

://VR/

WHITEPAPER



VRT
VR TECHNOLOGIES

VR PLATFORM FOR GLOBAL INTEGRATION OF
DEVELOPERS, CONSUMERS AND BUSINESS

● TABLE OF CONTENTS

Disclaimer	3	Technology for Working with Virtual Reality	15
Executive summary	4	Hardware Solutions	16
Market review	5	Graphic Engine	16
Market Size	5	VRT Tracking System	16
Key Players	6	VRT Kinematics	16
Market Trends	7	VRT Full-body Tracking Emulator	16
Industry Problems	8	Starter Pack	17
Product Overview	10	Team	18
About the Platform	10	Mentors	20
VRT Tokens	11	Project Roadmap	22
Long-term Plans for Additional Functionality	12	Token Sale Details	25
VR Parks	13	General Information	25
Technology	14	Distribution of Tokens	25
The VRT Ecosystem	14	Allocation of Funds	26
Infrastructure Solutions on Blockchain	14	Risks	29
Smart Contracts Constructor	15	Regulatory	29
User Interactions	15	Technological	29
Voting and Rating	15	Market	29
Authorship Verification	15	Glossary	29



● **DISCLAIMER**

Please read this disclaimer carefully. Should you have any doubts regarding the contents of this document, please seek the advice of a financial, legal, tax or other professional consultant.

This Whitepaper (hereafter referred to as "Technical document" or "Document") is designed as a reference guide and does not imply any contractual arrangements. The purpose of this Document is to provide information on a Project. This Document is not a prospectus or an investment application.

The English version of the Whitepaper contains the most up-to-date and highest priority information about the Project Compared to information published in any other sources, transmitted viva voce, or as part of the Whitepaper translated into other languages. The Project reserves the right to make changes to the Technical Document, and any such revisions will be clearly marked.

The Document contains the preliminary parameters of the Project. The Project cannot guarantee that these parameters will be implemented precisely as indicated in the Document. The Project implies certain known and unknown risks that should be assessed by potential investors. The investor is responsible for making a decision regarding these risks, either independently or with the assistance of professional consultants.

Potential investors shall make their own assessment of the legality and feasibility of investing in, acquiring, holding and selling tokens in light of legal or any other restrictions. The Project is not liable for any legal infractions on the part of the investor.

● EXECUTIVE SUMMARY

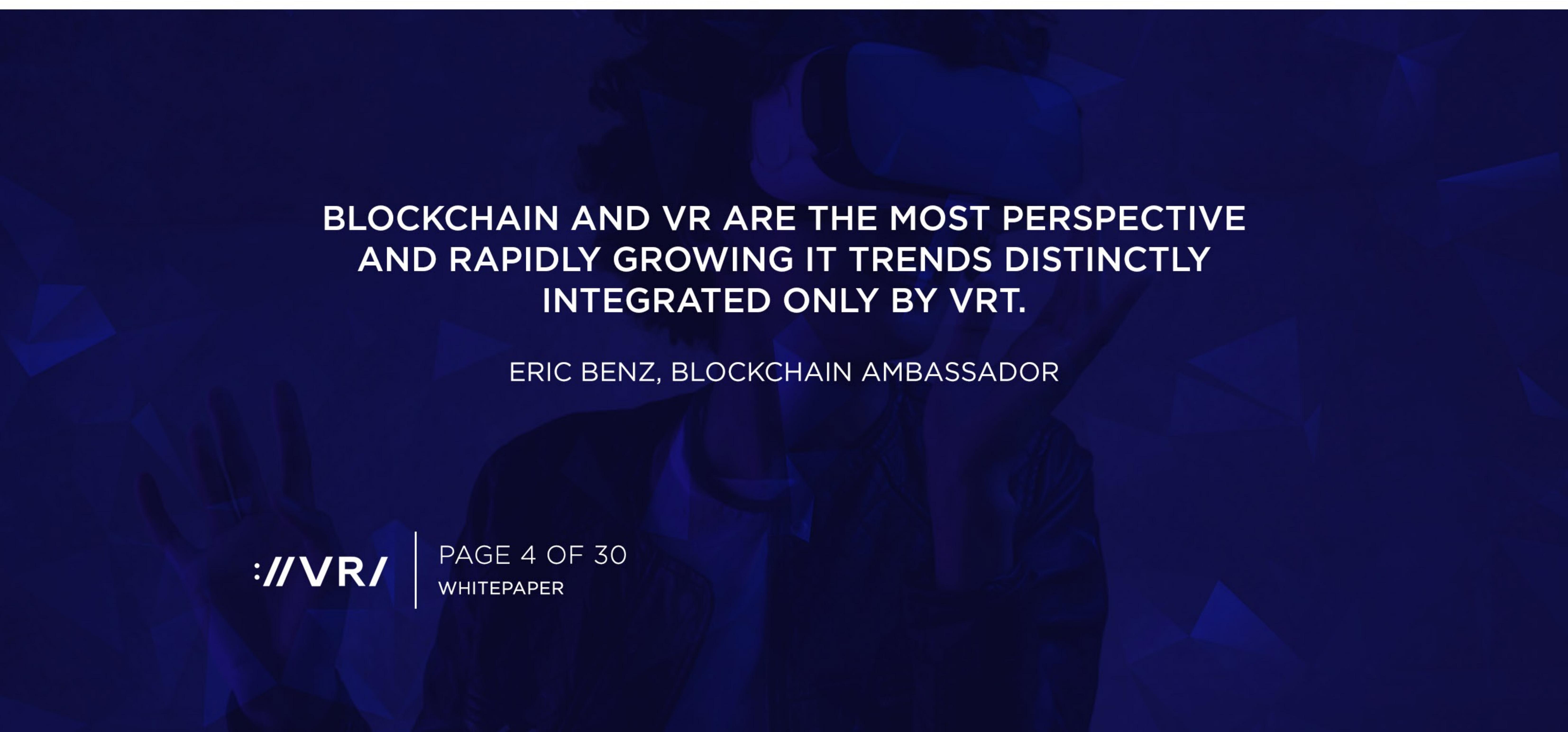
Virtual Reality ("VR") technology is actively taking over the entertainment industry all over the world. This is not surprising, as improved modern technology turns virtual reality into an entirely new experience. According to analysts, the VR industry is highly likely to create a multibillion market in the next few years. However, one of the key issues getting in the way of full-blown development of this technology is a lack of quality content for VR equipment.

In this Project, we offer a solution that will entice thousands of developers from all over the world to create and monetize quality VR content—a VRT platform serving as a decentralized VR marketplace. The platform will be based on blockchain technology, which guarantees an honest and transparent distribution of funds and the protection of intellectual property rights. In addition, VRT users will have access to platform SDK and API that will make it possible to involve a large number of developers in improving the system.

Success of this Project is founded on our team's unique set of experiences. In 2015, we started work on technology that makes it possible to immediately convert any movement into VR, and in two years, we made significant progress. Our technology is not just a prototype, but a real breakthrough in VR games. We have an operating Project with an unprecedented level of interaction between users. In November 2017, we launched our first VR park in Moscow, followed by four more parks on a franchise basis. We have also signed a partnership agreement to open 30 VR parks based on our technology in various European cities over the next 18 months.

To maintain a high level of interest in VR parks, new game worlds and new game scenarios are needed, and so our park network will become the first customer for platform-based VR content, immediately generating economic activity on this basis. We will also establish a fund for the same purpose, which will be used to reward pioneer developers of the platform and will amount to 5% of the money raised.

In order to develop and promote the platform on the market, we are organizing a Token Sale. VRT Tokens issued during the crowdsale will have a utility function and serve as the internal currency of the system. A part of the funds raised through the Token Sale will also be spent on expanding our VR parks internationally, which will significantly increase internal demand for VRT Tokens and will serve as a great incentive for other participants to join the platform.



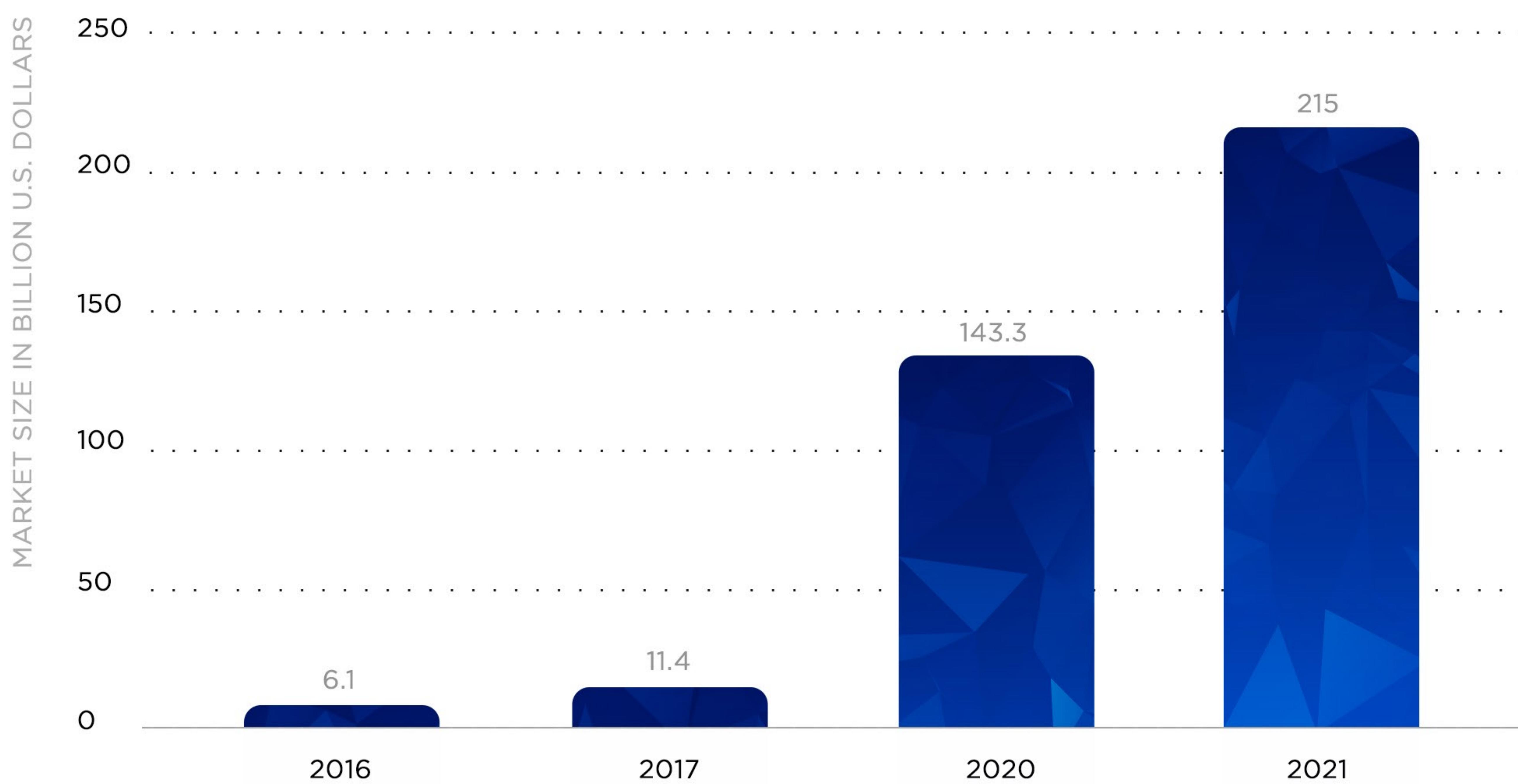
**BLOCKCHAIN AND VR ARE THE MOST PERSPECTIVE
AND RAPIDLY GROWING IT TRENDS DISTINCTLY
INTEGRATED ONLY BY VRT.**

ERIC BENZ, BLOCKCHAIN AMBASSADOR

● MARKET REVIEW

MARKET SIZE

Over the last several years, Virtual Reality has become one of the most promising segments in the entertainment industry, and all of the major technology firms are vying for a foothold in the market. According to Digi-Capital¹, total Augmented Reality and Virtual Reality investments on the part of Venture Capitalists and corporate entities totaled \$2.3 billion in 2016, a threefold increase in comparison with 2015. Behind this increase, lies a sound rationale; according to Digital Data Corporation², global spending on AR/VR-related goods and services may grow from \$11.4 billion in 2017 to almost \$215 billion by 2021, with the compound annual growth rate reaching 113.2%.



Digi-Capital³ experts are more restrained in their predictions for AR/VR market growth; their estimates place total revenue from this segment at slightly over \$100 billion by 2021. Goldman Sachs⁴ is even more conservative; their base scenario predicts that the AR/VR market will not reach \$80 billion until 2025, with \$35 billion attributed to the software segment. Video games, live events, and video entertainment will lead that segment, bringing in almost \$19 billion dollars in total revenue.

¹ <https://www.digi-capital.com/news/2017/02/record-2-3-billion-vrar-investment-in-2016/#more-1651>

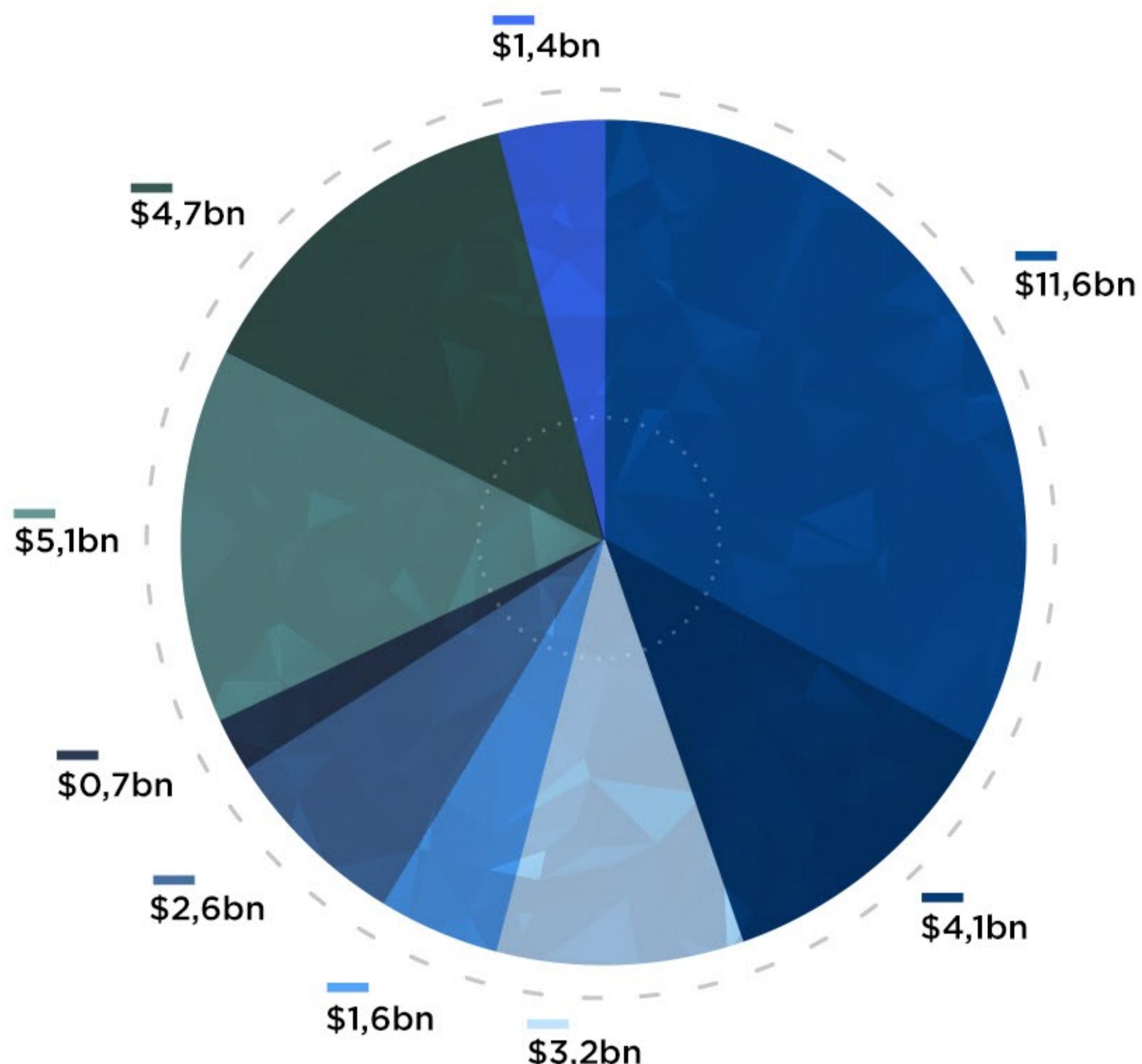
² <https://www.idc.com/getdoc.jsp?containerId=prUS42959717>

³ <https://www.digi-capital.com/news/2017/01/after-mixed-year-mobile-ar-to-drive-108-billion-vrar-market-by-2021/>

⁴ <http://www.goldmansachs.com/our-thinking/pages/technology-driving-innovation-folder/virtual-and-augmented-reality/report.pdf>

In any event, the overall trend clearly points toward the growth of the virtual reality market, and video games are poised to play a major role in this expansion. This is primarily evidenced by the large number of potential users interested in these products.

According to Goldman Sachs⁵, the existing target audience for VR gaming includes approximately 380 million people—230 million console owners and 150 million PC gamers in developed nations. After adding live events and video entertainment viewers to these figures, we can estimate the target audience for VR at over one billion users.



KEY PLAYERS

The best-known Head Mounted Device (HMD) manufacturers include Google, Samsung, HTC, and Facebook (which owns the Oculus brand).

According to The Virtual Report's site⁶, there were around 18 million HMD owners globally at the start of 2017, with Google Cardboard accounting for more than half of these devices.

Additionally, according to statista.com⁷, almost 4.5 million HMDs were sold in the first half of 2017 alone, with Samsung, Sony, and Facebook's Oculus Rift in the lead.

- Videogames, \$11,6bn
- Healthcare, \$5,1bn
- Engineering, \$4,7bn
- Live events, \$4,1bn
- Video entertainment, \$3,2bn
- Real estate, \$2,6bn
- Retail, \$1,6bn
- Military, \$1,4bn
- Education, \$0,7bn

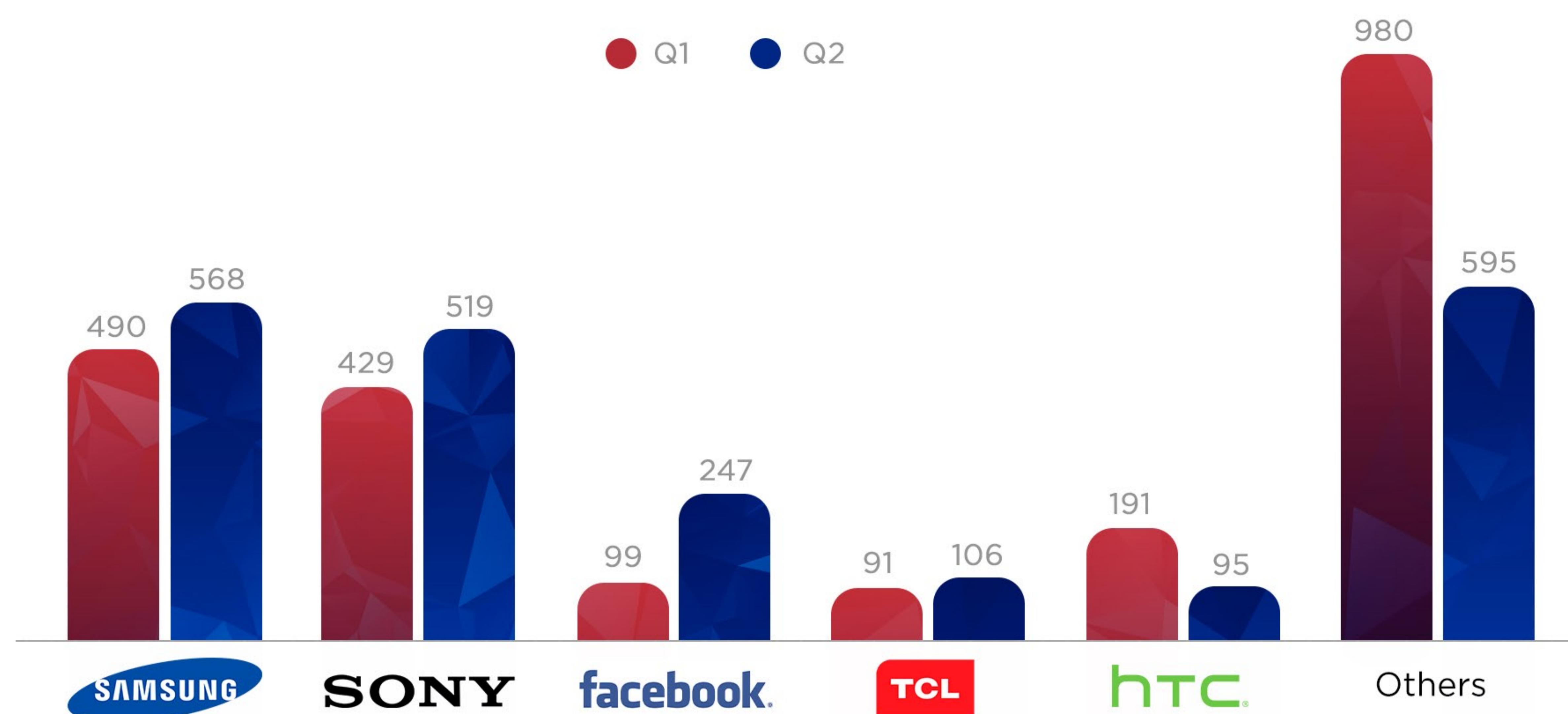
⁵<http://www.goldmansachs.com/our-thinking/pages/technology-driving-innovation-folder/virtual-and-augmented-reality/report.pdf>

⁶<http://www.thevirtualreport.biz/asia/feature/63914/the-size-of-the-vr-consumer-market-updated/>

⁷<https://www.statista.com/chart/11006/vr-and-ar-headset-shipments/>

WHO LEADS THE VITRUAL REALITY RACE?

Worldwide unit shipments of AR and VR headsets in 2017 (in thousands)



* excluding simplistic headsets that do not have technology built in, e.g. Google Cardboard

**Facebook acquired Oculus Vr, maker of the Oculus Rift virtual reality headset, in March 2014

Source: IDC

statista

Gartner⁸ estimates that by 2021, the number of these devices will rise to over 67 million units. However, this number may increase if manufacturers are able to produce HMDs at more affordable prices while maintaining high image quality. Facebook has already taken steps in this direction, with CEO Mark Zuckerberg unveiling the Oculus Go—a new version of their VR headset—in October 2017. Starting in early 2018, the headsets will be sold at a price of \$199, which is significantly lower than that of its predecessor, Oculus Rift⁹.

MARKET TRENDS

Most HMDs are sold directly to consumers, with the assumption that their owners will use HMDs in the comfort of their homes and in close proximity to a PC or charging device.

At the same time, however, so-called virtual reality parks are becoming increasingly popular because they provide HMD users with an experience that cannot be replicated at home. Park guests move freely within a room, unconstrained by the wires that traditionally connect VR headsets to PCs, and can even use special devices to experience flight or car racing simulations in entirely novel ways.

The Void¹⁰ and Zero Latency¹¹ are the two best-known companies in this field, which also comprises a number of smaller players.

The Void is an American virtual reality game in which groups of guests are invited to take part in various

⁸<https://www.gartner.com/doc/3811368>

⁹<https://www.theverge.com/2017/10/11/16459442/oculus-go-standalone-vr-headset-announce-pricing>

¹⁰<https://www.thevoid.com/>

¹¹<https://zerolatencyvr.com/>

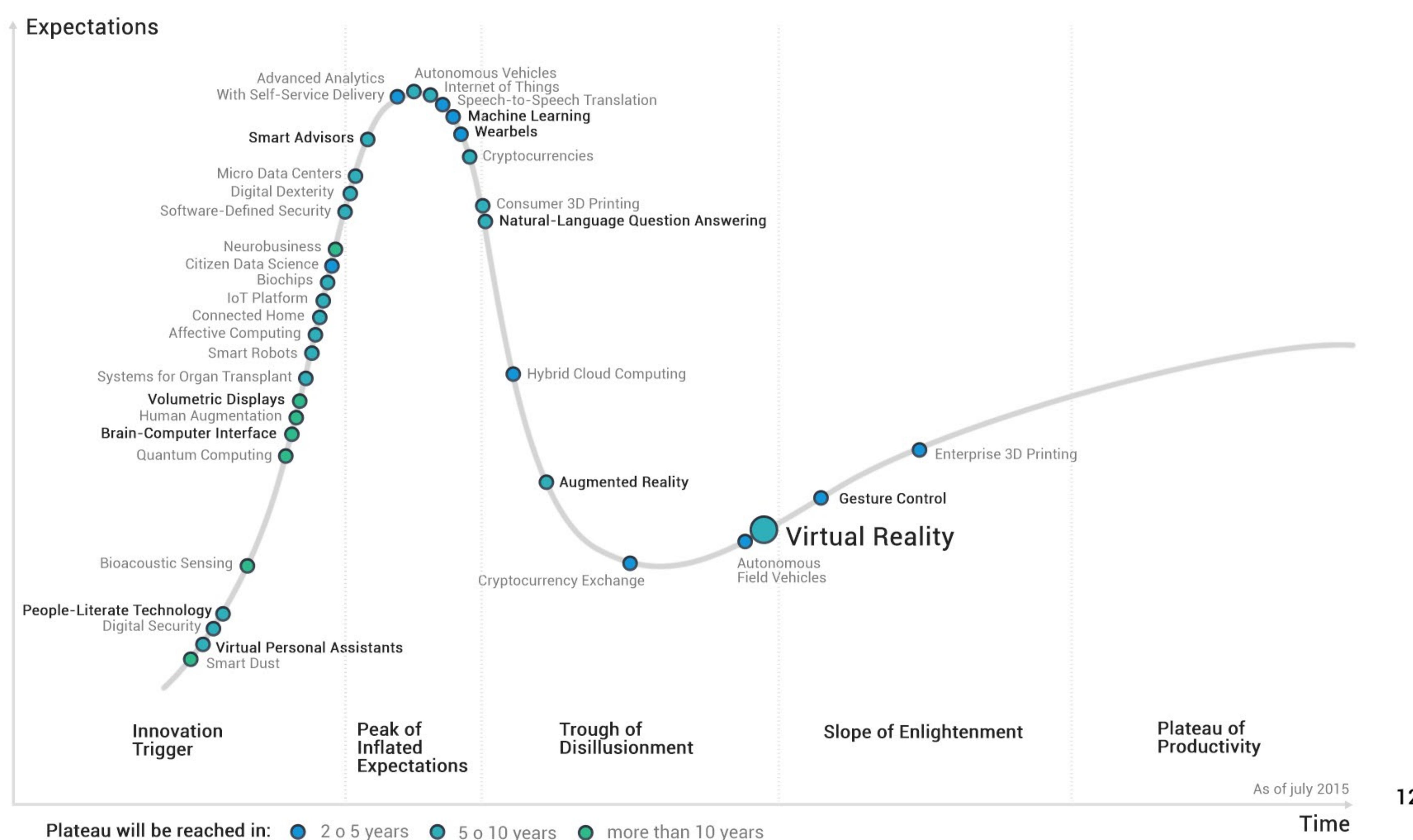
scenarios inspired by popular movies, such as Ghostbusters: Dimensions and Star Wars: Secrets of the Empire (currently in development). The park allows guests to move around freely within a specially equipped facility, while an HMD creates the illusion of interaction with a virtual world containing an unlimited number of special effects.

Zero Latency is a VR park in Australia with an area of several hundred square meters. Similar in scope to more traditional PC and console games, the park offers guests a variety of games, including several in which players fight zombie hordes, repel alien invaders in a space station, or try to solve the mysteries of an ancient fantasy world with its own form of gravity.

In addition to the aforementioned VR parks, there are also thousands of smaller VR attractions around the world that offer heightened VR immersion via specially designed equipment that enhances the gaming experience. These enhancements may include chairs or stands that change position depending on a player's actions and position in the virtual world, as well as various suspension devices designed to simulate free flight.

INDUSTRY PROBLEMS

We can conclude that virtual reality technology has reached a point at which it can be effectively used for commercial purposes. However, a lack of quality content is a key problem at this stage and may well hamper the industry's growth. This is a direct consequence of the fact that developers lack adequate development tools and a sufficiently broad customer base. Lack of content in turn deters users from purchasing VR headsets and equipment, creating a vicious cycle.



Technology giants are attempting to solve this problem by launching their own products (Youtube VR by Google and Oculus Story Studio by Facebook, for example), but these services have issues of their own.


¹² <https://www.gartner.com/newsroom/id/3114217>

The first problem is that each company tends to develop content optimized for its own hardware. This will lead to market segmentation, with each company's developers limited to their own brand's audience, culminating in higher content costs as independent developers and creators are forced to adapt their content to comply with each company's standards.

The second issue is that as HMD markets become more saturated, each company's own platform will become its main source of revenue, resulting in higher fees for content creators. For example, app development fees charged by Apple's App Store and Google Play stores can reach 30%¹³. In both cases, these costs will be passed down to consumers, which will drive down demand for content and erode the profits earned by hard-working developers.

These issues will be solved by VRT. As a decentralized marketplace, blockchain technology will provide transparency in the distribution of revenue between developers and platforms, and will guarantee intellectual property rights for all products. Additionally, the establishment of a chain of VR parks will create stable demand for VR content on the platform, which combined with free SDK (Software Development Kit) and API (Application Programming Interface) will then become a powerful incentive for motivated developers and other market players to join the platform.

¹³<https://seekingalpha.com/article/4075648-apple-itunes-app-store-double-sales-google-play-store>



**VIRTUAL REALITY IS THE FUTURE. WHILE
BRANDS AND DEVELOPERS DREAM, VRT
CREATES.**

IGOR VASILIADIS, FINANCIAL CONSULTANT

● PRODUCT OVERVIEW

ABOUT THE PLATFORM

The main goal of VRT's platform is to create a decentralized VR marketplace in which easy to use SDK and APIs facilitate VR content creation without restricting developers to a single company or type of device. The key advantage of the platform lies in our VR parks, which will become an "offline gateway" into this marketplace and allow outside developers to sell their content without purchasing costly equipment. In addition to these benefits, we will also create an emulator that allows developers to test their products before launching them on the platform.

The platform will operate based on blockchain technology, and as a result will benefit from a high level of transparency and openness to all market participants. This will also facilitate a fair distribution of funds between content creators and content markets, making the end product more affordable for consumers.

Additionally, VRT will be regulated by its community, which will decide on development direction and priorities. The platform will incentivize new content that reflects the needs of the platform's users and not the interests of a small group of owners (as commonly happens with other centralized services today). Artificially inflated vote counts and paid releases will become a thing of the past, and top spots in content ratings will be earned by products that have been voted on by the platform's users.



The main elements of the platform are:

- 1. Marketplace:** an area where the platform's content and services can be bought, sold, or rented. Content creators will be able to set their own prices and price models, including free distribution, freemium, and one-time-subscription payment. Other models are possible as well, including auctions, crowdfunding, and donations.
- 2. Blockchain and smart contracts** will be responsible for the following functions:
 - a. To act as the platform's payment mechanism and to guarantee transparency in the distribution of funds acquired through transactions between VRT's participants.
 - b. To ensure that all intellectual property rights of content creators are protected.
- 3. API and SDK:** content development tools that will simplify VR content creation.
- 4. Storage:** decentralized storage based on the IPFS¹⁴ protocol that will store all of the platform's content.
- 5. Emulator:** a partition in which developers will be able to test their content to ensure compatibility with various VR devices.

VRT's participants can be divided into the following categories:

- 1. Content Creators:** game and application developers, video makers, and streamers of live and recorded content.
- 2. Content Buyers:** HMD owners who purchase VR content for entertainment or educational purposes. Other major content buyers will include companies and noncommercial organizations that use VR technology in various contexts, such as in VR parks, telepresence, and so on.
- 3. Platform Moderators:** community members that ensure content safety and compliance with platform guidelines.
- 4. Storage Providers:** community members that rent out their hard drive space to store the platform's content.
- 5. Advertisers:** agencies and other parties interested in placing their advertisements in VR content.

VRT TOKENS

VRT Tokens act as a "fuel source" for the entire platform. They will be released on the Ethereum blockchain in accordance with the ERC-20 standard. The tokens will be used in several ways, as described in the following paragraphs.

VRT Tokens will primarily be used as a payment method for all platform transactions, including the purchase, sale, and rental of VR content, as well as for various services. A smart contract with all relevant details (subject of the deal, deal type, price, time limits, etc.) will be created at the time of transaction. After verifying contract details, the buyer will send VRT Tokens to the address specified in the contract and will then receive a download link or confirmation of services performed. The seller will then receive the specified sum minus a small commission to cover the platform's fees. The size of this commission will vary based on several key factors, such as the base commission rate set by the platform for each type of transaction, the buyer's and seller's respective ratings, and total amount of the transaction, among others.

¹⁴<https://ipfs.io/>



THE MOST IMPORTANT ADVANTAGE OF THE
PLATFORM IS THE UNIFICATION OF VERY
ISOLATED VR MARKET INTO ONE SYSTEM.

FRANCOIS ASSEMAN, PHD. HEAD OF SALES OPTITRACK.



VRT Tokens will also be used as rewards, given to platform participants for completing certain tasks such as content moderation, conflict resolution, and other functions. A VRT Token fund will be set up to provide platform participants with rewards for assisting with the platform's development.

VRT Tokens may also serve as payment for content storage. Since VRT's platform will use a decentralized storage model, all of its content will be stored on servers and hard drives belonging to platform users. This storage will be based on the IPFS protocol.

Lastly, VRT Tokens will be used to access our VR parks (with a 20% discount). Additionally, VRT Tokens will be the only way to provide a lump-sum payment when entering a franchise agreement for our parks. In both of these cases, tokens will be erased after the transaction takes place. As a result, the number of VRT Tokens in circulation will decrease immediately after the Token Sale, driving up their value.

Long-term plans for additional token functionality include:

1. Organizing tournaments with prize funds consisting of VRT Tokens.
2. Streaming services with payments using VRT Tokens.

● VR PARKS

According to Metcalfe's Law¹⁵ as applied by some researchers to Bitcoin and Ethereum¹⁶, the value of a network is proportional to the square of the number of connected users in the system. This means that the value of VRT's platform (and the value of its tokens) will increase along with the number of active system participants. Therefore, the top priority after the launch will be to popularize the platform within the community, with a focus on developers.

The initial influx of developers will be ensured through VR game orders for our own VR parks on the platform. Increasing the number of VR parks around the world will drive the adoption of the platform. In accordance with this strategy, we plan to use some of the funds raised during our Token Sale to develop our network of VR parks.

The parks created with VRT's technology are the future of entertainment and e-sports. Through our research, we have developed the technology to virtually transport players into the game, allowing them to enjoy their gaming experience on an entirely new level. Our main technological advantage is our innovative full-body tracking system, which allows us to monitor all player movements in a given location. This unique technology gives us a major advantage over existing projects of this type that use obsolete equipment, such as The Void and Zero Latency.

Every VR gaming park is designed to provide unlimited content that can be chosen at will by visitors. This content can be gaming-related as well as educational. We plan to create and buy VR content in various genres and for various audience types through the VRT platform. We are also considering creating unique content for each market that takes into account specific market conditions. These elements combined form one of the major advantages of our Project.

In the future, VRT Token holders will be able to acquire licenses for our proprietary full-body tracking technology and use it in their own projects. All external developers that purchase the full-body tracking SDK will be able to then integrate their projects into our infrastructure and profit from sales of their content.

VRT Token holders will also be able to spend tokens on developing business solutions relating to VR and full-body tracking. For example, holders would be able to fund technological solutions for presenting real estate properties in VR, or training modules designed to demonstrate safe equipment handling.

¹⁵ https://en.wikipedia.org/wiki/Metcalfe%27s_law

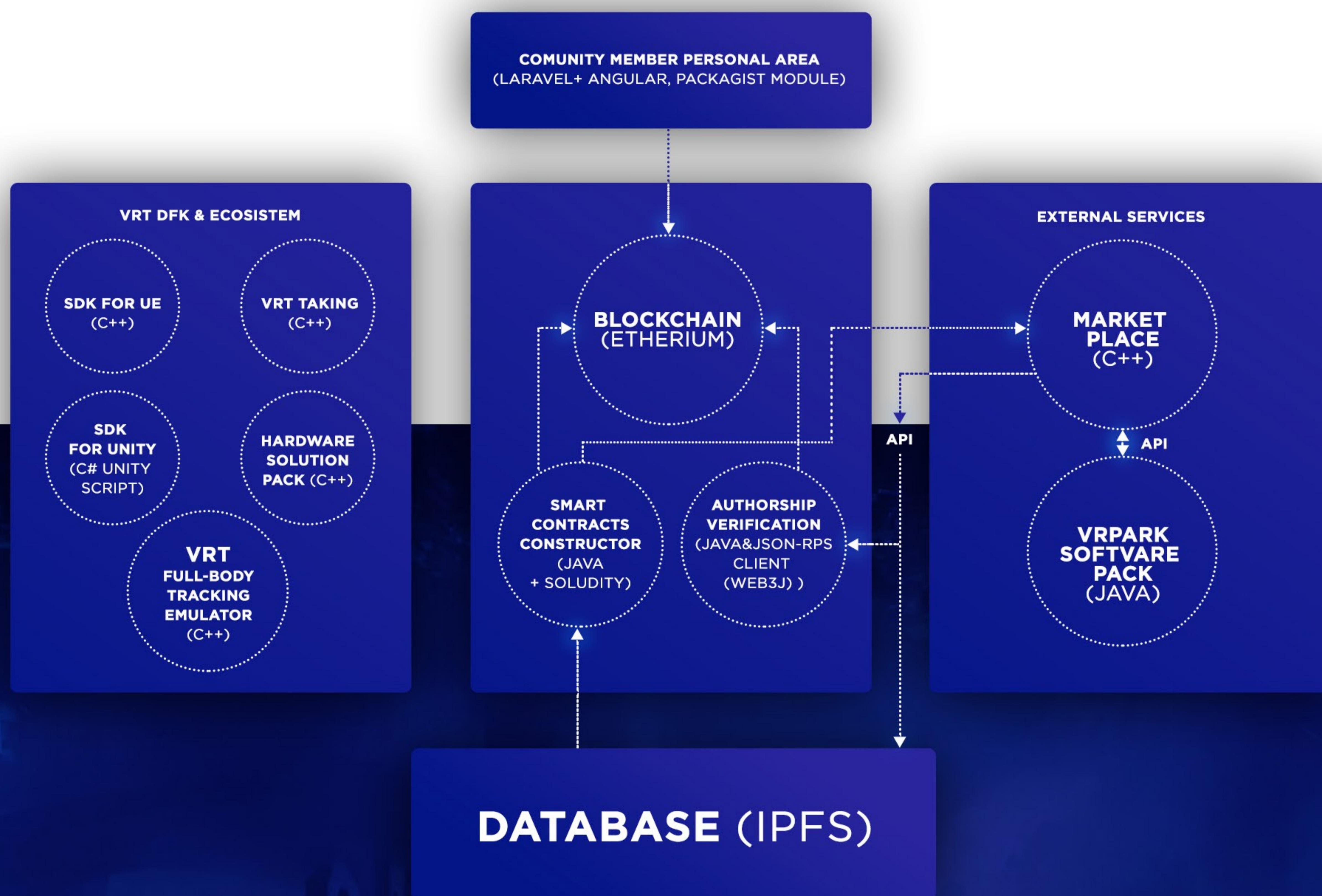
¹⁶ <http://www.sciencedirect.com/science/article/pii/S1567422317300480>

● TECHNOLOGY

The VRT ecosystem will consist of multiple elements responsible for various tasks. For clarity, they can be divided into two categories: a number of control solutions and a number of technologies for working with virtual reality.

INFRASTRUCTURAL SOLUTIONS ON BLOCKCHAIN

These solutions are used to create the infrastructure of the platform and for interaction of the content with the environment. At initial stages of the Project it will be implemented on a private Ethereum blockchain, where our VR parks will serve as nodes, transmitting idle capacities to support system transactions.



Smart Contracts Constructor

This interface is designed to create smart contracts using templates—for example, for distributing profit following, a sale or a lease of created content, or holding a cybersports tournament. To implement this concept, we have developed a Java program that can make and test contracts written on Solidity, following a certain number or conditions specified by the user. Then all functions of the contract are tested using auto-tests.

Users interact with this module using “visual programming” with a special visual constructor. Its format automatically adjusts to new conditions, parameters or values.

This module is highly significant within the infrastructure of the Project and enables users who have no experience in creating smart contracts to use all advantages of the blockchain technology.

Authorship verification

This module is designed to save the files hashes in blockchain and record information about creators of content and copyright. When registering new content, the author will also be able to create a number of smart contracts describing the terms of acquisition or lease of the created intellectual property.

We are also working on developing special software for verifying content authenticity by checking it against blockchain records. This solution has similar verification mechanisms to those of the Proof of Stake algorithm, which links each copy of the software to a particular owner.

Voting and Rating system

To get feedback from the community, a special voting system will be created based on standard blockchain protocols of Ethereum. Using this module, we will be able to publicly select and test content before uploading it onto the marketplace. All data will be recorded in blockchain. Community members taking part in the vote will be rewarded with tokens and rating points.

TECHNOLOGIES FOR WORKING WITH VIRTUAL REALITY

This technological stack is designed to provide opportunities for creating quality VR content for its further distribution. The VRT team and some of the most active community members will track the relevance of these technologies, and will supplement and develop them as needed, with VRT Tokens used as rewards for these actions. Through this system, we will be able to provide developers with the most up-to-date solutions for VR content creation.

Currently, we have prepared blueprints for the integration of our full-body tracking technology with various devices. These blueprints will be updated as part of our SDK support.

Hardware Solution pack (HMD, Mocap Sensors, Controllers etc)

This is a set of solutions that allows quick connection to various physical components and processes data from them through one single gateway.

This library includes multiple interpreters linked to the most commonly used templates of actions in virtual reality. Using a prepared mapping table, developers will be able to operate a set of assets when creating content and automatically adjust the content for working with various controllers. This add-on will automatically detect controllers and adapt to their particularities.

In case of a new model of controller, this component can be modified by a team of VRT developers or by active community members. The results of the code modifications and versioning will be recorded in blockchain together with the test results.

VRT Kinematics (full-body tracking)

Our full-body tracking uses a special algorithm with inverse kinematics to calculate a person's body's location. This algorithm can predict movements made by users or objects and complete trajectories based on previously received data.

The full-body tracking algorithm reduces processing power requirements and imitates human motion with a relatively small number of active beacons, which obviates the need for special gear or complex preparations before entering the game. For example, the motion of a user's shoulder, elbow, and forearm can be calculated using active beacons placed on his head and wrist.

We are finishing the third iteration of the system, which will be capable of analysing not only movement vectors but also considering them in the context of what surrounds the user. This improvement will make it possible to considerably enhance UX and make working with various objects and interfaces of virtual reality easier.

Graphic Engine

Our solution is offered together with integration into several graphic engines at a time, such as Unity, Unreal Engine 4, CryEngine, etc., which means that our technology can be used in various tasks. Being able to choose the engine, enables developers to optimise their Projects either for mobile devices or for special VR-ready computers.

VRT Tracking System

This is a module developed by our programmers that tracks special markers in space and transmits data about them to various pieces of software. This system supports both skeleton animation and rigid body, which means that both users and other objects from the real world can be transferred into virtual reality. This module can work with various systems of optical or hybrid tracking.

VRT full-body tracking emulator

This environment and toolkit used for testing content, is designed for developers who have no tracking systems of their own. These tools will contain pre-recorded movement assets, which are combined with a set of modules to allow content testing without the need for costly equipment.

In addition, the testing environment allows developers to connect to a VR park's infrastructure and conduct tests using the park's equipment. In this case, the content will be run in a special container where test results can be recorded and a higher level of safety is maintained in order to avoid any malware integration.

Starter Pack

To ensure faster development and expansion of the system, we will provide pioneer developers with a special Starter Pack that will include all necessary tools with examples of samples of various algorithms:

1. Optical tracking integration allows the system to receive active beacon location data from external systems and tune active beacons via radio channels.
2. A toolkit for fast active beacon integration with default skeletons and outside objects inside a game engine.
3. An AI builder for non-player characters that supports characters controlled via full-body tracking.
4. Blueprints for integration with various virtual reality headsets and controllers. A multiplayer system that has been adapted to work with full-body tracking technology.



VIRTUAL
REALITY



● TEAM

VRT has been registered in a certain country at a certain address and has been operating there for a certain amount of time. The company's headquarters are located in Moscow, with another office located in Singapore. As of today, the company has 40 employees and is developing virtual reality software.

VRT is a team of professionals with more than nine years of IT, entertainment, and creative experience. We have partnered with NaturalPoint, Inc., owners of the Optitrack brand, a leading equipment manufacturer in the sector. At this point, we are collaborating with NaturalPoint to reduce VR park equipment costs. We are one of the first companies to test NaturalPoint's new solutions and have already developed a number of our own tools to accelerate the development process. As a result, our system allows us to set up VR parks at half the cost required by competitors with no loss of quality.

Our team has significant VR development experience, having launched the successful educational project "VR Time Machine"¹⁷ in 2017. The project focused on teaching history via virtual reality gaming. The project has drawn interest from ASI (Strategic Initiatives Agency), a non-profit organization set up by the Russian government to promote priority projects in economic and social fields.



KONSTANTIN
NEGACHEV, CEO

[in](#) [f](#)



DMITRIY LIVSHIN,
CIO

[in](#) [f](#)

Konstantin has overseen four major international projects, in which he served as general and executive director. During his time managing ILN Softlab, he acquired valuable experience in creating digital products. Over seven years' experience creating and managing company offices all over the world makes Konstantin an expert in the strategic and business aspects of the Project. His varied experience includes working with VR solutions, IT development, and franchising, inspiring confidence and creating incredible opportunities for the VRT Project. Konstantin is a media expert and consultant who works closely with various media and analyst firms and has his own expert blog on "Echo of Moscow" and other sites.

Dmitriy has launched and developed a number of complex IT projects from scratch. He has a great deal of industry experience, including projects for major investment and government funds. Dmitriy has served as CIO and Product Owner at two international companies, which are still operating successfully today. He is often invited to advise technology startups, including new blockchain-related projects, and his analysis has helped twelve startups enter an active working phase and avoid the problems usually associated with the early phase of a startup's lifecycle. Currently, Dmitriy is a CTO at ILN Softlab, as well as a consultant at several digital agencies that deal with creating complex IT projects. He is responsible for technical implementation of the VRT.

¹⁷<http://tmvr.ru/>



DENIS MAZUR,
CTO

in f

Denis is an extremely experienced player in the software market, who has held key positions and leading roles in the actively expanding VR field for more than four years. Over his eight years of accumulated IT experience, Denis has become known as a dependable, creative, effective, and talented manager. He is considered one of the leading VR experts in Western Europe, as well as the rest of the world.



IGOR BEREZOVSKIY,
BUSINESS CONSULTANT

in f

Igor worked at a number of banking institutions from 2012 to 2016, including the Moscow municipal government's small-business support network and Sberbank, as well as others. He has since transitioned from the banking sector into management. Igor develops and manages a specialized space that is adapted to the needs of startups and business management. The enterprises he manages include a unique chain of co-working spaces, a transport rental service, and a number of food service companies. As a VRT consultant, Igor effectively adapts and optimizes the Project's resources.



EVGENIY KISELEV
HEAD OF MARKETING

in f

Igor worked at a number of banking institutions from 2012 to 2016, including the Moscow municipal government's small-business support network and Sberbank, as well as others. He has since transitioned from the banking sector into m



NEEMA TEYMORY,
SMART CONTRACT AND
SOLIDITY CONSULTANT,
CEO

in f

Neema is a leading international expert in multiplayer game development as well as in high-load, high-reliability systems. During his nine-plus years in software development he has created a rigid quality control system for his tasks. His main focus during development is software security and stability.



SEVIL BAER,
PR & COMMUNICATIONS

in f

Sevil is a professional journalist, editor, and director. She has managed communications and PR at several startups and founded an interactive publishing agency, an innovative book platform, and complex technical projects in pharmaceuticals, IT, and entertainment. She also worked with the Russian government fund for the development of interpersonal communications.

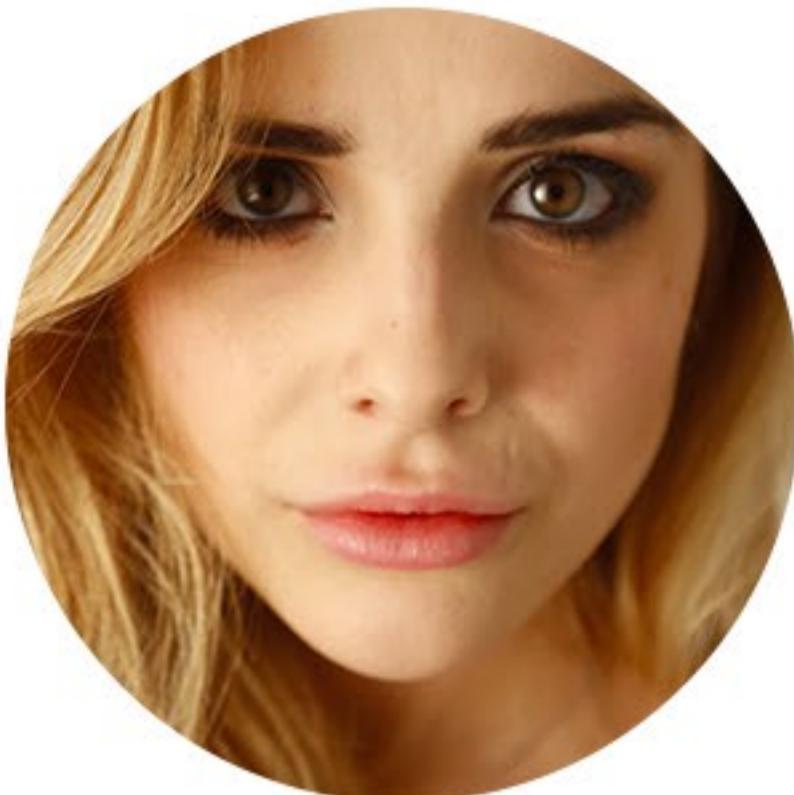


ALEX OVCHINNIKOV,
BLOCKCHAIN DEVELOPER

in f

Alex is a native of Canada and is a leading developer for several international companies, including News Media Canada. Alex is an experienced blockchain developer and has participated in creating complex solutions for documentation and financial paperwork tracking based on blockchain technology. Alex is a highly sought-after specialist in this field and is responsible for developing and adapting blockchain solutions at VRT.

● MENTORS



DARIA AREFIEVA,
BLOCKCHAIN
AMBASSADOR /
TOP 5 FACES OF BLOCKCHAIN

in f

Daria is one of the most recognized figures in the Russian crypto-community and is one of the five most recognized women in the blockchain industry. She acquired invaluable experience during her years as a partner at consulting firm Token Sale by Eberhard Lindford, and as CEO and cofounder of CryptoFriends, a company that specializes in organizing large blockchain-related events. This experience formed the basis for developing an absolute game-changer in the industry, the Token Sale Hypethon format. Daria is the inspiration and source for the development of this unique format.

Daria is an organizer for an accelerator that specializes in financial/technical startups, and has worked as a marketing and PR team leader in the banking sector. She also works with various charities in her spare time.



ERIC BENZ, ADVISOR/
BLOCKCHAIN
AMBASSADOR

in f

With over 10 years of experience in finance and related fields, Eric is the project's advisor and Blockchain Ambassador. Eric has been an active investor in blockchain and financial/tech projects since 2012 and is an acting board member at a number of large companies. He is also acting director at Cryptopay, one of the largest bitcoin exchange and merchant systems in the UK and EU.



DR. MARCO SACCO.
ADVISER ON THE
DEVELOPMENT STRATEGY
IN THE EUROPEAN UNION

in f

Marco is a senior researcher at ITIA-CNR and Head of the Department of EVA (Enterprise Engineering and Virtual Application), Manager of IT Infrastructure and Networks, Head of VR/AR Laboratory. In addition, he is president of EuroVR, the European Association for Virtual Reality and Augmented Reality.



FRANCOIS ASSEMA,
PHD. HEAD OF SALES
OPTITRACK

in f

Ph.D, whose education and experience includes a doctorate in Biomechanics and Neuroscience, a three-year postdoctoral fellowship in clinical research and six years' experience in mechanical engineering. He lead optitrack European office and help us to improve our tracking technology.



**IGOR VASILIADIS,
ADVISOR/FINANCIAL
CONSULTANT**

[in](#) [f](#)

Igor is the project's advisor and financial consultant, and was responsible for developing the structure of the project. He is currently managing financial and tax issues, as well as fundraising and strategic business planning. One of his major projects was the acquisition and management of the MirTeleCom holding (worth approximately \$320 million). Igor founded Level 2 Consulting in 2004 and still serves as the company's CEO.

From 1998 to 2004, Igor worked with Savchenko's IT-holding SIBINTEK, and has served as CMO at WinWin Solution.



**DMITRIY MACHEKHIN,
ADVISOR/
LEGAL ADVISOR**

[in](#) [f](#)

Dmitriy provides legal support for VRT as an expert consultant in legal matters. Dmitriy formerly specialized in providing startups and cryptocurrency ventures with legal assistance and received recognition for his work as partner at the firm GMT Legal, where he is leading the "digital, blockchain, and startups" practice.

He is known by colleagues as a dedicated professional with extensive experience in international law and ICO support. He has written a number of articles on blockchain technology and cryptography, and has been working as a consultant and blockchain specialist at the GVA LaunchGurus startup accelerator.

● PROJECT ROADMAP

Developing the VRT platform will be the team's main priority for approximately six to eight months. At the same time, we will start building a network of VR parks based on full-body tracking technology, which will fuel initial demand for the platform. We plan to start the construction of the VR park network at the end of November 2017, once the test period is over.

Starting in the second quarter of 2018, we plan to launch three to five VR parks each month. We will have finished implementing the blockchain platform by then, and there will be 15-20 VR parks by the time it is launched. These parks will be ready to purchase game content on this platform.

By the end of 2019, together with our partners, we will establish an e-sports league to promote e-sports with VR technologies. We plan to organize international e-sports competitions with large prize pools, wide media coverage and the involvement of professional gamers for further promotion of this genre. For this, we will need to create portable units to install on-site and rent sufficiently large venues to accommodate over 1,000 people at the first stage.

The main distinctive feature of this service is not only the ability to watch the game from the outside, but also the illusion of total presence, since spectators will be able to move among the players in observer mode. The players, on the other hand, will not notice the presence of the observers. Using a VR headset (including those operating on mobile platforms), spectators will be able to choose their vantage point or even watch the game from the players' perspective. The platform will also support a system of votes and ratings for popular streamers.

2017

1
2

We will actively search for partners and administrators in promising markets. We are considering the following markets for expansion in 2018-2020: China, North America, Japan, Korea, as well as the UK, Germany, France and the United Arab Emirates. In the next four years, we plan to open more than 170 locations around the world.

2018

3
4

To further involve the gaming community, we plan to gradually transfer newly created game worlds from VR parks to PCs and home game consoles. These games will have similar mechanics but will be adapted for home use with Playstation VR, Oculus Touch controllers and HTC VIVE.

2019

5
6

2020

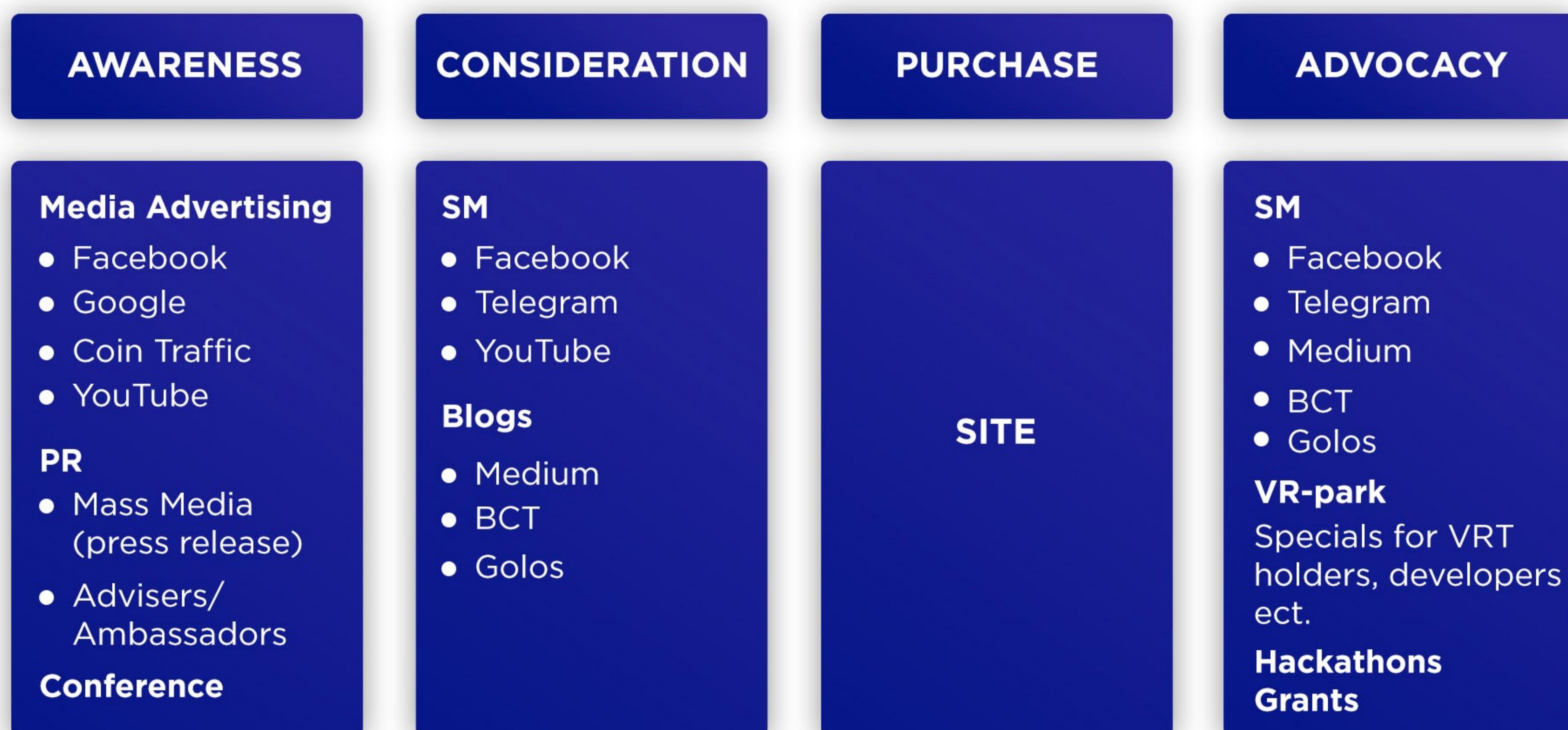
In order to further integrate into the gaming community, we will create our own streaming platform, designed specifically for VR technologies, by the end of 2020. This technology will be implemented as an add-on to VRT and will give spectators the illusion of taking part in an e-sports competition.

7
8

This service will serve as a basis for further development of our e-sports league and will also include a function for people to reward their favorite players with cryptocurrency.

● MARKETING

The marketing strategy is designed to support development of the product and draw the attention of many interested parties. We have developed a consumer journey for a successful start of the VRT, based on a profound analysis of the world's best practices, and consisting of four main stages:



The marketing budget will make up 15-25% of the raised funds if the SoftCap or the HardCap is reached and will be allocated roughly as follows:

1. Media AD – 20%
2. PR support – 25%
3. Conference – 20%
4. SM – 15%
5. Blogs – 5%
6. Hackathon – 15%

The target audience of the platform at the initial stage of its development is VR developers. We plan to attract these developers through the following methods.

First, approximately 5% of the funds raised through ICO will be used to establish a prize fund for contributions to the development of the platform. This fund will be used to reward those offering the most interesting and relevant VR solutions.

Second, every six months, we will conduct hackathons, which will help us identify the most promising developers and invite them to work for us. We will focus on two types of hackathons:

- 1. Professionals, supported by partners and widely covered by the media with a prize fund of \$20,000;
- 2. Specialized top universities of the world with a prize fund of \$10,000.

We will also focus on working with the media and attending large exhibitions and events involving VR technologies, and will launch sponsorship programs within various professional communities. Such marketing activities will help us cover not just the target audience but also experts, some of whom have already become advisers for the VRT Project.

At the same time, we will actively promote our VR parks and establish partnerships, thus generating demand for VR content on the platform. To actively develop in this direction, we are attracting investors and franchisees, which will make it possible to scale up exponentially. Constant marketing support of the parks will create hype around them, and as a result, visitors will learn about the possibilities of the VRT platform and will be able to use it.

We are convinced that developing VR technology depends on its popularization. Therefore, one of our main objectives will be to create not only a series of games in different genres, but also an entire community ecosystem that enables players to form teams, take part in international competitions, and earn awards for their achievements.

The lack of major players that could monopolize the market makes it possible to collaborate with competitors and run joint campaigns. Thanks to this approach, companies will be able to share traffic and increase brand recognition. Another advantage of this approach is that no competitor currently has enough content to maintain the same level of customer interest throughout the year; in addition, sharing a customer base keeps players interested in this type of entertainment.

● TOKEN SALE DETAILS

GENERAL INFORMATION

- Hard cap: \$16,000,000
- Soft cap: \$3,500,000
- Token: VRT, ERC20
- Basic token exchange rate:
500 VRT = 1 ETH
- Minimum transaction amount:
50 VRT (0.1 ETH)
- Maximum transaction amount:
1,500,000 VRT (3 000 ETH)
- Accepted currencies: BTC, ETH. Tokens bought for ETH will be loaded on users' wallets on the Ethereum blockchain with a closed balance in smart contracts.
- All raised funds will be received and saved in multi-signature wallets.

Fund-raising will be done in two stages:

1. Pre-sale:
 - Start of pre-sale: December 5, 2017
 - End of pre-sale: December 15, 2017
 - Total funds to raise: \$1,000,000
 - Bonus: 30%
2. Token Sale:
 - Start of Token Sale: 20 January 2017
 - End of sale: 20 February 2017
 - Total funds to raise: \$15,000,000
 - Bonuses:
 - Up to \$5,000,000 – 20%
 - from \$5,000,000 up to \$10,000,000 – 15%
 - from \$10,000,000 up to \$15,000,000 – 10%

DISTRIBUTION OF TOKENS:

100 million VRT Tokens will be issued and distributed among participants immediately after fundraising concludes. No further issuing will be permitted. All unsold tokens will be destroyed.

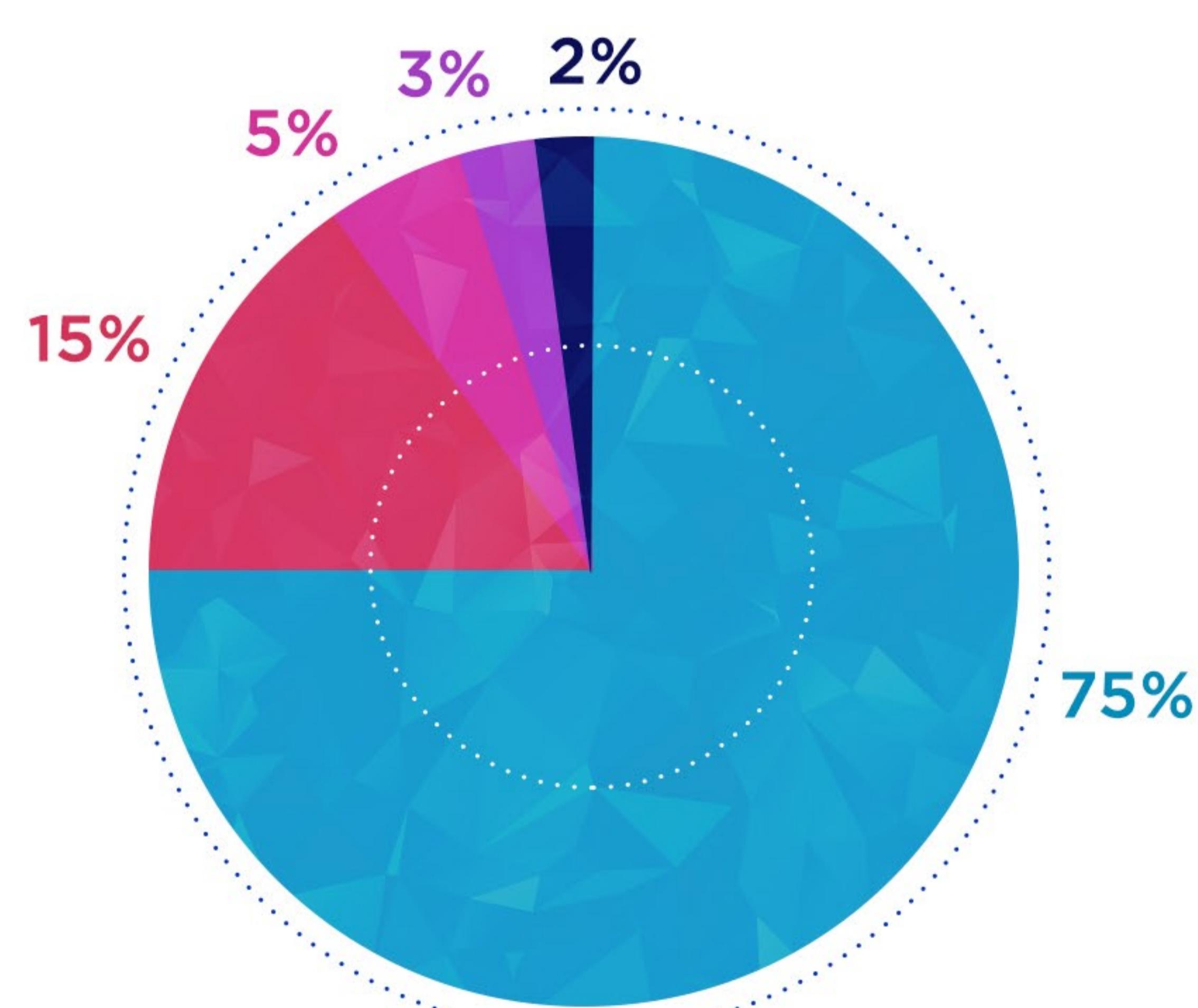
75% of tokens will be available to Token Sale participants;

15% of tokens will be reserved for the founders of the project and top management. These tokens will be frozen for two years;

5% of tokens will remain in the VRT Fund;

3% of tokens will be reserved for Bancor;

2% of tokens will be used to reward members of the community.



ALLOCATION OF FUNDS:

Soft cap

BUDGET ALLOCATION	PERCENTAGE	USD	PURPOSE
Creation and promotion of platform marketplace using blockchain	30	\$1,029,000	Developing blockchain component and attracting clients; promoting platform in specialized developer communities
Creation of SDK and upgrading technologies	25	\$857,500	Creating full-fledged SDK for UE4.
Creating content for VR parks	18	\$617,400	Creating the first four items of VR content in different genres
General marketing of the project, PR activities	15	\$514,500	Publications in the media and promotion of the project in specialized media
Developing the VR park franchise	12	\$411,600	Investing in development of the franchise, identifying regional partners, developing the project through a master franchise.
TOTAL	100	\$3,430,000	

ALLOCATION OF FUNDS:

Hard cap

BUDGET ALLOCATION	PERCENTAGE	USD	PURPOSE
Construction of VR parks	25	\$3,858,750	Building our 15 parks in various countries, including the US, the United Arab Emirates, Canada, Israel, Japan and China, with simultaneous sale of franchise rights.
Marketing, PR activities, promotion of VR parks	25	\$3,858,750	Working with the media and buying traffic in various countries, promoting the brand and VR parks in all regions where we maintain a presence, focusing on performance marketing.
Creation and promotion of the platform marketplace using blockchain	12	\$2,778,300	Developing the blockchain component of the platform, promoting our own VR app store for home use. Running co-branding projects with large international companies in various fields. Creating an advanced API that allows projects to use our blockchain for their own purposes, e.g. to hold e-sports competitions.
Creation of SDK and upgrading technologies	12	\$2,778,300	Creating SDK for various engines, including UE4, Unity, and CryEngine; creating an emulator integrated into a sandbox for testing content

BUDGET ALLOCATION	PERCENTAGE	USD	PURPOSE
Creating content for VR parks	12	\$1,852,200	Creating several settings with 2-3 scenarios each.
A prize fund for developers (hackathons, grants and awards)	5	\$771,750	Creating a 3-pronged program to support developers. Establishing a grant fund together with several international institutes, organizing hackathons and providing grants to developers to cover some of the costs of content development.
TOTAL	100	\$15,435, 000	

We plan to use the funds raised through the Token Sale over the following two years. The maximum single withdrawal amount is \$200,000. The total amount spent during the first 12 months after the end of the fundraising may not exceed 40% of the total amount raised.

Raised funds may be spent on purchasing equipment, paying for tasks related to the development of the VRT platform, construction of new VR game parks and content development, and staff and contractor pay. These funds may not be spent on equipment or real estate with a price of over \$25,000 if these purchases are not directly related to the company's core business or if the investment cannot be recouped within two years. Expenses under \$5,000 related to the business activities of the company or its subsidiaries will be reported as a single line item.

Reports on the allocation of funds and profits from investments will be available to all token holders once the report has passed an audit.

● RISKS

REGULATORY RISKS

Blockchain technology, which includes issuing tokens as part of the Token Sale process, is still being actively debated by regulatory bodies in many nations. As a result, there is no clear legal framework that covers all aspects of this technology. Therefore, the concept and functionality of the VRT platform may undergo significant changes in response to new laws and regulations regarding cryptocurrencies.

MARKET RISKS

There may be a lack of interest in the VRT platform from other market players, which in turn may hamper the Project. The VRT team cannot guarantee commercial success for services and products offered; a lack of commercial success may lead to full or partial loss of token value.

REGULATORY RISKS

The VRT platform is based on open-source protocols, which may lead to additional information security risks. The VRT team will do everything in their power to pre-empt potential hacking attempts, but the team cannot be held responsible for losses incurred as a result of such attacks. Additionally, tokens for the Project will be issued through the Ethereum platform, and any disruptions to that platform may negatively impact VRT's performance.

● GLOSSARY

Active Beacon: a device consisting of a microchip with a radio antenna, a battery and eight infrared lights. Each of these beacons is programmed with a different blink rate.

Motion Capture (Mocap) Camera: a camera that tracks player movements in VR parks and is equipped with an infrared filter.

Virtual Reality: a computer technology that uses virtual reality headsets, sometimes in combination with physical spaces or multi-projected environments, to generate realistic images, sounds and other sensations that simulate a user's physical presence in a virtual or imaginary environment.

Head Mounted Device: a display device, worn on the head or as part of a headset that has a small display optic in front of each eye.

WHITEPAPER

://VR/



HTTP://VRT.WORLD