve, grow and be better

District Pi
Idealism

Desire for social justice, causes, what's "right"

District Beta
Play

Desire for fun, for thrill, to be entertained, and to de-stress

District Delta
Romance

Desire for intimacy, sex, beauty, and aesthetics

District Omega
Vitality

Desire to thrive physically and mentally, to be calm, to be active, and to feel healthy

District Sigma
Imagination

Desire to influence others, to change things, and to lead others towards a smarter way of living

District Kappa
Community

Desire for companionship, connection, relationships, community, and belonging

5.4 VHC Development Plan

VHC is a multi-metaverse layer divided parametrically into a grid as shown in Figure 5. The parameters that define the morphology (urban fabric) follow the principles of difference (the right to difference) and define the block typologies.
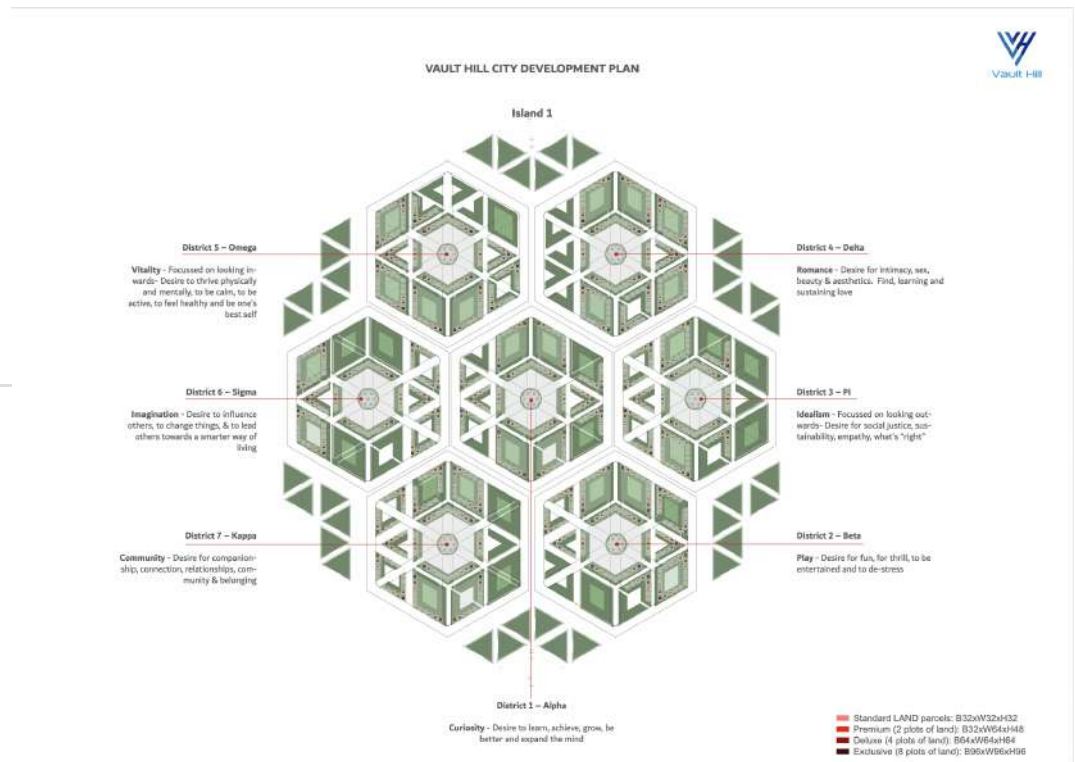
There are four categories of VLAND, which seek to promote interaction and diversity among users. Figure 6, and 7 depicts the typologies as organised within a 160mx160m coordinate system (boundary). Every single coordinate is divided into a 16mx16m grid that defines the position of the VLAND. A block is a group of lands that form a square. This gives creators and landowners great space to build, advertise, and showcase their products/services.

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5.5 VLAND Typologies

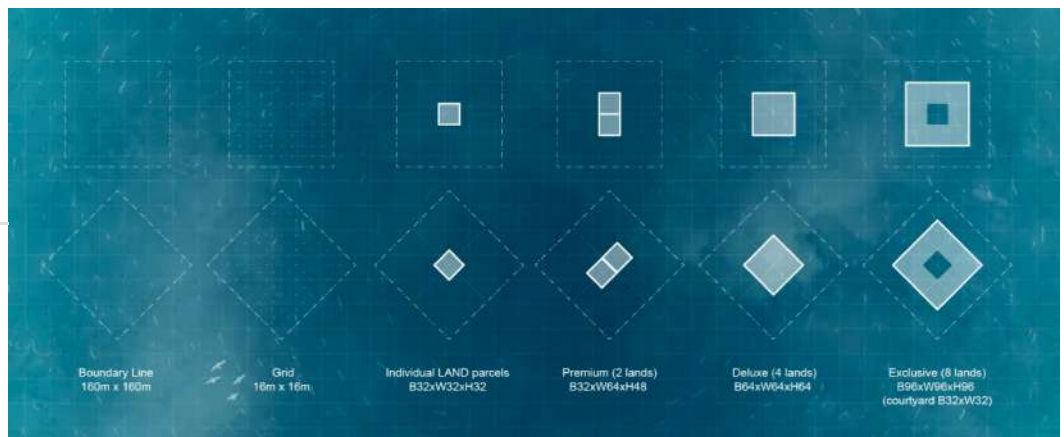| Blocks	Dimension
Standard LAND parcels	B32 x W32 x H32
Premium (a combination of 2 land parcels)	B32 x W64 x H48
Deluxe (a combination of 4 land parcels)	B64 x W64 x H64
Exclusive (a combination of 8 land parcels)	B96 x W96 x H96

Figure 6
Typologies of VLAND

Figure 7
Illustration of the
VLAND typologies

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5.6 Vault Hill City Marketplace

A key feature of the VHC marketplace will be to enable transactions for VHC virtual assets that can be traded on the VHC platform as shown in Figure 8. The VHC marketplace will be developed and managed using smart contracts, which will be fully decentralised. VHC ecosystem actors will be able to transact here using the VHC token. These transactions will all be recorded on the Blockchain.
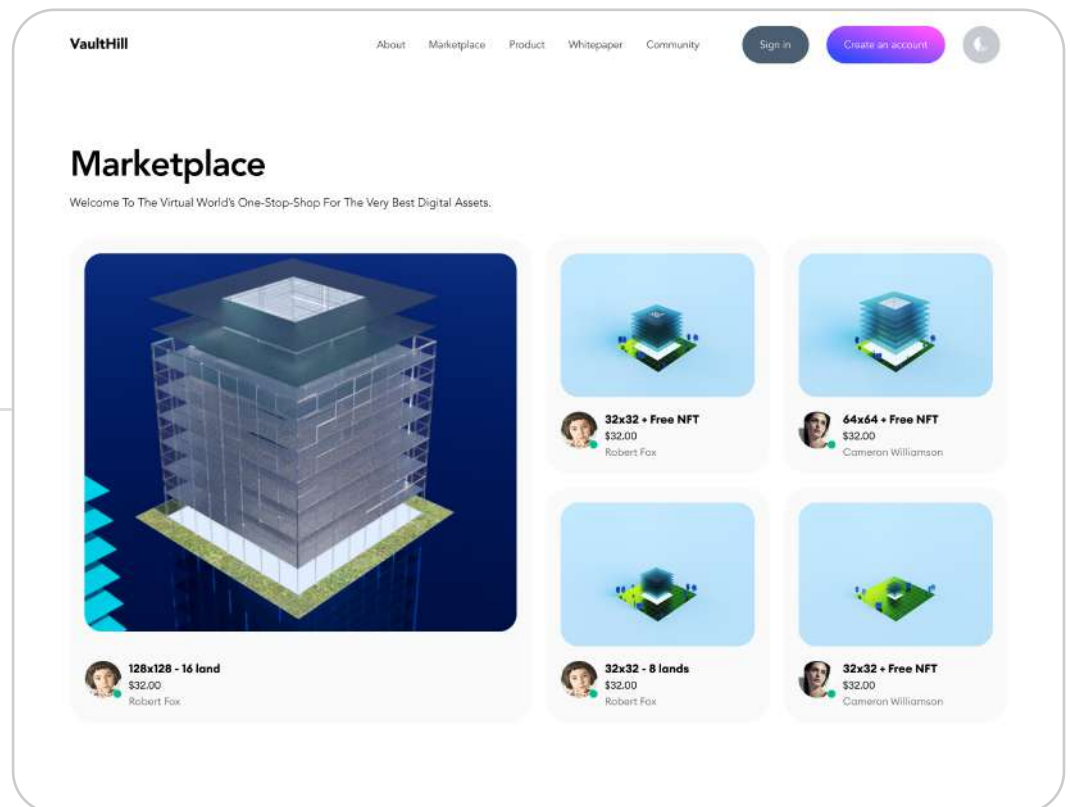
*Figure 8*
Vault Hill City
Marketplace

6 Technology

6.1 Technology Vision

Vault Hill City is a platform that enables the development and operation of immersive digital 3D simulations, environments, and worlds. Users and businesses can create, explore, and participate in various experiences related to several use cases across multiple sectors such as Healthcare, Real Estate, Entertainment, Education etc., to enhance the human experience.

Technology vision – To enable and support a **sustainable ecosystem** of creators and developers to generate content in the Vault Hill City platform and **collect an economic reward** for their contributions as shown in Figure 9.

Figure 9
Vault Hill three pillars of technology
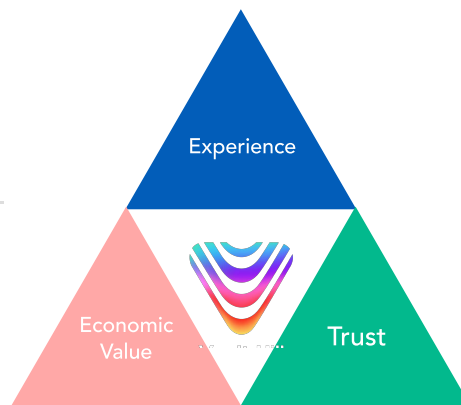
Experience

Use of eXtended Reality (XR) technologies to deliver rich experiences for users to enhance dimensions of the human experience: Curiosity, Vitality, Creativity, Community, Play, Imagination, and Romance.

Economic Value

Enable creation, content ownership, representation, and transfer of economic value for all stakeholders using smart contracts, fungible (ERC 20), and NFTs (ERC 721 & 1155) on the Ethereum network.

Trust

Enable a robust ecosystem underpinned by trust, a safe and secure end-user control of identity, data, and assets.

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6.2 Architecture

- Application layer – Land record management and wallet management
- Consensus layer- This verifies, tracks, and maintains land ownership, and contents
- The content layer – This controls the parcel contents using script files and interactive definition leveraging the benefits of a decentralised system - InterPlanetary File System (IPFS)
- The real-time layer – Users' avatars interact using voice chat and messaging to connect with each other

6.3 Security

The VHC marketplace relies on the security of the Ethereum Blockchain, which is immutable and secure for the functioning of its smart contracts. In addition, we will be introducing a layer 2 solution to improve security, scalability and reduce gas fees.

The database will be managed using a reputable decentralised protocol to cache the smart contract events and track ownership. Minimal temporary assets may be stored here to minimise any risks.

A smart contract audit is planned for all our smart contracts that will be implemented within the VHC platform.

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Users

Creators

Developers

End User
Hardware and Software

Creators/Developers
**Tools (SDKs and APIs)
and Software**

EXTENDED REALITY EXPERIENCE

VIRTUAL ASSETS	ECONOMY	CONTENT	DECENTRALISED IDENTITY

Land (VLAND)

Buildings

NFT Arts

VHC Token (ERC20)

Currencies and Payments

Marketplace

Media

Data

IP and Brand

Identity and Credentials

Registry

Reputation

APPLICATION LAYER

TRANSACTION LAYER

PEER TO PEER LAYER

CLOUD COMPUTE & STORAGE

**Ethereum
Blockchain**

**Immutable
X (Layer 2)**

Pinata

IPFS

Figure 10 - Architectural Overview of Vault Hill City

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6.4 Technology Solution

Virtual Assets
VHC enables design, creation, sale, resale, storage, and security of digital assets, such as virtual goods (VLAND, Buildings, Avatar, Virtual arts).

Virtual assets are presented as NFT created using ERC-721 smart contracts. With the introduction of ERC-1155 which has the benefits and ability to store under its control, tokens that can act as if they were an ERC-20/ERC-721 token, or both at the same time under the same contract; will be implemented at a later stage.

Virtual assets are under the direct control of owners, stored in their digital wallet of their choice. Users will have the ability to combine multiple virtual assets into a single ERC-1155 non-fungible token once implemented.

Virtual assets such as avatars and wearables will have the functionality of portability and interoperability, i.e., these assets can be used in other metaverses and vice versa.

Economy
VHC aims to enable a thriving economy for all the ecosystem participants: Owners, Users and Creators through the marketplace. $VHC, an ERC-20 native utility token, is to be used to govern the virtual platform and all in-metaverse economic transactions.

VHC tokens will be available for purchase from decentralised and centralised exchanges. Payment capabilities to support the trade of VLAND and virtual assets via the marketplace will be made available.
- Trade VLAND and Virtual assets
- Reward for creation and usage of virtual assets
- Royalties payments

Content
Content creation is vital to deliver rich extended reality experiences. The VHC platform enables creators and developers to control data privacy and IP protection.
- Rich media (video, audio, images) + NFT
- Data
- IP and brand

Identity
- Self-sovereign identity and verifiable credentials
- Optional registry
- Reputation tracker

Creator/Developer Tools and Software
- Rhino, Autodesk, Sketchfab for architectural building
- Unity and Unreal Engine for game development

7 Tokenomics

Token Name	Token Symbol	Token Standard	Maximum Supply
Vault Hill City Token	$VHC	ERC-20	340,000,000 (Deflationary Token)

Smart contract address - 0x60E14651d0Df26D114E5B55be970B76eC9f3eF74; this can be viewed on Etherscan here - Vault Hill City | **0x60e14651d0df26d114e5b55be970b76ec9f3ef74** (etherscan.io). A thorough security audit was performed for our smart contracts (ERC-20 and ERC-721) by Hacken, audit report can be found here. https://hacken.io/audits/#vault_hill.

Core business model - The VHC platform will allow users to purchase, lease and rent land and add-ons in the metaverse, curate art and create various establishments to attract visitors or sell upgraded properties and accessories. The platform will collect fees for all these actions, including perpetual royalties.

Token valuation - The token valuation will be performed using a discounted cash flow analysis, which is the generally accepted approach for cash flow generating assets and productive tokens.

Token sale - The token sale will be structured as a staged approach with the primary target audience being Private Investors and later the general public through an Initial DEX Offerings (IDO).

Token supply mechanism - The $VHC token is a **deflationary token** facilitated by the buyback and Liquidity pool (LP) mechanism.

7.1 The Need for VHC Token and economy assumptions

The VHC platform focuses on the rapidly growing metaverse to offer users a way to purchase, rent, upgrade and resell virtual property with options for minting NFTs and creator royalties. The $VHC token is a payment settlement & governance token for the Vault Hill City platform. The token facilitates additional functions as both an incentive for good actors (via its rewards distributions) and a payment option, offering additional discounts to its users. The below are the functions of the token:

- Purchase of goods and services on the platform (at a discount)
- Rewards distribution for:
  a. Liquidity providers
  b. Governance participants
  c. Platform participants
- Governance

4. https://newsletter.banklesshq.com/p/how-to-value-crypto-capital-assets

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Payment settlement - While not the primary function of the $VHC token, it can still be used as a pure medium of exchange/payment token for transactions on the $VHC platform along with other cryptocurrencies. Payments made in the $VHC token will enjoy a 40% discount on the fee of the transaction.

Rewards - The VHC platform will reward users who contribute to its growth and development. The following actions prompt daily reward distribution:
- Provide liquidity for the $VHC/USDC pair on Uniswap and stake the resulting LP tokens
- Participate in system governance
- Users of the platform who make purchases

The rewards will be distributed from a fixed supply reward pool. The rewards will be distributed daily and will be based on the outstanding tokens in the pool. 0.05% of the outstanding tokens in the pool would be distributed daily between all groups of people eligible for rewards (the exact percentage allocation, to be determined later). The above setup means that:

- The reward pool can never be depleted since the rewards are always distributed as a percentage of the outstanding tokens in the pool
- The rewards get less and less over time (Bitcoin style), but the net USD value of the rewards might increase if the $VHC token price increase)
- This rewards mechanism provides capped inflation and is compatible with fixed supply tokens (as opposed to perpetual inflation)

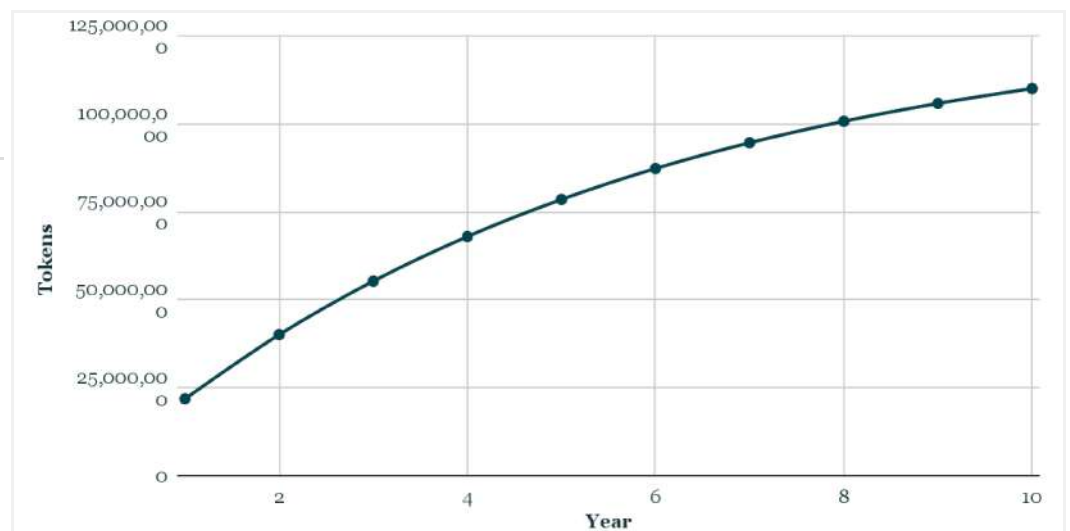Figure 11 depicts the rewards distribution (as cumulative of all distributed tokens from the reward pool):

Figure 11
*Token reward pool
distribution*

Perpetual royalties - Creators who mint their NFT on the VHC platform can enjoy perpetual royalties from their creation. Virtual land, wearables, and add-ons can be sold and resold as NFTs, with a set % of the sale price being distributed to the creator of the NFT and Vault Hill City. The pay-out can happen in the native token or another cryptocurrency.

Perpetual royalties work in the following way:

- User A purchases land and "builds" an art museum on it
- Multiple artworks are displayed in the museum
- An NFT is minted and associated with the museum and all artwork within. As part of the minting process, the creator sets a 10% rate of perpetual royalties. Those royalties will be split between the creator (8%) and platform (2%)
- The NFT creator (User A) sells the museum's NFT to User B. User A receives only the sell amount and any fees
- User B resells the NFT for 10 ETH to User C, User A receives 0.8 ETH of that sale as royalties for his creation, and the platform takes 0.2 ETH as fees
- User C later sells the museum for 20 ETH. User A again receives 8% (1.6 ETH) as royalties, and the platform gets 2% (0.4 ETH) as fees

Once the NFT is transferred to another marketplace such as OpenSea, the continuous royalties are discontinued.

Buyback and Liquidity Pool (LP) - Buyback and Liquidity Pool (LP) - With the emergence of Decentralised Finance (DeFi) and Automated Market Makers (AMM) such as Uniswap, a new approach has emerged, with the core benefits of the buyback and burn approach together with the added value of deeper liquidity - **buyback and liquidity provision**. In this scenario, instead of burning tokens, they are first provided as liquidity for the token on its primary AMM market. Then the resulting LP tokens are burned, thus combining the benefits of the reduced token supply with deeper liquidity for the token.

Here is how this works in practice:
- User A comes to the platform and purchases services worth 1000 $VHC tokens
- The platform collects a 20% fee or 200 $VHC
- 1/10th (20 tokens) of the fee is used for buyback and LP (B&LP). The remaining 180 tokens are used to fund the platform`s operations
- Of the 20 tokens for B&LP, 10 are sold at the current market price on UniSwap (let's assume 0.10 USD), and thus 2 USDC are obtained.
- The resulting 10 $VHC and 2 USDC tokens are posted back as liquidity on UniSwap, thus providing more $VHC tokens for people who want to buy them and more USDC for people who wish to sell $VHC
- As liquidity is added, the resulting UNI-$VHC USDC LP tokens are burned (sent to an unspendable address) so that the added liquidity can never be taken out of the pool.

The platform will dedicate 20% of all fees collected to a Buyback and LP program. This means that the $VHC token will have a constantly decreasing supply, with the rate of decrease being proportional to 20% of the platform's fees.

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Governance – The Decentralised Autonomous Organisation (DAO) is to be instituted within the platform and facilitated by staking the $VHC token in the governance contract of the platform. Staking for longer duration yields more voting power. Voting power will be determined by the formula:

$$VP = T_s \times M$$

Where:
- VP = Voting power
- Ts = is the number of staked tokens
- M = is a multiplier based on staking duration

The multiplier M (based on stake duration in weeks):

$$M = 1 + 0.2 \times D^{1/2}$$

Where (D) is the duration of the stake in weeks, this gives us the following multiplier curve based on duration as shown in Figure 12.
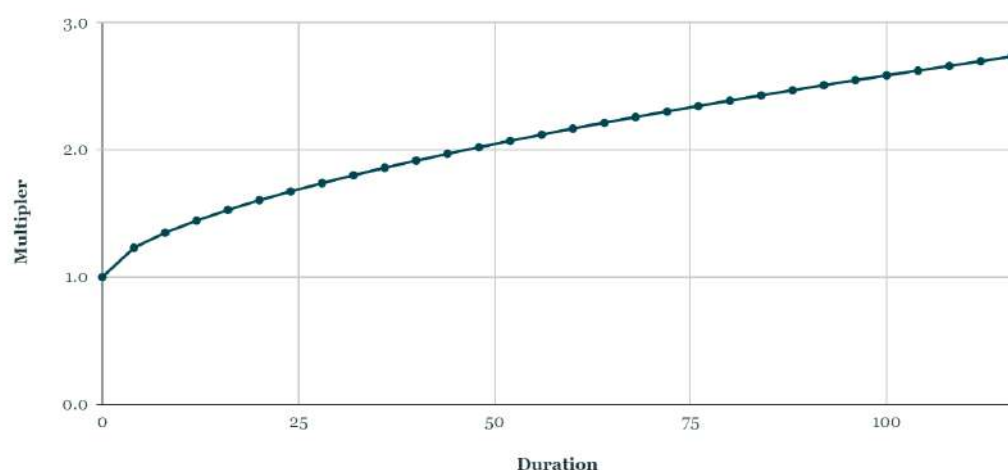

Figure 12
Multiplier bonding curve

The platforms governance will have three distinct stages:

- **Early days** - during this period the team is in complete control of the project, and no voting is done. This is because there will be bugs and events which require immediate hotfixes, and this cannot be done democratically
- **Semi-decentralisation** - during this period, the team is still in complete control of the project and can deploy hotfixes same as above, but for the non-urgent decision, it can take community input via a forum or even via off-chain voting like a snapshot - https://snapshot.page/#/
- **Complete decentralisation** - during this stage the project is fully decentralised, and all decisions are made via a strict procedure, and all voting is done on-chain. The platform's governance rules will be based on state-of-the-art governance systems such as Uniswap or Compound

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5. https://uniswap.org/docs/v2/governance/process/
6. https://compound.finance/docs/governance

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7.2 Token Allocation

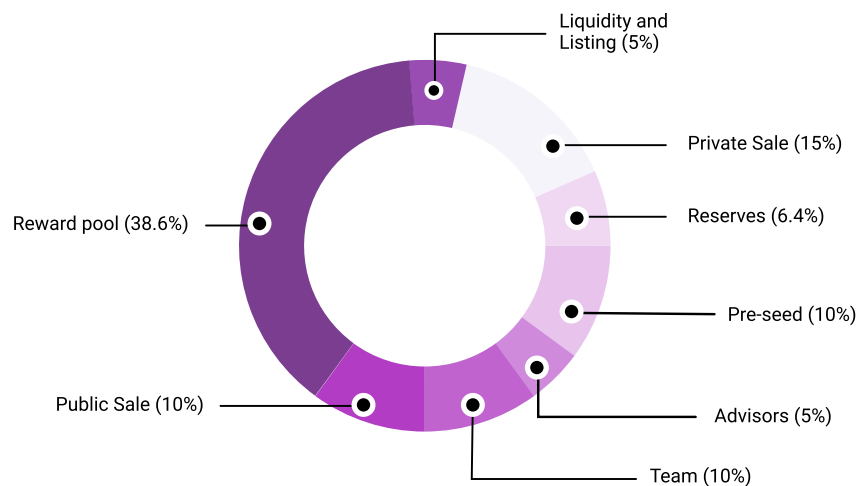| Category	% Allocation	Supply	Vesting
Pre-seed	10	34,000,000	5% at listing, 15% distribution 2,3,4,5,6, 20% at distribution 7 (quarterly distribution after TGE)
Private Sale	15	51,000,000	10% at listing, 20% distribution 2,3, 25% at distribution 4,5 (quarterly distribution after TGE)
Public Sale	10	34,000,000	15% at listing, 10% distribution 2,3,4,5,6,7,8,9, 5% at distribution 10 (monthly distribution)
Team	10	34,000,000	Unlock 10% 12 months after TGE, 15% at distribution 2,3,4,5,6,7 (quarterly distribution after TGE)
Advisors	5	17,000,000	Unlock 10% 12 months after TGE, 15% at distribution 2,3,4,5,6,7 (quarterly distribution after TGE)
Reward Pool	38.6	131,240,000	Unlock 2% at TGE, 18% at distribution 2, 20% at distribution 3,4,5,6 (quarterly distribution) – Used for Staking, Incentives for content creators and other metaverse activities
Reserves	6.4	21,760,000	Unlock 10% 12 months after TGE, 15% at distribution 2,3,4,5,6 (quarterly distribution after TGE)
Liquidity and Listing	5	17,000,000	Unlock 100% 6months after TGE (Multi-sig enabled) for future listings

Figure 13
VHC Token allocation

Liquidity and Listing (5%)
Private Sale (15%)
Reserves (6.4%)
Pre-seed (10%)
Advisors (5%)
Team (10%)
Public Sale (10%)
Reward pool (38.6%)

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7.3 Use of funds

Funds raised will be used for the development and launch of the platform. In addition, research and development into XR hardware to establish cost-effective hardware to increase adoption of XR technologies.

Product Development – Solely dedicated to the product and engineering team to build the VHC platform with features mentioned in Section 3. This fund includes all expenses related to product development. A vast majority of these funds will be capitalisable

Regulatory and Legal – Ensuring legal compliance and regulatory framework is in place to safeguard Vault Hill and users of the VHC platform.

Ecosystem Growth and Marketing – This is a foundational aspect of VHC; growing the XR and Blockchain ecosystem aids the adoption of these technologies, which maximises our growth and success opportunities

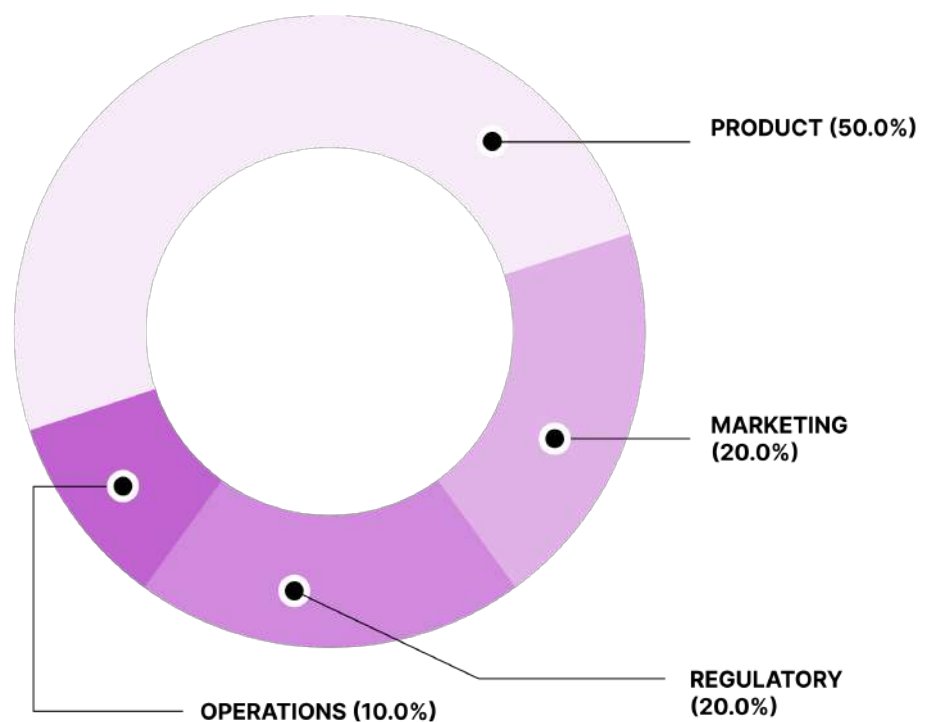**Operating Costs** – General operating costs to run the company and achieve its growth potentials

Figure 14
Allocation of funds raised during the sale. Assumes reached Hardcap.

- PRODUCT (50.0%)
- MARKETING (20.0%)
- REGULATORY (20.0%)
- OPERATIONS (10.0%)

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8 Production Roadmap

Q3 2022
- Vault Hill City Early Access
- Play District Opens
- ERC-1155 Smart Contract Audit
- ERC-1155 Smart Contract Deployment
- Marketplace Enhancements
- Fiat-to-crypto Integration (Wave 1)

Q4 2022
- Multiplayer Functionality
- Vault Hill Rewards\Airdrop System
- Vitality District Opens
- Vault Hill Launcher*
- Exchange Listings (Wave 1)
- Wallet Integrations (Wave 1)
- #The22 NFTs sale

Q1 2023
- No code Builder Tool
- Vault Hill Exclusive NFT Drop
- Romance District Opens*
- Exchange Listings (Wave 2)
- Fiat-to-crypto Integration (Wave 2)

Q2 2023
- Creator Hackathon
- Avatar Wearables
- Imagination District Opens*
- Exchange listings (Wave 3)
- Wallet Integrations (Wave 2)
- VLAND Anniversary Sale

Q3 2023
- Idealism District Opens*
- Virtual Reality Marketplace
- Hackathon Voting
- Augmented Reality in Vault Hill City

Q4 2023
- Hackathon Winner Announced
- Curiosity District Opens*
- Wallet Integrations (Wave 3)
- DAO Implementation

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9 Growth Strategy

The growth strategy for Vault Hill City will be a crucial component in promoting the project. The growth plan covers three objectives: ignite, inspire, invite.

- **Ignite**: Attract the right kinds of products and services to VHC and ignite their desire to buy land. Emphasise the brand name and product point of difference to create buzz and interest pre-product launch

- **Inspire**: Make an entrance on the XR stage, and establish Vault Hill's reputation as an XR disruptor. Create a reputable model for predictable lead generation through digital media and inbound organic channels

- **Invite**: Populate VHC with citizens that are excited to enhance their humanity. Generate significant yearly sales growth and reduce customer acquisition costs through outbound marketing methods to enhance our adoption rates and dependency on the existing client portfolio

9.1 Promotion Strategy

Social Media - Social media will play a major role in the Vault Hill marketing ecosystem. Social media platforms such as LinkedIn, Instagram, Twitter, and Telegram allow the company to advertise directly to the target audience and track progress relatively inexpensively. Social media platforms are also an effective way to create a following behind the brand, tracking popular trends and promotions.

Pay-Per-Click - Pay-per-click advertising is an efficient way to target our demographic and drive traffic through search engines. VHC will adopt this model for promotion. Platforms like Google will serve as a medium to reach the target market while tracking a strict budget plan.

Public Relations/Trade Shows and Conference - VHC drive disruptive PR spikes that will generate buzz for the brand. This a cost-effective strategy for building our followerbase , and standing out when over investing in awareness marketing is not an option. The brand needs to be recognised at all virtual gatherings to promote the brand and unique offerings continuously.

Website - The website tells the story of VHC and promotes our innovative approach, plus differenatiated products and services within VHC. The website is at the centre of all marketing activity; we have designed it to ensure it aligns with our branding, is easy to navigate, and provides a completely seamless customer experience. Additionally, as we integrate technology in line with our roadmap, our website will reflect these updates to ensure our stakeholders are kept up to date

Outbound Marketing - By adopting a combination of direct and indirect sales methods. Key industry stakeholders that can help add value to the brand within our target market will be approached directly to secure initial business development relationships.

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A key component of our outbound marketing efforts will be to display our value proposition to our customers. This will include the use of cold calling, media buys, and direct lead emails to help put our value proposition in front of our target customers. Developing relationships with key industry stakeholders is also a way for us to gain strategic relationships within the industry, allowing us to generate leads and onboard customers.

Inbound Marketing - Inbound Marketing Vault Hill will continue to adopt a direct sales model to all targeted customer organisations. The objective is to remain in touch with potential customers by building awareness and boosting sales through inbound solid marketing leads. Inbound strategies will include on-site and off-site content marketing, which is helpful in several ways. Not only does new content drive new readers to our site, it keeps our existing readers and customers engaged with our brand, allowing us to maximise client retention.

Off-site marketing campaigns will function similarly to on-site, prompting us to provide well-written, targeted, valuable content. However, instead of publishing it on our site, we will be publishing on Medium but integrating our page to our website; with this, we leverage the reader base of Medium. The advantage of off-site content is the opportunity to gain visibility with new audiences who may not have heard of our brand otherwise. In addition, the strategy will help to generate referral traffic and support our brand reputation and growth.

10   Teams and Advisors

Leadership team members

Jimi Daodu

Founder and Chief Executive Officer

Jimi is Vault Hill's founder and CEO, and a board member at Fodds Capital - a Venture Capitalist (VC) supporting small and medium-sized businesses in Africa. He was a Transformation Director at Colt Technologies services, UK, and has been part of various start-ups such as Today Fit in Hong Kong and Sports100 in the UK. Previously at Barclays, Jimi led one of the most significant divestment programmes between Barclays and Absa (the African subsidiary). Jimi holds a BSc in Computer Science from Babcock University, an MSc in Advanced Computing from the University of Bristol, and an MBA from the University of Warwick. Jimi is also a certified Blockchain architect and NFT expert who has been in the blockchain space since 2017.

Nick Merritt

Head of Operations, Strategy and Partnerships

Nick leads the company's strategic decisions particularly in terms of the upscaling the virtual world's strategy, partnerships and innovation. He worked as a Business and Technology Strategy Consultant for Accenture - a market-leading business and technology consultancy. Nick has also worked across several advisory projects involving Multi-Party Systems, Cloud Strategy, Product and Service Design, Board and Market submissions, and transformational operating model design. His work has focused mainly on FTSE 100 Companies spanning several industries including Oil and Gas, Banking, food and fashion Retail, and Aviation.
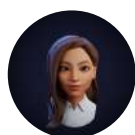
Marwa Othman

Metaverse Art Director

Marwa is our Metaverse Art Director and oversee our visual and content production. Marwa has over 12 years' experience in the digital marketing and art industry, having worked with high-end brands to achieve their creativity and tone of voice. With a master's degree in 3D Animation, including cinematography and movie direction, she is equipped to take our metaverse creativity to the next level.

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Piyush Bhatia

Head of Growth

Piyush oversees all things growth at Vault Hill. He has a background in journalism, PR, marketing and content strategy. Piyush joins us from RFOX, a metaverse technology start-up where he was the Chief Marketing Officer and overhauled their marketing department, which yielded significant growth. He is part of the leadership team and doing an incredible work aligning the growth plans with the organisation's strategic objectives and partnerships.

Maria Dervenco

Head, CEO's Office

Maria is the Head of CEO's Office at Vault Hill supporting the operational elements across the company. She has extensive experience supporting CEOs and Board of Directors in different industries like broadcasting, legal and hospitality. She was most recently a project manager in the real estate/construction space where she supported teams and project management activities. Maria has a BA in Business Management from Roehampton University in UK and finishing a Master's in International Business at Ulster University.

Tayo Kalejaiye

Head of Gaming

TK oversees all things gaming at Vault Hill and has over 15 years' experience in the digital media, creative and gaming industry. He joins us from Unanimous Games, NY, USA where he was the Head of Game Development having worked with a number of high-end brands and on gaming projects. TK has a Masters degree in Digital Film and Animation, hands on experience with Unreal engine, he is equipped to take our metaverse development and production to the next level.

Rizwan Bhatti

HR Manager

Rizwan is a motivated HR professional with a BSc in Business & International Relations coupled with circa 10 years of experience within various Business Operation, including 6 years specialised within Recruitment and HR Operations on a National & International level. He is exceptional at Recruitment, HR Policy Development, People Management, Process Improvement, and Workforce Planning.

Ruchali Dodderi

Head of Engineering

Ruchali Dodderi joins the team with over 30 years' experience, including 20+ years of leadership in contemporary and emerging tech industries. She has 3 patents in India, 3 patents in the USA, and several publications. Likewise, she has garnered valuable experience in blockchain development, including dealing with Solidity and Rust smart contracts, and working as a lead blockchain specialist and engineer.

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Team members

Abbey Dabiri

Software Engineering Manager

Abbey has been in Blockchain Development since 2016 and an ex-PwC staff who built an MVP of a token generation platform on the Ethereum testnet. He has also developed a trading wallet as a personal project. He has also developed a trading wallet as a personal project. Abbey has over 10 years of experience in software engineering, and has won a number of awards at the Lagos Blockchain Hackathon and Cyber security challenge. Abbey is remarkably utilising his wealth of knowledge and experience to build infrastructures across our technology landscape.

James Mulqueeny

Full Stack Developer (Blockchain)

James is a full-stack Software Engineer at Vault Hill. He has worked on a number of software projects, gaining good exposure to all areas of the software development lifecycle. Over the last few years, his passion for Blockchain and decentralisation has kept increasing. Recently, he has been experimenting with Blockchain technologies like Ethereum and Chainlink. He participated in a hackathon sponsored by UNESCO and Chainlink where he won the Social Impact Prize for developing a smart contract scholarship idea that leveraged Blockchain technologies to help refugees, and girls' education.

Omowole Gbenga

Full Stack Engineer

Gbenga is a skilled Full stack developer and a great asset to the team. He has a whole host of experience in UI design, design implementation, cloud computing, software architecting, setting up databases, implementing clean and efficient server-side logic with SOLID principles, all that good stuff.

Ritik Chopra

Full Stack Engineer (Back End)

Ritik has experience with various computer languages and multiple frameworks and libraries. His expertise is in Front End, Back End and DevOPS tools. He has a BA in Tech (Computer Science and Engineering) from Jaipur Engineering College and Research Center.

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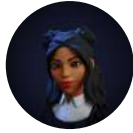
Dr. Oyin Ajayi

Communications Specialist

Dr. Oyin oversees all our branding and communications flow internally and externally, and develops strategies that promote a favourable corporate reputation. She has extensive experience working as a brand specialist in a public relations agency, as well as an in-house communication specialist executing notable communication strategies. Oyin has a PhD in Corporate Communication from the North-West University, South Africa; and an Msc in Public relations from Birmingham City University, UK.

Alex Ratto

Partnership Manager

Multidisciplinary professional with a background in accounting and knowledge of several industries such as financial services, infrastructure, hospitality, chemical industry, cryptocurrencies and blockchain. Fluent in many languages, he has worked and lived in Argentina, Brazil, Venezuela, Australia and the United Kingdom. With experience in commercial projects worth billions of USD, Alex became a private investor at Vault Hill and then proactively applied to lead the commercial team in search of creating long term relationships with customers and business partners. He has a BSc in Accounting from National University of La Plata, Argentina; and a Diploma in Management from Australian Institute of Professional Education, Australia.

Murray Giudici

Social Media Manager

Murray has extensive experience helping to grow communities and improve social media strategy, most notably with publishers Playstack and Avid Games. Murray's specialities are social media design, content strategy, and community management. He has a BA in Politics from the University of Stirling and is currently on a part-time Masters program in Computer Science at the University of Bath.

Hazem Alhalabi

Content Writer

Hazem is a versatile content writer with profound experience in technology having worked on different cryptocurrency and blockchain projects. He has a B.Sc. and a Master's degree in Business Administration and Management at the International Black Sea University in Georgia. Hazem writes compelling content that spur action, and keep our tone of voice intact.

Carlos Arleo

Head, Architecture

Carlos is the Head Architect at Vault Hill, as well as a PhD Candidate at Newcastle University. He studied Architecture at Polytechnic University of Catalunya before completing his studies at the Polytechnic of Milan. Carlos has worked on a number of architectural projects in UK, the Middle East, and Spain. He has enjoyed playing an integral role on a variety of projects varying in scale, scope and complexity, with his main focus in recent years on Urban Re-generations. He relishes the challenge of exciting briefs and enjoys working closely with clients and stakeholders to truly understand their needs and explore opportunities that can be created through collaboration and innovation.

Asad Malik

Senior Creative Technologist

Asad is our Senior Creative Technologist. He is an accomplished Creative Artist with 7 years of experience working in Architectural Development Industry, with an innovative mindset & diverse exposure in the fields of 3D design, post-production and CGI. He performed as a Technical Manager for Live Virtual TV Production leading technical team and operations, where he was instrumental in integrating virtual production pipeline - a bridge between camera tracking solution and Unreal Engine. Asad holds a bachelor's degree in Computer Games Technology from the University of East London with first class honours.

Andrew Chang

Creative Technologist

Andrew has worked with Sky for Olympic interactive installation for five UK cities branches and RCA for real-time visualise installation. He works closely with the production team and provides creative solutions and technical support. Andrew holds an MA in Computational Arts from Goldsmiths, University of London.

Nuwan Madurapperuma

Metaverse UI/UX Designer

Nuwan has over 10 years' experience as a UI/UX Designer. He has a BSC in IT from Sri Lanka Institute of Information Technology, and works with our creative team to create outstanding UI/UX designs.

Cheslav Sukstul

Senior Technical 3D Artist

Cheslav is our Senior 3D Technical Artist actively working with the art team to support internal software development and to bring the teams' designs into reality. He is a self - taught 3D Generalist with over 6 years' experience creating 3D real time environments, props and providing technical support. He has worked with game development, architecture modelling and visualisation software development teams creating and optimizing 3D content and in-game engines' shaders and post-processing setup. He has an MA in Entrepreneurship from the Falmouth University UK.

Lucas Panciulo

3D Modeler Generalist

Lucas is an environmental artist, passionate about the video gaming industry. He gained invaluable skills and knowledge working in amazing projects (including QA testing Oculus headsets). He attended the Objectif 3D, in Montpellier, France where he specialised in 3D Infographic (Environment Artist specialisations in video games)

Ahmed Hany

Senior Conceptual Artist

Ahmed has over 5 years' experience working in the biggest design companies in Egypt and one of the biggest in the Middle East - Aroma Studios. He works with the Creative team to generate and develop concepts, art styles that defines and visualizes the company vision. Ahmed provides visual ideas and aesthetics that contributes to the development of both pre-production and post-production phase.

Silvia De Tommaso

Metaverse Conceptual Artist.

Silvia attended the University of the Arts, London, and has a BA in Animation. She has worked on several projects such as music videos, documentaries, and comic books. She's also currently the lead animator for an animated feature film. Silvia is supporting the team by creating conceptual arts, sketches and character designs. Her ability to create quick detailed storyboards help develop our team and her understanding of digital/traditional art techniques also improves our process.

Irene Cerezo

Graphic & Motion Designer

Irene has over 6 years' experience in graphic design, photography and animation. She has a master's degree in Motion Graphic from The Professional School of New Technologies and a Bachelor's degree in design and Visual Communication from the University of Madrid.

Hammed Arowosegbe

Senior Software Engineer, XR

Hammed Arowosegbe is a Senior Software Engineer, XR at Vault Hill with over 6 years' experience in the XR Industry. He has worked with diverse teams across the globe to develop software solutions. Hammed is currently the President of the Virtual Reality Augment reality association (VRARA) - Nigerian chapter.

Tamer Array

XR Producer

Tamer is an XR Developer at Vault Hill. Most recently, Tamer has been working with arts on the immersive production of Air Morphologies for the Tate Exchange 2020 with regards to hand tracking gestures on the Oculus Ouest. He works closely with our architect and 3D development department. Prior to getting his MA in Virtual reality from UAL in 2019, he studied Architecture and Fine arts in the United States.

Yoni (Ananta Kin)

Senior Motions Graphic Designer

Yoni has diverse experience in motion graphics and both 2d and 3d animation and videography, and knowledge of image and video editing, along with music scores. He also has an understanding of website layout, interface UI/UX. Yoni graduated from Computer science, IPB university and works closely with the product team and marketing team. His previous experiences comprise of working as a video editor and multimedia motion designer in multiple agencies such as Christian podcasting network Brandster, MD entertainment production, and more.

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Paromita Bhattacharya

Social Media Manager

Paromita handles all things Social at Vault Hill. Paromita joins us from RFOX, a metaverse technology start-up where she was the Social Media Manager, and led multiple content campaigns which yielded significant growth. Prior to this, she was with Eros Now, which is a leading Bollywood film production house and OTT platform in India.

Ajay Negi

Performance Marketing Specialist

Ajay oversees all aspects of paid marketing, spends, funnel and optimisation within the growth team. He joins us from an agency background with over 8 years of professional experience. He is proficient in customer acquisition, and retention and efficiently scaling up the campaigns across funnels & platforms. In his previous stints he has strategized, developed & managed paid digital marketing across Meta & Google for various clients.

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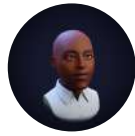
Advisors

Lans King

Project Advisor - NFT

Lans an interdisciplinary artist. His ongoing project, "The Hyperreality Show", blurs the lines between real & virtual, analog & digital, humanity & technology. This interconnected ecosystem of artworks includes paintings, videos, installations, sculptures, digital, and signature painting-NFT hybrids. He had been making crypto art since 2017 and NFTs since 2019. His studies in Cognitive Science focused on artificial intelligence and human-machine interaction. He worked in the digital and communication sectors whilst developing his art practice in parallel.
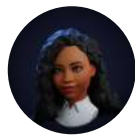
Lavinia Osbourne

Project Advisor - Blockchain

Lavinia is an enterprising and driven expert in the world of Blockchain and its ecosystem, bringing a distinct dynamism and thought leadership to the space. Lavinia has a degree and postgraduate diploma from Middlesex University, London, UK. Her professional background is in the field of Finance and Operations. As an advisor, she brings her insight and ability to create strong relationships with key players in the industry such as Gemini Exchange, Rarible, Cointelegraph, and Polkadot to name but a few.

Mohammed Kawshowa

Project Advisor – Business Development

Mohammed is currently the eCommerce Lead at Carrefour after spending 4 years at Amazon (3 at Souq.com and 1 at Amazon). Prior to this Mo started out as a Business Manager with Chocolate City Group – Media and Distribution company in Nigeria and later grew into an Executive Director role and a shareholder in the business. The company today is worth over $300,000 after the acquisition by Warner Music. He has a degree in Banking and MA in Marketing.

Melcom Copeland

Project Advisor - Crypto Payments

Melcom is currently the Head of Payment Solutions and Partnerships at Samtrade FX. Prior to this, Melcom was the Director of Global Business Development at PundiX, the largest cryptocurently point of sale (POS) platform. Melcom is a subject matter expert in stablecoins, digital payments, development of Betfair API White-Label Sportsbook, Land-based Casino Payment, and Cryptocurrency Payment Solutions.

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11 Disclaimer and Risk Warnings

The information in this Whitepaper is subject to change and is provided on an "as is" basis; this should not be interpreted as a guarantee, warranty or commitment by Vault Hill or any individual or organisation mentioned in this Whitepaper regarding future provision of services related to the use of the tokens or their performance or value.

This Whitepaper does not constitute or form part of any opinion on any advice to sell or any solicitation of any offer by Vault Hill to purchase our token, nor shall it or any part of it nor the fact of its presentation form the basis of, or be relied upon in connection with, any contract or investment decision. If you decide to participate in Vault Hill's project or purchase our tokens, you agree that you have sufficient knowledge of digital currencies, cryptographic tokens, blockchain technology and a comprehensive understanding of applied cryptography.

Do not trade or invest in VHC tokens or VLAND based solely upon this information in the Whitepaper. If you do invest in VHC tokens or VLAND, you agree not to engage in speculative investments, conduct or engage in any illegal activity, hide or disguise the proceeds of any illegal activity, and you agree to invest in VHC tokens or VLAND at your sole risk.

All proceeds of the Vault Hill City project shall be used to expand Vault Hill's businesses and operations. By participating in Vault Hill City project and purchasing VHC token, you agree that VHC token do not give you any right, title, interest, dividend, distribution, benefit, control or ownership of Vault Hill or VLAND, and you purchase VHC token solely to facilitate Vault Hill City project's development. No person is bound to enter into any contract or binding legal commitment to the contribution of the Vault Hill City token event, and no cryptocurrency or another form of payment is to be accepted based on this Whitepaper.

Eligibility to participate in Vault Hill City future sales event may vary depending upon your country of citizenship or residence. In particular, do not participate in Vault Hill City future sales event if you are not at least 18 years old or if you are a citizen, resident or a green card holder of the United States of America, Algeria, Bolivia, China, Colombia, Egypt, Indonesia, Iran, Nepal, North Macedonia, Russia, Turkey, Vietnam, or are going to be in the future. Final decisions have not yet been made in that regard but will be announced well before the date on which our platform (www.vaulthill.io) will first be made available for private and/or public contributions.

The information contained in this document may include, or incorporate by reference, forward-looking statements, which would include any statements that are not statements of historical fact. No representations or warranties are made as to the accuracy of such forward-looking statements. Any projections, forecasts and estimates contained in this document are necessarily speculative in nature and are based upon certain assumptions. These forward-looking statements may turn out to be wrong and can be affected by inaccurate assumptions or by known or unknown risks, uncertainties and other factors, most of which are beyond control.

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It can be expected that some or all of such forward-looking assumptions will not materialise or will vary significantly from actual results. The publication, distribution, or dissemination of this Whitepaper does not imply that the applicable laws, regulatory requirements, or rules have been complied with.

The regulation of cryptoassets is still maturing and there is no currently no common standard for the regulation (or otherwise) of VHC tokens. As such, this Whitepaper should not be construed as a financial promotion or an inducement to enter into transactions in regulated investment products in any jurisdiction and you should take legal advice prior to your entry into transactions in VHC tokens. We are not authorised or regulated by the Financial Conduct Authority or any similar authority and this Whitepaper does not provide any professional advice on which you should rely. Vault Hill does not provide any warranty, representation or guarantee about the suitability of VHC tokens or your participation in any transactions involving VHC tokens. You accept all risks associated with purchasing VHC tokens and participating in VHC project and will seek you own professional advice before purchasing VHC tokens and participating in VHC project. You also acknowledge that cryptoassets are considered to be very high risk, speculative purchases and if you purchase or hold VHC tokens, you should be prepared to lose all your money.

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Enhancing Human Experiences

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