WORLDOPO

NEW CRYPTO-ECONOMICAL MOBILE GAME.

EARN AND MINE CRYPTO USING AR & GEO!

Contents

1.   Introduction

About the Worldopo mobile game

In the spring of 2018, Qubit AG released a crypto-based mobile game with the capability of transforming the gaming experience into real profit. "Worldopo" is a crypto-economical strategy game in the real world based on blockchain, Augmented Reality and Geopositioning. It is a building simulator set on a real world map where every player can buy or rent a piece of land, start raising in-game structures and mining farms around the world so as they may build up their capital. The game encourages an economic stimulus and encompasses gameplay through the implementation of its own cryptocurrency WPT, which players may mine within the game.
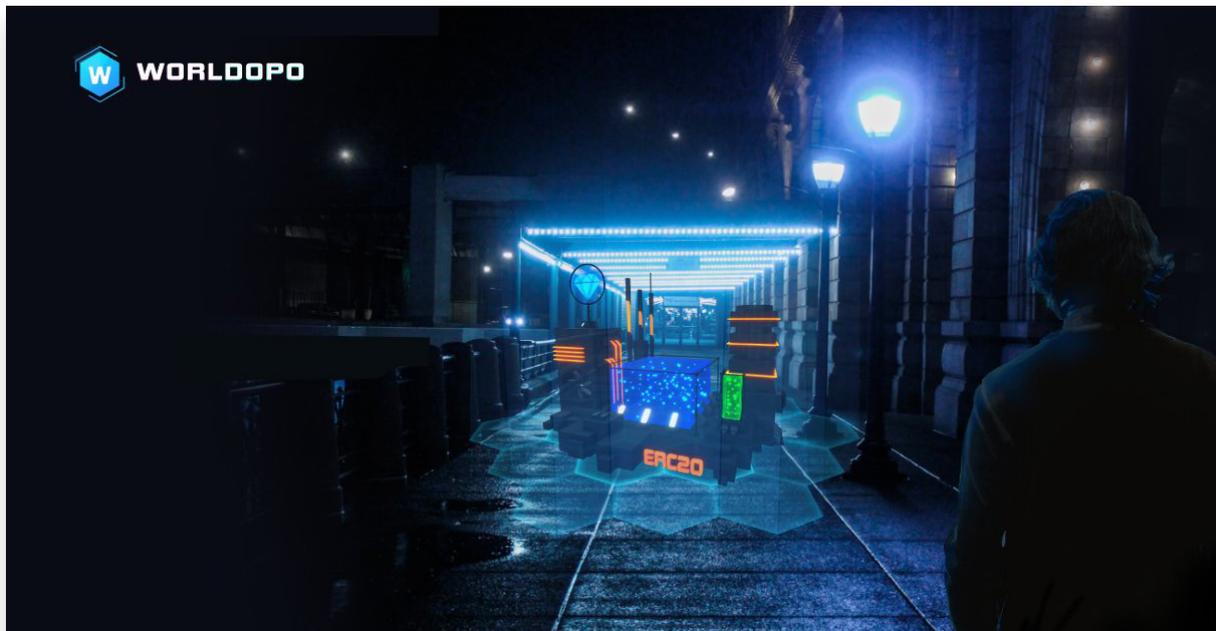
The Mobile game is already available for download in both the Appstore and the Google Play store, (Android and IOS devices).

At this stage, a fully-fledged and active community with over 40,000 people is already in existence, everyone in the community helps to improve Worldopo in one way or the other, investing time, knowledge and ingenuity. The development team that currently consists of 20+ specialist is ever-growing, with the stage-by-stage development model allowing for the team to create a high-quality product based on the feedback of the

ever-growing community. Flexibility and the ability to take on changes in a rapidly changing environment is the main rule of today's market.

You may be aware that the Liechtenstein government has formulated a legislative framework that will allow for regulation of business models based on blockchain technology. With regards to this, a decision was made to found the company Qubit AG in Liechtenstein.

In July 2018, after a full audit and legal opinion from the Nägele Bar Association, which focuses on cryptology, Qubit AG obtained business authorization. As well, the Office of Financial Regulation and Supervision of Liechtenstein (FMA) sent out confirmation of such a regulation being passed to allow for companies to establish a regulatory base for blockchain business.

Soon following, the development strategy was improved, the website and MVP (Minimum Valuable Product) were updated and Qubit AG started the CCO (Continues Coin Offering) more details of which you can find here.

The main mission of Qubit AG is to develop games and services of a whole new generation, combining the most innovative technologies as they go through their initial development stages. Worldopo is a dynamic example, proving that in this day and age it is possible to combine intriguing technologies such as blockchain and Augmented Reality by creating realistic games.

Why blockchain?

In the gaming industry, with thanks to blockchain technology, we want to be able to solve the following problems:

Player time Lose

- Shortage of game assets
- Security.

With the help of tokenization and an active game token-economy, we create an opportunity for the player to turn his experience and game assets into tangible assets. Though despite all the technical complexity involved with the game, we created a game that is easily accessible and understandable to every player.

One glance at the variety of weapon designs or loot-boxes in AAA games is enough to understand how many online gamers want to stand out among other players.

Imagine games like The Sims, Diablo, Dota, Ingress, but with the ability to sell and buy items that are unique in their own way. And now in-game "trading floors" look much more interesting than before.

2.   The Mobile Games Market and Industry

"With a market share of over 40%", mobile games are the most profitable sector of the gaming industry to date. The potential of Mobile games is growing, as well as the potential of mobile devices. The recent introduction of AR Kit by Apple within its brand in 2017 creates a new milestone in application development. By implementing this important step in developing games and applications by means of AR, Apple also demonstrated where they see this technology dominating in this industry. Bearing in mind that Apple, as well as Google actively promote their AR-platforms with their own graphics and commercials, Worldopo is a favourable starting point in comparison with other games in the same category. Unlike other AR games on the market, Worldopo is ready to offer a rich gaming experience with an interactive world, as well as many add-on features to keep users captivated. With the current estimates for the gaming sector, the potential for stable growth in all directions is highly anticipated. "It is expected that by the year 2020 revenues of the global game market will reach US $128.5 billion this will mark a growth of 18%. In 2017 the United States had a game market revenue of US $108.9 billion, and mobile games were responsible for 50% of this revenue or US $64.9 billion."

Mobile games not only dominate the gaming industry but also the mobile software market as a whole. With 75% of revenue in the iOS App Store and 90% of the Google Play store, mobile games contributed the majority of revenue in 2016. In 2017 mobile apps brought in over $46m in revenue, expanding their market share from 39%(2016) to 42%.

Mobile Game

75%

iOS App Store

90%

Google Play Store

Other 4%

Asia 47%

Europe and Africa 25%

4%

25%

47%

24%
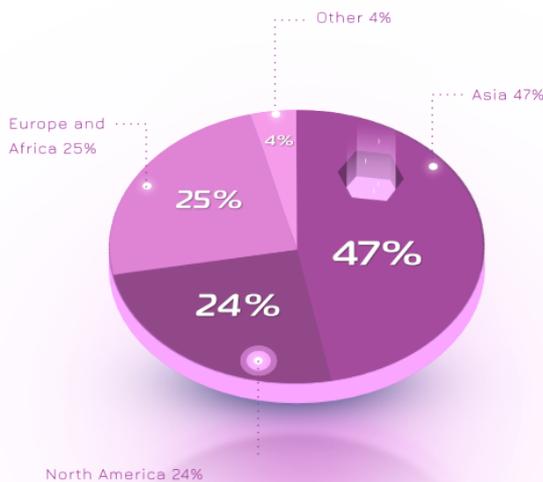
North America 24%

The Asian market is by far the biggest of mobile games markets with a share of 47% ($51,2 billion). Naturally dominated by China with a contribution of 53,7% ($27,5 billion) to the total revenue. Followed by North America (25% of $27.0 billion) and Europe, Middle-East and Africa (27% of $26,2 billion).

Efficiency of entering the market

To determine the effectiveness of a companies involvement in the development and promotion of games, various indicators are used, Fiksu is a company that's popular in tracking this information, they are a provider of mobile marketing technologies.

Below are the main criteria by which the analysis of effectiveness is conducted.

Cost per Loyal User Index

This index shows how much money the company has to spend to attract one loyal user that will be actively using their product.

"In January 2015, this indicator was at $ 2.78, which is 34% less than in December 2016, when the cost of attracting one loyal user was $ 4.23." Such dynamics are explained by the intensification of marketing activity before the New Year holidays.

$ 2.78
Cost Per Loyal User
December 2015

$ 4.23
Cost Per Loyal User
December 2016

App Store Competitive Index

This index allows you to track the total amount of downloads per day, which is based on a rating that consists of the top 200 free iPhone applications in the US. "This index reached 8.8 million in January 2016 which was an increase of 4%. However, the volume of daily downloads decreased by 15% compared to January in the previous year."

Amidst all this, games still remain the most competitive applications in the AppStore.

Cost per Install (CPI) Index

Depicts the costs required to have a single installation on one mobile device.

According to Geenapp (an application promotion platform), "the cost of installing the iOS application in January 2016 was $ 2.42 with the cost of installing Android applications falling shorter at only $ 1.88." These values are based on an average, and they change every day, depending on the number of advertising campaigns around the world. The reason for this significant difference in the cost of iOS and Android installations is that Android has significantly more applications than iOS, with a higher acceptance level, especially in countries such as India and China.

The top 10 countries with the highest CPI index between 2016-2017 are as follows:

Country	CPI
Australia	$ 3.23
New Zealand	$ 2.99
Canada	$ 2.93
Hong Kong	$ 2.85
The United States	$ 2.78
Sweden	$ 2.77
South Korea	$ 2.71
Singapore	$ 2.68
Norway	$ 2.63
Taiwan	$ 2.59
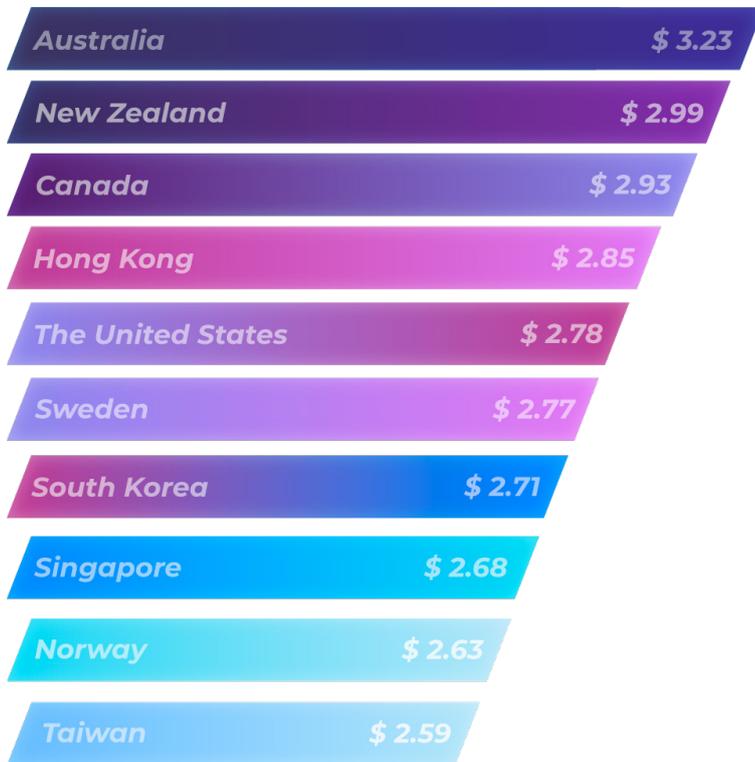
It should also be noted that the cost of attracting users does depend on what sort of actions the company wants to achieve from the user.

Expected actions include:

1. Game application Installation
2. User registration
3. User subscription
4. In-App purchases

Gender as a factor in attracting users

According to Liftoffs' 2017 Mobile Gaming Applications report, "the differences in Cost Per Install between male and female users is remarkable, showing a 14% difference between

$ 4.43

$ 3.89
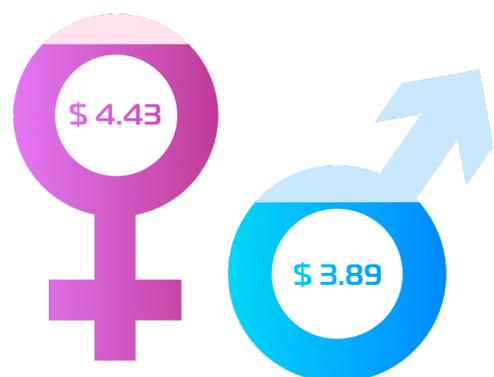
the two, where their cost to attract male users was $ 3.89 as opposed to the cost of attracting female user which was $ 4.43."

Pat reports have shown that Female players on average are more likely to spend more time in the game once they are registered, which makes them more cost-effective acquisitions. Worldopos use of both microtransactions and its own cryptocurrency certainly allows for female users to positively influence the profit potentials as well as the value of the in-game tokens.

Taking into account the fact that Worldopo is not focused on players of one gender specifically, gender-neutral advertising campaigns have been applied during the ICO.

Blockchain and mobile games

Although the concept of blockchain has existed for more than a decade, the technology itself and its possibilities have only been actively realised only within the past few years. With the surge in popularity of cryptocurrencies such as Bitcoin and Ethereum, now more and more people are becoming aware of the benefits of blockchain technology. Moreover, the gaming industry is still behind in the implementation of blockchain into games, although it truly does have undeniable advantages:

It provides an unprecedented level of **security**

It allows the development and implementation of **cryptocurrecies**

It makes digital economies possible through easy **peer to peer transactions**

It transfers networks from a centralized server to user-controlled **decentralized networks,** which not only makes the experience smoother but also faster
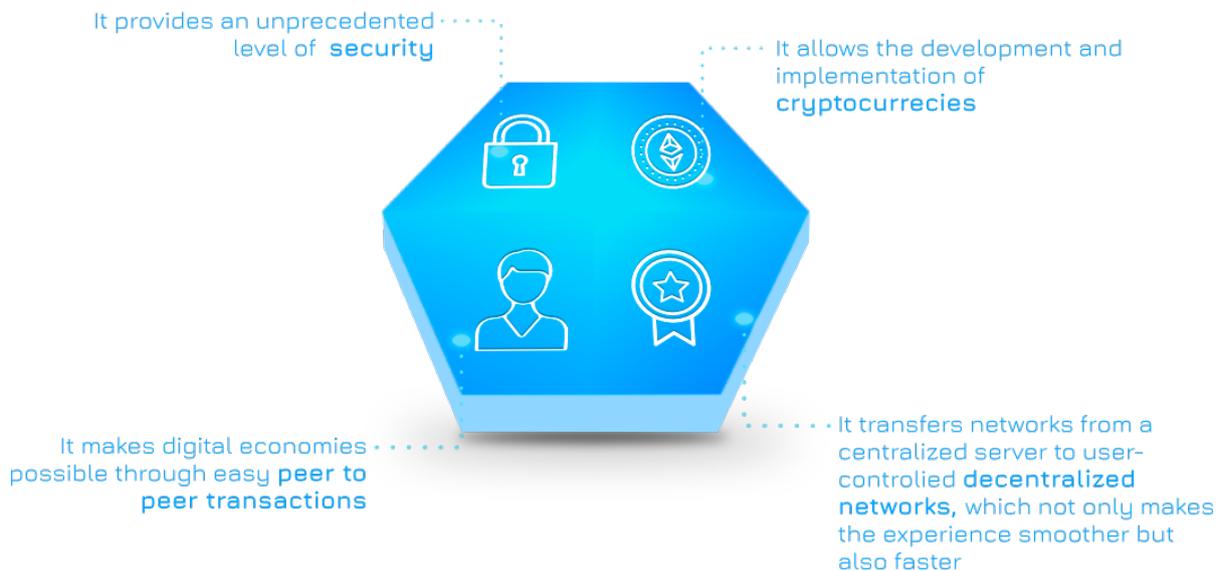
Within the competitive environment of the mobile games industry, being able to stand out is key to your success. Large companies have the advantage of simultaneously developing several games and promoting them on a large scale - this increases the chances of success at the same time small development studios lack the human

resources and the means to compete in this regard. But Worldopo has a unique advantage and here is why:

- We are expanding and launching within an environment where innovative technologies such as augmented reality, are being actively promoted by Apple and Google.

- By integrating blockchain into the game and tokenizing in-game objects/ resources, we allow players to have tangible revenue in return for the time and effort spent in game.

- In addition to these technological innovations, Worldopo also provides a truly interesting gaming experience and exciting in-game events.

These factors give Worldopo a competitive advantage and place it a leading position within a number of game categories in both the iOS and Android stores.

The development strategy of Worldopo is already laid out for the next 5 years with the possibilities of expansion inside the game. Worldopo gameplay will certainly become more and more exciting, more game mechanics employed increasing the difficulty based on each new level of players. In addition, the scaling strategy includes the markets of Asia, India, the US and Europe. Let us not forget the formation of its own player base through the ICO Crowdsale.

Problems faced by the Gaming Industry

Anyone that is playing mobile games to enjoy the gameplay experience, as well as the plot involved in it and not just playing for the mere sake of killing time will constantly face the following problems:

- Time loss, which leaves behind only a "virtual" track.

- Endless in-game purchases, which in turn carry no tangible value outside of the game.

- The quality level of the mobile games market.

The blockchain technology solves all these problems. Thanks to the tokenization of game objects and resources, we are able to create an opportunity to exchange and trade resources on internal and external marketplaces. Now each player will be able to convert his game XP into a real value. Every in-game purchase, as a matter of fact, is an investment that will be returned in the future, and users may also earn based on it.

Thus, we intend to bring value to the game world, which will contribute to the qualitative development of gameplay, and so forth. Only games with high retention rates of players, fascinating game mechanics and the ability to earn while playing, will be able to bring this market to a completely new level.

Thanks to such technologies and products, we are capable of developing both e-sports and cyber-professions.

In Game Balance

One of the main difficulties faced is the observance of the in-game balance in various game mechanics, we are constantly improving on ways to solve this.

Big challenges for the team then stem from the following questions:

- How to combine game scenarios of F2P (Free to play) and P2W (Pay to win)?

- The whole world is your playground! How to create a balance between the in-game world and the real world?

- How to maintain a stable portal of entry into the game for beginners, whilst the game is dominated by strong leaders?

- How to formulate conditions for the steadily growing income of Cryptolorods?

Next, we will describe how it is we will be able to manage these challenges.

3.   Analysing the Gaming Market

The largest and most profitable game manufacturers are concentrated in the US, Japan, China, France, Britain and Finland. We can take March 2017 as an example of this, the world leader in downloads on iOS devices was a Chinese company, Tencent, followed by Ubisoft with their new and extremely popular product Ballz from developer Ketchapp Studios.

Profit from mobile games

The total revenue for gaming applications in 2016 was $ 33.6 billion of which the majority 68% ($ 23 billion) came from IOS games.

The most profitable games on iOS in the US as of November 2017 were:

- Candy Crush Saga from King Digital Entertainment PLC
- Golf Clash from Playdemic Ltd.
- Pokémon GO from Niantic Inc.
- Madden NFL from Electronic Arts
- Slotomania: Vegas Slots Casino from Playtika
- Clash Royale from Supercell
- Homescapes from Playrix

The most profitable games on Android in 2016:

- Pokémon GO from Niantic Inc.
- Mobile Strike from Machine Zone Inc.
- Game of War from Machine Zone Inc.
- Candy Crush Saga from King Digital Entertainment PLC
- Clash of Clans from Supercell

All listed games are referred to as "free to play" models. This means that the profitability of the game depends not on the number of downloads but on the number of microtransactions within the game. The model "free to pay" has several advantages in comparison with the classical "pay to win":

Pokémon GO, released in 2016, set the trend for the games based on Augmented Reality technology, earning more than $ 800 million and becoming the most successful game on iOS and Android.

Summing up this analysis, we can conclude that the most successful games to date are marked "free to play", they are established on the genre of real-time strategies, use the technologies of geopositioning and AR. These are the characteristics that Worldopo is based on combining everything with the security of the blockchain technology, the project provides an unrivalled gaming experience, optimized for the gaming market.

Examples of other games based on blockchain technology

As already mentioned, the gaming industry is just beginning to actively incorporate the blockchain Technology. Nonetheless, there is already a market in existence for games based on this technology and several interesting games are in the works and will soon be released, looking at these games we can obtain valuable information. The list below details a few of these games:

- **Decentraland**

  offers a virtual reality project that is based on Ethereum backed blockchain. In such a system each participant will be able to purchase a digital land plot, making it unique and interact with other users within the whole ecosystem.

- **Megacryptopolis**

  This is a blockchain game where participants have plots of land at their disposal in a virtual Crypto-City and are able to develop them. Players begin to acquire land on a decentralized city map, which allows them to raise several types of structures, such as residential, industrial and commercial structures. Each plot of land, together with the structures standing on it, represent a cryptographic code based on ERC-721, which can be transferred or sold like any other cryptocurrency on both internal and external markets.

- **Lordmancer II**

  presents itself as the first online game with an internal cryptocurrency. Moreover, the features of the gameplay allow you to earn in form of cryptocurrencies.

- **Privateers life**

  this is a multiplayer online game in a pirate setting, whose economy is based on blockchain / DAG. The internal cryptocurrency of the game is one of the means of valuation in the game.

- **Prospectors**

  another game using a cryptocurrency, however, the main distinctive feature is the fact that the cryptocurrency can be obtained only within the game. Therefore, there will be no official way of trading the in-game currency for real cryptocurrencies.

Analysing the adaptation of the blockchain Technology in these games shows that it may certainly be implemented in an effective way. Looking at the MMORPG genre is especially interesting because it traditionally sets the trend of modern technologies - to be specific the online multiplayer world. But MMORPGs are a niche market that can be used as a proof of concept - though the RTS genre (real-time strategy) has a wider appeal. The success of CryptoKitties, not represented by the RTS genre, proves that people are ready to invest in games with built-in cryptocurrencies.

The main advantages of the project ahead of competitors

Other games based on the blockchain Technology, are characterized by an unattractive gameplay. They either target very specific niche markets (MMORPG genre), games based on casinos or simple games aimed at collecting in-game assets (CryptoKitties). At the moment there are no games on the market that focus on the main audience of casual players and offer an exciting gameplay with high retention rates of players.

- The unique use of advanced technologies (AR, blocking, geo-positioning) effectively enriches the game process.

- Instead of creating a new game model that would require players to learn, Worldopo offers affordable and economical modelling within the real world. The game will be interesting and useful for people who want to understand the principles of blockchain and cryptocurrencies in a risk-free environment. Equally, people who do not want to sit still and want to immerse themselves in

an alternative reality creating powerful infrastructures that they will be able to view with a mobile device.

- The ability to transform all the acquired gaming experience (in-game assets, resources, etc.) into cryptocurrencies. Not a minute spent in the game will be wasted.

New advertisement channels

The combination of augmented reality and geopositioning in Pokémon Go became an effective tool in mobilizing a large number of players. As advertisers struggle to find new and effective ways to reach across to large audiences, Worldopo can provide interesting opportunities within the existing advertising channels. Our plans include the following game elements, which, of course, will be scaled:

- AR events: advertisers can use the augmented reality capabilities of Worldopo for business promotion. For example, "Somewhere in Central Park there are 100 AR hamburgers, using the AR-extension to find them and enjoy a free hamburger for every AR-hamburger that is found"

- Providing in-game rewards for purchases, for example: "Buy a hamburger, scan the code on the receipt and get N coins as a reward!"

- Giving players the opportunity to buy limited game assets, for example: "Acquire an exclusive ice cream shop from brand N!"

As an illustrative example, at the Gamescom 2018 conference, a similar action was carried by gaming company Honor. More information on our social networks.

4. Mobile game Worldopo and the Game Process

Worldopo: Innovation in the world of mobile games

Combining the technologies of augmented reality, blockchain and geopositioning, Worldopo provides a unique gameplay experience that exceeds the boundaries of the current capabilities of mobile games. All these technologies are purposefully combined together to form up Worldopo, each technology plays its own unique role within the game.

Augmented reality brings the user into a sense of an altered world merging the game world with reality,

Blockchain provides an increased level of security, Geo-positioning brings cities around the world to your mobile device.

The main goal of Worldopo is to bring the blockchain technology to the gaming industry and create new channels for the development of decentralized games, giving players the opportunity to easily evaluate all the advantages of crypto games.

Worldopo users fall into two categories: First we have cryptolords and then casual players. Each casual player, abiding by a certain strategy, can choose to move up to the rank cryptolord, or can simply continue to enjoy the gameplay of the urban simulator as a casual player. The main goal of the game is to become a real estate mogul and proficiently manage all your assets. Players actively join clans, accumulate their own resources and forces to achieve their goals. All generated resource pools and transactions which are concluded in Worldopo are all backed by smart contracts. The identification of each unique player and all of his game assets are stored in the locker, which makes the game more secure and even more secure.

Below are 3 outstanding characteristics that make Worldopo a unique phenomenon in the field of mobile games:

- The possibilities of Augmented Reality (AR)

  Augmented reality allows you to actually "see" your own gameplay. AR-technology brings completely new opportunities for mobile games, the technology is developing quickly, there are certain limitations that prevent

AR from being integrated fully into mobile games, such as the size of AR objects, accurate placement and, of course, interaction with the environment. Worldopo solves this problem by using dedicated AI to help locate all AR objects. It analyzes your environment, defines fixation points, thus, allows you to superimpose AR-structures over existing ones.

- **Real-time. Real world**

  Team Worldopo sought to make sure that the whole game is in real-time. A player can buy plots of land - Hexagons on which he will raise his structures (Mining farms, structures, factories, etc.). Basic Geolocation technology: working with Google maps / openstreetmaps users are able to play not only in real-time but in the real world.

- **Risk-free introduction to the crypto-currency world**

  Worldopo is one of the first mobile games in which the gameplay process is built around the blockchain technology. This creates a comprehensive understanding of the blockchain technology and the world of crypto-currencies.

Having the opportunity to sell any in-game asset for WPT, a player can earn Cryptocurrencies without getting real money involved. This is a great way to introduce players to the world of cryptocurrencies without financial risks. In addition, the exchange and trading of tokenized game assets on both domestic and foreign exchanges gives players the opportunity to both earn and exchange unique in-game assets.

Blockchain and WPT token

WPT becomes the real currency that is generated during the game. Worldopo Token (WPT) is a game currency based on blockchain, which was implemented on the Ethereum platform. WPT can be used both in the game and beyond, as a real monetary unit. Thanks to the innovative economy of the token, every active player who chooses the right strategy can collect and earn the WPT inside the game.

Smart contracts

The use of smart contracts in the mobile game industry allows developers to create a secure environment for the end user, namely to protect and automate any transactions

related to the game. In particular, the sale and exchange of game assets, the creation of various resource pools and distribution of profits to all its participants, etc.

Within the Worldopo environment, all transactions are carried out using smart contracts that also ensure a fixed state of the game world (fixing Hexagons in the blockchain chain). Each farm has its own unique Hashrate and thanks to the logic implemented in smart contracts, we can ensure collective ownership of gaming assets.

All this is done to ensure that every player had the opportunity to unleash the full potential for the implementation of individual strategies and develop their real estate empire while remaining protected from fraud. Smart contracts allow making every transaction transparent and safe.

Game process
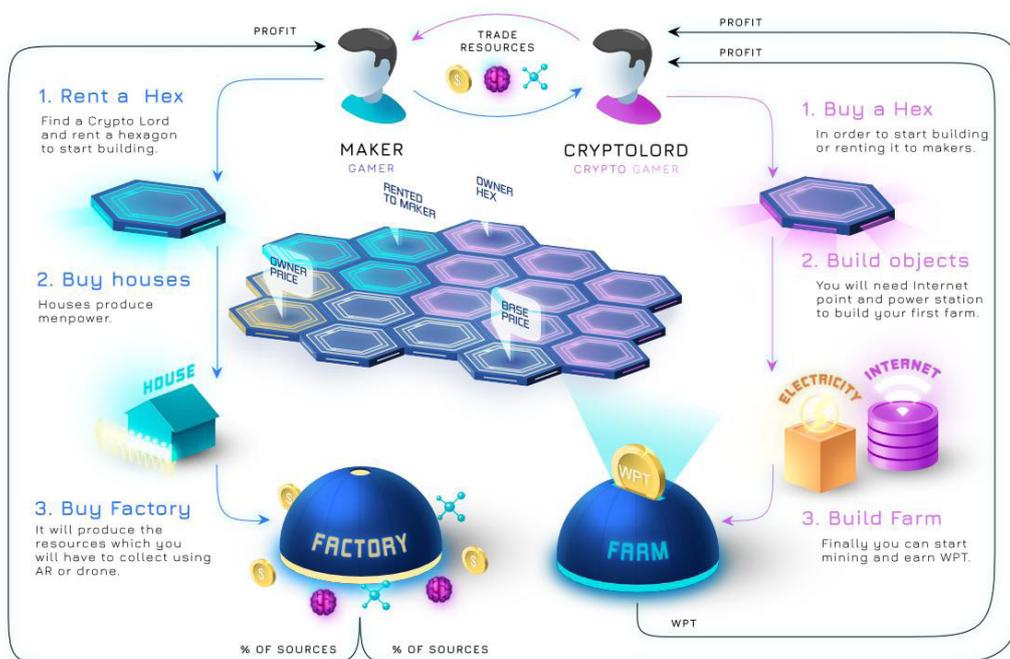
Asymmetric gameplay and different game scenarios

We have developed different roles reflecting the essence of F2P (Free to play) and P2W (Pay to win) games. For each role, we have thought through different game scenarios, corresponding to the goals of each type of player and providing different possibilities.

Game Roles

In the game Worldopo there are two types of players: Cryptolord and Maker

- ### Cryptolord

  whose main resource is the world around us - hexagons. The Cryptolords buy Hexagons with WPT tokens. They then go on to develop the Hexagons or possibly lease them to the makers. When developing Hexagons, Cryptolords raise mining farms, Life Quality (LQ) structures (Internet, Electricity, etc.), once they have developed several levels of real estate this leads to them creating a powerful infrastructure that brings profit. By correctly building up their infrastructure, Cryptolords directly influence their profits.

- ### A Return On Investment (ROI)

  is the main motivator for the Cryptolord. The goal is to maximize profitability through the selection, promotion and mentoring of the makers (help in opening the wallets of explaining the crypto economy, etc.). In the future, the most influential players will have unique opportunities in the field of marketing activities. Using AR, players will be able to create points of interaction online and offline world, through advertising campaigns and in-game events.

- ### The Maker

  the first task of all makers is to find themselves a Cryptolord and rent a Hexagon from them on which they can start to raise structures. After setting up their real estate (LQ-Structures and factories), the makers will then be able to produce and collect the necessary resources for the further development of the infrastructure. All resources can be collected using AR-engine, as well as using unmanned drones inside the game.

For the makers, the game becomes an exciting urban development simulator, the results of which, they can easily watch with the camera on their mobile devices. Also, makers actively collect the crypto by moving along familiar streets and participating in in-game events.

Each Hexagon is unique in its own way and each has a different level of development. In order for structures to be the more productive, it is required to develop both Hexagons and real estate.

In the case, a Maker wants to become a Cryptolord

To do this, the maker should start actively trading all the in-game assets and resources that they have collected whilst playing the game, by using one of the exchanges, for WPT tokens. After they have collected enough WPT, they will then be able to purchase a Hexagon and start interacting with other makers.

How does mining work in Worldopo?
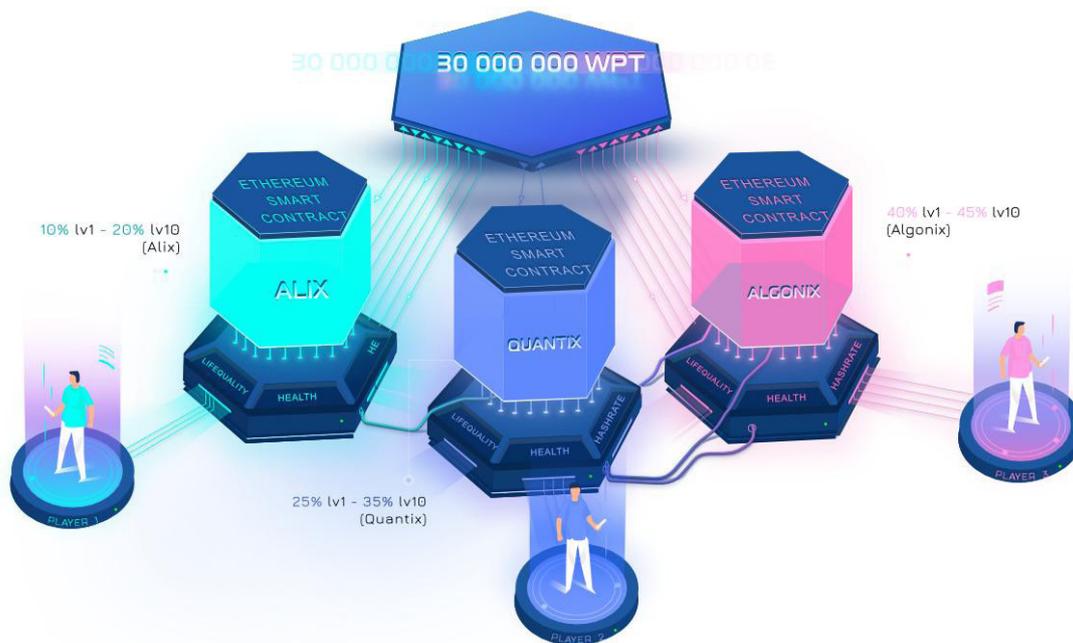
Every Cryptolord that owns a farm earns revenue every day in form of WPT tokens. All tokens can be mined from a universal pool of 30 million tokens. The main pool is constantly replenished based on commissions from all in-game transactions and purchases.

In Worldopo, as in many popular games, we implement a game mechanic known as "Grinding". Grinding - means performing a monotonous and/or routine work. It exists in almost every game and is part of the game process. We have digitalized the in-game

time and such things like grinding or unfreeze that help us now to replenish the main pool as additional sources.

There are several types of farms, a few are Alix, Quantix, Algonix. With them, you are able to mine WPT tokens, though each has its own power level. The power level of each farm can be improved by its Cryptolord, which in turn directly affects the profit generated.

You may also come across unique farms such as Tangle farm, ERC20 farm and the Holy Grail. With these farms, not only are you able to mine WPT tokens but will also be able to mine other altcoins such as BTC and ETH.

Each mining farm can bring to you a daily maximum income from the main pool.

Token Distribution. How does the mining pool work?

The amount of tokens Cryptolords may mine, outside of the power level of their farms, we take several other parameters into account. These would be the Hashrate and LQ-structures as they would affect the production rate of tokens.

- **Hashrate**

  this is a dynamic indicator that takes into account the number of players, farms, and the amount of commissions within the game. The level of this indicator will be constantly changing. The higher the indicator, the more complex mining occurs. Everything is just as it is in real life.

- **LQ (Life Quality)**

  this influences the production rate, which represents the quality of the structures on the Hexagons as well as the game level of nearby Hexagons. A higher LQ indicator implies a higher production rate for all the mining farms and factories that are located within the specific territory.

5. Business model within the game

Worldopo combines the exciting gaming process of a multiplayer strategy game with the ability to earn real money. Over the next 3 years, Worldopo will undergo well over 150 new and exciting enhancements within the game world that are meant to constantly surprise all players in a very pleasant way.

All functionality is compliant to the following principles

- Prevent cases of "Pay2Win rejections" from casual users, so as all in-game transaction may yield returns on the users' hard work

- Game mechanics, in which users are involved

- Clear progress and reward system

- Affixing a community-based constituent

In the case of Worldopo, it is interesting not only because of its intriguing gaming process but also for the financial component involved in it - each player will deal with real money which is issued in the form of a cryptocurrency. The Worldopo Token (WPT), is the in-game currency, can be exchanged for other cryptocurrencies as well as fiat currencies. Thus, users are able to earn simply by playing a mobile game.

Moreover, earning WPT within the game is something achievable by both Cryptolords and Makers.

Though certainly it must be noted, in order to earn in the Worldopo environment within each scenario players must perform various actions, in accordance with their role in the game.
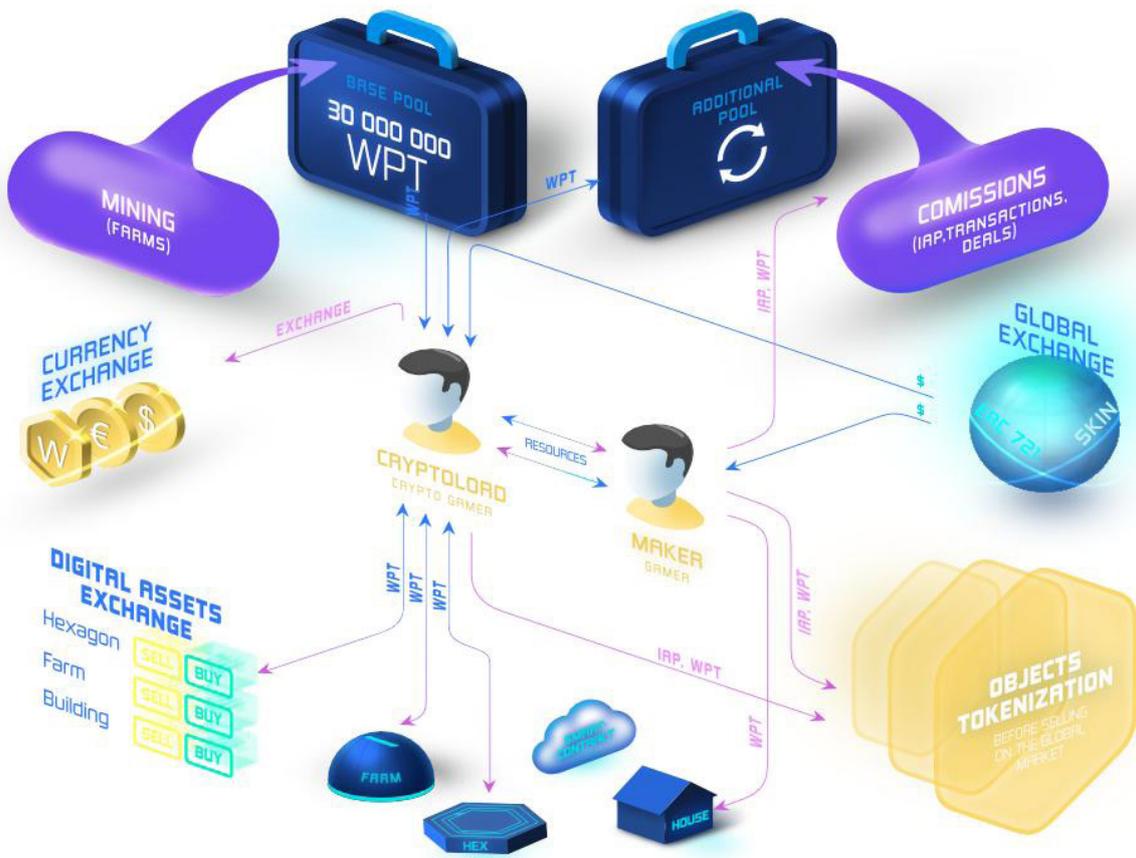
Cryptolords Revenue

- ### Cryptocurrency Mining

  Cryptolords can own their own mining farms and in-turn receive a cryptocurrency based income. Just as it is in the real world, in order to receive a cryptocurrency income, one must make an initial investment. Therefore, this option is only available for P2W players (Cryptolords) and it is not available for casual users.

- ### Renting land (Hexagons)

  Another unique opportunity to generate income within the game, which is available only for cryptolords. Just as in the real world, Cryptolords may use

their land to generate profit by renting it out to Makers (casual users) and receive a form of "rent" from them.

A Cryptolord can use their own plot of land (Hexagons) independently, for example, to raise a farm and receive crypto income. They may also choose to develop this land independently by raising other structures, in turn, forming a formidable infrastructure, which will bring higher profit returns.

But if the placement of the farm, for example, is not part of Cryptolord's plans, just as in real life they are able to rent it out other players - the Makers. The Makers will then raise their structures there for the production of resources, in this case, the Cryptolords will constantly receive income in form of rent: a portion of the resources produced by the structures on their land.

Makers Revenue

- **Gather Crypto (WPT)**

  by means of AR and actively moving around the city.

- **Starting with the production and collection of resources**

  that once produced can generate factories and other in-game structures.

- **Ability to tokenize and then trade in-game resources and assets**

  on both domestic and foreign exchanges.

- **Makers have the opportunity to interact with Cryptolords**

  and other makers by creating joint resource pools, acquiring common Hexagons, and so on, with the ability to sign contracts based on smart contracts and receive distributed profits for each successful transactions.

Rent Hexagons and Property management

The use of Hexagons and the ability to lease them out, this makes up one of the elements that make it possible to combine in one game F2P and P2W users.

Seeing as Hexagons are the primary base element of the game process, they are necessary for both F2P and P2W players, in order for them to start the game as well as to continue it.
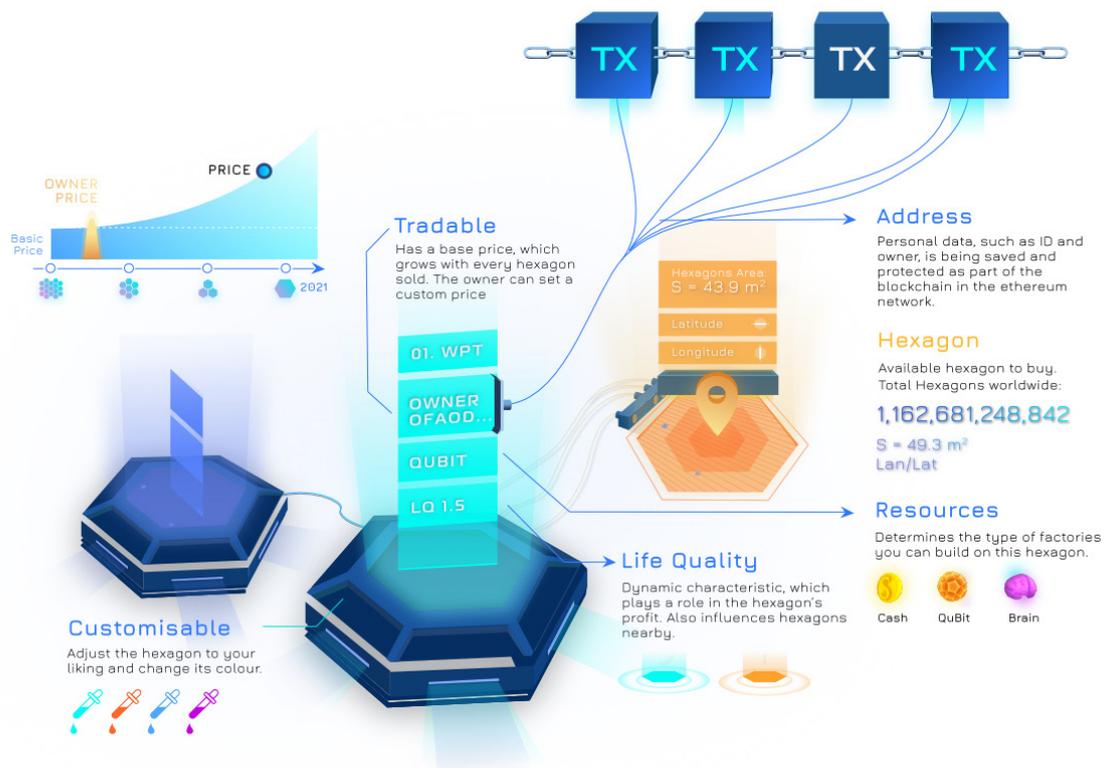
With each scenario for both P2W and F2P players, we envisioned different actions to take with Hexagons, all together will allow all participants of the game to realize their main goals and the game to develop as a whole:

- **Cryptolords:**

    Purchase Hexagons, develop infrastructure and can also lease them to Makers.

- **Makers:**

    Lease Hexagons from Cryptolords so as they may raise structures on them, in order to produce resources to develop their empire, ultimately, so as they may receive an income.

Introducing the games volatile currency into the market brings up several interesting factors. As much as WPT undergoes price changes, this will affect all in-game interaction of players, namely the buying and selling processes.

As a result, players will experience a model based on an appealing multi-use economy with WPT, within the game and partaking in the exchange of WPT outside of the game environment.

6. Technology and Architecture

Technical realizations and issues that we have faced

Primarily, popular multiplayer games are high-loaded system projects that include a lot of microtransactions. Support for data consistency in non-blockchain games has been a proven mechanism for years. The situation has completely changed with the advent of the blockchain technology. The blockchain technology is relatively young and there are a number of problems with network bandwidth, commissions (fees) and a limited number of transactions per second. The speed of the transaction within the economic game is so critical that we faced the challenge of moving from a decentralized to a semi-decentralized (hybrid) model with support for on-chain and off-chain transactions.

Communication improvement for more effective support

Also, the problem of the gaming industry is the lack of a simple platform for flexible interaction with a player. Although many studios provide e-mail addresses and chats as feedback channels while most people still rely on a rating system like in the App-Store. blockchain provides a specialized united platform for direct communication between players and developers. Such a kind of platform will benefit both developers and players as good interaction is crucial for the day-to-day quality improvement of support and further development of the game.

Among all available blockchain solutions, we have chosen Ethereum as our base platform because of its customization capabilities and constant improvements of its computing platform.

Nevertheless, there are certain shortcomings that should be noted when implementing blockchain technology, i.e.:

- **Maintaining the network functionality**

  Conducting transactions on the network, as well as performing other operations with the help of blockchain requires keeping the network in a stable and functional state.

- Bandwidth limit

  The same as in other projects based on the Ethereum platform, there are two main issues that can affect Worldopo, these would be the transactions processing time and fees.

The transactions processing time is reduced as more people use the application. As a result, this can negatively affect the gameplay in our case. To counteract this, it was decided to create a hybrid service with two types of transactions: on-chain and off-chain. In this case, the performance of the game will be preserved and the players will not have any issues with WPT.

In addition, each transaction on the Ethereum platform requires fees to be paid. Since Worldopo relies on the interaction of players with predominantly small transactions, commission payments can become a problematic issue, especially as the player base is increasing. The two-transaction approach solves this by using a centralized transaction register for off-line transactions, only WPT transactions will use the Ethereum platform. The smallest transactions will take place outside the network and will then be written on-chain which will make them almost free.

Problems of irreversibility

An integral part of the blockchain is the irreversibility of transactions. While the level of security improves, simple errors become unforgivable. For example, if player A makes an error in the wallet address of player B during the transaction, as a result, the funds will be lost and this is irreversible. In order to prevent such scenarios, various security measures are used in the world which will be implemented based on feedback from players and pending transactions.

Advantages of blockchain based games

You can easily make a list of the advantages that we found and which ones we use in the game Worldopo, so we decided to list the most significant in our opinion:

- Ownership

  Players have real ownership of their items and in-game currency. As soon as something is bought, exchanged or sold, the record of the transaction remains permanent and can not be hacked. Your game values can be stored on your wallet next to real money or other altcoins.

- **Uniqueness and value of in-game assets**

  In most games, for example, as in Diablo, the value of an in-game asset is achieved only due to its uniqueness and limitedness while in blockchain based games their value is also backed by the possibility of tokenization. Here you can conclude at a bargain and not profitable price, selling a really valuable item (structure, street, etc.) cheap and then watch as someone sells it 10 times more expensive. Inside the Worldopo game, each item can be tokenized and some assets can be based on smart contracts.

- **Decentralized gaming economy**

  Blockchain technology in both games and other software developments creates a direct link between developers and users. What about the games, players can monetize their progress, skills or even collected in-game assets, like real estate.

- **Transparent sharing of in-game assets**

  Secure transactions and confirmation of the right to change ownership. For example, in the game Worldopo, the world is divided into plots of land (Hexagons) and each player can both buy a Hexagon and set a price on it and afterwards sell it automatically.

A good and relevant example to everything that you have read above about Worldopo is Entropia Universe. In its gaming environment, an unknown gamer bought a piece of an in-game real estate for 2.5 million dollars.

Solving the gaming industry problems

In each industry, there are many problems that require solutions and improvements. It is enough to say about the most painful problem in the gaming industry, **it's all about the time spent by the players and the loss of interest**. Loss of interest in the game leads not only to the loss of money spent in the game but also to the fact that the player irrevocably loses time and bought items depreciate. And here, unlike anywhere else, the tools provided by the blockchain technology help to monetize the time spent in-game, the player's skills as well as previously purchased items.

In Worldopo, as in many popular games, we implement a game mechanic known as Grinding. Grinding - means performing a monotonous and/or routine work. It exists in almost every game and is part of the game process. In our opinion, Grinding is mining in

the virtual world, to achieve the result you also need Proof of Work in form of waiting for the structure upgrade or other events.

- ### The value of the virtual currency

  in non-blockchain games such currency has a "pseudo value" because it has practically no pricing factors and can be replicated an infinite number of times. When using blockchain, the game currency has value and depends on the pricing factors.

- ### Singular ecosystem based on blockchain

  tokenization of Qubit gaming values and the ability to integrate this into other games and platforms allow for the creation of a single system for trading, exchanging and selling.

One can simply summarize the aforementioned, thanks to the blockchain technology, the hours of time spent in the game will not be wasted, the economy of the game allows you to convert virtual results into quite real things, openly monitor who owns what and what is happening in the game and need not concern themselves about security or transparency problems.

Combining the technologies of augmented reality, blockchain and geopositioning, Worldopo provides a unique gameplay that exceeds the boundaries of the current capabilities of mobile games. All these technologies are purposefully combined together in the form of Worldopo, each having its own unique purpose within the game. Augmented reality creates a sense of play in the real world, blockchain provides an increased level of security, and geo-positioning brings cities around the world to your mobile device.

7. Worldopo Token (WPT)

What are tokens?

Tokens are digital assets that investors acquire from a company in exchange for a fiat currency. A token acts as a unit of counting that is used to represent the digital balance in the business model of a project. The counting of tokens within the database is facilitated by the blockchain technology, and access to the tokens is carried out using special applications using specific electronic signature schemes.

- ### Worldopo Token (WPT)

  is an in-game currency with which one is able to play the game as the role of Cryptolord and earn a daily profit. All transactions with WPT will be carried out through the blockchain.

The blockchain technology was chosen as the basis of the Worldopo economic system as it allows for transparency in all in-game transactions, as well, will provide users with an extra level of security.

Technical description of the token and the platform

We chose to work with two platforms: Ethereum and ByteBall

We opted for the Ethereum platform because we see a way to improve on it since its formation. On the basis of transaction confirmation, we see an increased response time. This may affect the operation of the system as well as the general disposition of the audience. In addition, for each transaction on the Ethereum platform, users will pay a commission in form of ETH currency.

The ByteBall platform is not as widely used as the Ethereum platform. Nevertheless, Byteball is not based on the blockchain technology rather on the DAG technology, which allows us to eliminate the above-mentioned potential problems of the Ethereum based platform: the response time on the ByteBall platform is less than a second and the transaction fee is approximately 1000 times less, it currently stands at about $ 0.0001.

Until we are truly convinced that one platform is more effective for users than the other, we will continue to support both. Tokens released on one platform can be exchanged for tokens from the other, and vice versa, on a 1:1 ratio.

In addition, for tokens released on the Ethereum platform, we decided to create a hybrid service as a form of guarantee. The service will allow you to carry out two types of transactions: within the blockchain as well as externally(outside the blockchain). As a result, you are certain not to run into any sort of problems when working with WPT token.

WPT Functionality. WPT pricing

The Worldopo game is one that demands users who are willing to pay a certain amount of money, expressed in a fiat currency or in any other form of cryptocurrency, so as they may purchase the in-game currency WPT. Users are able to acquire WPT tokens by one of several means, on a Crypto exchange, through the official Worldopo site or the internal mechanism of the game. Nonetheless, in relation to the number of WPT tokens available for sale, the price is determined as follows:

Price WPT = Demand at a given time / Number of WPT tokens available for sale

$$\text{WP Token} \left[\frac{\text{Demand and at a given time}}{\text{Number of WPT tokens available for sale}} \right]$$

- Limited issuance
- Stable market
- Highly liquid token
- The value of the token
- Blockchain
- WPT mining

The supply of WPT tokens is based on:

- Gamers who earned tokens in the game;
- Other token owners (ICO members, bounty program participants, team members, Worldopo Foundation).

Key factors affecting the price of WPT

Worldopo's popularity, the demand for advertising and the number of WPT tokens available for sale, are the main and fundamental factors, but there are many other factors affecting the price of WPT.

Positive correlation

- Number of users

- Number of raised structures

- User engagement

- Holidays - events and competitions that take place during these special days with awards and auctions of unique assets

- High position in leading marketplaces: Apple Store and Google Play

- Expansion of the game world and appearance of additional functions as well as structures which will be acquirable only by means of WPT tokens

Negative correlation

- Supply of tokens (the more tokens available for sale, the lower price for WPT)

- Low position in leading marketplaces: Apple Store and Google Play

- Competition and counterparts

Reverse tokens redemption

To ensure liquidity and market regulation Worldopo will periodically redeem tokens from the market or vice versa, adding them to the trust fund.

Purchasing tokens by customers

To make any transaction on the Worldopo platform, users will need to acquire tokens. As a way to simplify the procurement method, Worldopo does provide a client portal where acquiring tokens is done with a single click.

- BTC (by transferring the desired amount of BTC to a specified address. Confirmation of the transfer of funds in form of BTC to our address will be in accordance with a specialized Hash transaction code).

- ETH (by transferring the desired amount of ETH to a specified address, Confirmation of the transfer of funds in form of ETH to our address will be in accordance with a specialized Hash transaction code).

- Fiat (traditional currencies) currencies $ USD / EUR

An important feature of the WPT-token is its limited issuance - only 200,000,000 tokens will be issued, which in turn will not only prevent inflation but will give it an unlimited deflationary potential.

Attention: in case the goals of our ICO-company are not met, all remaining WPT tokens will be temporarily frozen so as they are not affected by the ongoing exchange rate of the token. We reserve the opportunity to later use them as a means to cover the possible needs of the game, for example, for price adjustment in the case of increased demand). We can certainly assure you that the team will not use said WPTokens for personal or enrichment purposes.

8. Post-ICO strategy. Goal and end results

The diagram below shows the distribution of received tokens.
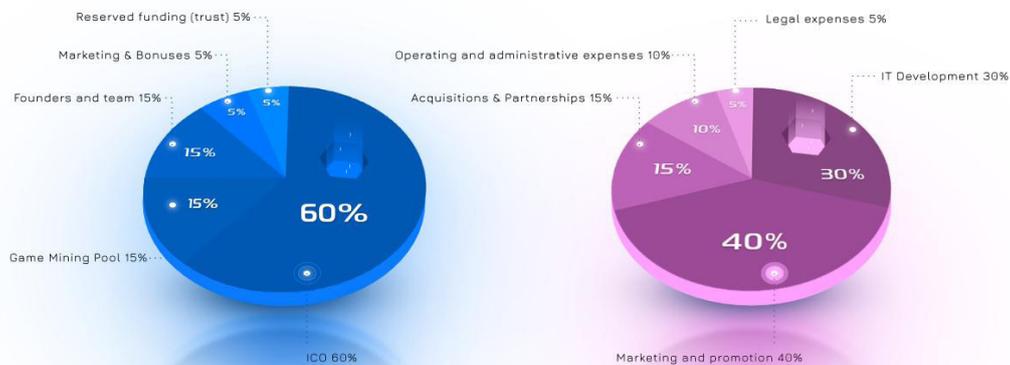
Distribution of tokens:

- ICO 60%

- Game Mining Pool – 15%

- Founders and Team 15%

- Marketing and bonuses 5%

- Reserved financing (trust) 5%

Distribution of expenses from collected funds:

- Game development 30%

- Marketing and promotion 40%

- Development and partnerships 15%

- Operational and administration. expenses 10%

- Legal expenses 5%

The Alpha version of Worldopo is already available in stores, and the Beta release is already on its way. The main goal of the Crowdsale is to raise funds to accomplish our

upcoming goals. Additionally, we are not limited to just Crowdsale, we are considering options on the sale of shares of the project to substantial and legal persons who are potentially interested in the scale and development of Worldopo:

- Further development of the game

- Development of gameplay and opportunities in the game

- The perfection of the economic system inside the game

- Carrying out marketing campaigns and product development

Further development of the game

To bring Wordopo to the next stage, we need to significantly expand the range of gaming opportunities for users, add new features and regularly release updates. Actively cooperate with companies and individual specialists in the gaming industry, constantly provide help to the Worldopo team to improve the game qualitatively.

All collected funds will be the financial basis for the active support and development in the early stages of the project. Multiplayer online games require constant maintenance as well as the development of additional functionality to ensure the game stays interesting. The years following (2018-2020), the development of Worldopo will include the following items (but not limited to):

Development of the gameplay process and possibilities within the game.

- Expanding on in-game functionalities (adding new game mechanics, assets, structure, etc.)

- Continuous implementation of in-game events with a variety of possibilities.

- Generation of an exchange platform that will allow for the exchange of cryptocurrencies (including WPT), as well as allow for trading of in-game assets.

- Implementation of a service that will allow users to receive revenue from advertisements placed on their assets, as well as the ability for them to post their own advertisements.

- Integration of artificial intelligence, which will simplify the adaptation process of new users to the characteristics of the gameplay process as well as quicken it.

A more detailed Roadmap can be found below or on our website.

Formation of the economic system of Worldopo

Worldopo's economic system is based on the blockchain technology to ensure the transparency of all transactions and protect users from manipulation with the in-game currency. The issuance of WPT-tokens will set the backbone of such an economic system.

Moreover, the issuance of tokens is limited, this is a determining factor in the growth and the demand of the token and thus its value.

Fundraising for the successful implementation of the company's marketing strategy.

With stern and competitive conditions of such a market economy, success largely depends on a competent marketing strategy. With the help of the accumulated funds, our team plans to increase the respective budgets of various promotional advertising campaigns both online and offline.

More than 55% of the funds raised through the ICO campaign will be allocated for the projects marketing purposes.

The results of a successful marketing strategy will see a surge increase in the number of users on our project which in turn will attract additional capital for its further development.

9. RoadMap

2017

Market entry. Our first steps

- ✓ ICO Launch
- ✓ MVP. Worldopoly Airminer release
- ✓ Roadshow. Introduction Worldopo within Europe
- ✓ Initial Community

2018 May - July

Reaching Softcap. Strategy & Game concept upgrade

- ✓ Reached Softcap
- ✓ Detailed Game Play Design with Everdreamsoft at Station F (Paris)
- ✓ Started working on Alpha Release of Worldopo (Upgraded concept)
- ✓ Started negotiations due to WPT-token listing on several exchanges

2018 August

Preparing for Main Sale. Release of New Updates

- ✓ Foundation of Qubit AG in Liechtenstein and FMA approval
- ✓ Main Sale on Continued Token Sale Structure (CCO)
- ✓ Release of Alpha Version & migration from AirMiner (MVP)
- ✓ Game mechanics fixation in blockchain
- ✓ Implementing new Marketing campaigns. Publishing new Game-trailer!
- ✓ The Presale of Worldopo in-game digital assets. Smart contracts based deals.

- ✓ New Update release. Redesign of the website and other crypto-software
- ✓ Setting up the merchandise store for fans & clans
- ✓ Preparation for Gamescom in Cologne for 21-25.08.2018 (H10.1)

2018 September

WPT-token listing. Entry on external Digital assets marketplaces

- ✓ Game update. New game mechanics, buildings & resources, etc
- ⋯ Introducing an in-game Auction for Digital assets trading
- ✓ In-game objects tokenization for trading on Global Digital assets marketplaces
- ✓ Creation of Worldopo Forum
- ⋯ Deposit WPT into the game and unlock 25% of tokens on holders' ERC 20 wallets
- ✓ Preparation for WPT listing on Exchanges
- ✓ Running the fixation of the game mechanics in TestNet
- ✓ starting working on webversion (Manager) of Worldopo

2018 October

Marketing expansion. Worldopo "Game Manager" release

- ○ Post ICO strategy implementation to support WPT-token growth
- ○ Diving deeply into community interaction
- ○ Bug-bounty Campaign / Hackathon Event & Security Fixes
- ○ WPT support into CSM Manager
- ○ Running the fixation of the game mechanics on Ethereum platform

○ Start working on microtransactions and moving to fully DAPP (from off-chain to on-chain model)

○ Implementing new Game loops, resources and digital assets

○ Releasing the first web-version "Game Manager" for Worldopo

2018 November

Game Loop Finalizing

○ Finalizing the High Level Game Design and closing the game loop for the Cryptolord

○ Preparing to launch the first stable Pre-Release(Beta) Game-candidate

○ Start working on AR & building recognition

○ Personalization for end users and advertisers. Creation of SDK & technology such as ARKit / ARCore for outdoor building/shape recognition

○ Integrating game loop for the Makers

○ Resource trading possibilities between Cryptolords and Makers

2018 December

PVP-activities. AR-advertising and new opportunities

○ Finalizing the full Game loop

○ Launch of in-game chat and push-notifications for important game events, (i.e. when someone buys the most expensive building)

○ Making all in-game deals between players and for the clans to be based on smart contracts

○ New In-game Events and competitions

○ Users will be able to receive revenue from AR-advertisements placed on their game objects, as well as, being able to place adverts of their own

○ All tokens will be unlocked

2019 Q1

Land Register

○ Cryptolord will be able to buy land through a special land registry divided by region

○ Expanding AR-functions for PVP-gameplay

2019 Q2

New Buildings. New Market Economy stage

○ Entering special types of buildings: Banks, hedge funds and Casino

2019 Q3

New Features

○ New features, new options for in-game building improvement, new methods of interaction between players, as well as the introduction of unique objects. To be continued...

10. Worldopo Team

The most valuable assets of the Worldopo environment is our team of 25+ specialists with vast experience in a wide range of technologies.

Finance, Publicity & Organization

Leaders who're responsible for main issues, teamwork and public game representation. Every day and every minute they make sure that all components of the formation and development processes work smoothly. Also they build reliable connections with the media and audience in 24/7 mode. This is the main ideologists and enthusiasts of Worldopo, who are also responsible for the overall project's success.

Sebastian Schneider
Chief Executive Officer

Sergey Sergeenko
Chief Technology Officer

Felix Weinstein
Chief Operating Officer

Game Design & Development

The brainiacs of the team: a group of developers, each familiar in different areas such as programming and design. Each brainiac is well versed in their field, using their unique vision and implementing their talents and skills they are able to mold the game so as it's convenient and interesting to all users.

Andrew Sencilo
Creative Director

Oleg Zaitev
Senior Frontend Developer

Marin Diaconu
Senior Fullstack Developer

David Avaza
3D Designer

Oleg Kuzmenko
Blockchain developer

Stanislav Chepiha
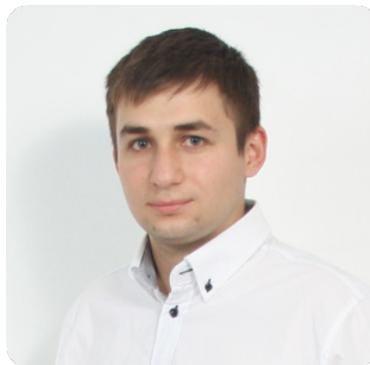Blockchain developer

Yaroslav Vorozhbyt
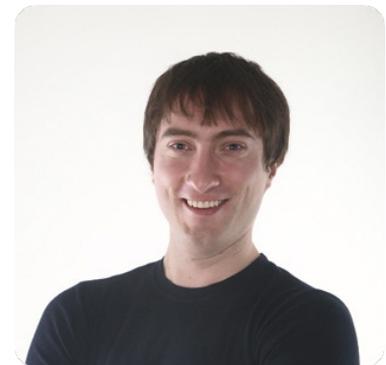
Unity3D developer

Nikita Popov

Unity3D developer

Roman Lesnichenko

Unity3D developer

Timur Abdrakhimov

Unity3D developer

Alex Krepchuk

Fullstack Developer

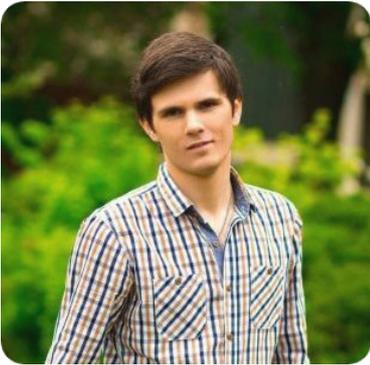**Mihail Krukov**

Fullstack Developer

Vladimir Press

Fullstack Developer

Oleg Tyutyunov

Frontend Developer

Sergey Kozlov

Frontend Developer

Nikita Bakunov

Computer Vision and Deep
Learning Engineer

Media Marketing & Advertising

Who uses Worldopo, who are the fans of this interesting game? What matters to them now and what will matter in the future? How will they be informed about the game and why will they love it? Our marketing team may shed some clarity on these questions as they have the answers. Interacting with both, current and potential partners, as well as the audience drawn to Worldopo, and working hard everyday to promote the game brand.

Artem Gordadze
Business Development Executive

Katya Boyko
Business Development Executive

Christopher Schofield
Influencer Marketing Manager

11. Board of Advisors

Crypto & Finance Advisors

Our project has attracted the attention and participation of renowned Crypto and blockchain experts from around the globe. They are well familiarized with the world of crypto as well as the inner workings of the game, focusing on the monetary aspect of the game.

Ilya Anikin
ICO, Investment and Strategy Advisor

Vladimir Nikitin
ICO/Compliance Advisor

Nikolay Shkilev
Strategic Business/ICO Advisor

Graham Doggart
Senior Advisor

Sadie Hutton
Co-Founder of DynamicAbundance

VR & AR Advisors (RE-FLEKT)

We work hand in hand with RE-FLEKT a world-class VR & AR developer with offices in Germany and the USA. In addition to the Human Resources delegated to implementing our AR in-game tasks, RE-FLEKT leaders are constantly monitoring the implementation and development of the AR-module and make valuable recommendations for solutions.

Wolfgang Stelzle

CEO and founder of RE'FLEKT GmbH

Kerim Ispir

Chief Operating Officer at RE'FLEKT GmbH

Industry & Game Play Advisors

We are striving not only to demonstrate the technological capabilities and innovations of a game such as Worldopo but also to create a game that is user-friendly for all Worldopo users. The advisory aspect on gameplay issues comes from those that are truly fans of our idea, this is will also help with the project as it brings the investment of heart, soul and joy into the project and in turn will hook millions of casual players of all ages.

Nicolas Sierro

Product & Project Manager at EverdreamSoft (EDS)

Technology & Sales

A group of advisors whose purpose is to work with and improve on aspects of Worldopo such as development, implementation and innovative concepts. Their work covers various significant areas: both strategic and project management, sales, social presence, creative marketing, the blockchain and much much more.

Prof. Dr. Dieter Kranzlmüller

Senior Advisor

Paul Borst

Head of ICT at Ferrari Financial Services GmbH

Manuel De Vits

Founder & Managing Director of Valyman Consulting

ICO Strategy Advisors

Having created a crypto currency as well as setting an ambitious plan towards its development into the mobile gaming world, we have sort out the assistance of a number of ICO experts. They have successfully completed projects that have brought tens and hundreds of millions of dollars in revenue. This is an invaluable experience for leaders, in turn helps in building a commercially successful product, whilst satisfying the requests of the audience.

Ian Scarffe
Senior Advisor

Constant Tong
ICO/Blockchain Game Advisor

Nathan Christian
Senior ICO-Advisor

12. Contact us

Site

URL   https://worldopo.io

Social Networks

Telegram   https://t.me/worldopo
Discord   https://discordapp.com/invite/hQTkTws
Facebook   https://facebook.com/worldopo
Twitter   https://twitter.com/Worldopo
Youtube   https://www.youtube.com/channel/
                             UCj15AmzU5wvjxtrGRaPVJcQ/
VK   https://vk.com/Worldopo
Instagram   https://www.instagram.com/worldopo.io/

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Qubit AG

Dr. Grass-Strasse 12

House of Blockchain

9490 Vaduz

Liechtenstein

13. Disclaimer

When making a purchase using Cryptocurrencies, be extremely careful. If mistakes are made during the transaction, namely if the address of the receiver's wallet is incorrectly specified, the funds will be lost without any possibility of their recovery.

The information presented in this document is not exhaustive and does not imply any elements of a contractual relationship. The document is solely advertising and fact-finding. The content is not legally binding for the initiating company. The document is not a public offer. This document is a translation of the English version of the Whitepaper. It is regularly updated, but, for natural reasons, may not always contain 100% up-to-date information. For current information, please read the English version of the Whitepaper.