IMMVRSE™

PREAMBLE

ImmVRse is a decentralised website, iOS and android application which utilises a standard Ethereum based ERC20 token to create its own eco-system. Therefore it is neither considered nor classified as a crypto-asset. Although tokens are designed to be traded in multiple exchanges across the globe, this does not necessarily provide a guarantee or an immediate increase of price. The sale of the tokens constitutes the distribution of a fully legal web and mobile application under the laws of the United Kingdom. ImmVRse will be treated and utilised as a DAPP TOKEN and will respectively be integrated as a form of payment. This whitepaper should be used for general understanding of the concept and does not constitute nor intend to provide any form of professional investment advice to the contributors either new or experienced in the world of cryptocurrency. Anyone willing to participate in ImmVRse ICO will therefore independently be required to understand the risks and implications. Details of terms are set aside by the company's appointed law firm, regulated by the Solicitor Regulation Authority in the UK. For ease of understanding for potential users and ICO participators, this whitepaper is available in multiple languages.

Please contact protocol@immvr.se for more information.

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VRTUALISE™

IMMVRSE™

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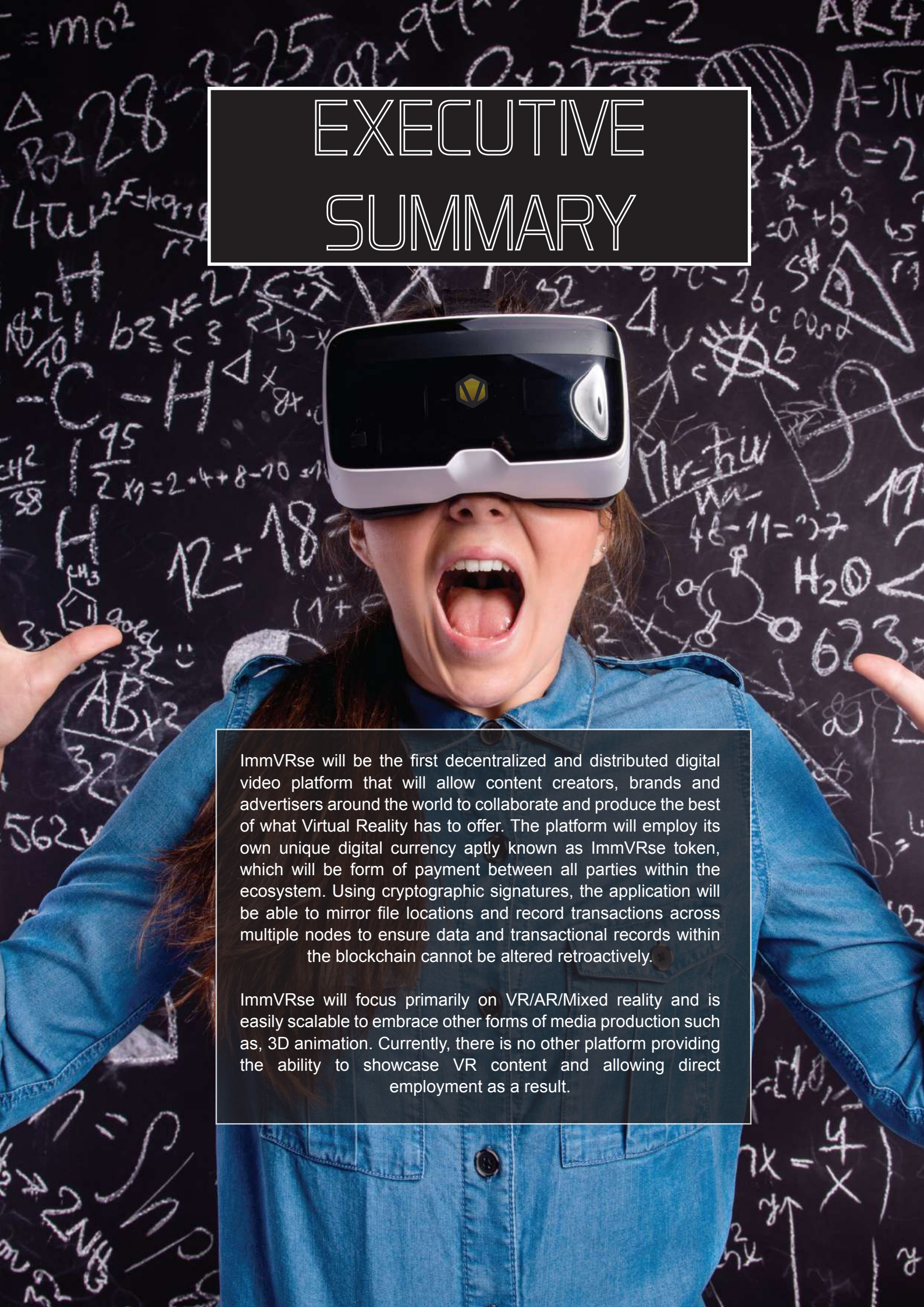
EXECUTIVE SUMMARY



ImmVRse will be the first decentralized and distributed digital video platform that will allow content creators, brands and advertisers around the world to collaborate and produce the best of what Virtual Reality has to offer. The platform will employ its own unique digital currency aptly known as ImmVRse token, which will be form of payment between all parties within the ecosystem. Using cryptographic signatures, the application will be able to mirror file locations and record transactions across multiple nodes to ensure data and transactional records within the blockchain cannot be altered retroactively.

ImmVRse will focus primarily on VR/AR/Mixed reality and is easily scalable to embrace other forms of media production such as, 3D animation. Currently, there is no other platform providing the ability to showcase VR content and allowing direct employment as a result.

VISION

We strongly believe that Virtual Reality will play a significant part in our lives during the next decade. This will come in many different forms and affect a wide range of business segments. Already, we are seeing huge transformations in the medical, gaming, manufacturing and educational sectors where substantial investments have been made in both hardware and software. The demand for specific and quality content unlocks opportunities for creative, collaborative and contribution of VR production, thus gradually revolutionising the virtual reality industry as a whole.

We are confident that blockchain will provide the chance to create a more secure and transparent platform for a new generation of VR content creators, permitting them to showcase their work to a global reach of businesses, from start-ups all the way up to big corporations. Smart contracts in conjunction with cryptocurrency will inevitably improve upon the current payment methods by adding the missing layer of trust and drive real values for all members of the Eco-system.

Our long-term vision is to become one of the largest decentralised creative platforms; a self-sustaining and autonomous network that utilises a personalised cryptocurrency as a tradable commodity.

WHAT IS VIRTUAL REALITY?

Virtual Reality (VR) is the umbrella term for all immersive experiences created using real-world content, purely artificial content or a hybrid of both. Within this, there are 4 core types:
- 360° Video
- Computer Generated VR (CGVR)
- Augmented Reality (AR)
- Mixed Reality (AR)

360° VIDEO
360-degree videos are video recordings where a view in every direction is recorded at the same time. Real world content is filmed using an omni-directional camera or a collection of cameras, to allow viewing from every angle.

COMPUTER GENERATED VIRTUAL REALITY (CGVR)
Computer Generated Virtual Reality (CGVR) is essentially the synthetic version of a 360-degree video. Immersive content is created using computer rendered images.

AUGMENTED REALITY (AR)
Augmented reality (AR) is an overlay of content on the real world, but that content is not anchored to or part of it. The real-world content and the CG content are not able to respond to each other.

MIXED REALITY (MR)
Mixed reality (MR) is an overlay of synthetic content on the real world that is anchored to and interacts with the real world. The key characteristic of MR is that the synthetic content and the real-world content are able to react to each other in real time.

BUSINESS APPLICATIONS OF VR

VR technology is rapidly transforming how business is conducted and is due to become the next biggest platform in consumer technology. The momentous leap towards the future will revolutionise the art of interacting with the world around us.

Facebook, Google, Microsoft, HTC, Samsung are just a few of the companies that have manufactured VR headsets and are striving for continuously improving quality, which can be seen by the huge investments in research and development by major global corporations.

Forecasts by Goldman Sachs indicates that the VR technology has the capability to grow into a $90 billion industry by 2025[1].

When Mark Zuckerberg invested $2 billion into a VR start up in 2014, only a handful of people believed in the potential of virtual reality[2]. Since then, we have experienced the achievements of multiple milestones in the development of VR, as technology giants swiftly move into this disruptive industry. Oculus Rift, Samsung VR and HTC Vive were some of more notable headsets that have been released in the recent years.

Experts believe that the industry will outgrow expectations in the next five years. It is also predicted that almost every household will own a pair of virtual reality headsets as the concept will gradually infiltrate a number of industries.

The increasing popularity of virtual reality has now created a high demand for more 360-degree videos. Here are some of the industries that are utilising VR in some capacity:

HEALTHCARE

Virtual reality has multiple applications for healthcare. One use, which is not entirely new, is the use of VR in therapy. For example, psychiatrists at the University of Louisville use VR in cognitive behaviour therapy to treat patients with social anxieties or phobias such as flying, public speaking and heights. The controlled environment allows doctors to expose their patients to simulations and direct them on how to cope with how they are feeling.

EDUCATION

Producing training videos to assist in learning in schools as well as in the job training for professionals, VR has seen huge growth in this sector. The military has also invested in VR material as part of their recruitment campaigns.

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1. Goldmansachs.com. (2017). Profiles in Innovation: Virtual & Augmented Reality. [online] Available at: http://www.goldmansachs.com/our-thinking/pages/technology-driving-innovation-folder/virtual-and-augmented-reality/report.pdf [Accessed 03 Oct. 2017].

2. Yarow, J. (2017). The Only Explanation Of Facebook Buying Oculus For $2 Billion That Makes Any Sense. [online] Business Insider. Available at: http://www.businessinsider.com/why-mark-zuckerberg-bought-oculus-for-2-billion-2014-3?IR=T [Accessed 30 Oct. 2017].

TOURISM

Many hotels have begun offering tours around their resorts using VR. Marriott Hotel unveiled an advertising campaign named “The Teleporter” in 2015, where guests were given the opportunity to explore the beaches of Hawaii and London’s Tower 42 in a custom-made special effects booth[3]. Guests were provided with a virtual headset that took them to their desired destination for 100 seconds. The 4D technology meant that users were not only able to see but also feel the environment around them, allowing holiday-goers to explore different locations before making a booking.

ADVERTISING

As more companies are shifting towards virtual reality, big brands are starting to produce their own VR advertisements. The strong attraction that VR holds towards advertising is its ability when presented effectively to completely immerse its audience into an experience thus allowing brands to emphasize their intended individual message. VR also results in a much deeper emotional impact than regular advertisement could be capable of, lending itself to a much higher level of engagement.

YouTube has already launched a dedicated VR channel, which can be viewed using any commercial VR headset including Google cardboard. In turn, this will require companies to produce VR advertisements to complement the videos being produced.

FILMS AND VIDEOS

One of the most attractive features of VR is being able to completely revolutionise the way a story is told. VR has the potential to dramatically enrich the cinematic experience for audiences everywhere, thrusting them directly into the midst of the action and allowing them to exist outside of their personal realities for instance changing their persona or even their gender. VR enables viewers to “live” the story from the perspective of a character within the film, instead of simply feeling like an observer in a dark theatre or room.

The Cannes film festival this year showcased a VR film created by Oscar-winning director Alejandro G.Iñárritu “Carne y Arena”, a six-minute piece about a group of Latin immigrants crossing the border through the Arizona desert, where they are then caught by the U.S. authorities. The audience experienced the film in a sand-strewn space the size of a few basketball courts, in order to simulate a desert, accompanied by an Oculus headset[4].

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3. Marriott News Center. (2017). Marriott Hotels Introduces The First Ever In-Room Virtual Reality Travel Experience - Marriott News Center. [online] Available at: http://news.marriott.com/2015/09/marriott-hotels-introduces-the-first-ever-in-room-virtual-reality-travel-experience/ [Accessed 10 Oct. 2017].

4. Zeitchik, S. (2017). Cannes 2017: Alejandro Iñárritu's virtual reality project takes film to new frontiers—and questions. [online] latimes.com. Available at: http://www.latimes.com/entertainment/movies/la-et-mn-cannes-vr-inarritu-20170521-htmlstory.html [Accessed 02 Oct. 2017].

MARKET SCALE FORECASTS

Virtual reality is currently estimated to be a $1.6 billion market, of which most of the HMD (head mounted displays) are smartphone-based devices such as Google cardboard, due to lowers costs and availability. Although it compromises quality, price point is a very important factor for VR end users. VR headsets such as Oculus, Vive and PlayStation VR, three of the biggest current players on the market, will account for an estimated 3 million units in 2017 and will increase to 5 million in 2018[5].

Research conducted by business Insider shows positive forecasts for virtual reality. BI Intelligence (2016) states that the adoption of VR and AR headsets will grow slowly after the launch of mobile and PC VR, followed by mainstream adoption of stand-alone headsets[6]. While research conducted by Goldman Sachs shows exponential growth, as the total revenue for VR software industry will grow from $28 billion in 2020 to $79 billion in 2025, as the combined hardware and software revenue will grow to $90 billion[7].

> ***While early adopters will drive the initial wave of purchasing, sustainable growth will likely come from VR and AR app developers building a robust and engaging ecosystem of content that entices slower adopters. Lastly, as the underlying technology powering these devices increases, so too will the capabilities, creating new use cases in entertainment, workplaces, and education.***

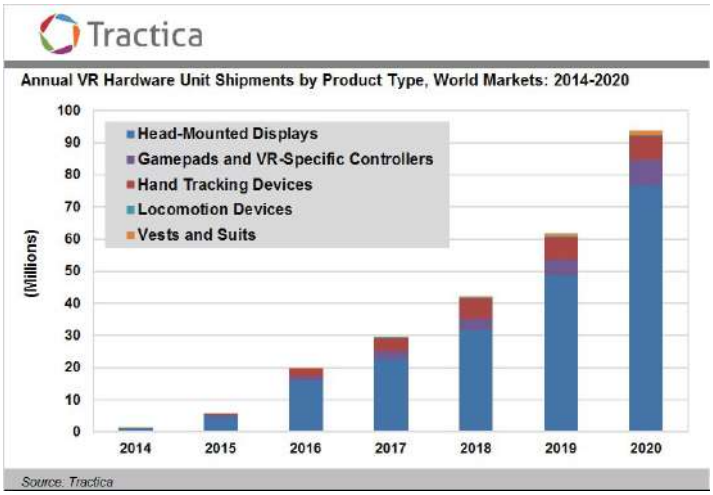
5. Koytcheva, M. (2017). Virtual Reality and Augmented Reality Device Sales to Hit $11.9 Billion and 99 Million Devices in 2021. [online] Ccsinsight.com. Available at: http://www.ccsinsight.com/press/company-news/3226-virtual-reality-and-augmented-reality-device-sales-to-hit-119-billion-and-99-million-devices-in-2021 [Accessed 01 Oct. 2017].

6. Intelligence, B. (2016). The virtual and augmented reality market will reach $162 billion by 2020. [online] Business Insider. Available at: http://uk.businessinsider.com/virtual-and-augmented-reality-markets-will-reach-162-billion-by-2020-2016-8 [Accessed 05 Oct. 2017].

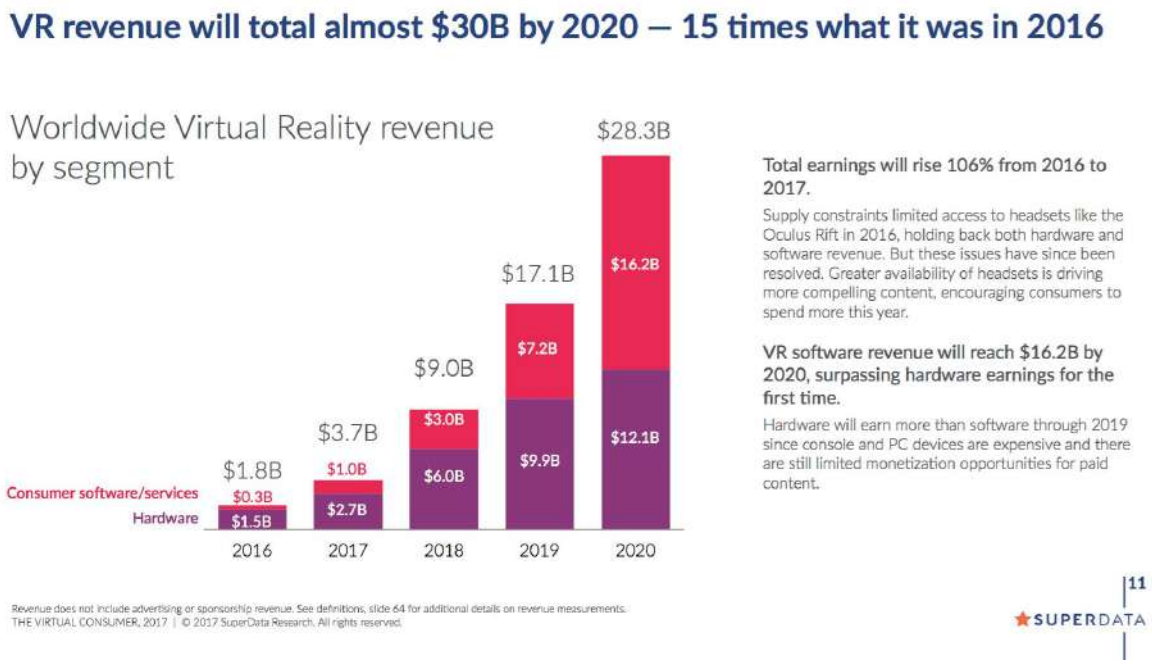
7. Goldmansachs.com. (2017). Profiles in Innovation: Virtual & Augmented Reality. [online] Available at: http://www.goldmansachs.com/our-thinking/pages/technology-driving-innovation-folder/virtual-and-augmented-reality/report.pdf [Accessed 03 Oct. 2017].

In the research paper, Boland (2016) purports that beyond gaming, the VR entertainment industry will start developing once demand for VR headsets increases. Advertisements featured in virtual reality will have better view through rates. That is why many other industries are starting to adopt virtual reality, including travel agencies, e-commerce merchants and blue chip brands[8].

According to research data by Tractica (2016), hardware and content companies will be banking on the strong consumer interest in Virtual Reality. Consequently, experts predict that over 150 million headsets will be sold between 2019 and 2020. With the ever-increasing use of Virtual Reality technology, it's only a matter of time before it becomes a common household item[9].



Virtual reality content research organisation Superdata Research (2017) concludes that worldwide VR revenue will reach $28.3 billion, with an indication that the growth will start picking up by 2019. VR consumer software and services sales will further fuel this growth by $16.2 billion[10].



8. Boland, M. (2016). THE VIRTUAL REALITY CONTENT REPORT: Why exclusive content is key, top games on major headsets, and the possibilities beyond gaming. [online] Business Insider Australia. Available at: https://www.businessinsider.com.au/upcoming-content-from-virtual-reality-headsets-in-the-mass-market-clone-2015-08 [Accessed 30 Oct. 2017].

9. Tractica.com. (2017). Consumer Virtual Reality Hardware and Content Revenue to Reach $21.8 Billion by 2020 | Tractica. [online] Available at: https://www.tractica.com/newsroom/press-releases/consumer-virtual-reality-hardware-and-content-revenue-to-reach-21-8-billion-by-2020/ [Accessed 30 Oct. 2017].

10. Superdataresearch.com. (2017). SuperData Research | Games data and market research » Virtual Reality Market and Consumers. [online] Available at: https://www.superdataresearch.com/market-data/virtual-reality-industry-report/ [Accessed 01 Oct. 2017].

As the demand for virtual reality and head mounted display surges, the subsequent demand for content will also increase. This is where ImmVRse steps in as the platform will help sustain the growth of VR content development in marketing, entertainment and media industries. The content creators in ImmVRse will offer an array of VR content types, such as entertainment videos, VR vlogs, corporate introductions, VR music videos etc.

CURRENT PROBLEMS

COMPLEXITIES WITH CONTENT DISTRIBUTION

Multiple platforms have VR support including YouTube and Facebook, however, there are not enough content creators on any one platform. Current media sharing platforms are dominated by 180/2D video content with only a few top tier influencers being compensated well. Unfortunately expensive cameras are discouraging the new generation of content producers, thereby reducing the volume available for viewers. In addition, the lack of copyright protection against the reproduction of content does little to encourage and stimulate growth in VR production. The end result favours only a handful of VR video and animation creators who are able to dominate the field.

Given the fact that the marketplace for traditional video producers are wholly saturated, it is very difficult to feed the growth of VR without more dedicated platforms. The current offerings are however flawed in many respects with most being centralised and with limitation of approval. That is, not all the content creators will be approved on the platform, a decision which is retained by the platforms themselves.

PAYMENT MODEL

There are currently many countries in the world where users are bound by legislative restrictions in regards to payments. The decentralised model overcomes these hurdles by implementing a standardised approach to digital payment transactions. By providing a blockchain payment integration, ImmVRse will allow anyone in the world to create a wallet within seconds and use it to make and receive payments.

REVENUE GENERATION

Due to massive influx of video producers on platforms such as YouTube and Vimeo, a substantial amount of effort or an extraordinary idea is necessary for a producer to stand out and subsequently generate revenue from their respective production.

SLOW GROWTH

It is inevitable that the growth of VR and AR requires the involvement of media and entertainment content producers. Due to Head Mounted Display units being forecasted to increase, the demand for content production will rise exponentially.

SOLUTION TO THE PROBLEM

Blockchain is at the forefront of a new digital revolution that has caught the world by storm. In essence, blockchain is a decentralised network and digital ledger for transactions, which can be programmed to store all types of valuable data and also has no single point of failure.

ImmVRse will be powered by a web infrastructure built on the foundation of blockchain called Ethereum. This is a platform that allows smart contracts to be distributed as well as decentralised applications to be developed and run without the influence of a central arbitrator, downtime, fraud or any external interference.

CREATIVITY – ImmVRse will not only provide a common platform for general viewers, advertisers and businesses, but also a community where members can interact, help and inspire each other to create some of the best VR content available online. By using the power of a decentralised network, we will create an efficient and self-sustaining ecosystem for our members.

CONTROL – Control and the power of sharing will be shifted towards the community to remove centralised decision making and removing third party or middlemen from the workflow. ImmVRse will not act as a mediator or intermediary. Every job will use the functions of smart contracts, the parameters of which will be set by the users on both sides, e.g. brands and the content creators. The contract will be deployed on the blockchain and payments will be processed based on set deadlines agreed between parties. The system of contracting will therefore function similar to a peer-to-peer hiring system.

PAYMENT – Payment is one of the biggest problems that blockchain will solve via this application. Firstly, there are no high transaction fees, requirement for bank accounts or any other restrictions for users. Using ImmVRse tokens, it will take seconds to send and receive payments anywhere around the world without paying a high processing fee to a bank or a third party money transfer. This will open opportunities to millions of content creators in many countries where the citizens prefer using cryptocurrencies due to geographical and administrative restrictions imposed by their country's legislative authority. Additionally, the users will be moderated using a sophisticated autonomous ID verification system. Once the users are verified, the payments will be made using ImmVRse tokens.

REVENUE – ImmVRse will allow creators to attract lucrative contracts from employers, as well as creating customised content for companies and high profile global brands. Besides, the system has been designed to not only reward creators, but also the VR content viewers who will be incentivised using tokens for interacting with the application. Additionally, high-value creators will pay a monthly fee to the platform for maintaining their premium status. By creating a balanced ecosystem, the platform will aim to become one of the largest video sharing platform, thus attracting hundreds of companies around the world. The combination of all the above will contribute to ensuring the rapid growth of users and content. This in turn will attract advertisers to invest into the platform to the benefit of all within the ecosystem.

BUSINESS MODEL

TYPE OF BUSINESS

ImmVRse is a mix of B2C and B2B, connected & decentralised blockchain VR video-sharing platform, where VR content producers are able to showcase their talents to a broad audience. Brands can hire content producers and also directly advertise to viewers on the platform. Viewers are able to interact with the community by liking, commenting and sharing videos, in addition to receiving rewards as an incentive.

TARGET MARKET

Target audience for ImmVRse is primarily those who are involved or would like to be involved in VR content production and the age range is between the ages of 16 to 45. The corporate target audience varies from small businesses, start-ups and medium enterprises to large consumer brands and internet personalities.

> ***ImmVRse offers a revolutionary platform for brands looking to branch out into the new and compelling world of VR/AR, allowing them to hire content creators in a quick, easy and convenient manner.***
>
> *-Adrian Chan, Head of Marketing*

ImmVRse
IN DETAIL

ImmVRse Network is a network architecture that consists of:

- ImmVRse Token
- ImmVRse Wallet
- ImmVRse Protocol
- ImmVRse (ĐApp)
  - ImmVRse Decentralised Engine
  - User Retention Engine

The core component of the network will be based on Ethereum Metropolis. This enables the system to initiate smart contracts. Every transaction and contract will be channelled through this platform.

ImmVRse TOKEN

The bespoke token for the network has been created as a centralised currency to be used within the ImmVRse Network. Users will be able to purchase and sell ImmVRse tokens in exchanges. The token follows the standards of Ethereum ERC-20 Standard token.

ImmVRse PROTOCOL

The protocol is a fundamental feature to the business. This is a ledger where we can monitor the health of the network and any token-based transactions.

ImmVRse (ĐApp)

This is the decentralised VR application where brands can directly hire content creators. This platform also allows companies to advertise and users to watch and subsequently receive rewards for interacting with the application.

ImmVRse DECENTRALISED ENGINE

This is a solidity based algorithm on blockchain that is at the very core of powering ImmVRse ĐApp. The system is being developed to connect ImmVRse Token, ImmVRse ĐApp and all of its users within the platform.

ImmVRse USER RETENTION ENGINE

This is an algorithm for blockchain, designed specifically to retain users within the ecosystem. The blockchain algorithm enables users to directly engage with Virtual Reality content producers by earning reward badges. Furthermore, the system will be designed to reward the viewers for simply interacting with the application. A portion of advertiser's payment will be distributed to the viewers for watching, sharing and voting on the app.

DISTRIBUTED APPLICATION FUNCTION

The ImmVRse application will have the following characteristics in order to be decentralised:

The application will built entirely on open-sourced blockchain protocol and function autonomously without any mediation from a financial controller

The DApp will allow users to create an Ethereum address and wallet within the application, resulting in a direct connection to the Ethereum mainnet

The DApp's data and records of operation will be cryptographically stored in a public, decentralized blockchain so as to avoid any central points of failure

The application will use a cryptographic token as a form of payment to initiate smart contracts between two parties, enabling a peer to peer hiring process without third-party mediation

The token will also be used to reward the users, using algorithms on the blockchain that will allow users to be rewarded and thus resulting in better user adoption

The system may adapt its protocol in response to proposed improvements and market feedback.

ImmVRse will permit content creators around the world to upload their own VR videos and showcase it to viewers, brands, advertisers and businesses on one platform. The brands or companies can then directly hire content creators, using the application and Ethereum's smart contract deployment to pay media producers. ImmVRse token works as a sole tradable currency within the application and ecosystem. With the token being tradable and exchangeable in many various exchanges, the increased use of the token will subsequently boost the future valuation of the token.

The recent growth of cryptocurrencies and blockchain technology has completely shaken the fintech and banking world to its core. Cryptocurrency is currently the newest form of crowdfunding which uses "Initial Coin Offerings" and applications hosted on decentralised networks. As more people are gradually starting to adopt virtual currencies, crowdfunding is shifting to a new paradigm.

ImmVRse has built its own personalised cryptocurrency - ImmVRse token (IMV), which will be used to raise funds for the company. The token is connected to the mobile ĐApp as a tradable commodity by the users.

CONVERGING VR AND BLOCKCHAIN

Dedicated VR content publishing websites are generally restricted to having their content approved before publishing, for instance, most VR content sharing platforms intervene to approve content before it is published on their application.

ImmVRse aims to be a platform free of any such type of restrictions, as creators are able to publish whatever content they would like, whenever they want, in whatever form they wish. However, there are moderators that will intervene in extreme or significant cases of inappropriate content.

We are aware that without a specific system in place for independent creators, it will eventually become extremely difficult for them to compete with mainstream giants. The DApp's algorithm is designed to address this particular issue. The system provides an equal opportunity for both new and experienced content creators. As an autonomous application, the system values amateur content creators the same way popular content creators will be valued, so that everyone may have their share of the spotlight.

> ***The idea behind blockchain is to craft an extraordinarily powerful and secure application on a decentralised system that allows developers to build self-governing applications, a system that is powered by the people. By developing a VR content publishing platform where a public voting system is in place, ImmVRse aims to fulfil the initial vision of the decentralised blockchain founders, in creating a democratic platform with no external interference.***
>
> *Limon, Co-Founder & CIO, VRtualise.*

BLOCKCHAIN'S CORE FUNCTIONALITY

ImmVRse will be hosted on a hybrid decentralised platform. Decentralised platform is where computer servers or otherwise known as "nodes" are connected to each other from different parts of the world, in order to run the smart contracts on the application. This allows the system to remain both public and encrypted via blockchain.

Using ImmVRse, companies can transparently and directly hire VR content creators on the platform without the need for an arbitrary third party. A smart contract application holds a specific amount of currency and locks it in an escrow, until a given date or goal is reached. Therefore, the brands have the opportunity to make payments based on results, which will either be released to the creators, or safely returned back to the brands. The intelligent protocol on Ethereum blockchain is designed to process any transactions within the application, allowing ImmVRse to be self-sustaining.

The core architecture has three components that provides the foundation for the system

- ImmVRse token (an ERC-20 token)
- ImmVRse Network Distribution System- a blockchain file distribution on the network
- User Retention Engine - a system that balances the supply of currency

ERC TOKEN ON SMART CONTRACTS

Users will be able to receive or spend ImmVRse tokens, our own personalised cryptocurrency for the ImmVRse Network. ImmVRse token will be tradeable and exchangeable in various crypto exchanges around the world. Users can send or receive ImmVRse tokens and simultaneously store them in their ImmVRse Wallet. The Smart Ledger within ImmVRse protocol will automatically log and keep track of every single transaction within the ecosystem. The system will be open sourced, similar to tracking contract deployment on etherscan.io, and therefore will be very transparent.

NETWORK FILE DISTRIBUTION SYSTEM

On a typical hypertext transfer protocol, cloud storage files are protected by replicating data and storing identical data in multiple destinations. This increases cost of web storage significantly. Unlike typical cloud storage, ImmVRse will use IPFS, a radical new file storage system specifically designed for blockchain that will remove duplication of data and storing information on decentralised nodes.

IPFS, or interplanetary File System replaces the file duplication system of the hypertext transfer protocol storage. Each video and file uploaded on the system, as well as all blocks within the file are provided with a distinctive fingerprint called "cryptographic hash". The structure doesn't require the data to be duplicated or stored in numerous databases. Instead, it replicates the cryptographic signature and mirrors its data.

In addition, the algorithm enables nodes around the world to store and index relevant content. When ImmVRse users look up videos and profiles, the application requests the network to find the nodes that stores content. IPFS also provides a blockchain search engine that allows a user to locate videos and profiles, similar to the way users would find data on a standard http search engine.

FAIL-SAFE NETWORK STORAGE

ImmVRse network distribution system (INDS) along with IPFS will track signatures and as many cryptographic replications as possible. Given the current situation of blockchain, it is difficult to track the total number of signatures, however the majority of them will be sufficient to guarantee non-redundancy as the data will be immutable.

CACHE STORAGE

Unlike a typical web storage facility where initial streaming is slowed down due to high latency and ping time, ImmVRse has plans to deploy a system where cache will be stored to the closest available address, if the project is fully funded. This will save bandwidth, decrease latency and ping time.

The overall architecture will be designed to be everlasting, immutable and cost effective. As the address is mirrored in hundreds of thousands of places around the world, taking down one or a hundred nodes will not result in overall system downtime.

USER FUNCTIONALITY

APPLICATION INTERFACE DESIGN

Creators, advertisers and brands begin by selecting their respective profile types. Brands and advertisers are unable to upload videos through their profiles, they can only view videos and hire content creators. However, brands may post their job openings onto the site while advertisers, on top of recruiting content creators, may also post ads directly within the application's system.

A substantial part of our interface is ensuring brands and advertisers have the transparency to select any content creator they see fit. However, a system is in place to help them find a specialist creator that they may be looking for, which is where our awards and creator badge systems comes into play.

Categories For Uploading Videos:

- *Science & Tech*
- *Education*
- *People & Vlogs*
- *Entertainment*
- *News & Politics*
- *Music*
- *Film & Animation*
- *Advertising*
- *Corporate Videos*

0xf45B6991c957c9eab6bC9
854Ddff263F9e86Bd7b

Uploaded a Virtual Reality Video?

Yes

File receives unique Cryptographic Hash

Identification & duplicate file validation

No

Request to upload VR video with supported codec

Licenses issued against every video

Cryptographic Hash

Video Files

Content Creator

Cryptographic Fingerprint

IPFS DB

Video files are stored in Multiple Storage DBs by Microsoft Azure

Type of User?

Regular Viewer

Brands & Corporates

START

Creates Account

Checks duplication and user validation

Is the user valid?

Yes

Account created with unique Ether wallet

No

Requires ID Validation

ImmVRse Protocol Records Ledger

User Validation and Data Encryption (Content Creator)

SMART CONTRACT VERIFICATION

ImmVRse Token (IMV) will be a form of tradeable token (currency) within the ImmVRse ecosystem. The distribution of the flow in and out of the system is balanced by a range of users within the network.

Brands who wish to hire content creators using the platform are required to purchase the ImmVRse token, in order to pay for their services. On the other end, creators receive the payment that they can later exchange to fiat currencies using various exchanges. Funds are held and locked into smart contracts without the interference of a financial controller. Once the content creator has achieved their objective, the funds are released, failing which, returned safely back to its original source.

Having a dedicated token for the Ecosystem provides a number of benefits, including but not limited to:

Using the currency across any number of jurisdictions.

Facilitating various forms of exchanges, including IMV/BTC, IMV/ETH and also other fiat currencies available in exchanges.

Making it possible to perform settlements e.g. paying for contracts using automated blockchain algorithm, financial dispute settlement, fund reversal - all that without minimum or any interference of humans.

Buying and selling of the tokens at the same time through the application balances out the possibilities of a sudden increased demand for ImmVRse tokens, resulting in reduced volatility.

Performing incentivised contracts that drives the demand and supply of ImmVRse tokens, benefitting all types of users within the ecosystem.

START

Brands
& Corporates

Run decentralised search algorithm

Brand posts job in the marketplace

ImmVRse
Client Server
Architecture

Job
Accepted**

Payment
Initiation**

Funds Held in Escrow**

Job Complete?

No

Yes

Partial

Receives
Partial Payment
based on
set deadlines

Single Payment
on completion

Payment based on
set deadlines

Full
Payment
Released

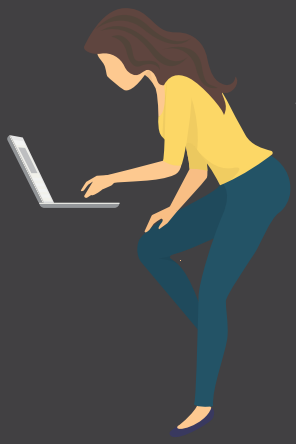
ImmVRse Protocol
Records
Ledger

Algorithm Workflow For Hiring Content Creators

**ImmVRse will not function as a middleman between the hiring company and the content creator. The parties will set the parameters of the contract and the system will automatically deploy it. However, protection of contentcreators are very important to us. Therefore, full guidance on smart contract and workflow process along with instructions of using Ethereum as a payment system will be published in the future.

SMART CONTRACT VERIFICATION

START



Advertisers

Creates Advertisement

Yes

Campaign Validation for Approval of Content

Purchased sufficient IMVs for the campaign?

No

Yes

Request to Purchase sufficient IMVs via Wallet

Ads Posted on ImmVRse DApp

Contract Verification and Fund Distribution

25% Funds held in Escrow for Rewarding Viewers who receives IMVs for interacting with the ecosystem

Did the user achieve required accolade by using the application?*

No

Yes

User receive payments every month based on their activities

ImmVRse will receive a 50% share of all payments made**

User can store IMVs in ImmVRse Wallet or convert their funds into Ether/Fiat Currencies at various exchanges

ImmVRse Protocol Records Ledger

Algorithm Workflow For Advertisers & User Retention Engine

SMART CONTRACT VERIFICATION

*Users will need to achieve accolades, e.g. "Liked 100 Videos" or "Posted 500 Comments" etc. and get paid in real currency.
**Payments received by ImmVRse will be processed straightaway, however, until the users complete their achievement, they will not receive any payment.

ImmVRse USER RETENTION ENGINE

The User Retention Engine has been designed specifically to balance the circulation supply of ImmVRse tokens, in order to stabilise any unpredicted volatility. The application will attract casual users - viewers who can simply sign up and use the application to watch VR videos, similar to YouTube. Users are able to like, comment and share their videos. By interacting with the app, the viewers are rewarded with a small portion of ImmVRse tokens.

The flow of payment is controlled using smart contracts and the system takes a percentage of advertiser's payment, holding it in escrow until the T&Cs are met. Once the creator has completed the task, they are paid in the form of ImmVRse tokens. The tokens can then be stored in their ImmVRse Wallet or sold in an exchange with any other crypto or fiat currencies.

VIEWERS AWARD SYSTEM

In order to incentivise the viewers for watching videos on ImmVRse, they earn a small share of ImmVRse tokens as a token of appreciation for the recurring use of our platform. These tokens can then be accumulated to be exchanged for real monetary awards, or to make purchases within the application that will be made available in the future.

Viewers on ImmVRse receive tokens as a reward for interacting with the application. The proportion of the funds they receive is set by smart contracts and can be adjusted based on their activity heat map.

The users need to achieve certain accolades or complete defined tasks to unlock and receive earned tokens. If the user does not complete the task defined by the smart contracts, the funds remain locked in the blockchain.

The users are able to exchange the token with fiat currencies at selected exchanges or alternatively stored in their ImmVRse wallet.

Moderation at the beginning of the user account creation process, users have to be verified to join the platform, in order to prove that the account holder is human.

Approval of the brands and companies by providing verification and badge system

Developing an encrypted module, that allows users to set up an optional 2 factor authentication when logging in from a new device

Moderation of content by upvote and downvote of users. Only videos and content flagged by the community will be further verified by central moderators

MONTHLY CREATOR AWARDS

Blockchain smart contracts automatically trigger a monthly awards system, where viewers are able to vote for their favourite videos under multiple categories. Under each video is a voting button, which allows the viewer to select the video to be entered into the monthly awards selection, under the specific category it falls within.

Monthly award winners are selected by smart contract, based on the videos that have received the majority of votes at the end of each calendar month. Award winners are able to accumulate these categorical awards and gradually progress into a higher tier of our creator rankings, in addition to receiving a generous share of ImmVRse Coins that can be added to their wallet. The algorithm is designed to filter the most voted content and award the creator with a fixed amount of ImmVRse Coins.

As our platform places emphasis on providing an opportunity for independent creators to flourish, it is worth noting that corporate companies are not eligible for this award. The more quality videos produced and accolades won by a creator, the increased attention they will draw from brands and advertisers.

ENDORSEMENT BADGES

Endorsement badges are a way for companies and brands to recognize creators for the successful completion of a project. The creators automatically receive an endorsement badge from a company when they successfully complete a project and receive cleared funds. These badges indicate the amount of business related projects creators have completed, thereby allowing companies to filter creators out in terms of business related experience.

CREATORS BADGES

In order to aid the selection process for brands and businesses looking to hire content creators, the application has implemented a creator badge system as a measure of their experience and quality of work, which is displayed in their Creator's Trophy Case. Content creators that put significant effort into their work can find themselves quickly moving up the system, achieving more recognition, which in turn opens up further and potentially better business opportunities.

The badge system ensures that content creators recognise that they are progressing in their careers and with mounting projects being completed, the higher their pay-out. Creators will start off with zero badges, but with every upload and accolade achieved, they will be able to quickly develop.

Creators also receive a share of ImmVRse tokens for every tier they reach, with each amount being greater than the previous. As they progress through the ranks, creators are given the option to increase their minimum costs for their services if they wish, for example, a platinum creator would be eligible to set their minimum cost much higher than a silver creator.

Every tier represents a new challenge for the creator, as they thrive to reach the diamond tier, where they will be recognized as one of the elite creators on the platform. Diamond creators will also have an opportunity to make an influence in the direction of the platform moving forward, as they will be invited to attend the exclusive annual ImmVRse creators' summit.

The entire reward system functions under Ethereum's algorithm, which inherently reduces human error, so as to provide content creators the best chance to receive these rewards via a totally transparent process.

CREATOR BADGES

3 uploads = Bronze tier creator

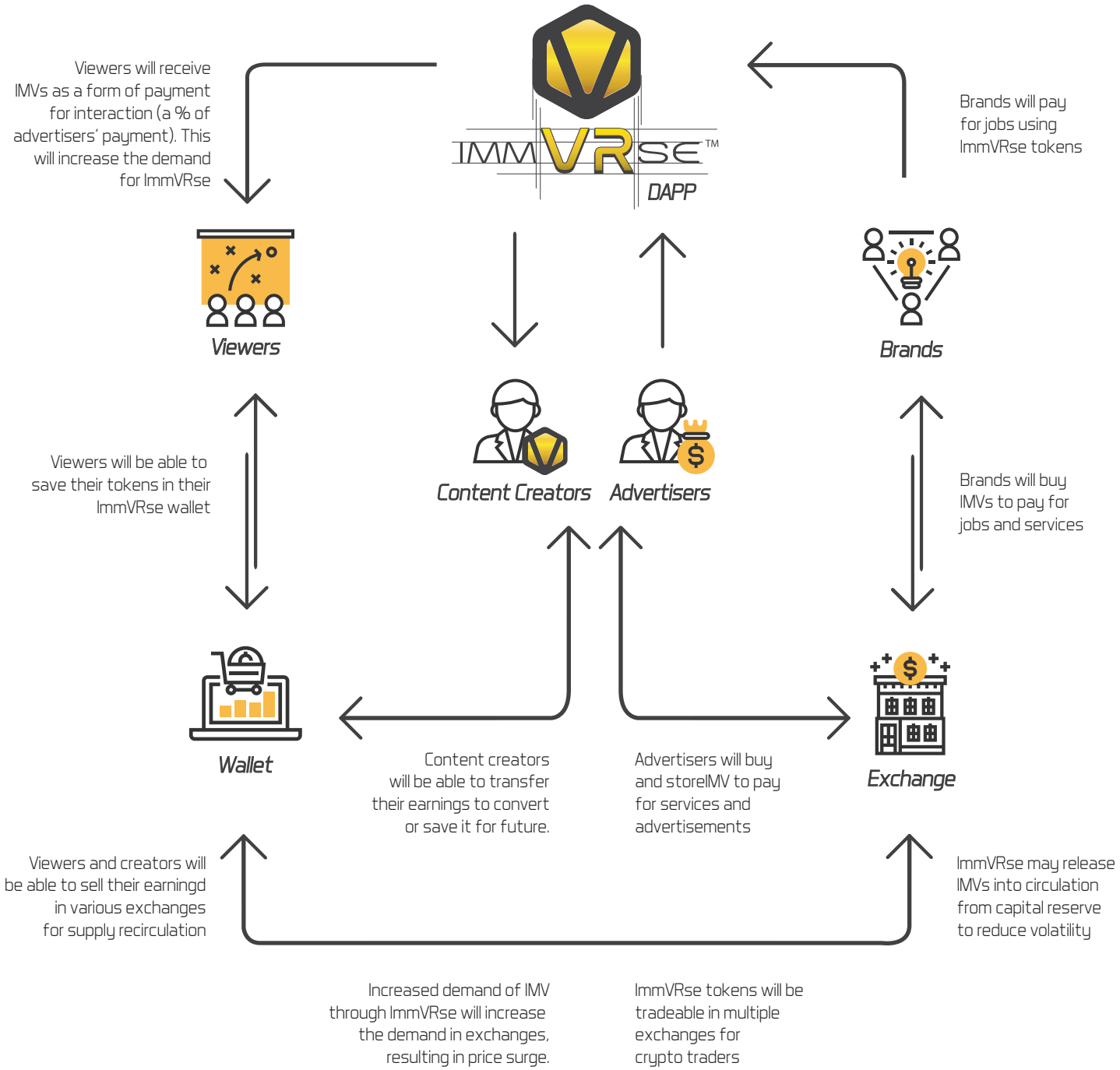
1 monthly award or
endorsement badge = *SILVER* tier creator

2 awards or
2 endorsement badges = *GOLD* tier creator

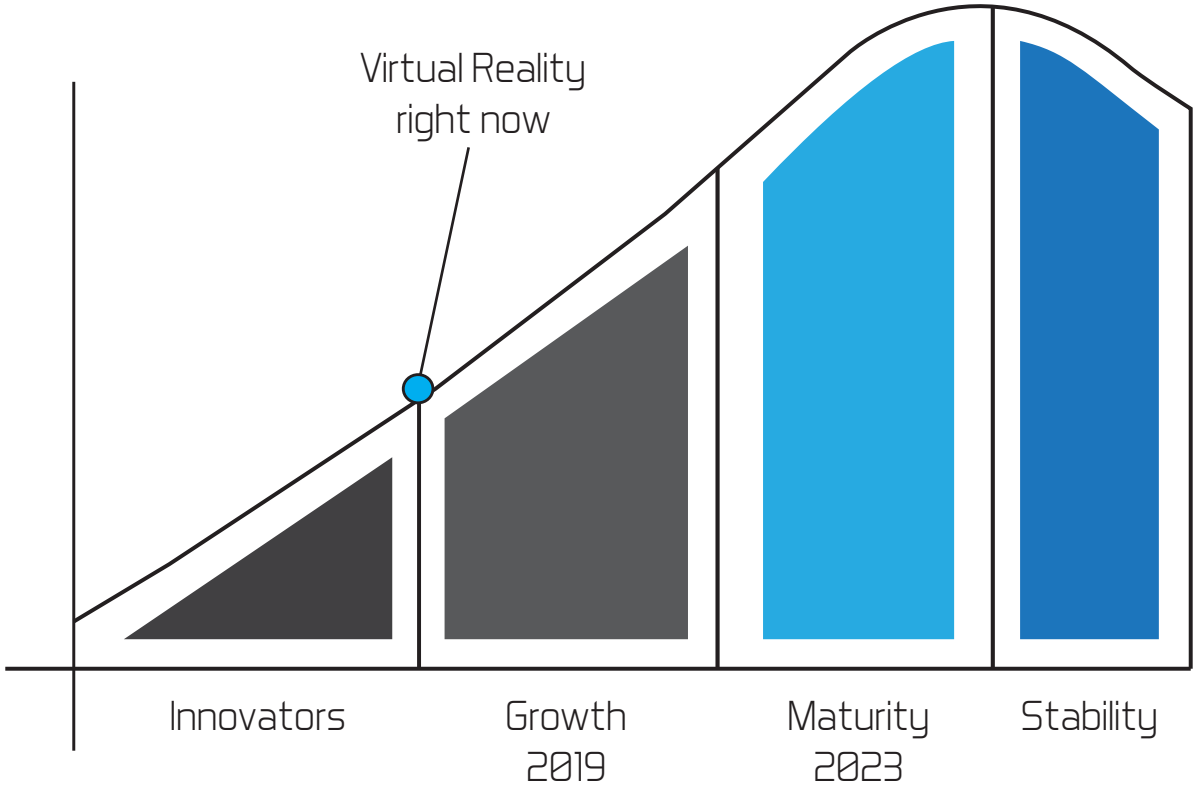
3 awards and
3 endorsement badges = *PLATINUM* tier creator

6 awards and
6 endorsement badges = *DIAMOND* tier creator

ECOSYSTEM WORKFLOW



INDUSTRY LIFE CYCLE



As VR is at an early innovative stage, the technology still has a long way to go before it becomes a household item. The start-up or innovative stage consists of the marketing of a new service, which is where ImmVRse currently stands.

At this stage, information on products and services are limited and consumers have still much to learn about the business.

The growth stage is where demand starts to rise rapidly and consumers begin to understand the value of the new services that are offered by a business. One of the most important components of this stage is research and development, along with the marketing of services. We would like our contributors to join us in this exciting stage and together, experience the growth of the business from research projects to the development of our revolutionary blockchain platform.

PRIVACY AND SECURITY

Blockchain provides a highly secure system to share and store information. This platform allows us to execute secure end-to-end encrypted transactions that can serve as a defense structure in preventing cyber attacks and security threats.

PROTECTING DATA

Most public key infrastructures are centralised and dependent on third party certification authorities, which is why it's easy to compromise identities and access data. As IFPS mirrors data on cloud, blockchain cryptography is decentralised and therefore has no single point of failure.

As a result of the distributed ledger, running ImmVRse on blockchain eliminate the risks of false key propagation and securely verifies the identification of the user. Furthermore, as the network is dependent on millions of floating nodes across the world, it ensures that a strong defense system is in place to be able to withstand DDoS attacks.

EXTREMELY SECURE TRANSACTIONS

Every transaction on the ImmVRse platform will be executed using the smart contract application. This is the same technology that enables peer-to-peer secure transactions and subsequently prevents and reduces cyberattacks e.g. DDoS.

SYSTEM INTEGRITY

All transactions within the application will be processed using the peer-to-peer automated identification system built into ImmVRse Coin's code. That is why the transactions are executed exactly as the protocol commands, without the interference of a third party.

IMMVRSE LEDGER

All transactions will be logged on ImmVRse Protocol's central ledger, decluttering complications and increasing efficiency. The open smart contract explorer will allow users to track addresses, therefore eliminating privacy and complying with the ethical implications of blockchain.

PROTECTING DATA INTEGRITY

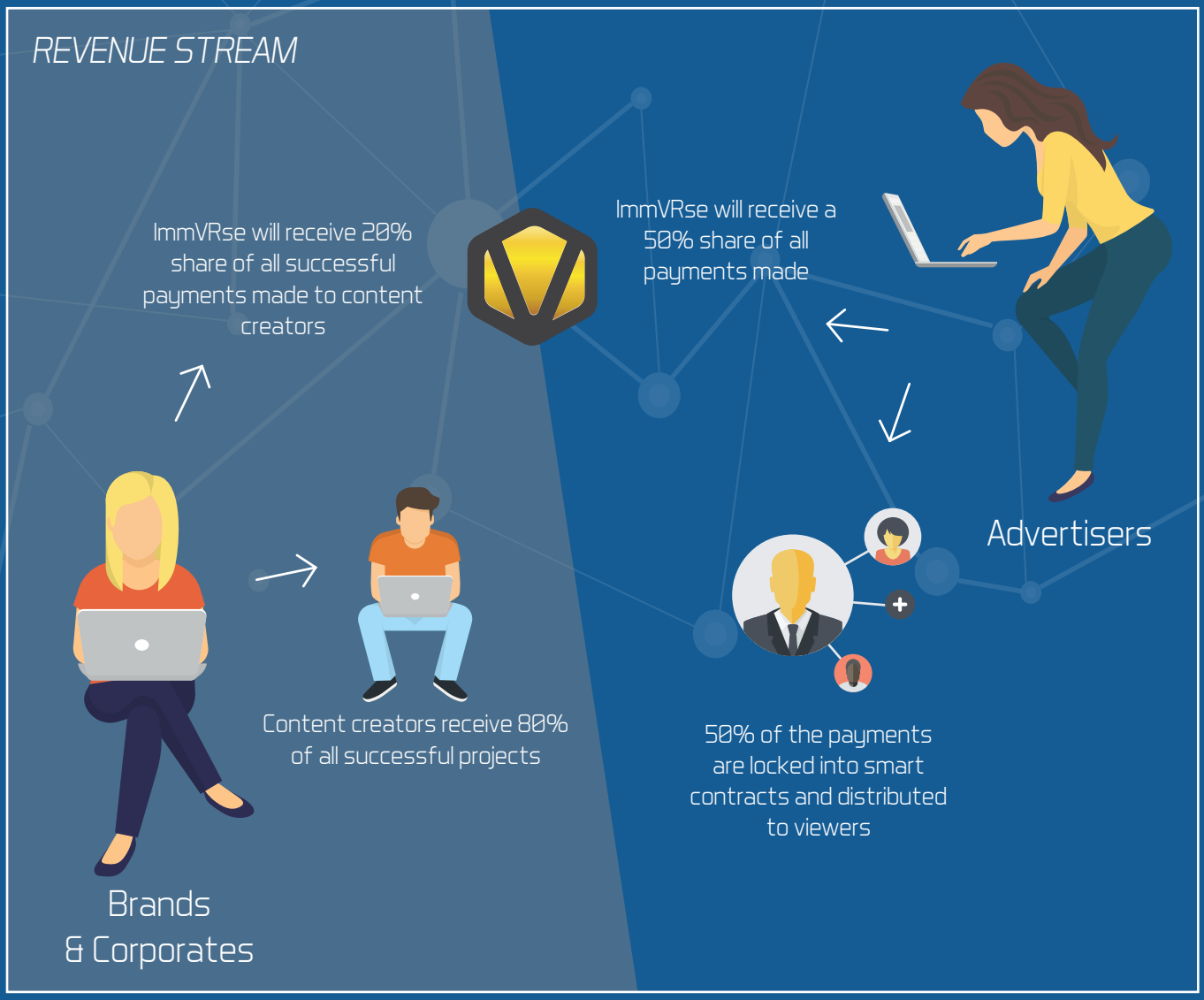
Signing secure contracts is a fundamental building block within the ImmVRse infrastructure. All the contracts signed on ImmVRse ĐApp are completed using blockchain's smart contract system, distributing evidence across multiple blockchain nodes and making it impossible to manipulate from a central data source. Should any manipulation of data be identified, it is immediately discovered as the original hash exists on millions of nodes. Data control will be a critical part of the process, along with securing any project proposals that are deemed as trade secrets.

DISTRIBUTED DNS

ImmVRse also has plans to integrate the concept of a distributed DNS system, which carries a minimal risk of failure under an excess of requests.

REVENUE AND PROFITABILITY

As advertisers and brands are recruiting content creators directly without the interference of a third party, they will be typically saving a significant amount of money. The cost of hiring content creators should range between $3,000 to $50,000, depending on their badge tier, experience and specifications.



CONTENT CREATORS

Once content creators reach the golden creator tier and have made a considerable amount of profit from their work with brands and companies, a charge will be implemented per month and will increase as they continue to rank up. Golden tier creators will be charged $5.99 a month, Platinum tier creators will be charged $7.99 a month and Diamond tier creators $10.99 per month.

Due to the exponential rise of demand in virtual reality content in the recent years and the forecasted rise in years to come, this is a perfect opportunity for ImmVRse to establish itself as the most prominent platform online for virtual reality content distribution. This in turn will lead to generating opportunities and subsequent value increase of the company.

IMMVRSE™ ACADEMY

As many users on the platform will be new to virtual reality, we want to provide individuals with the opportunity to not only become part of the community as viewers but also as paid content creators. ImmVRse Academy will be a separate application which aims to be a comprehensive learning component integrated into the overall ImmVRse ecosystem, teaching users that are interested in VR content creation how to film and produce professional VR content. If the project is fully funded, the token will be used to provide Proof-of-Access to the users on the platform.

To become a member of ImmVRse Academy, the monthly cost will cost $12.99 and this will give students access to live webinars, a number of tutorial videos with experienced VR content creators, as well as a private channel to communicate and get feedback from them on any projects they may be working on. Students will be taught everything about required equipment, filming and post production process.

ImmVRse Academy hopes to inspire a new generation of VR content creators and provide everyone, regardless of their experience, the opportunity to begin a career as a VR content creator, or perhaps even simply, to generate a secondary source of revenue.

DEVELOPMENT PROCESS

Phase 1

Q4 2017

Under Development: ImmVRse DApp MVP is currently under development. ImmVRse Protocol's development is also under way and is projected to be complete by Q4 2018. In the meantime, ImmVRse plans to use Etherscan.io to record ledgers and monitor the health of our blockchain platform.

Launch of Marketing Campaign: Our marketing campaign for token launch will be launched on the first week of 2018. We will reach out to potential contributors via multiple promotional channels along with Google AdWords. Part of our marketing campaign will be to sign up users for the alpha version of our application.

Q1 2018

Pre ICO: A private Pre-ICO will be conducted in April 2018 with contributors who are willing to contribute over 1 Ether. Pre-ICO allocation will be 10% of the tokens to be distributed.

Q2 2018

ICO Launch: ICO launch dates are yet to be announced. ImmVRse plans to release 100,000,000 IMVs immediately after the sale with a hard cap of US$20million.

Token Release: ImmVRse tokens will be released in one or more exchanges upon the successful completion of the ICO. Some exchanges may be confirmed prior to the ICO, however, the official date from which tokens will be transferrable, will be announced after the ICO.

Q3 2018

Team Expansion: 3 months after the ICO launch, ImmVRse will recruit a full DevOps team to initiate the development operation for the full version of the app, in order to prepare for the official launch of the alpha version.

Marketing Campaign: A crucial part of the plan is positive PR and marketing as the success of the application will heavily depend on the adoption and retention of users. On this basis, we have decided to allocate a certain amount of the raised funds towards the marketing campaign.

**US$ has been used as a reference for our global contributor audience.*

Phase 2

Q4 2018

Office Extension in EU & Asia: A segment of the team will join a vibrant community with local offices in Asia and EU to primarily manage DevOps.

ImmVRse Alpha Launch: ImmVRse is aiming to launch the alpha version of the app by Q4 2018.

Q1 2019

ImmVRse Ecosystem Setup: Upon the establishment of ImmVRse Protocol, ImmVRse tokens will be usable within the application ecosystem. Brands and advertisers will be able to purchase ImmVRse tokens to recruit content creators.

Continued Research and Development: ImmVRse will partner with universities across the country to enable students' participation in blockchain technology. A part of the process will be to recruit PhD students and dedicated researchers to improve VR/MR/AR technologies based on blockchain platforms.

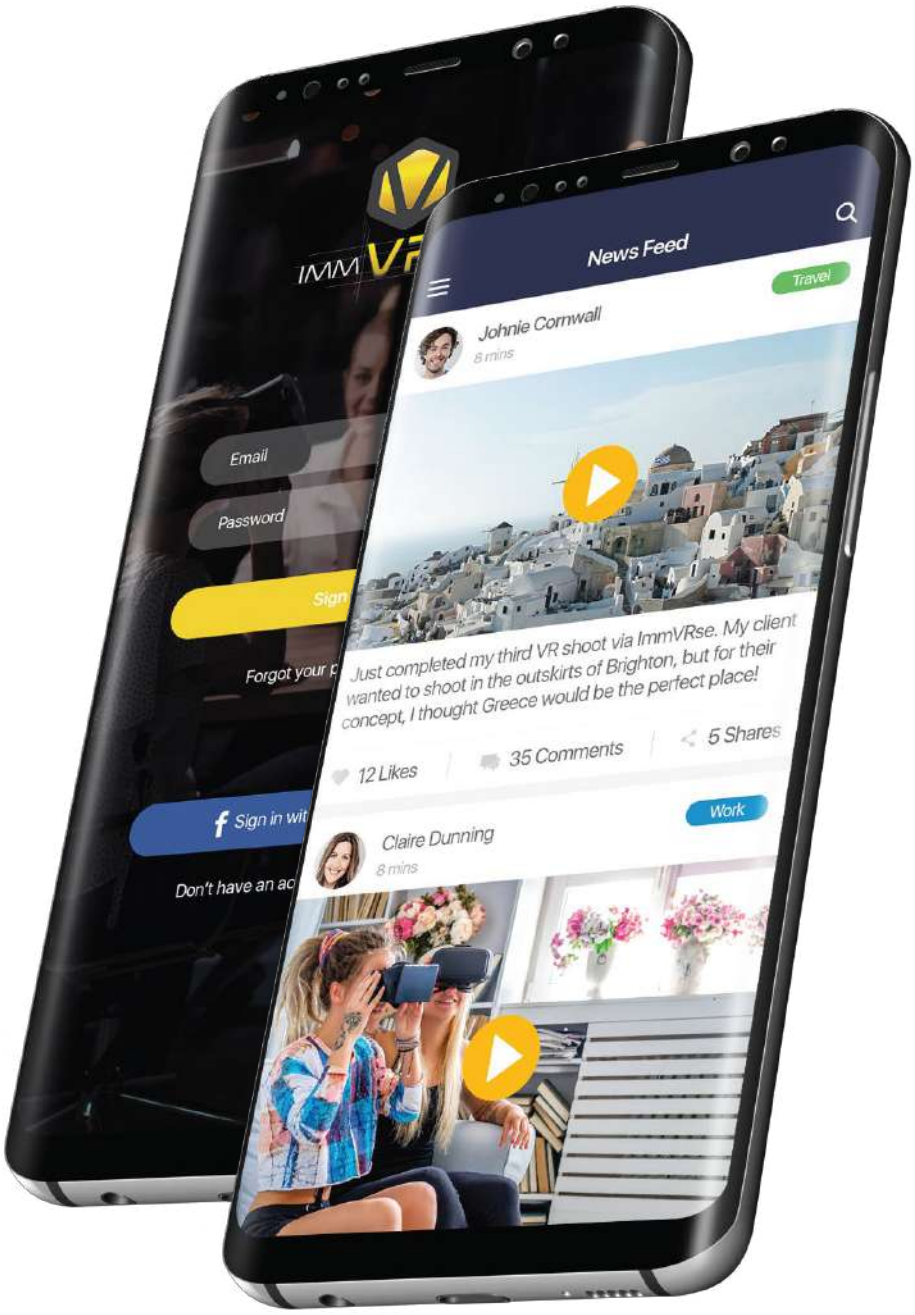
Phase 3

ImmVRse Token DevCon:
ImmVRse will organise a global hackathon to gather talented blockchain developers around the world.

Q2 2019

ImmVRse Full Version Launch: The full version of the application will be launched by mid-2019 after extensive testing on the beta version. ImmVRse aims to stick to these target dates and predicts that this will be the optimal time to launch the application, as this will tokencide with the year that Facebook, Intel and Apple will also be launching their own commercial VR headsets. Once this happens, mass adoption will take place, creating an extremely high demand for VR content.

There are also plans to recruit crypto economist, PR experts and full marketing team for increasing and retaining our user base, including content creators, viewers and recruiters. Extensive campaigns for headhunting will be launched by Q2 2018.



COMPANY PARTNERS

Imperial College London

Kingston University London

INITIALISE™

VRTUALISE™

BITCOIN PR BUZZ

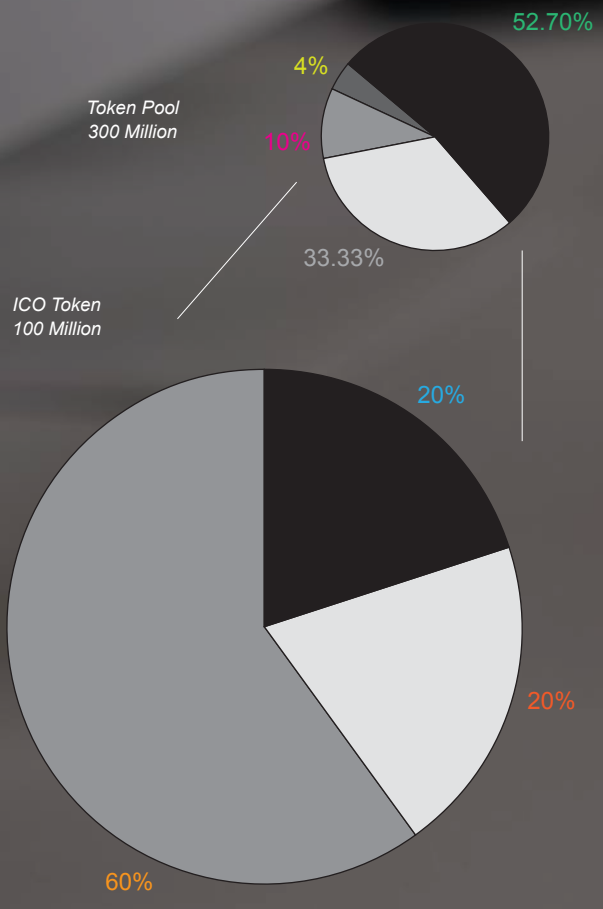
ENTERSOFT

TOKEN ICO

The ImmVRse token launch, where approximately 100 million tokens are planned to be distributed, will officially commence on Q1 2018. The token generation will cease 6 to 8 weeks from the launch of the ICO.

- ImmVRse will offer up to 33.33%, 100,000,000 of the company's total circulation supply - 300,000,000 tokens**
- Each ImmVRse token will cost $0.20
- Participants will be able to purchase the tokens with Ether and store the tokens via their MyEtherWallet address
- The price of ImmVRse token will remain steady throughout the token generation period
- Participants in Pre-ICO will be eligible for bonus of 20%
- Early contributors of ImmVRse tokens will receive additional bonus of up to 10%
- The token launch will take place with target funding and cap of $20,000,000

TOKEN DISTRIBUTION



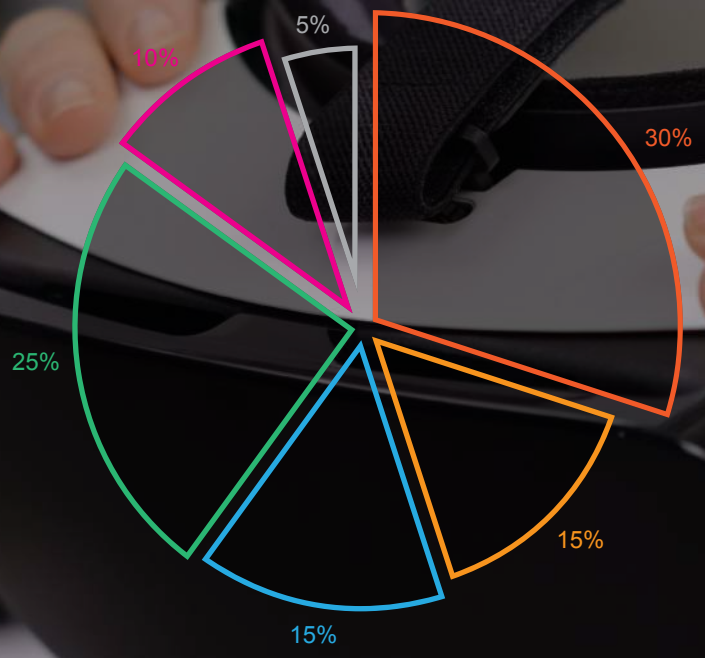
52.70%	Retained by ImmVRse
33.33%	Distributed During Ico
10%	Team and Advisors
4%	Rewards and Bounty

20%	Private contributors
20%	Pre-ICO Event
60%	Main ICO Event

US$ has been used as a reference for our global contributor audience.

FUNDS DISTRIBUTION

Raised funds from ICO will be allocated in the following ways:



- **30%** Development Operations fund
- **15%** Future Employees Pool
- **15%** Operating and Admin Expenses
- **25%** Marketing, Advertising & PR for ImmVRse
- **10%** VR Research and Development
- **5%** Legal

"From the funds raised in the ICO, we will invest a significant amount into R&D for ImmVRse. R&D will assist in designing a stronger foundation for our token and the ultra-modern road that we are paving right now. As a startup that utilizes cutting-edge technology, we will unequivocally transform the VR/AR industry by converging our groundbreaking ImmVRse Decentralised Engine; followed by the systematic integration of blockchain, and powering artificial intelligence. This will eventually create a incredibly influential self-sustaining ecosystem in the future".

Farabi, Co-Founder & CEO, ImmVRse

ImmVRse CORE TEAM

FARABI SHAYOR
Co-Founder & CEO

LIMON RAHMAN
Co-Founder & COO

ADRIAN CHAN
Head of Marketing

MARK HIGGINS
Chief Information Officer

PETER GOSTINCAR
Chief Technical Officer

ROBIN WARE
Chief Solutions Architect

JASON TAYLOR
Head of Business Strategy and Development

CAROLINE TIBBITTS
Project Manager

TONY FREEMAN
Head of Business Intelligence

SAMIRA CHEURFI
Android Developer

SHAMA SHIBLEE
Content and Community Manager

SARAF CHOWDHURY
HR Executive

ImmVRse ADVISORY

KATRINA SALE

PR and Branding Advisor

SHAHAD CHOUDHURY

Advisor, Blockchain Development

WULF KAAL

Blockchain & Smart Contracts (Legal) Advisor

HUGH TONKS

Technical Advisor

MATTHEW CODD

Business Development Advisor

CARL WHITLEY

General Counsel

Adnan Javed

Strategic Advisor

Tyler Sanford

Community Outreach Advisor

Imagine providing access to a **DECENTRALISED** network for **MILLIONS** of content creators and users around the world, without the need for a PayPal or bank account, yet permitting them to receive payments **ANYWHERE** with a simple Digital-wallet.

Envision a fully **AUTONOMOUS** **PROTOCOL** where transactions occur in an **ENCRYPTED** ecosystem- one that does not require **INTERVENTION** from a financial controller, yet transparent enough for anyone to view.

Picture a platform where **VR** and **AR** content creators will have the opportunity to grow and advance. A network where some of the most proficient and accomplished creative minds are able to **CONNECT** and **COLLABORATE**, to revolutionize the future of entertainment.

Visualise a place where brands around the world will be able to **RECRUIT** talent and reap the benefits of this new **DISRUPTIVE** **TECHNOLOGY**.

IMMVRSE™

THE FUTURE OF
IMMERSIVE MEDIA
IS ANYTHING BUT
VIRTUAL, EMBRACE
THE TREND
AS IT BECOMES
A REALITY