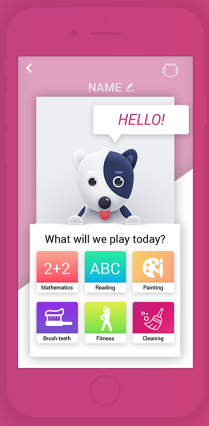
CUBOMANIA

BLOCKCHAIN GAME-BASED EDUCATIONAL PLATFORM INTEGRATED INTO ITS OWN ROBOTICS OPERATING SYSTEM

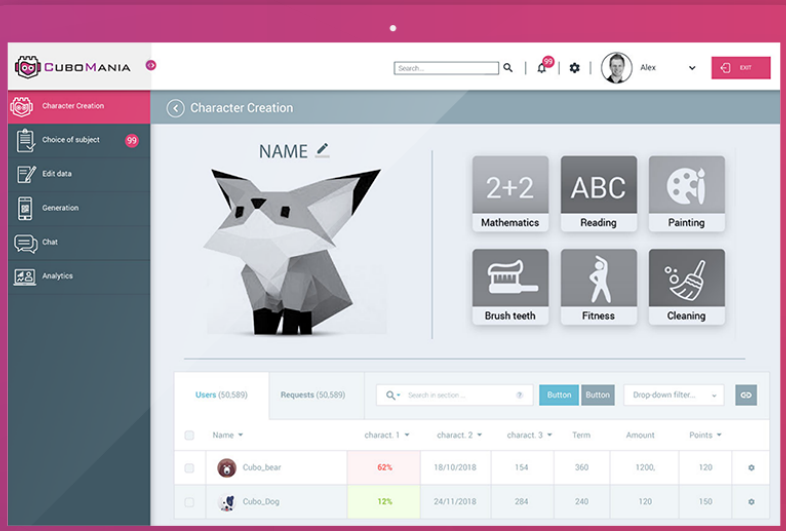
CUBOBUDDY

CUBO APP ANDROID, IOS



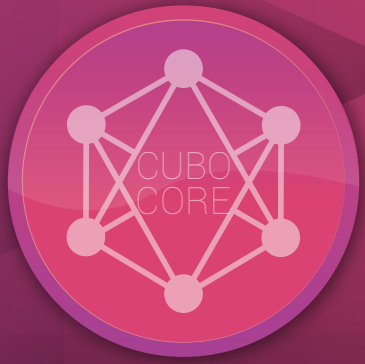
BLOCKCHAIN CUBOSTORE AND CUBO WORKSHOP

Purchase and sell characters and educational programs
Manage and create characters and educational programs



CUBOCORE ™ ROBOT OPERATING SYSTEM

for smart toys, robotics and IoT powered devices



WhitePaper

April 2018

CONTENS

CUBOMANIA INTRODUCES THE FIRST BLOCKCHAIN GAME-BASED EDUCATIONAL PLATFORM INTEGRATED INTO ITS OWN OPERATING SYSTEM FOR SMART TOYS, ROBOTICS AND IOT POWERED DEVICES.

Cubomania is creating an online platform for early childhood education that will allow creation and provide access to modern education programs. These programs will allow teachers, educators and other professionals involved in the sphere of education to fulfil their potential and help learners (aged 4-14) get acquainted with gamification and discover a completely new system of obtaining knowledge. Cubomania started as an IoT Smart-toy. However, the idea of an AI-based virtual character that interacts with kids based on their individual characteristics opened up an opportunity for the ultimate blockchain platform development and a new type of content creation. Cubomania is creating an online platform for early childhood education with the integration into the physical environment.

What's more, implementation of the cutting-edge blockchain technology will enable members of the education industry to create customized curriculum as well as interactive programs and offer them directly to the market as the platform operates using a decentralised payment system to ensure safe transactions. Also, the advent of the blockchain era has expanded both the toy's functionality and means of interaction with it.

We see unlimited innovative potential for creating new behavioral, economic and business models based on a gamified learning process. The competitive advantages of this business project are its market attractiveness by virtue of using the blockchain technology, blue ocean of online pre-school and school education market, the demand for IoT-smart toys and the high competitiveness of goods. Cubomania seeks to decentralize the education industry by connecting teachers, parents and students worldwide with the blockchain solution.

So far, there haven't been any similar platforms as almost all attention has been paid to university education and student preparation for a better integration into the working community. Lack of competition in this segment holds much promise for Cubomania.

1 INTRODUCTION

No one will dare to deny the fact that childhood is easily the most important period in every person's life as the experiences people have in childhood shape the brain and their capability to learn, get along with others, and respond to daily stresses and challenges. However, the process of child upbringing and development is not without its challenges for both parents, educators, teachers and any other people working in the field of education.

First of all, today's children are far more developed than their peers even 10 or 15 years ago. Today 5-year-olds can use mobile phones, tablets, e-readers. They can surf the net. They know what a touchscreen is. This is happening as each subsequent generation capitalizes on the knowledge and experience obtained by the previous ones. As our living standards -– involving nutrition, education, safety, and many other factors – have significantly improved over the past 100 years, our ability to solve cognitive problems likewise increased. Therefore, in order to develop, children need a much higher intellectual load than in the past. They need the latest educational experience-based programs that will let them acquire skills and knowledge that are in demand today. However, schools and kindergartens don't always manage to respond to the fast pace of technological development. Another problem is that all centralised educational systems are like educational factories where all children study the same subjects at the same time regardless of any individual characteristics. However, will this approach work in the information age? Finally, nowadays parents are so busy working that they barely have time to fully control what their children learn, what skills they obtain and what personality traits they develop. Despite this, parents really want to manage this process, and they desperately need a tool through which they will influence the process.

Creators of educational content face a lot of difficulties as well. For example, modern payment systems don't allow to make transactions so smoothly as the Blockchain technology does. Another problem they are faced with is that copyright registration is so complicated a process that content creators hardly ever register their intellectual property. Further, their content is distributed for free. And, in most cases, they are not even aware of that. Finally, most content creators don't have technical base and tools to create educational programs of any level of complexity themselves. They need to involve some specialists who possess special skills and knowledge in the IT sphere which is quite difficult. As a consequence, content creators either create great educational content, but don't gain financially for what they have created or become demotivated to create anything worthy as they are aware of the potential problems.

This is what makes the importance of creating and developing a new school and pre-school educational system that will be able to respond to the challenges of our time and enormous intellectual superiority of a new generation. Therefore, we decided to challenge the status quo in the education industry, and this idea gradually morphed into the Cubomania project.

2 MARKET ANALYSIS

This section presents publicly accessible information on the size of the global online education and smart toys markets.

Global Market

Education is a global industry. Education expenditure grew worldwide to approximately 6 trillion dollars in 2016. Growing demand at an annual rate is globally fuelled by population growth and middle-class expansion in Asia and Africa. Despite market prospects, students face many obstacles and restrictions which reduce the accessibility of high-quality educational experience. The rising cost of education, total imbalance between existing school or university systems and educational opportunities of today's modern world create a trend which proves that education will in the first place be affordable for the global elite. Unfortunately, by and large, education is either not affordable or not keeping in pace with world advances.

E-Learning Market

In the year 2015 e-learning market share totalled approximately 165 billion dollars [Statista.com]. Since then the industry is constantly growing and developing and is projected to reach a record 250 billion US dollars by the year 2023. The e-learning market growth rates are especially preeminent in India, China and Malaysia with a growth rate of approximately 50% annually [Virtual-college.co.uk].

Although these figures might seem big, they account only for a part of world's top universities budgets. Harvard, Yale and Stanford account for more than 70 billion dollars with the tuition fee of around 45 000 US dollars and the average salary of a full-time professor of around 200 000 US dollars. 100 best world universities have a total budget value of more than 433 billion US dollars [Thebestschools.org].

IOT-Smart toys market

It is expected that during the period 2017-2022 the demand in the global smart toys market will increment at a considerable CAGR, gaining additional traction from a number of factors such as advancements in artificial intelligence (AI) and Internet of Things (IoT) as well as lifestyle changes of the urban population who have increased their disposable income but lost on time for upbringing and raising awareness of the advantages offered by these modern toys both indoors and outdoors. Though the high cost of these products continues to challenge the prosperity of global smart toys market, this is where the first advantage of Cubomania lies - the low cost and high-quality functional content.

It's well-known that the segment of toys able to recognize voice commands and images is the most profitable among all toy segments.

Based on the type of toys, the global smart toys market has been segmented into:

- app-enabled mechanical toys
- screen toys
- voice or image recognition toys
- toys-to-life
- health-tracking toys or wearables
- puzzles and building games, and others

In 2017, the segment of voice and image recognition toys accounted for 31.1% of the overall demand, which was valued at 2,271.7 mn US dollars [transparencymarketresearch.com]. The demand for this segment has been projected to experience a CAGR of 3.7% during the forecast period of 2017 to 2022, reaching a global worth of 2,720.4 mn US dollars by 2022. The voice and image recognition smart toys segment is growing at 89.7 mn US dollars annu-

ally over the course of the forecast period, and this absolute growth is larger than that in any other segment.

Based on the type of interfacing devices, the market for smart toys has been bifurcated into smartphones, tablets, consoles, and drones, whereas on the basis of wireless communications technology, the market has been categorized into Wi-Fi, Bluetooth, RFID or NFC, and others.

Geographically, the report evaluates the potential of smart toys market in North America, Europe, Latin America, Asia Pacific except Japan (APEJ), the Middle East and Africa (MEA). In 2017, North American smart toys market was worth 1,802.0 mn US dollars [prnewswire.com]. High adaptability of new technology and substantial buying ability of the citizens of developed countries such as the U.S. and Canada are two primary factors aiding to the North American smart toys market.

Europe accounted for 23.9% of the overall demand in 2017, the second most prominent chunk of regional demand in the global smart toys market. In countries such as India and China, disposable income is increasing among the urban population and the pool of prospective customers is escalating. The overall revenue in the APEJ smart toys market is estimated to reach a net worth of 1,619.6 mn US dollars by 2022. Japan smart toys market is expected to create absolute dollar opportunities of 56.1 mn US dollars between 2017 and 2022.

Competitors engaged in R&D to Develop Niche Products are Fisher-Price Inc., Activision Blizzard Inc., The Hasbro Inc., Genesis Toy Co. Ltd, Spin Master Corp, Seebo Interactive Ltd, LeapFrog Enterprises, Inc., Wow Wee Group Ltd, Reach Robotics Ltd, and SmartGurlz ApS - some of the key companies currently holding a prominent position in the global smart toys market. Most of these players are investing heavily in research and development activities, as new and niche products help them get more sales. Though the market is currently in nascent stage, advancements in the field of IoT and AI are expected to open up endless potential for content in this market.

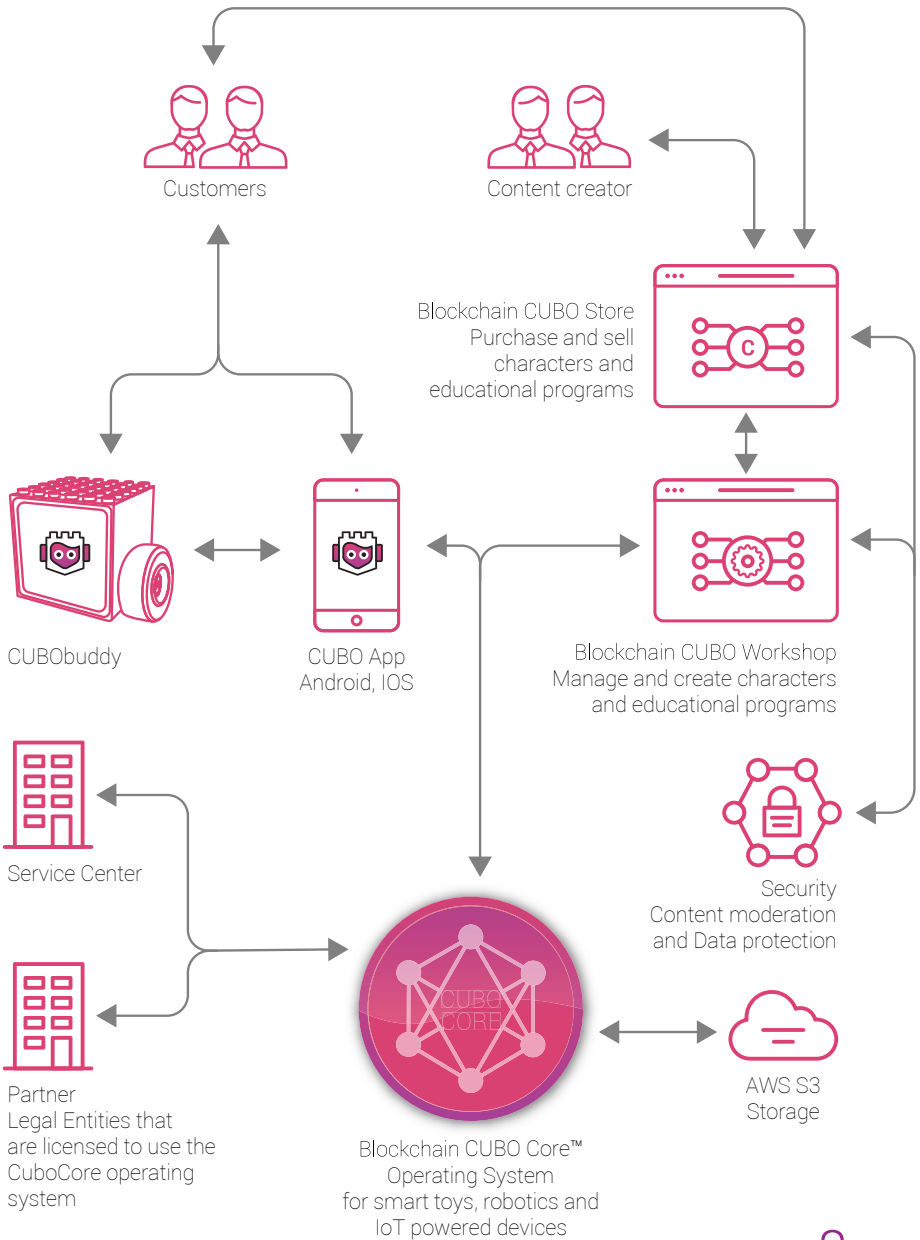
Summary

Cubomania is an online platform of early childhood education with the integration into the physical environment. The synthesis of these two interesting and absolutely unexplored markets in terms of using the blockchain technology creates a unique opportunity for the first investors in this segment.

So far, there haven't been any similar platforms as almost all attention has been paid to university education and student preparation for a better integration into the working community. Companies which create technologies and professionals who develop the content used in digital economy should consider the possibility of taking part in our platform development if only to represent the technology they create in the course materials available for millions of prospective students. Lack of competition in this segment holds much promise for Cubomania.

3 CUBOMANIA ECO-SYSTEM

Cubomania is a blockchain-based educational platform for children and parents which develops children's imagination as well as creative and social skills through interaction between virtual AI-integrated environment and a real-world toy. Here, in the Cubomania project, we believe in developing mental abilities and imagination as well as promoting love for learning. Cubomania is a combination of a constructor model, programmable platform, interactive ways of communication, simplicity and usability.



4 CUBO CORE™

A key trend which has appeared in the robotics industry is that industrial robotics, which was a traditional market pillar, has given way to non-industrial types of robots such as personal robot assistants, UAV (quadrotors) and IoT devices. Every year there is an increase in the number of manufacturers of home and toy robotics. New enterprises which produce IoT devices and robots open in China every month.

Private investment in the robotic space has continued to amaze with exponential year-over-year funding curves and sensational billion dollar acquisitions.

Prices for robots, sensors, CPUs and communications continue to fall while capabilities continue to increase. Taking all these factors into account, it's easy to see a unique opportunity.

Robot programming and maintenance is one of the biggest obstacles in robotics research: when you spend all your time just finding out how to make a robot work and then maintain its work, you don't have any time to make your robot do something useful. There was the same problem in the early days of the computer age until Bill Gates gave everyman the opportunity to communicate with computers having created the first operating system BIOS forever changing the computer world and setting a trend in software development.

The challenge remains for robotics system developers and users all around the world. Companies have to adjust the operation algorithms of their prospective machines to obsolete control and monitoring systems (the last system was created in 2010) losing out on the opportunities offered by modern technologies. Today's Robot Operating Systems are steadily installed and work well only on Ubuntu version 10 or later. We are going to tackle this problem - using the experience of creating a programme shell from scratch for our learning IoT toys, we strive for creating a single operating platform for robotics - CuboCORE.

We integrate the whole range of Cubomania Market learning programs into this ROS. Just by installing CuboCore into your robot/quadcopter/IoT system you will get direct access to the library of programmes and learning courses from simple directive commands to AI-based behavioral patterns, thus creating demand for using CuboCore for external projects.

The point is that CuboCore is intended for companies that develop hardware which is necessary for all but is not specific to any particular application.

Main principles

Content

Devices with installed CuboCore will have access to the decentralized store with apps and programmes administered by the Cubomania community. The main programming examples and greenfield projects of varying complexity are readily accessible at all times to provide students with different tasks: starting from the first movement algorithm and up to complex behavioral patterns.

Software development kit

Along with the basic version of CuboCore, the Cubomania project will prepare SDK which will provide teachers, students and developers with ready-made opportunities to program behaviour, sounds, movements and add additional electronics.

Global trend

We expect that CuboCore will be made available in laboratories, classrooms, workshops and hackathons where new users are trying to touch the world of robotics for the first time.

5 CUBO IOT TOYS

While developing the concept of Cubomania educational toys the following principles were laid down:

Game + Studies + Skills + Social Effect

- the toys promote fine motor skills development as well as contribute to the ability to read, count and make decisions;
- the toys do not provoke aggression;
- the toys are interactive and multifunctional;
- the toys are safe;
- the toys can be modified with the help of additional software installation, which increases their life cycle;
- the toys must be affordable;
- the toys can be used as means of rehabilitation for children with special needs

THE CUBOBUDDY TOY HAS THE FOLLOWING SENSORS:

- sound sensor
- proximity sensor
- gyroscope
- humidity sensor
- accelerometer
- temperature sensor
- magnetometer
- video camera
- optical sensor
- touch screen
- rotational speed sensor

Thanks to embedded microcontroller chips and all types of sensors IOT makes it possible to create interactive AI-based virtual characters able to interact with the physical world.

The cubes are powered by the battery which is charged via a standard electrical power point using a micro USB charger cable without the need to disassemble the toy.

The programming code will be made available for public access on GitHub

6 EDUCATIONAL CHARACTERS AND PROGRAMS

The thread that runs through all education programs and systems on the Cubomania platform is gamification which nowadays has become a key player of the educational process. This kind of interaction helps to be actively involved in the educational process and makes it as fun as playing computer games. The paradigm shift in perceiving the outside world is happening before your eyes. This is more like a computer game in which characters possessing certain characteristics and skills achieve high levels. Those who refuse to accept new reality and prefer to remain within archaic, selfish and dogmatic systems are facing more and more difficulties integrating into modern society, and therefore the inability of achieving high levels of this 'game'.

Encouraging players of the Cubomania eco-system through the system of token bonuses will make them more productive because a little incentive is always reachable. They just have to earn points for experience and increase the level of their characters. The gaming industry has proved that this concept works efficiently and brings financial gains to entertainment products exploiting human responses such as stress, induced impatience, a sense of pride, desire to be the first, desire to achieve a goal or a need for belonging to some group. We will engage the same subconscious routes as those used by people who play computer game. This will be done by implementing gamification through smart contracts.

Yu-kai Chou determines gamification as “Human-Focused Design” because the process considers people’s feelings as well as the reasons for which they either want to do certain things or not. Yu-kai Chou has come up with a system which breaks down people’s motivation into 8 Core Drives.

According to Yu-kai Chou, the core drives of people’s motivation are:

Epic meaning and calling

If a person takes part in the process and believes that this is an important mission, he / she is ready to make efforts and devote a lot of time to achieving the goal.

Development and accomplishment

Development, leadership and accomplishment are the second drive of people’s motivation. This is the core drive where people are driven by a sense of growth towards a goal and accomplishing it, developing and mastering their skills and, eventually, overcoming challenges. People like not just planning their moves ahead and completing tasks but also seeing their progress, getting some bonuses and prizes and being on the leaderboards.

Empowerment of creativity and feedback

This is the third core drive. Any trophy or prize makes almost no sense for people in case the award was received without efforts. People value only those awards for which they overcame some obstacles and difficulties or did some tasks.

Ownership and possession

The forth core drive of people's motivation is the feeling that they own or control something. When people own something, they innately try to make what they own better and own even more.

All people have a wish to accumulate wealth, all people value the things they own. For example, people who sell their house often believe that its price is much higher than the market value because of their sense of ownership.

Social influence and relatedness

The fifth drive incorporates all the social elements that drive people to do stuff: mentorship, acceptance, social responses, companionship, all the way to competition and envy.

When we see a friend who is amazing at some skills, who has achieved some skill level, as a rule, we become driven to reach the same level or even leave him behind.

Scarcity and impatience

The sixth core drive is specifically the drive of wanting something because you can't get it - a wish to own something just because it is very rare. And the more rare the thing is, the more value it has.

Curiosity and unpredictability

The seventh core drive is unpredictability of the game and human curiosity. Something is interesting for people just because they don't know what is going to happen. Curiosity makes people keep doing something and find out what will happen next. This explains why many people read novels and watch movies. However, this drive is also the primary factor behind gambling and lottery addiction.

Loss and avoidance

The eighth drive is based on the avoidance of something negative happening. No one likes negative emotions, so everyone tries to avoid them if possible. Sometimes it makes people act immediately because of the fear to lose this opportunity forever ("a special limited time offer")

This motivation system has proved its value in business education as well as has been a breakthrough in the field of improving business skills of adult people.

As far as the reward system is concerned, the companies willing to introduce new technology or services to people will provide financial incentives (rewards for completing the quest) for students willing to spend time on studying and skills development as well as try out the company program.

Providing incentives, any company gives a clear signal about the demand for certain qualifications or informs about the knowledge and skills necessary for the efficient use of recently introduced technologies / products / services. People who look for new opportunities will learn new emerging technologies, develop marketable skills and get to know existing technological solutions provided by content suppliers. The system which will register applicants' enrollments for subsidized courses in order to enable them to gain more knowledge and develop practical skills on a selected issue of technology is one of the goals of the project. Students will be able to communicate with other players and course facilitators, ask questions and look for more detailed explanations, get mentoring in their fields of interest. All course materials and assessment of progress will be divided into small parts (levels) in order to structure the curriculum and identify the obstacles they will have to overcome for getting incentives (CUBO platform tokens). The companies which provide incentives will be able to get in touch with students of subsidized courses and perhaps offer grant programs to good performers.

Description of characters

The characters created in the Ethereum blockchain can be regarded as an improved version of Tamagotchi. Each character has 3D images that can be viewed from different sides by means of the screens on the sides of the cube. Some cubes will have an engine and LEGO-compatible surfaces.

There will be a set of pre-installed characters. Also, each eco-system participant will have an opportunity to create or order customized characters and programs. Pre-installed characters cannot be altered in any way.

A child or a parent chooses a type of educational experience, the program sets character personality traits and influences its behavior to align with a chosen educational program (experience, exercise). Further, a child will be able to study changes in character's behavior. Here's the list of characteristics that will be used for creation of characters. The list below includes the characteristics that people may possess as a result of upbringing and/or interacting with people around. The list contains the characteristics that are generally regarded as positive, neutral and negative. Certain theories define well-being as the presence of positive emotions and the relative absence of negative emotions. Also, to be accepted by society, a person should demonstrate socially acceptable behaviour and positive characteristics. However, more and more specialists in early childhood development and education say that it is essential for a child to learn to acknowledge a full range of characteristics in order to be able to recognize the whole spectrum of human emotions and behavioral patterns, not only positive ones. For this reason, we included a wide range of the characteristics so that children, while interacting with others, can identify these characteristics correctly and react or behave accordingly. This will improve the efficiency of interaction with other people. However, we intentionally did not divide the characteristics into positive or negative ones as all of them are only conditionally negative and positive. For example, on certain occasions being direct can hurt people's feelings. On certain occasions, it helps people clarify the situation fast.

There are 2 types of characters a child will interact with (game characters and educational characters).

Basic behavior characteristics of game and educational characters can be found here: [link]

Game characters

Game characters will help a child study social interaction in the society, understand human social nature, human interaction with the world around them. The character has got several

scales. It has got scales of energy, happiness and vigor, which teaches a child to take care of a character, and therefore take care of people around. If successful (for example, if a child takes care of the character so well that a character shows the highest level of happiness), a child gets a reward (Cubo tokens which can be exchanged for education programs on the platform). The sensors that the cube contains make playing the game exciting and close to reality. For example, when the cube is exposed to the cold, sun or water, the character changes its behaviour in accordance with the circumstances. The character starts shivering or taking off the clothes, takes an umbrella, etc. This way a child studies the influence of the outside world. Using on-device AI makes communication really exciting as a character will be able to react to a child's actions, speak with a child with their parent's voice, tell them stories and the like. Using so-called behavior codes in the Cubomania blockchain will mark a new stage of the Blockchain development. Imagine a game in which a character regulates the conduct and dialogues depending on a set of characteristics of a human being.

Educational characters

Educational characters will be a part of educational experience (a gamified process in which a child directly interacts with a character) and educational programs (a process of obtaining knowledge and skills and testing them).

One of the pre-installed characters is called CryptoBuddy. This educational character presents a program which aims at teaching children blockchain philosophy through the game. Our character will explain abstract concepts of the blockchain technology and crypto terms to the rising generation. We were inspired by CryptoKitties, an online game and the marketplace involving virtual cats, which evoked an unevenly growing interest to the Blockchain technology and became a starting point in globalization and popularization of such a thing as Blockchain. "As part of launching this project we were really trying to educate people who perhaps hadn't bought Ethereum before, people who weren't in the crypto space." said Elsa Wilk, marketing director at Axiom Zen, the Canadian tech consultancy that created CryptoKitties. So, inspired by success of the first version of the mechanism for promoting the Blockchain technology, we made a decision to use such a simple playful form for creating more complex interactive characters that can be put into a physical body and played with.

The cube includes a possibility to communicate with characters from other cubes. If several cubes get closer to each other, characters get a possibility to visit one another and complete quests together. Besides that, characters will be able to visit each other if the cubes are connected to the Internet. Depending upon programmed characteristics, characters will be on friendly terms or quarrel with each other, play or fight.

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HOW IT WORKS

1

THE PRODUCT IS EASILY ADJUSTED AND CONNECTED

A child needs only to scan the QR code on the packaging of the toy to start exploring the world of new possibilities with just a few mouse clicks.

2

A CHILD EAGERLY INTERACTS WITH THEIR FAVOURITE CHARACTER

Every child will enjoy a wide selection of characters, their characteristics and qualities. Accompanied by a favourite character, a child will complete tasks of any complexity, play and develop.

3

THE PRODUCT FULLY USES POTENTIAL OF MODERN TECHNOLOGIES

A set of sensors, engines, microcontrollers and other elements of the toy will allow a child to explore the outside world, learning a wide range of easy and complex things from learning letters to basics of robotics.

7 SMART CONTRACT

Agreement between prospective students and content providers will be attained with the least possible involvement of intermediaries through Ethereum-based smart contracts. The inefficiency and vulnerability of modern payment systems, and most importantly cash payment protocols, provide fertile ground for a variety of fraud schemes and tricks to cheat buyers or sellers. In the Cubomania ecosystem smart contracts completely exclude the possibility of being cheated on under condition of content pre-moderation. Ethereum-Blockchain-based smart contracts will enable access to the services of “unconditional trust” level.

On a practical level this means that people can buy learning programs and characters or get rewards for achievements from people from the other side of the world without knowing if they are honest or not and still have full confidence in success of the deal. Thanks to indestructible blockchain database any ecosystem player can check the blockchain and make sure that he can trust the seller’s reputation and the exchange mechanism while learning programs suppliers can make sure that the buyer has sufficient means to make the payment.

Also, the Cubomania platform will offer students online courses with a clear and transparent blockchain-based reward system and achievement tracking which will be referred to as a smart incentive. Smart-incentive is a smart contract on Ethereum network ensuring the exchange of tokens between a sponsor (the Incentive Provider) and a student (the Incentive Taker), who is committing to study a specific subject in order to receive tokens (the Incentive).

Any company (for example, a technology or service supplier), public institution (a school, a college or a university) and even ordinary citizens can become creators of a Smart Contract.

CUBO token

BUYER

Selecting a service, character, educational content

PLATFORM
Cubomania

1

Registration,Creating a wallet

2

CREATOR
teacher, programmer, parent, tutor, coach

Content publishing

Loading your characters, programs to the CuboStore

BLOCKCHAIN ZONE

Making a request for creating and selling a program

Receiving a request for creating and selling a program

EDUCATIONAL EXPERIENCE

Educational programs	Online classes
Game characters	Educational characters

3

Opening a transaction

Receiving confirmation of a request

AGREEMENT OF TERMS AND CONDITIONS OF THE TRANSACTION:
price, length of a program, the estimated time period for the completion of the program, character profile, desired results, payment terms

Opening a transaction

MODERATION

4

Approval of a transaction

SMART CONTRACT LEVEL
writing a smart contract

Fulfilling the terms of the deal

5

Reservation of funds, sending payments

BURNING UP 0,5%
'fuel'

Receiving Cubo

SMART CONTRACT COMPLETED

When registering in the system a student fills in the test form without their parents' help, answers a number of test questions in order to figure out their socionics type for implementing the main idea of personalized learning - it's not the student who adapts to the restrictive limits of the system, but it's the system that adapts to the personality of the student. On the basis of test results the system selects the most efficient personality type of the teacher for a particular child (in our case it is a virtual character) who will be able to find an approach to the student and give them knowledge as fast as possible. Also, students will be able to choose training courses from the list of courses available for them in accordance with their achievements and completed programs (i.e. their XP 'experience'). All the students participating in maintaining the Smart contract will record their result and the way of completing their "Quest" (learning activities) into the blockchain forever. Using the CUBO Token will enable us to use incentives (token bonuses) for any student in the world, which is quite difficult at the moment because of the drawbacks of fiat currency systems.

All the programs will go through 2 stages of moderation. The first stage is manual moderation which is carried out by a special department whose employees filter trolls and inadequately developed programs. The second stage is running the program through the moderation neural net. The education program and the character are moderated by a special neuronet that detects the potential mismatch in characters and creates different models of interaction between a teacher and a student. As a result, the net will determine the students for whom the program is not suitable as well as those for whom it will be most efficient as this idea builds on the compatibility of a teacher (a virtual character) and a student.

Use case 1

An eco-system player that acts as a Creator of educational content (a teacher, programmer, coach, etc) places their CV in the eco-system depending on the topic of the content they create. An eco-system player that acts as a Customer finds their CV using a system of tags. The Customer needs to have a customized education program developed. They strike a deal via a smart contract. The contract sum is blocked on the Customer's balance. The Creator makes a requested program. The program is then checked by a moderator. After the approval, the program is downloaded on the Customer's device. The smart contract is regarded as executed, and the tokes are sent to the Creator of the requested education program. According to the conditions that the participants agreed on:

1 The Creator gets authorship and ownership rights. The content Creator can add this program to their CV and sell it on the marketplace as a finished product. A learning character can be sold an unlimited number of times. Each character is rated upon completion of the course, which has an impact on the character's position at the marketplace and its popularity. Every subsequent sale of this asset to participants of the platform will give the bonus points in the form of tokens to the author of this character or education program as the author is a holder of the ownership rights. The Customer uses the program. The Customer doesn't acquire authorship and ownership rights and cannot sell or change the program.

2 The Customer gets authorship and ownership rights. The Customer has an opportunity to keep the character and use it or to sell\promote the character on the marketplace for Cubo tokens.

Use case 2

Any person that is expert in some field of knowledge and that would like to become a participant of a decentralized educational platform registers on our platform. We provide them with templates available on the Cubomania platform that will enable them to create content and design a unique character on the Ethereum blockchain platform, using a database of educational programs available on the platform. Tokens are used as consumables. The program is then checked by a moderator. This content gets attached to the character and becomes a digital asset with ownership rights that are registered in the blockchain. Further, there are 3 possible scenarios.

1 The Creator has an opportunity to keep the character and use it. At the request of the Creator, data on the character are recorded in the blockchain.

2 The Creator can present their character as 'a model' so that other eco-system players could use its 'genetic' structure for creating improved characters that are more complex in nature and able to demonstrate more complex modes of interaction. The Creator keeps ownership and authorship rights.

3 The Creator can sell the character on the marketplace for Cubo tokens and, at will, promote their character in the 'Learning characters' section using tokens. If someone

purchases the character, ownership rights are transferred to the Customer. This information is recorded in the blockchain. The Creator gets tokens. Tokens used for creating and promoting a character are burnt. Having received tokens for selling the digital asset, the Creator may convert tokens into fiat money.

Use case 3

An eco-system player who acts as an Incentive Provider wants a child (Incentive Taker) to complete some program and reach a specific level of achievements. The Incentive Taker commits to study a specific subject for Token bonuses (Incentive). They strike a deal via a smart contract. The contract sum is blocked on the Incentive Provider's balance. The Incentive Taker fulfils their obligations. The smart contract is regarded as executed, and the tokens are sent to the Incentive Taker.

8 CUBO TOKEN

CUBO token is the only internal means of payment used in the Cubomania eco-system. CUBO token is a utility token. CUBO token is an ERC-20 compliant Ethereum based token which is designed to work on the Cubomania platform.

The token will have the following functions in the Cubomania eco-system:

1. CUBO token will provide access to the Cubomania game-based learning platform
2. CUBO token guarantees discounts for cubes. Any user can buy the product directly from the Company from anywhere in the world without waiting for the product to appear in local stores. Charges in tokens are always 40% lower than charges in Fiat money. If paying with fiat money (using either Visa or MasterCard), the exclusive discount for Cubomania eco-system players is not applied and the toy is sold at full price without a discount.
3. CUBO token will be used in smart contracts as a means of payment between cre-

ators of educational content, partners and participants of the platform. Thus, CUBO token will guarantee mutual fulfilment of obligations, for example, a means of payment for products and services such as educational programs, individual plans, classes with tutors or educational advisors, educational centres, online schools, colleges.

4. CUBO token is used as a means of payment in the Cubomania Bounty program.
5. CUBO token will be used as a Tool for the CuboBuddy game. CUBO token will be used for acquiring behavioral characteristics in order to create learning characters.
6. Using CUBO token as a reward in the Incentives program from external companies, creating content.
7. CUBO token will be used for getting access to digital assets such as student transcripts for concerned organisations (big data), learning characters and education programs.
8. Buying a toy, a user will get a certain number of CUBO tokens depending on the type and model of the cube. These tokens start to accrue after the user registers in the ecosystem.
9. Getting tokens as a reward for daily activities performed by a child, learner, student.
10. guarantee mutual fulfilment of obligations, for example, a means of payment for products and services such as educational programs, individual plans, classes with tutors or educational advisors, educational centres, online schools, colleges.
11. CUBO token is used as a means of payment in the Cubomania Bounty program.
12. CUBO token will be used as a Tool for the CuboBuddy game. CUBO token will be used for acquiring behavioral characteristics in order to create learning characters.
13. Using CUBO token as a reward in the Incentives program from external companies, creating content.
14. CUBO token will be used for getting access to digital assets such as student transcripts for concerned organisations (big data), learning characters and education programs.
15. Buying a toy, a user will get a certain number of CUBO tokens depending on the type and model of the cube. These tokens start to accrue after the user registers in the ecosystem.
16. Getting tokens as a reward for daily activities performed by a child, learner, student.

Deficit of tokens will be created by burning them when creating and promoting a character. Also, every time a person makes a payment, the transaction fee, which is 0,5% of CUBO transaction cost, is withdrawn from CUBO token holder as a means of payment for using the platform and burnt as a fuel for transaction. This process is regulated by smart contracts.

Each token offers the following rights to its holder

right to make a transaction

Each token holder holds the right to send or receive tokens between one to another. Tokens can also be sent to the third party to a supported digital wallet.

right to receive goods [services]

Each token holder holds a right to get the services made available by the company for the token, such as creation of the characters and educational programs.

Cubomania intended to use funds received during CUBO token sale for further development of the project, payment of salaries and future expenses. This will help accelerate development and also enable the team to work full time with total commitment.

During CUBO token sale, purchasers will be provided with the CUBO token within two weeks after the end of Token sale; provided, that this term may be extended due to unforeseen circumstances.

The tokens will be distributed during the public token sale.

CUBO tokens sold during the token sale are the only tokens that will be sold by Cubomania. After the token sale there will be no additional sales of CUBO tokens.

Buying tokens during the token sale is a guaranteed way of buying a CUBO token at a fixed price. Users that don't have CUBO tokens will have to buy them from existing token holders in order to take advantage of the Cubomania platform.

Tokens of the Cubomania project can be purchased with BTC or ETH during the public sale Also, tokens can be obtained as a reward in the Cubomania Bounty program

TOKEN SUPPLY

- **TOTAL TOKEN SUPPLY: 1.000.000.000 CUBO**
- **TOTAL HARD CAP:**
  38 100 ETH - 254 000 000 CUBO no bonus
  292 200 000 CUBO with bonuses
  1 CUBO = 0,00015 ETH

11.05 - 14.07.18

CROWDSALE

26 550 ETH - 177 000 000 CUBO no bonus
185 200 000 CUBO with bonuses

- 82 000 000 CUBO (90 200 000 CUBO including bonuses) = 12 300 ETH; For every 1 CUBO 10% of the bonus CUBO
- 95 000 000 CUBO = 14 250 ETH; NO bonuses

20.04 - 10.05.18

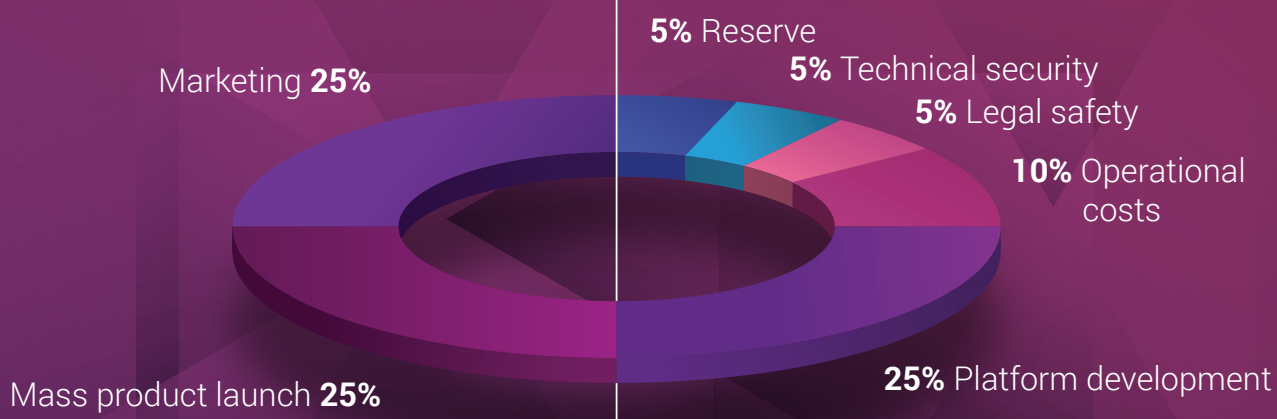
PRE-SALE

11 550 ETH - 77 000 000 CUBO no bonus
107 000 000 CUBO with bonuses

- 27 000 000 CUBO (40 500 000 CUBO including bonuses) = 4050 ETH; For every 1 CUBO 50% of the bonus CUBO
- 50 000 000 CUBO (66 500 000 CUBO including bonuses) = 7500 ETH; For every 1 CUBO 33 % of the bonus CUBO

Token distribution

Use of funds



ROADMAP 9

Start 2016

Concept study

2017

Cubomania Device Development

Taken part in 11 technological events

Vernadsky Challenge winner

2018 Q1

Finished product - CuboBuddy

Cubomania CES 2018 TOP 12 finalist from more than 900 startups

Token sale launch

2018 Q2

Educational platform beta release

CuboCore™ ROS early stage development

Establishment of production line

2018 Q3

Scheduled launch of the Cubomania educational platform

Development of distributions channels

Education AI based assistant BETA release

2018 Q4

CuboBuddy sales start in Japan, China, Europe, USA, UAE

2019 Q1

Education AI based assistant launch

2019 Q2

CuboCore™ ROS Beta release

2019 Q3

Release SDK for robot developers

2019 Q4

CuboCore™ ROS Launch event

10 TEAM

MAKSYM MUSIYENKO

Founder, CEO Doctor of Technical Science, Professor

Author of more than 500 scientific papers, more than 200 patents, and 3 monographs; Scientific advisor; award winner of the Cabinet of Ministers of Ukraine for contribution of youth to the Government development (2003); Scholar of the Verkhovna Rada of Ukraine (2008).

YURIY VDOVYCHENKO

Chief Technology Innovation Officer

PhD in International Economics, Head of Noosphere Engineering School. Associate Professor at the Department of international economics and business, Cherkasy State Technological University, Cherkasy, Ukraine. Author more 60 publications. Business development manager, Prime Group, 2006-2015.

YAROSLAV KRAINYK

Co-founder, CTO, PhD

3+ years of experience in embedded development and software engineering; Has experience with modern microcontrollers and FPGA, successful implementation of telecommunications systems and IoT-projects.

MAXIM AFANASEV

Chief marketing Officer

Marketing specialist with extensive experience in launching projects in the FMSG market; Has expertise in creating and developing successful private labels; Has conducted more than 30 efficient full-scale advertising campaigns; CEO of OK LOCK, innovative lost and found service.

VIACHESLAV SHVAYDAK

Chief Operating Officer

Lecturer of University of Customs and Finance; Founder and CEO of Bodybuilding.ua. Has extensive experience in on-line business operations, project coordination and analytics. Responsible for driving performance measures for the operation in the Cubomania team; Visioner of the Cubomania project.

TAKAYUKI YONEDA

Ux\UI designer, Art Illustrator

Comic artist, illustrator, web and graphic designer; Has published two educational comic books in Japan and is currently working on the third and fourth ones; Has 3D animation skills.

DMITRY VOSHCHINA

Art director

15+ years of experience in UI/ux design. Extensive experience and expertise in graphic design of any level of complexity. Has practical skills in web-design, printing, illustrating, animation, 3d-modelling.

NATALIIA ISHCHENKO

Product Manager PhD in economics, associate professor

Has 10 years of experience in foreign trade; Commodities expert, specialization - determining the country of origin of goods in accordance with national and international legislation; Coordinator of the socio-economic micro-projects under the British Council; Has conducted scientific research is transport logistics.

OLENA FILIMONOVA

Financier PhD in Money, Finance and Credit

Competent (expert) in banking credit and project finance; Acting Dean of Economic Science Faculty of Petro Mohyla Black Sea National University.

TATIANA GAVRILUK

HEAD of PR

Has over 10 years of experience working with brands in the education industry; Has extensive expertise and experience in establishing and developing social media channels for digital products;

ALEXANDR NEDAVNIKH

Project Coordinator

Starting his career as a web-developer in 2009; Launched 4 successful SEO products; Author and project manager of several mobile games; As the CTO at 50+ employers company, Since 2016 he has been actively interested in blockchain technologies and he has taken part in various blockchain events.

IVAN BURLACHENKO

Software Developer

Master in Computer Science, over 7+ years of experience; Responsible for the core development of our platforms; Recently had a successful experience at Hostopia, IQRIA as a full stack software developer.

YURI KOVAL

Hardware Developer

Programming skills of STM8, STM32 and other microcontrollers with ARM architecture in the programming environment: Keil, Ride, Cosmic, STM32CubeMX, Simulink for embedded solutions; selection of optimal electronic components, development of circuit diagram with further pcb trace in the Allegro software environment.

YEVHEN DAVYDENKO

Software Developer (Android Developer) PhD

Forward-thinking developer offering more than six years of experience building, integrating, testing, and supporting Android applications for mobile and tablet devices on the Android platform; Created 10+ fully functional applications for Android devices; Expert in interaction between various devices and versions of Android.

OLEKSII DENYSOV

Softdware Developer

Over 10 years of working experience in electronics: programming for microcontrollers, programming on VHDL/Verilog for FPGA/CPLD (Altera, Xilinx and Lattice), digital circuit technique, experience in schematic design.

VITALII DIDUK

Hardware Developer, PhD

10+ years of experience in microelectronics; develops automated microprocessor systems for industry and households; teaches a class on building electronic devices and software development at higher educational establishments; has extensive experience in teaching school-age children.

11 ADVISORS

MISHA HANIN

CEO of iRangers International

25+ years in IT infrastructures, Architecture and Cyber Security. 7+ years of Blockchain Systems, Architectures and Infrastructures.

DMITRY GRITSENKO

CEO and Founder of Master of Code

CEO and Founder of Master of Code, 13 year old software development company with 160+ employees across the globe. Co-founder of several successful IoT and SAAS start-ups: TrapTap, Zipify, FarmTrack and Tagible.

DMITRY LYAMENKOV

Business Analyst at ICOBOX

Business analyst at ICOBox. ICO marketing expert. 1+ year in preparing and launching ICOs. 2+ years in cryptocurrency trading. Collaborated with 7 successful ICOs such as ICOS, Sponsy, Cubomania, BCSHOP, etc.

DUSTIN REFVIK

Managing Partner and Chief Strategy Officer of Master of Code (Canada)

As the Managing Partner and Chief Strategy Officer of Master of Code (Canada), he is focused on the strategic growth and scaling of new markets. Advisor and board member to several startups in Canada and the USA.

VITALII CHERNIUK

CEO of Science Park, Taras Shevchenko University of Kyiv

Corresponding Member of the Ukrainian Academy of Technological Sciences and General Director of Kiev National University Science Park. Founded Kiev National University Startup Business Incubator and Business-Leader School KNU.

VLADIMIR SPIVAKOVSKY

Author of 7W education platform and 7-star Global School Network

Founder of Edu Future. Scientist, author of 7 best-selling books and 56 patents, Ph.D.Ec., and a public figure. Chief of the regional office of education reforms and the finalist of international competitions "The best education system" (USA - 2016, Hong Kong - 2017, Finland). Founder of the 'Grand' Lyceum.

FARHAN ALI

Director of Events at The Moving Heads

Worked as the Jt. Managing Director & CEO at «Global Nomads». Worked as the Chief Manager - Events at «ICICI Prudential». Got an MBA degree in Marketing at Institute for Technology and Management. Studied B.Com (Hons) at Institute for Excellence in Higher Education. Studied at Bal Bhavan School.

VYACHESLAV KHARCHENKO

Professor

Head of R&D Centre for Safety Infrastructure Research and Analysis, Research and Production Company Radiy. Honor Inventor of Ukraine (1990). Doctor of Science in Engineering and Computer Systems at Kharkiv Military University (1995).

12 CONCLUSION

The development of the online platform and a growing global immersion into a gamified learning process will intensify the involvement of players into the Cubomania world. The guarantor for ensuring the implementation of the project is a professional team which has academic and practical experience in various fields (design engineering, programming, certification, financial planning, etc.) supported by a highly-qualified advisors board with 25+ years of experience in the world top education system.

So, we will strive to develop the Cubomania platform regardless of the token sale results. We are waiting for an end of token sale and launch of mass production in the second quarter of 2018 as well as the open launch of the Cubomania platform in the third quarter of 2018.

13 DISCLAIMER OF LIABILITY

PLEASE REVIEW CAREFULLY THE PRESENT SECTION "DISCLAIMER OF LIABILITY". IF YOU HAVE ANY DOUBTS AS TO WHAT ACTIONS YOU SHOULD TAKE, WE RECOMMEND THAT YOU CONSULT WITH YOUR LEGAL, FINANCIAL, TAX OR OTHER PROFESSIONAL ADVISOR(S). No part of this Whitepaper is to be reproduced, distributed or disseminated without including this section "Disclaimer of Liability".

The sole purpose of this Whitepaper is to present Cubomania and Cubo tokens to potential token holders in connection with the proposed Token sale. The information is provided for INFORMATION PURPOSES only. It may not be exhaustive and doesn't imply any elements of a contractual relationship or obligations. Despite the fact that we make every effort to ensure the accuracy, up to date and relevance of any material in this Whitepaper, this document and materials contained herein are not professional advice and in no way constitutes the provision of professional advice of any kind. Further, Cubomania reserves the right to modify or update this Whitepaper and information contained herein, at any moment and without notice. To the maximum extent permitted by any applicable laws, regulations and rules, Cubomania doesn't guarantee and doesn't accept legal responsibility of any nature, for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including but not limited to loss of revenue, income or profits, and loss of use or data), arising from or related to the accuracy, reliability, relevance or completeness of any material contained in this Whitepaper. Further, Cubomania does not make or purport to make, and hereby disclaims, any representation, warranty or undertaking in any form whatsoever to any entity,

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You don't have the right and shouldn't buy CUBO tokens if you are (i) a green card holder of the United States of America, or (ii) a citizen or a resident (tax or otherwise) of the United States of America, Puerto Rico, the Virgin Islands of United States, or any other possessions of the United States of America, Singapore, People's Republic of China or South Korea, or person of those states, or (iii) a citizen or resident (tax or otherwise) of any country or territory where transactions with digital tokens and/or digital currencies are prohibited or in any other manner restricted by applicable laws. ("Person" is generally defined as a natural person residing in the relevant state or any entity organized or incorporated under the laws of the relevant state). Purchased tokens cannot be offered or distributed as well as cannot be resold or otherwise alienated by their holders to mentioned persons. It is your sole responsibility to establish, by consulting (if necessary) your legal, tax, accounting or other professional advisors, what requirements and limitations, if any, apply to your particular jurisdiction, and ensure that you have observed and complied with all restrictions, at your own expense and without liability to Cubomania.

Cubo tokens are not and will not be intended to constitute securities, digital currency, commodity, or any other kind of financial instrument and have not been registered under relevant securities regulations, including the securities laws of any jurisdiction in which a potential token holder is a resident. This Whitepaper is not a prospectus or a proposal, and its purpose is not to serve as a securities offer or request for investments in the form of securities in any jurisdiction. However, in spite of the above, legislation of certain jurisdictions may, now or in future, recognize CUBO tokens as securities. Cubomania does not accept any liability for such recognition and\or any legal and other consequences of such recognition for potential owners of CUBO tokens, nor provide any opinions or advice regarding the acquisition, sale or other operations with CUBO tokens, and the fact of the provision of this Whitepaper doesn't form the basis or should not be relied upon in matters related to the conclusion of contracts or acceptance investment decisions. This Whitepaper doesn't oblige anyone to enter into any contract, to take legal obligations with respect to the sale or purchase of CUBO tokens, and to accept any cryptocurrency or other form of payment. Potential owners of CUBO tokens are advised to contact relevant independent professional advisors, on the above matters.

Certain statements, estimates and financial information contained herein, constitute forward-looking statements or information. Such forward-looking statements or information involve known and unknown risks and uncertainties, which may cause actual events or results to differ materially from the estimates or the results implied or expressed in such forward-looking statements. Further, all examples of calculation of income and profits used in this Whitepaper were provided only for demonstration purposes or for demonstrating the industry's averages. For avoidance of doubt, nothing contained in this Whitepaper is or may be relied upon as a guarantee, promise, representation or undertaking as to the future performance of Cubomania and/or CUBO token, and/or promise or guarantee of future profit resulting from purchase of CUBO token.

CUBO tokens cannot be used for any purposes other than as provided in this Whitepaper, including but not limited to, any investment, speculative or other financial purposes. CUBO tokens confer no other rights in any form, including but not limited to any ownership, distribution (including, but not limited to, profit), redemption, liquidation, property (including all forms of intellectual property), or other financial or legal rights, other than those specifically set forth below. While the community's opinion and feedback can be taken into account, CUBO tokens do not give any right to participate in decision-making or any direction of business related to the Cubomania service.

English language of this Whitepaper is the primary official source of information about the CUBO tokens, any information contained herein may from time to time be translated into other languages or used in the course of written or oral communications with customers, contractors, partners etc. In the course of such translation or communication some of the information contained herein may be lost, corrupted or misrepresented. In the event of any conflicts or inconsistencies between such translations and communications and this English language of Whitepaper, the provision of this English language of Whitepaper as original document shall prevail.

By continuing reading this Whitepaper, you confirm that you have read, understood, accepted, and agreed with, the above section "Disclaimer of Liability".

14 RISK FACTORS

The purchase of CUBO token (hereinafter in this article "Risk Factors" referred to as the "Token" or "Tokens") may be associated with a high degree of risk. To protect the interests of Tokens' potential purchasers, the Cubomania (hereinafter in this article "Risk Factors" referred to as the "Company") team conducted an analysis of such potential risks and outlined the result of this analysis in this chapter of the Whitepaper. IMPORTANT: THE LIST OF RISK FACTORS

DESCRIBED BELOW IS NOT EXHAUSTIVE. IN ADDITION TO THE RISKS DISCLOSED IN THIS WHITEPAPER, THERE MAY BE EXISTING OTHER RISKS WHICH THE COMPANY'S TEAM AT PRESENT CAN NOT REASONABLY FORECAST. These risks can materialize in other forms of risk than those specified here. Prior to acquiring Tokens, each potential Token purchaser is advised to carefully review all the information and assess the risks of such purchase, including but not limited to, the risks set forth in this Whitepaper and to decide upon purchase of Tokens based on such assessment.

1. Technical and technological risks.

1.1. Risks of the blockchain. Tokens are released on Ethereum blockchain. In this regard, any malfunction of the Ethereum protocol may lead to a restriction in the use of Tokens, and / or to the fact that Tokens or the platform will function in an unforeseen manner.

1.2. Risk of hacker attacks on the platform, smart contracts, or Tokens. Tokens can be expropriated and / or stolen, by hacking Tokens, or otherwise. Hackers or other groups or organizations may attempt to intervene in a smart contract or Tokens in various ways, including, but not limited to, virus attacks, DDOS attacks, concerted attacks, network attacks, and denial of service attacks, and others. In addition, since the Ethereum platform is based on open source software, there is a risk that Ethereum smart contracts may contain intentional or unintentional errors or shortcomings that could adversely affect Tokens or lead to loss of Tokens, or loss of access or control Tokens. In the event of such an error or weakness of the software, there can be no remedy, and tokens owners are not guaranteed any compensation or compensation.

1.3. Risk of hacker attack on the computer of tokenholder, or loss of passwords / of private keys. Purchased Tokens can be stored by the tokenholder in her\his digital wallet or safe, for which a password, a digital key or a combination of digital keys is required. Accordingly, the loss of the necessary keys associated with such digital wallet or safe, can lead to loss of access to Tokens. In addition, any third party that gets access to such passwords and / or private keys (by way of getting (through hacking, or negligence of tokenholder) access to login credentials of tokenholders' hosting-wallet, or otherwise), will be able to use Tokens of the tokenholder. Company assumes no liability for such losses.

1.4. Risk of using new technologies, and changes in technology in the future. Tokens and blockchain are fairly new and relatively untested technologies. Although at the moment they have largely proven their efficiency, reliability and security, there is no guarantee that in future these technologies do not fail in any way. Further, as technological progress develops, flaws can be found in these technologies, which flaws will prevent their functioning in the way that they function at the moment. Finally, there is no guarantee that these technologies will be compatible with any new technologies invented in future. In the event of such incompatibility, use of Tokens and blockchain can be found unreasonable and stopped.

1.5. Risk of incompatibility of the cryptowallet service. An electronic cryptowallet or wallet service provider that tokenholder has chosen \ will choose for obtaining and storing Tokens,

must be technically compatible with Tokens. Failure to comply with this condition may lead to the fact that the tokenholder will not be able to get access to her\his Tokens. Tokenholders must independently determine the fact of the compatibility of the cryptowallet she\he registered, with the Tokens. Company assumes no responsibility for any errors related to wrong determination of the above fact.

2. Regulatory Risks.

2.1. Risk of regulatory uncertainty. Regulatory status of cryptographic tokens, digital assets and blockchain technology, is unclear or not defined in many jurisdictions. It cannot be excluded that such technologies, and, in particular, Tokens, will in future become subject to one or more (adopted or new) interpretations of laws (or other regulations), court judgments, or actions by various regulatory bodies around the world, including, but not limited to, the imposition of restrictions on the use or possession of digital tokens, such as Tokens. Such changes can adversely affect Tokens in various ways, including, for example, by determining that Tokens are regulated financial instruments that require registration or compliance with other legal requirements and procedures. Company may stop distributing Tokens, developing a platform or terminating operations in a particular jurisdiction if the actions of regulatory authorities of the relevant jurisdiction make it illegal or not commercially viable to proceed.

2.2. Risk of inability to obtain, maintain or renew licenses and permits. As of the date of Tokens sale, there are no statutory requirements requiring Company to obtain any licenses and permits necessary for the sale of the Tokens, but the risk that such legislative requirements may be enacted in the future cannot be ruled out. In this event, possibility of sale and further use of Tokens will depend on the procedure of issuing such licenses and permits, and on compliance with their terms. We cannot exclude that requirements of the law will be technically or economically unachievable for Company. Company may stop distribution of Tokens, develop a platform or terminate operations in a particular jurisdiction in the event of economic, technological or other inability to obtain the required licenses or permits under such jurisdiction.

2.3. The risk of governmental action. The industry of blocking and reversing tokens is new, and simply by virtue of novelty can be subject to increased supervision and regulatory control, including investigations or enforcement actions. There can be no guarantee that the government will not study the activities of the parties. All this can be investigated, which in turn can have a significant negative impact on Tokens and / or platform development.

3. Business risks.

3.1. Risk of failure in development. It cannot be excluded that for various reasons, including but not limited to, for reasons of insolvency of business or technological strategies or business arrangements, technological problems, emergence of new technologies, etc., that the model that Company developed and described in this Whitepaper, will not achieve the desired functionality, be inoperative, or work in a way different from what developers designed it for. Also, we cannot exclude the risk that for these or different reasons, development and

implementation of the model can take longer than Company predicts at the moment, and when the model is ready, it will appear to be outdated and\or irrelevant.

3.2. Risk of insufficient implementation. It cannot be excluded that, for various reasons, including, but not limited to, for reasons of insolvency of marketing strategies, external constraints, or competitors' actions, the model developed by Company and described in this Whitepaper model may appear to be unpopular and\or unclaimed, lacking use and application.

3.3. Risk of dependence on third parties. Even after the launch, the model developed by Company and described in this Whitepaper will rely, wholly or partially, on third parties, for adoption and implementation of certain functions, as well as for continuing its development, maintenance and support. Though above-mentioned third parties are carefully selected by Company's team, there is no insurance or guarantee that these third parties will do their job properly, or otherwise meet users' needs, and this can have a significant adverse impact on the platform.

3.4. Risk of loss of cash. The project described in this Whitepaper, the model developed by Company, the platform being created, as well as any funds collected within the framework of the Token sale described, are not insured. In case of failure of the project for any reason, loss of functionality of the Token or platform, there is no private or public insurance representative to whom token holders can apply for reimbursement.

3.5. Risk of force majeure. In the future, there may be extraordinary circumstances that Company cannot reasonably anticipate or prevent and that may be subject to restrictions or impediments to the operation of the Company or Token platform. Company performance may be interrupted, suspended or delayed due to force majeure circumstances. For the purposes of this Whitepaper, force majeure shall mean extraordinary events and circumstances which could not be prevented by Company and shall include: acts of nature, wars, armed conflicts, mass civil disorders, industrial actions, epidemics, lockouts, slowdowns, prolonged shortage or other failures of energy supplies or communication service, acts of municipal, state or federal governmental agencies, other circumstances beyond Company's control, which were not in existence at the time of Whitepaper release.

3.6. Value of Tokens. Once purchased, the value of Tokens may significantly fluctuate due to various reasons. Company does not guarantee any specific value of the Tokens over any specific period of time. Company shall not be held responsible for any change in the value of Tokens.

4. Other risks.

4.1. Taxes. Token holders are solely responsible for determining if the transactions contemplated herein are subject to any applicable taxes whether in their home country or in another jurisdiction. It will be the sole responsibility of Token holders to comply with the tax laws

of any jurisdictions applicable to them and pay all relevant taxes.

4.2. Disclosure of Information. Personal information received from Tokens holders, the information about the number of tokens owned, the wallet addresses used, and any other relevant information may be disclosed to law enforcement, government officials, and other third parties when Company is required to disclose such information by law, subpoena, or court order. Company shall at no time be held responsible for such information disclosure.

4.3. Risk of Insufficient information. Tokens are at a very early developmental stage and its philosophy, consensus mechanism, algorithm, code and other technical specifications and parameters could be updated and changed frequently and constantly. While the Whitepaper contains the up-to-date key information related to Tokens at the date of the Whitepaper, it is not complete nor is final and is subject to adjustments and updates that Company may make from time to time. Company is not in a position, nor obliged to report on every detail of the development of Tokens and other elements of the system presented by Company and therefore will not necessarily provide timely or full access to all the information relating to the Tokens, but will use reasonable efforts.

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