



# ARCONA

augmented reality ecosystem

developed by PilgrimXXI team



We understand the concerns that potential investors may have regarding the ARCONA project and its development. You can view our declaration of risks in the following document:

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#### **ARCONA: Risk Factors and Security Measures**

We understand the concerns of our existing and potential investors regarding problems and risks that Arcona may face during its development. Below, we outline the **risk factors** :

- Our products are highly technical and may contain undetected software bugs or hardware errors, which might manifest in a way that could seriously harm our reputation and our business.
- These bugs and errors can manifest in any number of ways in our products, including through diminished performance, security vulnerabilities, malfunctions, or even permanently disabled

products. We have a practice of rapidly updating our products to fix these bugs. Some errors in our products may be discovered only after a product has been used by users, and may in some cases be detected only under certain circumstances or after extended use.

Our efforts to protect our users' information may be unsuccessful due to the actions of third parties, software bugs, or other technical malfunctions, employee error or malfeasance etc. In addition, third parties may attempt to fraudulently induce employees or users to disclose information in order to gain access to our data or our users' data. Should any of these events occur, information belonging to us or our users could be accessed or disclosed improperly.

- ***Unfavorable media coverage could seriously harm our business.*** If we receive a high degree of media coverage globally, unfavorable publicity regarding, for example, our privacy practices, product changes, product quality, litigation, regulatory activity, or the actions of our partners or users could seriously harm our reputation. Such negative publicity could also adversely affect the size, demographics, engagement, and loyalty of our user base and result in decreased revenue or slower user growth rates, which could seriously harm our business.
- ***We may be subject to regulatory investigations and proceedings in the future, which could cause us to incur substantial costs or require us to change our business practices in a way that could seriously harm our business.***
  - It is possible that a regulatory inquiry might force us to change our policies or practices. And, were we to violate existing or future regulatory orders or consent decrees, we might incur substantial monetary fines and other penalties that could seriously harm our business.
  - ***We have a short operating history and a new business model, which makes it difficult to evaluate our prospects and future financial results and increases the risk that we will not be successful.***
  - We began commercial operations in 2016 and became profitable in 2017. We have a short operating history and a new business model, which makes it difficult to effectively assess our future prospects. Accordingly, we believe that investors' future perceptions and expectations, which may be idiosyncratic and vary widely, and which we do not control, will affect our token price.
  - Our business model is based on the promotion and development of new technologies in the field of augmented reality for real life projects that include advertising, construction, landscaping and tourism. The technologies are based on building 3D landscape models via high resolution geospatial data, machine learning algorithms, the blockchain and smart contracts. You should consider our business and prospects in light of the challenges we face, including those discussed in this section.
  - We develop and will continue to develop our products and services in partnership with game designers.
  - ***The loss of one or more of our key personnel, or our failure to attract and retain other highly qualified personnel in the future, could seriously harm our business.***

We currently depend on the continued services and performance of our key personnel, including our CEO. As we continue to grow, we cannot guarantee that we will continue to attract the personnel we need to maintain our competitive position. In particular, we intend to hire a significant number of engineers, game designers, IT developers and mathematicians, and we expect to face significant competition in hiring them. As we mature, the incentives enabling us to attract, retain, and motivate employees provided by our Token Sale gains or by future arrangements, such as cash bonuses, may diminish in effectiveness. If we do not succeed in attracting, hiring, and integrating excellent personnel, or retaining and motivating

existing personnel, we may be unable to grow effectively and our business could be seriously harmed.

→ ***We have broad discretion in how we may use the net proceeds from our Token Sale, and we may not use them effectively.***

We will use net proceeds that we receive from our Token Sale in accordance with our mission – constantly increasing prediction accuracy to improve the performance of our investment products. Our efforts may be ineffective due to poor management, regulatory investigations, and other problems. We may use a portion of the net proceeds to acquire complementary businesses, products, services, or technologies. We may also spend or invest these proceeds in a way with which our tokenholders disagree. If our management fails to use these funds effectively, our business could be seriously harmed.

→ ***If we are unable to protect our intellectual property, then the value of our brand and other intangible assets may be diminished, and our business may be seriously harmed.***

If we need to license or acquire new intellectual property, we may incur substantial costs. We aim to protect our confidential proprietary information, in part, by entering into confidentiality agreements and invention assignment agreements with all our employees, consultants, advisors, and any third parties who access or contribute to our proprietary know-how, information, or technology. We also rely on trademark, copyright, patent, trade secret, and domain name protection laws to protect our proprietary rights. We have filed various applications to protect aspects of our intellectual property, which could require significant cash expenditures. However, third parties may knowingly or unknowingly infringe upon or challenge our proprietary rights, and pending and future trademark and patent applications may not be approved. In addition, effective intellectual property protection may not be available in every country in which we operate or intend to operate our business.

In any of these cases, we may be required to expend significant time and funds to prevent infringement or to enforce our rights. Although we have taken measures to protect our proprietary rights, there can be no assurance that others will not offer products or concepts that are substantially similar to ours and compete with our business. We include open-source software in our products. From time to time, we may face claims from third parties claiming ownership of, or demanding release of, the open-source software or derivative works that we have developed using such software, which could include our proprietary source code, or otherwise seeking to enforce the terms of the applicable open-source license. These claims could result in litigation and could require us to make our software source code freely available, seek licenses from third parties to continue offering our products for certain uses, or cease offering the products associated with such software unless and until we can re-engineer them to avoid infringement, which may be very costly.

If we are unable to protect our proprietary rights or prevent unauthorized use or appropriation by third parties, the value of our brand and other intangible assets may be diminished, and competitors may be able to more effectively mimic our service and operational methods. Any of these events could seriously harm our business.

# OVERVIEW

## **Arcona – a Blockchain-Powered Ecosystem Merging Real and Virtual Worlds Worldwide**

The Arcona Ecosystem creates a Digital Land – a layer of Augmented Reality, uniting the physical and virtual worlds into a single information environment that is perfectly linked to our real world. It is designed for interactive everyday user experience with augmented, virtual and mixed reality multimedia content in real-world locations.

You can change the surroundings of the real space around you on the fly with a smartphone, tablet or a headset, such as HoloLens or similar. In this Digital Land, anyone will be able to rent a land plot and start doing business within the AR platform. Everything will be controlled remotely, making it possible for you to do business worldwide, without leaving your office. Token holders will bid on and own virtual lots and receive rent payments if their lot is used by other AR programs on the platform.

## **Augmented Reality World Discovered**

Arcona is designed to incorporate AR in all areas of real-world business. This ecosystem is useful in real estate, tourism, gaming, media, advertising, education, and art industry: the possibilities are limitless. The Arcona ecosystem is a simple and convenient way of delivering AR projects of any complexity and style, connecting users and developers on a P2P basis. The Arcona ecosystem marketplace will be the hub, uniting all community residents and enabling free trade of AR content, software, services, digital land, and more.

## **Become an Owner of Digital Land**

Digital Land is the main asset of Arcona AR ecosystem. You can buy, sell, rent or lease it using ERC20 tokens called Arcona. Using Arcona tokens, you can sell creative software or 3D content to landowners and users, buy games, attend special venues, buy professional services (coding, advertising, content creation) and participate in ads, promotions, special actions, games, and more – all within the Arcona Ecosystem.





## EXECUTIVE SUMMARY

### PROBLEM VS SOLUTION

#### 1) From the corporate point of view

**Problem:** The advertising channel market is oversaturated. The traditional media channels are losing their power of communication with their target audience. Advertising industry needs to discover new formats, places and experiences.

**Solution:** Arcona's layer of augmented reality is a new space, a new medium for advertising, communication and brand sharing opportunities. There is little space in the real world for new billboards, but there is plenty of virtual space in Arcona.

#### 2) From the end user point of view

**Problem:** There is no single tool for users to easily interact with augmented reality.

**Solution:** Arcona in the public information space unites the physical and virtual world anywhere. Arcona offers free access for all users and software functions, allowing them to change the surrounding real space on the fly.

### 3) From the AR developer point of view

**Problem:** Indoor AR projects are easy to build, but outdoor AR projects present a challenge, as developers must travel to the location in order to build it, which significantly increases expenses.

**Solution:** With Arcona tools you can accurately and remotely place augmented reality objects in a changing environment. No GPS – we use real-world objects as markers.

- Arcona offers the ability to link virtual content with real landscapes anywhere, regardless of their size.
- We have a universal augmented reality environment that connects developers and consumers.
- Arcona visually combines virtual and real space which also adapts to user's movements.

### 4) From the global AR market point of view

**Problem:** There are more than 10 AR platforms, each supporting just one specific AR-enabled device: only smartphones, only smart glasses, only AR headsets, only iPhones, only Android phones, etc. The market is entirely atomized, and a universal, cross-device ecosystem is necessary in order to make fluid interaction between AR content developers, AR apps, content, and end users possible.

**Solution:** Arcona is a cross-platform solution and supports any device. **We provide a shared experience and simultaneous use of devices.** Users will be able to see and interact with virtual objects in real-world locations simultaneously and through different gadgets. We bring together developers and users, businesses and customers, and, most importantly, **we erase borders between countries.**

Our decentralized system will operate on every continent and give all participants of the ecosystem equal opportunities.

### 5) From the conceptual point of view

**Problem:** Presently, only professional AR developers can create AR experiences. Therefore, the end user's only available role is buying and using what others have created, without being able to use his creative potential for building his own AR experience.

**Solution:** The Arcona ecosystem is of major social significance since it gives creative people an opportunity to present their projects to the wider public. Arcona residents would be able to create and monetize their own AR projects without the need of hi-level programming knowledge (Wordpress and Youtube model).

# WHY WE NEED BLOCKCHAIN

Arcona will use blockchain as a ledger to identify who owns the land, content, software, etc., as well as who has the right to make and register transfers. Blockchain technology can guarantee equal conditions and additional protection of the property rights of owners of Digital Land in the Arcona AR ecosystem, and protection of copyright for developers and artists living anywhere in the world. Every transaction in the Arcona AR ecosystem will be reliable, transparent, and mobile.

Smart contracts will guarantee copyright protection to every content creator and programmer and ensure automated payment for the use of their intellectual property. These contracts will protect the rights of content and digital landowners.

# WHY WE NEED OUR OWN TOKEN

The Arcona economy generates an augmented reality layer called Digital Land. It is a limited digital asset described in the Ethereum Smart Contract, and it can be acquired in exchange for Arcona ERC20 tokens.

The Arcona token is equivalent to the cost of digital assets and it is the universal currency of the Arcona ecosystem. It is used for purchasing all digital goods and services in the ecosystem. The Arcona token will ensure the infrastructure required for building a new digital layer in real space. It will enable the ecosystem to replicate itself and be filled with a variety of content.

All Arcona token holders will have the right to contribute to the formation of the ecosystem. They will have the opportunity to complete tasks, develop software blocks and content, and test the system in exchange for remuneration.

Arcona token holders can participate in ecosystem promotions and loyalty programs.

# TRACTION, REVENUE, MILESTONES

The Arcona AR ecosystem is being developed by a professional team – [Piligrim XXI](#). **We have 5 years of experience in developing AR solutions, and Arcona is the natural extension of our passion and experience in AR.**

Piligrim XXI has been working in the AR development market since 2013, enhancing tourism experience by providing an opportunity to time travel, to see how different historical places and events looked like in the bygone eras. In 2014, we launched the world's first outdoor augmented reality park.

**Currently, 8 augmented reality parks have been sold and are operating in 6 European countries.**

The company's revenue is USD 700K.



We are currently testing our computer vision prototype as an independent platform for AR.

Since 2015, we have made significant investments in the research of distributed GIS, augmented reality technologies, 3D simulation, computer vision and artificial intelligence.



## Milestones

**2014:** Received a pre-seed stage investment of USD 170K from the St. Petersburg Pre-seed Investment Fund. Received a grant from the Microsoft Seed Fund. Underwent accelerator programmes from Intel, Google and Faber Novel.

Launched the world's first open-air AR park, Ludza Castle (20 000 m<sup>2</sup>), which brought over 60 000 tourists in its first year, increasing the tourist flow in the region by 30%.

Launched the Cruiser Aurora AR Park (St. Petersburg, Russia; 200 000 m<sup>2</sup>).

**2015:** Pilgrim XXI became a resident of the Skolkovo Innovation Centre.

The project was voted as one of the world's top 10 start-ups at Future en Seine (Paris, France). Started work on our own computer vision system.

Launched the Altun Estate AR Park (Pskov, Russia; 100 000 m<sup>2</sup>).

Launched the Fortress of Bastille AR Park (Paris, France; 10 000 m<sup>2</sup>),

Launched the Forum of Pompeii AR Park (Pompeii, Italy; 40 000 m<sup>2</sup>).

**2016:** Withdrew from the Pre-Seed Investment Fund by selling shares to the Spanish investor The Next Big Wow, S.L. Started developing augmented reality platform for mobile devices for remote positioning of 3D content.

Launched the Road of Life AR Park (St. Petersburg, Russia; 50 000 m<sup>2</sup>).

Launched the Old Nessebar AR Park (Nessebar, Bulgaria; 250 000 m<sup>2</sup>).

**2017:** Launched the Battle of Narva AR Park (Narva, Estonia; 100 000 m<sup>2</sup>).

# OUR VISION

By 2023, to have the use of Augmented Reality as a broad phenomenon; Pilgrim XXI and our Arcona AR Ecosystem has become an industry standard; we have successfully combined the physical and virtual worlds into one single augmented reality environment, having achieved the total amount of georeferenced AR territory of 100,000 km<sup>2</sup> in major world capitals; the ecosystem community and its internal economy is fully operational and counts for millions of active users, participating in its further development and perfection.

# OUR MISSION

To develop augmented reality (AR) technologies that enhance and bring new experiences to people.

# OUR OBJECTIVES

**2018 Q1:** The launch of a marketplace and the Arcona unit of account, sale of the development kit.

**2018 Q2:** The launch of an AR Viewer prototype and applications with bonuses for testers and scouts.

**2018 Q3:** The launch of a technological prototype for AR Grid; the launch of remote positioning tools for mobile platforms.

**2018 Q4:** The launch of the AR Viewer.

**2019:** Introduction of the AR Grid positioning system in 10 of the world's largest cities. Create a total of 1,500 km<sup>2</sup> of Digital Land up for sale. The launch of internal economy.

**2020:** Increase the size of georeferenced AR territory to 40,000 km<sup>2</sup> and create a Worldwide Augmented Reality Grid.

**2023:** Increase the size of georeferenced AR territory to 100,000 km<sup>2</sup>, combining the physical and virtual worlds into one single augmented reality environment.



## RATIONALE

*Computers will soon be more powerful than ever before. They will become an integral part of your everyday environment. Instead of logging into your computer or smartphone, you will be able to simply enter a room or go out into the street and manipulate the environment around you in whatever way you like without having to take a gadget out of your pocket. (Walt Mossberg)<sup>1</sup>*

Why carry a bulky device with you if your calls, messages, TV channels, and games can be sent directly to your headset? All of this diverse content in this almost mystical environment will be at your fingertips. Isn't this what our childhood dreams of magic looked like?

Augmented reality headsets will soon become available everywhere. In this landmark moment in time, mankind will require a universal environment that unites real and virtual worlds in one single information space. This environment is being created today.

Such interlacing of the virtual layer with real landscapes is achieved through combining mobile device tracking technologies (already in the pipeline with Google Tango, Microsoft HoloLens and Apple ARToolKit) and geographical information systems (GIS). It uses geospatial data, where remote sensing generates digital elevation models and builds textured virtual 3D landscapes in stunning detail, at an accuracy of up to a few centimetres.

If the need for on-site developers for linking virtual objects to real landscapes is removed, the integration of digital reality will speed up. Remote positioning of augmented reality content is a step toward scaling the technology globally.

The unification of the real and digital world is unavoidable, and there are a few key ideas to discuss: the design and implementation principles behind the augmented reality

<sup>1</sup> [Mossberg: the disappearing computer](#)

ecosystem<sup>2</sup>, the link between the digital layer, the earth's landscape and geographical coordinates, and the value of digital land and its growth as the system's plots are put into use.

## CAPABILITIES

### Remote Positioning

Tools such as the incredible ARKit, Project Tango and Windows Holographic have provided mobile devices with new capabilities. Motion tracking enables a device to understand its position and orientation as it moves in three-dimensional space. Area learning uses visual cues, the device recognizes its location and can correct its movements. Depth perception sensors tell the device the shape of the world around it, using point clouds to set up virtual interactions.

Let's say you're an augmented reality developer and you live in Paris. You want to set a reanimated Godzilla loose on the streets of Tokyo, or revive the Bastille in Paris, or plant a line of snow-covered firs or palm trees along the street outside your window.

You'll have to spend days, weeks, perhaps even months linking your installations with the real world. Add to that the travel costs and hotels (if you decide to do your experiment in Tokyo). On the plus side, you would get fit from walking in circles up and down the street, scanning everything around you in order to give your app the required area learning.

You'd have to do quite a bit of walking since those visual markers you scanned a half an hour ago have already changed. The sun has that annoying tendency to move around the sky and to change the optical characteristics of space that are required for depth perception. Not only will your markers look different depending on the time of day, but also depending on the time of the year.

You've spent a Hollywood budget in making Godzilla appear in Tokyo, or gone out on the street outside your house every hour for a whole year. Provided that your markers in Tokyo haven't been covered up by new advertising, and your neighbour hasn't repainted their fence, or your markers haven't been blocked out by snow or a blossoming sakura tree, then, and only then, when people who've downloaded your app come to the place you've been "treating", they'll see the wonderful things you've created in augmented reality.

ARCONA is a remote positioning and content management system for augmented reality. You will be able to embed your installations remotely in any location on the planet. You will gain access to high-traffic locations, where you will be able to build entire worlds integrated into the real environment.

<sup>2</sup> [Ecosystem](#)

## Place Marketing

In 2014, we launched the world's first augmented reality park in a Latvian town Ludza. It's a small town with a population of about 5,000. In 3 years, over 200,000 people have come to see our reconstruction of a Teutonic knights' castle.

Our augmented reality attraction increased the number of tourists by 30% per year. The duration of time tourists spend on visiting this landmark has increased from 15 minutes to 2 hours. This means real customers for local businesses and a welcome supplement to the town treasury.

In 2016, we saw Pokémon Go bringing over 100 million people out on the streets all around the world in just two months. The Pokémon game showed how the simplest of virtual objects attached to the physical world, even conditionally, can increase the attractiveness of any location, and affect people's behaviour and perception.

Arcona is a system that will allow future generations of Pokémon to use the real landscape and play real hide-and-seek with the users. Soon, it will be possible to link 3D objects of any complexity with no space limitations at a click of a button.

## New Jobs in the P2P Economy

Experts predict sweeping job losses in many economic sectors due to the introduction of robotics and artificial intelligence. Many of us have been tangled up in virtual worlds since childhood, when the games we played taught us skills, including the ability to create 3D objects and trade them. Finally, these skills can find their real-world application.

To get our Arcona ecosystem working effectively, we plan on opening a marketplace — an online portal where producers and consumers can exchange resources and pay for them using the platform's internal tokens. The portal will be primarily used to sell content, software and Digital Land.

The Arcona system will place many tasks on the marketplace in an auction. Arcona will offer a price for the best solution. The higher the sum, the more developers, actors and professionals will be involved in the project. Similar systems are already in place on such websites as Threadless, 99Designs and TopCoder.

Arcona will use blockchain as a ledger to identify who owns land or content, and who has the right to transfer it, as well as register all transfers. Smart contracts based on blockchain technology will guarantee every content creator and programmer copyright protection and ensure automated payment for the use of their intellectual property. Smart contracts will also protect the rights of content and landowners.

Arcona will make extracting real-world value from skills developed in the virtual gaming space possible. This will give millions of people an opportunity to make a living in a world more populated than any other virtual universe.

During our work on the project, we discussed possibilities for the application of AR technologies with business professionals from different sectors. When creating this document, we realised that the list of uses would be endless.

We are sharing the ideas which have real humanitarian value and will be the first to affect the augmented reality market. These areas include media, advertising, architecture and design, games and entertainment, tourism, education. You can add projects you find interesting and be assured that they have the potential to become part of the Arcona economy.

## DESCRIPTION

Arcona is a universal information space that unites the real and virtual worlds in a single ecosystem. It is a peer-to-peer network with an infrastructure including a Digital Land Registry and other digital assets.

The Arcona ecosystem platform combines functions of distributed GIS, augmented reality, 3D simulation, AI and blockchain architecture. The augmented reality layer can be accessed on location by using customer-facing app AR Viewer with mobile devices, such as smartphones, tablets, smartphones with AR headsets, standalone AR glasses and headsets like HoloLens, AR contact lenses, and others.

AR Viewer is a free, cross-platform multi-user software program that enables participants to see augmented reality objects in a real-world environment.

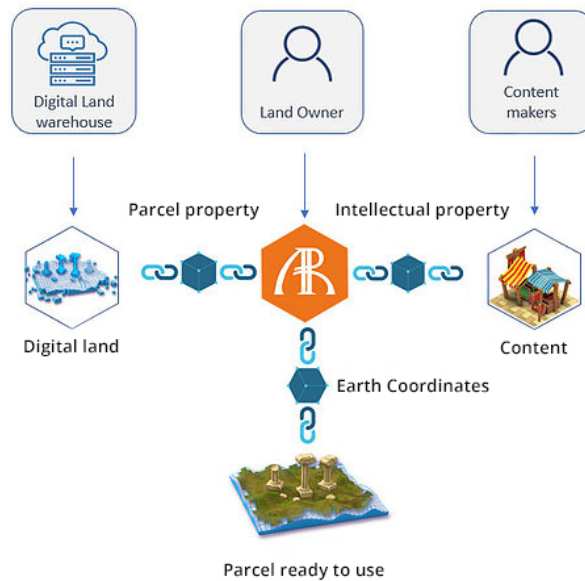


# ARCONA ECOSYSTEM

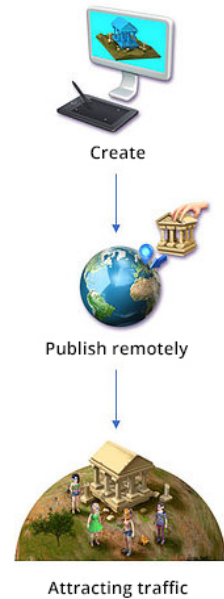
## ARCONA PLATFORM



## MARKETPLACE



## SETUP REMOTELY



## TECHNOLOGY

### Components and Functions

**AUTOMATED MODELLING SYSTEM FOR THE AUGMENTED REALITY ENVIRONMENT:**

This system performs the following tasks:

- Builds 3D landscape models based on high resolution geospatial data obtained from GIS and other information from the public domain (photos, etc.);
- Identifies likely paths of movement for the user in the given land plot;
- Generates objects-markers to determine the user's location (the location of the user's device);

**DATABASE MODULE:** This module executes a DBMS to store landscape models and provide remote access to them for dealing with various types of request.

**INTEGRATED MODELLING ENVIRONMENT:** A toolkit to create and maintain software and to manage and edit content.

**AR VIEWER:** A freeware client for mobile devices with a positioning system used for correctly displaying augmented reality objects at a given location.

**SMART CONTRACT:** A set of scenarios which enable users to adjust their P2P relationships and payment methods for various platform functions. A fast payment system for internal transactions with low commission. It is the key to the rapid economic development of Arcona's world of augmented reality.

# DIGITAL LAND

Arcona economy is based on the generation of an augmented reality layer called Digital Land. It is a limited digital asset described in the Ethereum<sup>3</sup> Smart Contract, and it can be acquired in exchange for an Arcona ERC20<sup>4</sup> token.

## Why Buy or Rent Digital Land Plots?

Owning or renting a land plot of Digital Land is an exciting opportunity for creative users and a profitable occupation for private enterprises. You can buy land to place the virtual objects you create or purchase in the marketplace in the real world.

Your land means your rules. You can transform the world on the lawn outside your house or develop a commercial project thousands of miles away in another continent. The digital layer is your domain, and you can fit it to your taste.

Every plot of Digital Land is linked to a specific real-world location — a place where you can bring real people and share the results of your labour by organizing shows, presentations and games.

## Value of the Land

The value of any plot of Digital Land is determined by its popularity. Places like the centres of large cities with high populations are limited and would have the highest popularity.

We feel that there will be mass adoption of the Arcona Ecosystem. We will also invest heavily in its development and promotion. Because of this, **the existing traffic in the real world will be turning into traffic in the ecosystem**. By launching and selling Digital Lands gradually — city by city, quarter by quarter — the deficit of Digital Land will be growing, which will fuel greater interest among future landowners.

This greater interest is the foundation on which we will build the auction system to enable Digital Land trading. This allows the community to independently determine the market value of Digital Land in the system. The price of plots sold in auction determines the average price of other plots.

Another variable determining the value of Digital Land will be profitability. The plot of Digital Land brings money by attracting users to paid content, e.g. an AR museum entrance fee at the site of historic ruins or a participation fee for joining

<sup>3</sup> [Ethereum](#)

<sup>4</sup> [ERC20](#)

an interactive multiplayer game. The profits will be higher from a digital plot that has been advertised in a territory with more traffic.

Another example: Attendance of a central location in a city ranges from 50,000 people per day (Paris, the area in front of the Eiffel Tower) to 100,000 (Beijing, Forbidden City of Gugun). This is comparable to the attendance of an average news website. The banner on such a site would cost about \$300 per month. The placement of terrestrial advertising in these locations is often prohibitive. 1 billboard per month would cost at least \$10,000. Our calculation is that in Arcona, in key locations, a single interactive banner can cost at least \$50 per month. The owner of 100 m<sup>2</sup> can place 10 banners, so the minimum advertising income from 100 m<sup>2</sup> bought for \$100 will be \$6000 per year. The income from one dollar spent for the land is \$60.

You can open a virtual shop in a real location and start selling any sort of product. For doing this online in any location without leaving your house, you'll need to get a Digital Land plot.

## Specs

The main service provided by Arcona is the augmented reality layer, the Digital Land. This system provides access to a development framework containing a 3D simulation of the earth's landscape and the functionality to create an augmented reality environment.

Logically, since the Digital Earth is linked to the earth's surface, its scope has a natural limit of 12% of the Earth's surface utilized by humans, i.e. 18 trillion m<sup>2</sup>.

The augmented reality layer, hosting remotely positioned virtual objects, is divided up into equal parts of 100 m<sup>2</sup> (1 are) each. Land plots can be purchased in exchange for a token called Arcona.

A single physical server can generate a plot of around 200x200 m. Each plot can support a limited number of virtual objects and simultaneously connected visitors. This is known as the land's capacity.

By collecting a pool of several land plots, the capacity can be increased, and more objects and a higher number of users connected can be supported. With Arcona, it is possible to pool together a group of non-adjacent plots and transfer the capacity of all the plots within the pool to a single plot.

This is called capacity transfer. This makes it possible for the system to generate the augmented reality layer and make full use of digital land plots outside of high-traffic areas.

## Digital Land as a Commodity

What makes the Digital Land as a commodity unusual is not the land itself that is bought, but the income that can be made by developing the infrastructure and activating the entrepreneurial potential. You buy the right to receive regular income because of your labour. The more you make from the plot, the higher the cost of the land.

Every plot of Digital Land comes with geographical coordinates, landscape marker descriptors, a basic set of tools to manage AR content, and a channel to contact the platform's management system.

## Types of Digital Land Plots

- Global network: Arcona landholdings and private landholdings.
- Region: a 200 x 200 m section of the network or 40,000 m<sup>2</sup> of digital land.
- Plot: a part of a region with an area of 1 are (100 m<sup>2</sup>).
- Private landholding: one or several plots owned by a single user.

Users can remotely buy, rent, manage, lease and sell their augmented reality layer plots. Within their holdings, users can create, display, share or sell augmented reality content.

A user's right to ownership over virtual land is encoded in a blockchain contract with the registry number for every 1 are (100 m<sup>2</sup>) plot linked to a specific set of geographical coordinates.

# ARCONA TOKENS

## Token Roles



1. Access to the ecosystem as an active user (landowner, content and software developer).
2. Participation in the creation of the platform on the Open Source principles. Copyrights guarantee and royalties' payment.
3. Participation in the functioning of the system in P2P economy model format. Guarantee of ownership of digital assets and the ability to get revenue from their use.
4. The right to vote to participate in the development of the system and evaluate the performance of tasks and the quality of content.
5. Access to the world market of "digital land" on the basis of an augmented reality layer. The ability to remotely install and manage content.
6. Access to various services of the system, such as the marketplace, land auctions, stock exchange, advertising, etc.

## Description

The arcona token is equivalent to the cost of digital assets and is the universal internal currency of the Arcona ecosystem. It will be used in purchasing all digital goods and services within the ecosystem.

Arcona is created using blockchain technology, on the basis of ERC20 smart contract which records the rights of the authors and owners of digital assets and automatizes the payment system for the use of intellectual property. A smart contract<sup>5</sup> also encodes geographical data, registry numbers for digital land plots, plot owner IDs, registry numbers for digital assets, author IDs, IDs for the owners of digital assets, and the cost and conditions for using digital assets.

Blockchain technology guarantees equal conditions and protection of property rights of the owners of Digital Land in the Arcona platform and protection of the copyright for developers and artists living anywhere in the world. Blockchain technology makes every transaction reliable, transparent, and mobile.

Arcona will ensure the infrastructure required for building a new digital layer in real space. It will let the ecosystem replicate itself so it is filled with a variety of content.

<sup>5</sup> [What is the sharing economy?](#)

# ECOSYSTEM RESIDENTS

Landowners, tenants, developers and users are the categories considered as residents in the ecosystem.

Landowners may buy and sell land, lease it, and place AR content on land plots. Tenants may rent land, sublease it, and place AR content on the rented plot per the conditions stipulated by the landowner.

Developers can create software or content. A developer may define the rules of usage for the work they create.

A user in the real world can access all the system's services through an AR viewer and can buy and sell digital assets.

Landowners can bring an unlimited number of users of augmented reality content to the plots they own. The popularity of each plot will depend both on the quality of content and on the popularity of the real territory.

For example, the demand for AR content in Paris will be considerably higher than that in the Mauritanian Desert. This contributes to developing a secondary market for land, rent, content and advertising. Landowners control what content is published in their holdings. This content can vary from a static 3D scene to an interactive system. A landowner may do as they wish with their land plot, including the following actions:

- Place any digital content in their territory. The smart contract may include a number of restrictions as to the nature of the content (content associated with violence, adult scenes, etc.);
- Schedule a showing of content for users (games, guided tours, educational programmes, promotions, AR attractions, etc.);
- Lease the plot or sell it to another owner;
- The amount of server space allocated to a single plot is limited, so the owner can buy additional capacity from the community or buy unoccupied land plots and transfer the capacity to their own holdings.

Content creators, i.e. code developers, 3D artists and authors of other works uploaded into the system, can use the copyright. These conditions are described in the smart contract.

There are bonuses for users who help to develop or test the system. They help to improve the positioning of the system in the surrounding area by accepting the transfer of data from their device to the system server.



# MARKET ANALYSIS

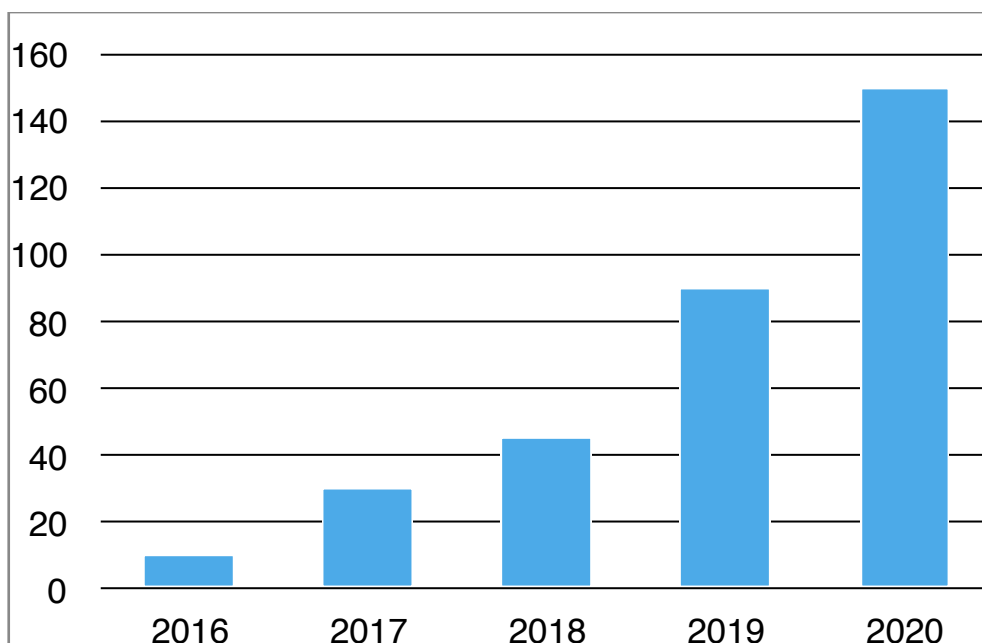
Our company works in the information and communication technologies (ICT) sector, which is involved in the creation of infrastructure and components to assist with modern computing technologies.

Although there is still no generally accepted definition of ICT, the term is usually applied to all devices, network components, applications and systems that collectively enable people and organizations to interact in the digital world. Since its creation, the company's main focus has been on developing augmented reality (AR) technologies.

## Overview of the AR Market

The augmented and virtual reality markets are currently undergoing rapid growth and are becoming one of the key drivers of the IT industry. According to a 2016 survey from Juniper Research, the market has a total volume of approx. USD 3 billion (with 1 billion of that in AR, and 2 billion in VR), and is expected to exceed USD 150 billion by 2020 (AR accounting for USD 115 billion).

All leading IT corporations are currently contributing to the growth of AR in some way. Google, Facebook, Apple and Samsung have announced AR platforms already in development. Investments in AR are also exhibiting an upward trend. Between 2014 and 2016, the total volume of investments increased from USD 250,000 to USD 1.6 billion.



In 2016, AR market had a total volume of approx. USD 3 billion, and it is expected to exceed USD 150 billion by 2020

## Examples of Deals Made in 2015/2016

Magic Leap raises a record round of funding in the AR market, receiving single USD 793.5 million from a pool of investors led by Alibaba. The company has an estimated value of USD 4.5 billion;

Google buys Eyefluence, a company developing AR/VR eye-tracking technology, for USD 14 million;

Apple buys Metaio, a company developing an AR platform, for USD 30 million;

DAQRI acquires ARToolworks, the developer of software for HoloLens-style headsets, for USD 38 million;

PTC buys Vuforia, the developer of an AR platform, for USD 65 million.

## AR Market Trends

Until 2016, the market dynamics were determined by companies providing SDKs for smartphones with standard cameras. Over the past few years, a large number of start-ups were bought by industry giants like Facebook, Google and Apple.

Aurasma, Wikitude and market leader Vuforia all focus on computer vision and tracking flat images and single 3D objects in real time and space. In April 2017, Facebook and Snapchat announced they are developing an AR ecosystem for their users. Digi-Capital says the “platform war” has attracted market newcomers such as WeChat, BaiDu and Alibaba.

These technological trends are contactless positioning systems based on point clouds and the improvement of 3D marker recognition technologies, which recognize any object in the surrounding world.

The most notable events of the past year were:

The AR game Pokémon GO came to the market, becoming an international hit, and took augmented reality to a wide audience. The market cap for the game’s developer Nintendo went up \$14.8 billion in a week after release.

Apple released its ARKit framework, making augmented reality an integral part of the iOS operating system. The toolkit is designed for developers and has great potential for bringing the technology to the mass market.

## AR Projects on ICO

- Augmentors: a turn-based war game based on bitcoin blockchain.  
<https://www.augmentorsgame.com>
- Reality Clash: a first-person shooter-style game.  
<http://reality-clash.com/>
- Decentraland: a virtual reality gaming ecosystem.  
<https://decentraland.org/>
- Cappasity: a platform for creating, integrating and analysing 3D, VR and AR content.  
<https://cappasity.com/>
- Neverdie: an Ethereum-based gaming platform with AR elements.  
<https://neverdie.com>
- Lampix: a device for creating augmented reality environments on flat surfaces.  
<https://lampix.co/>
- DMarket: a gaming marketplace for trading virtual items with AR elements.  
<https://www.dmarket.io>

What makes Arcona stand out from other AR projects on the ICO market is its universality. Since its outset, it has been designed to incorporate augmented reality in all areas of real-world business. It is not confined to the gaming industry like the vast majority of other projects (Reality Clash, Augmentors, Neverdie) or to the development of 3D content (Cappasity).

Arcona may be put to great effect in real estate, tourism, media, gaming, advertising, education, and art industry. Arcona is a simple and convenient medium for delivering AR projects of any complexity and style.

**Arcona is 100% real-world oriented: all projects in the system can be integrated into the world around us.**

It will be possible to develop, use and monetize the Digital Land remotely from anywhere in the world. No existing project offers these capabilities.

By comparison, Decentraland creates a virtual world without reference to real space and is focused only on the gaming industry. Lampix creates an augmented reality environment, only supported by their own device and has limited range.

## Competitive Advantages of the Arcona Platform

1. Accurate remote placement of augmented reality objects in a changing environment.
2. The ability to link virtual content with real landscapes anywhere in the world, regardless of size.
3. A ready-to-use network of markers anchored in the landscape all over the world.
4. An open, modular architecture, making the integration of third-party solutions possible.
5. A universal augmented reality environment connecting developers and consumers.
6. The ability for a wide range of users without any particular programming skills to create and monetize content within the augmented reality environment.
7. The ability to visually combine virtual and real spaces which correctly adapt to the user's movements.
8. The ability to significantly reduce the load on mobile devices when carrying out computer vision-related tasks.
9. The ecosystem has a major social significance, since it gives creative people the opportunity to present their projects to the wider public.
10. Arcona will be a unified platform, where a broad community of developers and users will communicate and share experiences, which in turn will facilitate the development of AR technologies and make the platform an industry standard.

# EXAMPLES OF PLATFORM USES

Markets	Buyers	Platform usage options
<b>Advertising</b>	Brands, Local companies	Ad placement
<b>AR development</b>	AR App developers	Saves time, money, and production resources. A convenient development environment, the ability to provide a wider audience with their work.
	Users	
	IT Companies	
<b>Construction market</b>	Project companies	Demonstration of the project to the client and investor using AR applications.
	Constructors of high-rise and low-rise buildings, infrastructure facilities.	<ul style="list-style-type: none"> <li>- The solution for integration of virtual objects of the project into the real landscape - from concept stage to production stage.</li> <li>- Demonstration of the project to the customer and investor.</li> <li>- Monitoring the stages of construction and their adjustment, staff training and support for high-tech production stages.</li> <li>- B2C sales support.</li> </ul>
<b>Entertainment market</b>	Game Developers	Solution for creating interactive multiplayer gaming projects. Attracting more users, the ability to quickly and regularly change the content. Change and supplement the content of any area expanding the location.
	Entertainment company: Mass entertainment, representations	The solution for creating interactive installations for a specific event: Attracting more visitors, the ability to quickly and regularly change the content for a specific event.
	Promotion company	Promotion of films. Placement of virtual characters of films, trailers, creating a new format for demonstrating the plot in a real environment.
	Theme parks	The solution for completing physical attractions: quests, games, climbing walls, just visual effects, attractions built on the interaction of virtual objects with real space. Gaming and advertising content both on the territory of the attraction and in any place of the meeting of the target audience to attract more visitors, the ability to quickly and regularly change the content, additional monetization.

<b>Markets</b>	<b>Buyers</b>	<b>Platform usage options</b>
	Art galleries	The platform for the introduction of its own content will allow: Revitalization of paintings, providing additional information about art objects, creating independent street art objects. Attracting more visitors, the ability to quickly and regularly change the content, additional monetization.
	Museums and exhibitions	The platform for the introduction of its own content will allow: provide additional information about museum facilities, create independent objects. Virtual demonstration of objects in archives and stockpiles. Attracting more visitors, the ability to quickly and regularly change the content, additional monetization.
<b>Travel market</b>	Tourist administrations	Delivery of finished projects with subsequent maintenance: reconstruction of lost architectural objects, historical events.
	Navigation services	Automation of the processes of building navigation systems in landscapes with complex terrain in a dynamically changing environment. Providing navigation services with the ability to create AR / VR help systems and hints at an arbitrary point on the surface of the planet. Expanding the types of information provided, additional monetization.
	Travel agencies, guides	Ready-made solutions for creation of interactive excursions: reference information in AR format, bright visual effects, reconstruction historical events and lost historical objects.
<b>Education</b>	Preschool School Higher education Special courses	Creation of modern projects to improve teaching methods for children and adolescents, built on the visual perception of information. Training of specialists of a wide profile with the help of various simulations.



# ECONOMICS

The Arcona system can be monetized in the following ways:

- direct sales and lease of land lots adapted for use with the Arcona platform from the Digital Land holdings,
- royalties<sup>6</sup> equal to the commission taken for transactions within the system (for example the purchase and sale of arcona tokens, resale of digital land on the secondary and lease markets, uploading of custom AR content, such as 3D models, textures, animations and scripts, into the system),
- sales of content within the system,
- service fee for land maintenance.

The system offers the following services through its own marketplace:

Service
Purchase and sale of arcona tokens at the average exchange rate
Sale of Digital Land from the Arcona holdings via the auction system (sale of new digital land)
P2P market for digital land (sale and lease)
Framework for the sale of digital assets: digital land, software, system and user content
Providing devkit licenses to software developers and 3D artists
Uploading content into the system
Providing a toolkit to carry out various kinds of transactions for user creations: sales, gifts, issuing licenses for use, etc.
Server capacity
Tech support
Providing software for remotely positioning and managing the AR content
AR Viewer
Providing users with guarantees of copyright for their creations
A service of recommendations for users based on traffic, ratings and community suggestions, choice of publisher
Payment system (ERC20 token)
Internal messaging service
Various levels of access to tasks
Earning opportunities in exchange for performing various tasks for the system

<sup>6</sup> Royalties, paid to the owner of author rights

System residents will be able to earn by creating and selling their own creations and leasing their land.

The Arcona token is the internal currency of the Arcona ecosystem. Arcona can be exchanged for digital land, other digital assets and various paid system services. Arcona can be also earned by carrying out tasks set forth by Arcona Ecosystem.

Arcona will have a limited emission – the total supply will depend on the ICO results, but will be no more than 135,000,000 Arcona tokens. As the system grows, the number of digital assets exclusively exchangeable for Arcona tokens will continuously increase. An increased system population will also result in rising prices for the digital land. All these factors will result in Arcona becoming scarce, therefore more valuable.

- 1. Scarcity – supply is limited**
- 2. Demand – demand is higher than supply**
- 3. Demand is created by user revenue**

The token will be put into internal circulation as soon as the first quarter of 2018, and it will be used to pay residents who carry out various tasks for the system, as well as content creators.

## HISTORY

Pilgrim XXI is an IT start-up operating in the tourism sector of the international augmented reality market since 2014. The company has created the first network of outdoor augmented reality parks: 8 parks in 6 countries with a total area of 777 000 m<sup>2</sup>. We have allowed tourists to combine real travel with time travel.

Travellers can witness lost architectural wonders and historical events in real time and space by simply using their smartphones. The service is mass market-oriented and adaptable to all versions of inexpensive AR headsets.

Our team has encountered a number of technological challenges while working on this project, such as the geographical positioning of augmented reality objects in real-world locations, tracking technologies and pattern recognition. We looked at the existing positioning technologies for augmented reality and discovered that none suit our needs. No solution positioned objects in a dynamic, changing outdoor environment correctly. We decided to create our own system for computer vision.

40% of our budget for creating the projects consisted of travel expenses to the locations. Each project required that our developers travel to the location for mapping, testing and adjustments 3 or 4 times. We decided to focus our system on remote positioning and management of augmented reality objects. We invested all available funds into R&D.

During our work on the project, we attended numerous conferences, exhibitions and other events. There is great interest in our ideas by fellow professionals and potential users. Without special programming knowledge, each person wanted to change the world around them with a simple set of actions. This gave us the idea of an ecosystem that would contain all the tools and capabilities required for a broad audience to work daily in an augmented reality environment.

# EXPERT ASSESSMENTS

Since the company was founded, it has passed several independent examinations:

1. The product, technology, and the anticipated results of the applied research has competitive advantages over its global equivalents;
2. The product, technology, and the anticipated results of the applied research has a significant potential for commercialisation within Russia and globally;
3. The project is theoretically feasible and does not contradict the laws of science;
4. The project's team (key researchers, developers and project managers) have the knowledge and experience required to bring the project to completion and conduct the required applied research;
5. The project team includes experts with international experience in research and development, as well as experience in commercialising results.

We were evaluated by the St. Petersburg Pre-seed Investment Fund in 2013, resulting in an investment.

In 2014, we were evaluated by Microsoft Seed Fund and were provided with a grant.

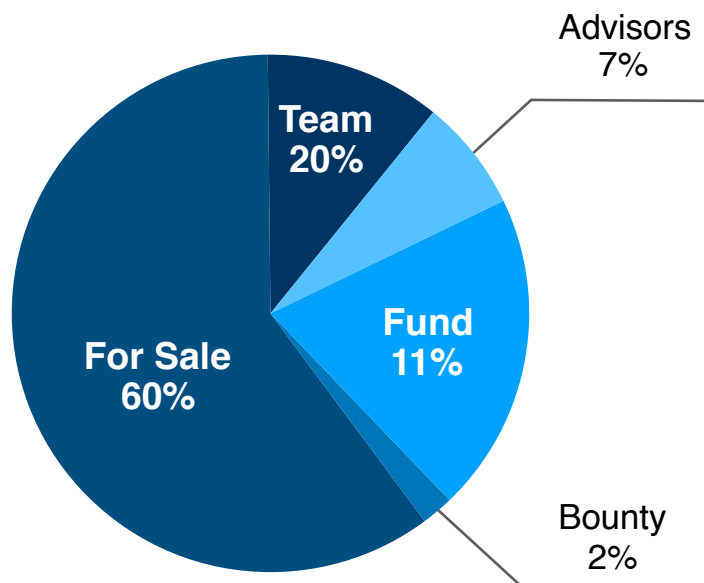
In 2015, the company underwent a thorough, multi-level review by the international expert panel of the Skolkovo Innovation Centre in Russia. The panel included independent consultants, scientists and business people. As a result, Pilgrim XXI became a Skolkovo resident.

# ICO CONDITIONS

<b>Token name</b>	Arcona – 100% Utility token
<b>Token Price</b>	0.0025 ETH
<b>Hard Cap</b>	135 000 ETH
<b>Soft Cap</b>	2746 ETH
<b>US Citizen Participation</b>	YES
<b>Minimum Contribution</b>	0.025 ETH

The total supply will depend on the ICO results but will not exceed 135 000 000 Arcona tokens.

## Distribution of Tokens



1. The total number of tokens issued during the Christmas Presale and ICO will be considered as 60% of total emission and will be held by the Presale and ICO participants.
2. The remaining 40% will be created and distributed in the following way:
  - Bounty 2%
  - Advisors 7% (Vesting: 3.5% for 6 months and 3.5% for 12 months after the ICO is finalized)
  - Team 20% (Vesting: 5% for 6 months, 5% for 12 months and 10% for 18 months after the ICO is finalized)
  - Reserve Fund 11%

Tokens of the reserve fund will be used for partners, community development and new user motivation. Their distribution will be carried out in the following areas:

- to support content creators and developers involved in the development of the ecosystem
- to reward users for performing Arcona tasks, such as field testing
- an incentive bonus for the first system user registration.

The spending of tokens from the reserve fund will be under strict community control and will be carried out in accordance with the Road Map.

## Private pre-sale (closed)

Contributions received from private investors and business angels – **USD 650K**.

## Christmas Pre-Sale (closed)

**27<sup>th</sup> of November – 24<sup>th</sup> of December 2017**

Bonus system:

12.5 ETH to 37.5 ETH – 15% bonus

37.5 ETH to 75.0 ETH – 20% bonus

75.0 ETH to 125.0 ETH – 25% bonus

125.0 ETH and over – 30% bonus

During the first 5 days of the CHRISTMAS PRE-SALE, we will randomly choose 5 participants and reward them with a trip to St. Petersburg (Russia) for Christmas to meet the team.

## Pre-ICO

**25<sup>th</sup> of December 2017 – 24<sup>th</sup> of January 2018**

Bonus system:

12.5 ETH to 37.5 ETH – 15% bonus

37.5 ETH to 75.0 ETH – 20% bonus

75.0 ETH to 125.0 ETH – 25% bonus

125.0 ETH and over – 30% bonus

## ICO

**25<sup>th</sup> of January – 25<sup>th</sup> of February 2018**

Bonus system:

10% bonus on the first day, bonus decreased by 1% each day.

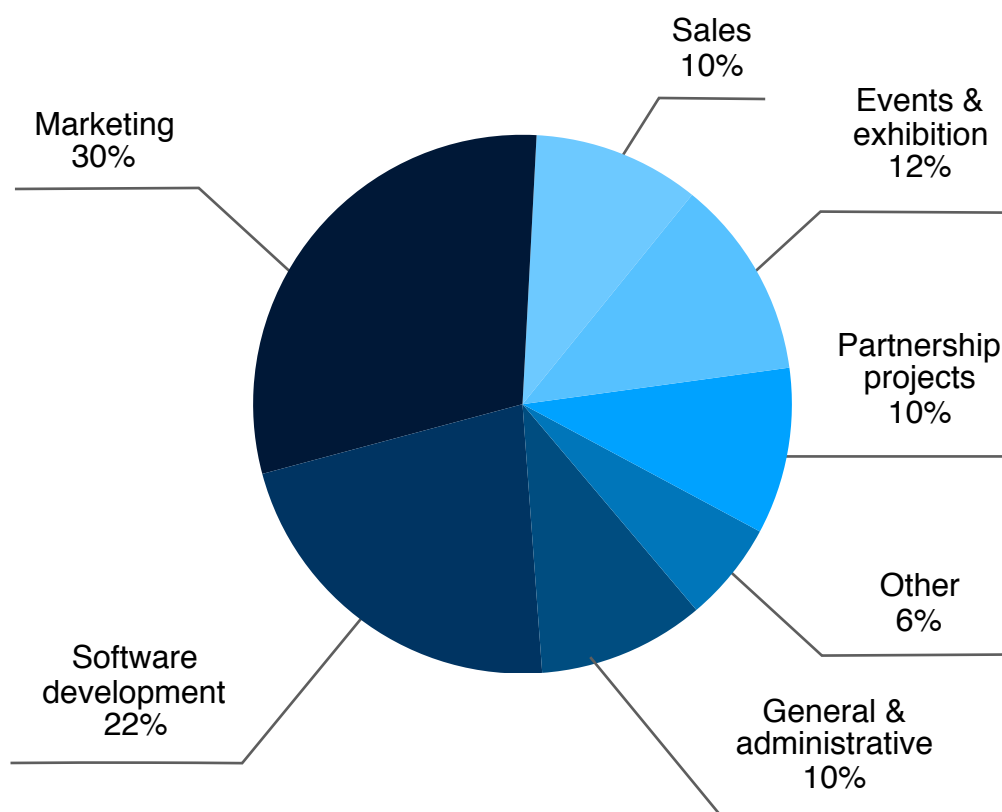
There are no offers during the last 20 days.

We launch the Drawing of the Digital Land.

Formally, this is a gift for a purchase. The draw takes place every six hours among all participants who have bought tokens over a given time period.

The person that has bought more tokens has a greater chance to win the lot.

## Distribution of the Funds



## Private Auctions of Digital Land

### 1<sup>st</sup> of March – 25<sup>th</sup> of March

Only the ICO participants will be able to choose and purchase the best digital territories. The first lots will be put up for sale within the territory of our 10 cities, which we will begin to digitize in 2019.

The starting price of the lot of 100 m/sq. is 1 token per square meter.

The happy owners of the lots received via the draw during the ICO will be able to sell their land here.

**Listing of stock exchanges and the opening of public auctions is scheduled for – 1<sup>st</sup> of April.**



# WHY BUY ARCONA TOKENS

The Arcona token will enter circulation in the system during the first quarter of 2018.

The value of Arcona tokens will be determined based on the development of the project, new technological solutions, the expanding ecosystem, the growing number of participants, the quantity and quality of the projects on the platform and the price of Digital Land.

The growing number of digital assets exchangeable for Arcona tokens will result in the Arcona token becoming scarce, therefore more valuable.

**By purchasing Arcona tokens, the token holder gets the right to purchase the Digital Land of the Ecosystem.**

## Right of Choice Over Digital Land Plot

During the ICO, the most active buyers of tokens are subject to receiving a special gift: a plot of Digital Land in one of the 10 largest cities in the world. Every day few gift lots will be exhibited, and participants, who will buy tokens in a given time period, will receive ownership rights to territory in top cities.

Once the ICO is finished, a series of closed auctions will be organized for owners of the ecosystem tokens, giving them an opportunity to compete for the digital territories offered. The initial price is fixed at  $1 \text{ m}^2 = 1 \text{ token}$ . The final price of each plot will be determined based on demand.

Such closed auctions will be held for 1 month until the Arcona token is launched on crypto-exchanges. Only the ICO participants will be able to choose and purchase the best digital territories.

After the full launch of the platform functionality in 2019, Digital Land will be offered for long-term lease. The rental price will be decided based on the analysis of market quotations of Arcona token and demand for digital territories. Auctions for the sale of Digital Land will be held for a limited period.

## Right to Participate in the Creation of the Arcona Ecosystem

All token holders will have the right to contribute to the creation of the ecosystem. They will be offered the opportunity to complete tasks, developing software blocks and content, and testing the system in exchange for remuneration. Copyrights and the right to the commercial use of intellectual property will be protected with smart contracts. Arcona token holders will also be able to participate in any promotions and loyalty programmes held by the ecosystem.

# OUR PARTNERS



Technology partner



Technology partner



SPb BlockChain Community



Association de Promotion de la Realite Augmentee



# MEDIA COVERAGE

## [Forbes](#)

“In the St. Petersburg Region, right on the shore of the Ladoga Lake, a full-scale reconstruction of the winter battle on the Road of Life was launched (the application was developed by Pilgrim XXI and is used not only in sightseeing programs, but also in school history lessons.”

[translated from Russian version of Forbes]

## [Le Monde](#)

“The young start-up based in St. Petersburg has developed a mobile application to recreate historic buildings destroyed or in ruins.”

[translated from French]

## [Disruptor Daily](#)

“But there are an elite few entrepreneurs who have brought to life start-ups that are poised to change the planet. Without further ado, here are the top 100 most disruptive companies in the world in 2017: Pilgrim XXI also offers a new innovation for travellers as well as museums. They use augmented reality to take users back in time to see what their locations used to look like.”

## [Télérama](#)

“Pilgrim XXI: monuments as you have never seen them.”

[translated from French]

## [Augmented-reality.fr](#)

“On the occasion of July 14, 2015, Pilgrim XXI will unveil its new application. "Bastille" is the reconstitution of the famous fortress of the Bastille.”

[translated from French]

## [club-innovation-culture.fr](#)

“14 July, 2015: a Russian developer proposes to discover and destroy the Bastille in augmented reality!”

[translated from French]

## [VRGeek](#)

“In the next couple of years, the augmented reality will radically change the entire tourism industry. Ilya Korguzalov, co-founder of Pilgrim XXI on the latest trends in this market and what interactive adventures are already awaiting the advanced travellers.”

[translated from Russian]

## [topspb.tv](#)

[Video-interview]

## [NTV](#)

[Video-interview]

## [Russia24](#)

[Video-interview]

## [Lebonbon](#)

“Pilgrim XXI develops historic augmented reality applications and for the occasion of July 14, its application "Bastille" will be available to rediscover the infamous monument and destroy it!”

[translated from French]

### **Snob**

“Pilgrim XXI reconstructs historical places and events on the screen of your tablet.”

[translated from Russian]

### **GeekBrains**

“Pilgrim XXI - developer of mobile applications based on augmented reality. This technology allows you to reconstruct on the tablet or smartphone the appearance of lost monuments and past events. Ilya Korguzalov explains us how the project works.”

[translated from Russian]

### **RusBase**

"Pilgrim XXI, St. Petersburg start-up, signed the first contract - to create an AR application with the help of which the image of the castle of the Livonian Order, destroyed in the middle of the 17th century, will be recreated in Latvia.”

[translated from Russian]

### **Complete list of media coverage:**

<http://www.pilgrimxxi.com/publiscity>

### **More Videos:**

<http://www.pilgrimxxi.com/presskit>

<https://www.youtube.com/playlist?list=PLpUydsEP3blq8LQkeDRojGdjuYWjiPgmd>

# TEAM



## **Ilia Korguzalov**

Project Leader, Founder

Education: Degree in Economics; 9 years of experience as artist-restorer and heads experience at restoration laboratory of the Peter the Great Museum of Anthropology and Ethnography in Saint Petersburg, the Russian Academy of Sciences, 15+ years of experience in business development; Founder of a branding agency and travel magazine. Team role: project conceptualisation and management, design and market research.

[LinkedIn](#)



## **Diana Sorina**

CEO/CMO, Founder

Education: Degree in Economics; 12+ years of experience in marketing, branding, sales and PR. Co-Founder of a travel magazine. Team role: marketing and sales.

[LinkedIn](#)



## **Tatiana Chernih**

Founder

Education: Degree in Journalism; 12+ years of experience in journalism and PR. Team role: leading researcher, PR.

[LinkedIn](#)



## **Daniel Girdea**

Co-Founder, IR

6+ years of experience in working and investing in Real Estate & construction business. Project role: EU branch of the business development.

[LinkedIn](#)



**Nikolai Melnyk**

AR Evangelist

10+ years of experience in advertising, sales/commercial, export management. Speaker in several international venues. Blogger. Project role: The International branch of the business development.

[LinkedIn](#)



**Alexander Zaulichnyy**

CTO

Education: Bachelor of Computer Science, ITMO University, Saint Petersburg, Russia. 5+ years of professional experience in: software architecture, development of AR and VR applications, mobile applications, games, A.I. for games, network engineering, web-based application development and management, databases, team management.



**Aleksandr Emilianov**

R&D Team lead

Education: Computer Science and Engineering (PhD): University of West Bohemia, Plzen, Czech Republic. Lomonosov Moscow State University. Russia. 20+ years of experience in: algorithm and software development, Computer vision.



**Igor Rozhdestvensky**

Mentor

Education: PhD in Physics, Theoretical & mathematical; IT and Entrepreneurship, 20+ years experience.

[LinkedIn](#)



**Shabetnik Ivan**

Developer

Education: Saint Petersburg State University of Aerospace Instrumentation, Business Informatics. 5+ years of experience in mobile development.



**Vladimir Stishkin**

Head of CG dept.

7+ years of experience in CGI, motion design, animation, visualization.



**Barynina Evgeniya**

PR manager

Education: PR in commercial structures, Russian Academy of national economy and public administration; 5+ years of experience in marketing, sales and PR.



**Yana Savinych**

2D, 3D Artist

Education: studied painting and sculpture at the Novosibirsk State Pedagogical University, a PhD student in Archaeology and Oriental Studies at the Institute of Archaeology and Ethnography. 7+ years of experience in game design as a 2D and 3D artist and designer.



**Ekaterina Rumiantseva**

CFO

Education: BA degree in Banking and Finance in University of Wales, Bangor, MSc Politics and Governance in London School of Economics and Political Science, 10+ work experience in banking and investment sector in Russia and the EU.



# ADVISORS



## **George Popescu**

CEO and co-founder of Lampix, an AR technology platform. Founder and Editor in Chief of Lending Times, a media company in the peer-to-peer, marketplace and online lending space. Chairman of the Board of advisors of Gatecoin, a blockchain asset exchange and an advisor to FirstBlood, a blockchain based eSports platform.

[LinkedIn](#)



## **James Haft**

Entrepreneur and Merchant Banker with broad experience in all aspects of forming, managing, advising, fundraising, and business development for entrepreneur-powered businesses, including business strategy and M&A. Advisor or co-founder of global ICOs and Token offerings. Significant and relevant experience with Internet apps and platforms, Crypto-currencies & Tokens.

[LinkedIn](#)



## **Lyubov Simonova**

Business lady and business angel specializing in venture capital, business strategy and development, and internet technologies. Has 20+ years of experience in organizing technological projects for the internet, plus 10 years of experience in the venture industry.

In August 2016, Lyubov became an investment manager of the seed fund RVC. Before November 2010, she was a leading expert at Almaz Capital Partners (a Russian-American venture capital fund) and the head of the company's internet department for Russia and the CIS.

Before starting at Almaz, she was the head of the strategy and business development at the investment company Finam, and a project manager at eHouse Holding where, among other projects, she was involved in developing an internet advertisement system.

Lyubov is considered to be one of the leading businesswomen in the Russian internet and digital media industry. In 2012, she was ranked as one of Russia's Top 10 most influential women in IT. She has been listed as one of Russia's Top 5 women in VC since 2014.

[LinkedIn](#)



**Kairat Kaliyev**

Founder of Cross Coin, the company which organized a successful ICO campaign, Starta ICO, raising USD 5 million. His current focus is in FinTech, a line of business at the Astana International Financial Centre, where he specializes in project development.

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**Sergey Khitrov**

Mentor and blockchain expert. Head of the Adwad Group, the CPA company Adwad.ru, advertising agency JetMedia.pro, organizer of CPALife and Blockchain Life and a number of other projects.

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**Alexey Strogov**

Head of R&D, software development, system integration and business development in the fields of IT, Internet and telecommunications for companies such as Siemens, T-Systems and DataArt.

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**Mikhail Afremov**

Expert in the management, strategic development and protection of assets in real estate, as well as specialist in attracting investment in real sectors of the economy. He is a co-owner of several production and construction companies.



## Sergei Chmel

He has worked with start-ups since 1999 both as an investment and business development consultant and as an entrepreneur. Sergei has established several companies in different areas. Has been involved in gaming, mobile payments, micro-lending, nanomaterial projects as well as valuation and M&A deals. Currently an advisor for ICORATING Rating Agency and Managing Partner at ICOSHARK Hedge Fund.

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# DEVELOPMENT ROADMAP

## 2018 1<sup>st</sup> Quarter

We will launch a marketplace within the first quarter after ICO with the primary goal of introducing Arcona tokens as the system currency.

Initial content on the marketplace will be focused on involving independent developers and content-creators, promoting and providing legal support to the system, and other tasks to help speed up its development.

The initial content on the marketplace will include the following:

**Task packages:** special packages with Arcona tasks for developers, 3D artists, lawyers, copywriters, musicians, animators, marketing and PR experts, and other professionals willing to contribute to the project and earn money from our system.

**Development kit:** open source library-based tools for developers and 3D artists designed to create personal assets\* for Arcona users.

**Original assets:** independent solutions created using Arcona DevKit or indie projects to be distributed within the Arcona ecosystem.

**Arcona Digital land:** Arcona land plots offered for ICO.

2018  
2<sup>nd</sup> Quarter

**The launch of AR Viewer prototype** in the form of an app for testers and scouts to motivate users to use the software and earn tokens. Testers will take photos of spatial markers using their devices and send those photos to Arcona. All they will need to do is go for a walk and perform some simple tasks with the AR Viewer turned on. Users will be able to earn arcona tokens by simply using the software installed on their mobile devices.

**The launch of Partner projects.** While we were preparing for our ITO, we were joined by some new partners. The projects they have created integrate perfectly into Arcona's global concept. They will include loyalty programmes and projects to develop educational and charity initiatives. A partner gaming project with the working title Secret Project will be among those launched.

2018  
3<sup>rd</sup> Quarter

The launch of the technological prototype for AR Grid; testing of remote positioning tools.

2018  
4<sup>th</sup> Quarter

The launch of AR Viewer beta version with basic functionality. Placing basic content in test locations.

2019

The AR Grid positioning system will be introduced in 10 world's largest cities. A total area of 1,500 km<sup>2</sup> of Digital Land will be up for sale.

**List of cities<sup>7</sup>:**

**1. Barcelona.** The Gothic Quarter. The centre of the old city of Barcelona. Area: 1.4 km<sup>2</sup>. Population of Barcelona: 1.6 million. Visitors: approx. 4 million tourists every year.

**2. London.** The City of London. Not just the city district, but the whole city-state. Area: 2.9 km<sup>2</sup>. Population of London: 8.5 million. London is visited annually by approx. 19 million people.

**3. Mexico City.** The historical centre of Mexico City, stretching from Constitution Square (Zócalo) to Alameda Central park. On the site of an ancient Aztec settlement. Area: 1 km<sup>2</sup>. Population of Mexico City: 20.3 million. Foreign tourists: 5.2 million per annum.

**4. New York.** SoHo. A historical neighbourhood in Lower Manhattan known for being a fashionable, youthful area of the city. Area: 1.14 km<sup>2</sup>. Population of New York: 8.4 million. Visitors: 12.75 million a year.

<sup>7</sup> [github: arcona - list of pilot districts](#)

**5. Paris.** 1st arrondissement. The oldest, most famous and elite district of Paris, the centre of the city's tourist scene and commercial life. Area: 1.83 km<sup>2</sup>. Population of Paris: 2.2 million. Visitors: 18.03 million a year.

**6. Beijing.** The Forbidden City. The largest and most famous palace complex and the most visited museum in the world. Area: 1 km<sup>2</sup>. Population of Beijing: 21.5 million. Visitors: over 14 million a year.

**7. St. Petersburg.** The central district around Palace Square. This is the most popular part of the city for tourists and a UNESCO heritage site. Area: 2 km<sup>2</sup>. Population of St. Petersburg: 5 million. Visitors: 6.9 million per year.

**8. Rome.** The districts of Celio and Campitelli. Located on one of the Rome's seven hills, this is the oldest part of the city, and it is where the most famous attractions are located. Area: 1.4 km<sup>2</sup>. Population of Rome: 2.9 million. Visitors: 7.1 million a year.

**9. Istanbul.** Sultanahmet district in the old European part of Istanbul. On a promontory between the Golden Horn, Bosphorus and Sea of Marmara, today it is the most popular place for tourism in Turkey. Area: 1.5 km<sup>2</sup>. Population of Istanbul: 14.8 million. Visitors: 7.1 million a year.

**10. Tokyo.** Asakusa District. One of the country's main tourist sites. Area: 1.5 km<sup>2</sup>. Population of Tokyo: 13.4 million. Visitors: 13 million a year.

2020

The amount of georeferenced AR territory will increase to 40,000 km<sup>2</sup> and the Worldwide Augmented Reality Grid will be created.

# CONTACTS



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