ATHENA

Athena lab s.r.o.

October 12, 2017

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

Notice

Any information contained in this whitepaper may in no circumstances be interpreted as investment, legal or tax advice, urge or incentive. You are urged and advised to consult your own advisors concerning the legal, tax, economic, financial and other aspects associated with the participation in the Athena crowdsale.

The Athena lab s.r.o. declares that, if not prohibited by applicable laws, it shall use 35% of its net profit for the previous quarterly to buy Athena tokens (for the spot price on the markets) and burn such purchased Athena tokens starting from Q1, 2018.

Athena ethereum address:

0x93f43701f0c06da8e4a30a5fdb4ca236dc89e792

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

Abstract

The Athena Project is a unique strategy that attempts to control human emotions. The best, most successful trader is still only human, and so he is subject to the influence of emotions which bring about an increased risk of failure. If human decision-making is influenced by emotions, it can no longer be considered fully rational. The biggest problem with this is that one may not realize he is under the influence of the emotions that obscure his recognition skills. The Athena project aims to get your emotions under control in order to help reduce the risks of bad decisions.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

Contents

Contents 4
1. Vision 7
2. Problem 7
3. Theoretical basis 8
3.1. Emotions 8
3.2. Neural networks 10
3.3. Behavior economy 12
4. Solution 14
4.1. Data mining for emotional analysis 14
4.1.1. Camera 14
4.1.2. IR camera 14
4.1.3. Heart rate 15
4.1.4. Retina 15
4.1.5. Direct brain scanning 15
4.2. Data mining for performance analysis 16
4.2.1. User annotations 16
4.2.2. Stock exchange data 16
4.3. Blockchain technology 17
4.4. Patent 17

Abstract
Contents
Vision
Problem
Theoretical Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

5. Application 17
5.1. Traders 17
5.2. Aviation 18
5.3. Automotive 18
5.4. Financial execution 19
5.5. Call Centers 19
5.6. Military 19
6. Profit 20
6.1. Profit income 20
6.2. Profit distribution 20
7. Roadmap 21
8. Crowdsale 23
8.1. Crowdsale (ICO) 23
8.1.1. Time Bonus 23
8.1.2. Quantity Bonus 24
8.1.3. Early Bonus 25
8.2. Verification of applicants 25
8.3. Token supply 26
9. Use of resources 26
9.1. Level 0: Up to 0,5m EUR 27
9.2. Level 1: 0,5 mil - 2 mil EUR 27
9.3. Level 2: 2 mil – 10 mil EUR 28
9.4. Level 3: More than 10 mil EUR 28

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

10. Athena research team 29
10.1. Core team 29
10.2. Advisors 32
11. Athena lab s.r.o. 34
12. Legal 35
13. References 41

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

1. Vision

Many companies are searching for software that can analyze past data to predict the future in the financial markets. This includes the use of various advanced neural networks and the recognition of events that influence the market. They are trying to create devices that can anticipate the future.

We state that such a device already exists:

the brain of a successful trader who is consistently profitable

When trading, pure logic is important, but there is an enemy of logic – emotion.

"Emotion is a good mentor, but it is a very bad master."

2. Problem

A person who can predict market developments with a high probability is still influenced by emotions that can cause him to make negative business decisions, and/or decline business opportunities with the potential to generate greater profits.

By identifying the stages where emotions interfere with pure logical decisions, elimination of a portion of loss, or gain can be achieved.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

3. Theoretical basis

3.1. Emotions

In ancient Greece, the famous physician Galen pointed out the relationship between emotions and the brain. At that time, people did not trust him and held Aristotle's view that the heart was the seat of emotions. Today, we know that the brain is the most significant contributor to the formation of emotions, and now experts consider it their "seat". For example, we are able to distinguish emotional signals (and their meaning) from the brain stem. The emotional signal in turn goes to the limbic system, which is responsible for our reactions, control, or lack of control of the emotion. The limbic system plays the most significant role concerning emotion - for example, it allows us to interpret our memories, evaluate emotions - pleasant or unpleasant, threatening etc., it causes us feelings of fear, anger, or well-being. Another important part of the brain affecting emotions is the basal ganglia. They hold a sort of control over the outward manifestations of emotions; to so-called "holds our emotions at bay", and also to process and evaluate emotional reactions. For example, we may fear a shadow in the dark, but the fear disappears after we find out that it is a mere tree. Then there is a feeling of relaxation, which is the relief and "care" provided by the cerebral cortex.

The basic features are:

- Subjectivity - people react differently and at different intensities to the same situation
- Spontaneity - they start spontaneously and can be misinformed by reason
- Up-to-date - come immediately and immediately after the event or remembered it
- Object - refers to a specific situation, experience, or memory

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

• Polarity - usually divided into pleasure/dislike; rarely ambivalent

• Impact on memory - emotional experiences are easier to remember, but very strong emotions can reduce the ability to memorize (panic or fear cause displacement of the experience in memory)

Because emotions are instilled through experience, they prepare individuals to respond to specific situations - fear alerts and protects us from potential dangers, which leads to a sort of self-regulating hierarchy of values.

Emotions can be classified according to their intensity and duration:

1. Effect - a very intense and short-lived emotion characterized by a rapid rise, stormy course, and lack of rational control
2. Mood - Low intensity and long-term, affecting attention, memory, motivation, and thinking.
3. Passion or long-term emotional relationship - a very intense, long-lasting emotion, often affecting the whole person and his actions. He is bound to a particular being (e.g., love for a certain person, or a domestic pet), object (such as a stuffed animal), ideas (religion), or activities (philately, football, etc.).

Furthermore, we can classify emotions by their character or quality:

1. Higher emotions - related to ethics, morality, intellect or aesthetics. They are not innate and are influenced by society: sense of justice, truth, honor, shame, curiosity, altruism, empathy, sense of beauty.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

2. Lower emotions - also referred to as basic emotions. These are associated with instincts. Most authors distinguish between 8 basic emotions, and others are their derivations: anger, fear, joy, acceptance, reluctance, anticipation (expectation), surprise, sadness.

It is possible to **define emotions** such as psychic and social processes of subjective experience of positive or negative experience. They are accompanied by physiological changes such as heartbeat, breathing and motor symptoms in the form of gestures and mimics.

3.2. Neural networks

Since computer technology began, people have been trying to make computers learn from gathered data; for example, how to diagnose an illness from its symptoms or how to find new gold deposits from test drillings or aerial photographs. In many situations, these **expert systems** have been successful.

One of the technologies for computer learning (more commonly called **machine learning**) are neural networks. Neural networks are designed to simulate the human brain in a simplified manner. For a long time, they were considered a sub-optimal method of learning and more direct machine learning methods were preferred – until recently.

Only five years ago, a new era of machine learning began using neural networks. Until then, expert systems had been learning from detected patterns that were fixed and unchangeable. The breakthrough was to let the network learn from data patterns on its own. This is a very difficult task requiring a great deal of computing power, but it emerged using general purpose programing on

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

graphics cards and easily rentable cloud computers. These new neural networks detected patterns several layers deeper than before (up to around 10 layers). This method is called **deep learning** for this reason**.**

Very soon afterward, deep learning systems became the best in carrying out various machine learning tasks. These began with image recognition, but soon traversed into voice analysis, text analysis, voice synthesis, and language translation.

Google Translator today is statistically better than a human translator. AlphaGo has mastered the game of Go, which was the last board game resisting computer domination. Siri, Google Home, and Amazon Echo can analyze a person's voice, words, intent, find appropriate answers, and read these answers back to them in a synthesized voice. Closed captions are available for most of the videos on YouTube. These systems are all based on deep learning.

What is the future? Where are we heading? Maybe fully autonomous intelligent machines will emerge. Maybe it will take only a few years, or many decades. We at ATHENA believe that machines should guide people in their decisions, instead of deciding for them. There are many scientific teams and companies doing that. They analyze specific situations; cars on the road, faces in a camera, matching voice patterns, analyzing movements, reading and translating street signs... We want to do something different. We want to help people understand themselves, to help them know their strengths and their weaknesses, when to trust their decisions, and when to avoid them because they are clouded by emotions. To do this, we are using the best tool available today to make it happen – neural networks.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

3.3. Behavior economy

The Athena project has its theoretical foundations in behavioral economics. In the narrower sense, this can be understood as a new branch of economics, and in the broader sense as a separate scientific discipline that overlaps with psychology and sociology, from where its knowledge is derived.

Behavioral economics deals with human behavior as well as economics, but unlike conventional economic theory, it approaches the concept of human rationality differently. Classical economics works with the assumption that a fully rational person acts to maximize his or her profit and benefit. Classical economics also admits that one can be mistaken, but he is expected to learn from his errors and not to repeat them. Behavioral economics works upon the concept of limited rationality. Thus, it still uses the premise that a rational person seeks to maximize his profit, but it also identifies the psychological and cognitive influences that may prevent him from doing so. Behavioral economics identifies these influences and explains their causes and impacts on human behavior and decision-making. At the same time, it states that people do repeat their mistakes as well. The first step in avoiding an error is to realize its existence. The Athena project uses this knowledge and, to some extent, extends it into the psychosomatic expressions of the emotional state of man. Every emotional state has its own specific biological manifestations that can be identified and recognized, including its level of intensity. Based on this, we may then warn people of the errors to which their current emotional state may lead them. For example, as the American psychologist and economist Dan Ariely wrote in his 2006 article, “The Heat of the Moment”, published in the Journal of Behavioral Decision Making, it was proven that an excited person is willing to undergo a one-third to one-half greater risk than a person who remains calm.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

The founders of behavioral economics, Israeli psychologists Daniel Kahneman and Amos Tversky, published the 1979 article “Prospect Theory: An Analysis of Decision under Risk”. Daniel Kahneman received a Nobel Prize in Economics in 2002 for this article, bringing behavioral economics into the mainstream.

This work highlighted the shortcomings of the normative theory of expected utility [J. Neumann; O. Morgenstern 1944], which had at its basis assumed risk-taking by a rational participant. Neumann and Morgenstern introduced mathematical principles of rational behavior and risk-taking through several axioms which subsequently served as a basis for predicting human behavior. Prospect theory challenges these assumptions through behavioral biases. For example, behavioral predisposition not only concerns the value of individual options presented, but also the manner in which they are presented. A classic example is Asian Disease, where an option to save infected people or their deaths affects decision making, even with the same result. [Tversky, A .; Kahneman, D .; 1974]

However, Tversky and Kahneman were not the first to question the theory of expected utility. At a Paris conference in 1953, French mathematician Maurice Allais had on the basis of experiment, already demonstrated that people do not behave according to the theory of expected utility [Allais, M .; 1953]. This experiment was followed by others who confirmed the invalidity of the independent decision-making axiom [Morrison, D .; 1967] [Raiffa, H .; 1968] [Allais, M .; Hagen, O .; 1979]

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

4. Solution

So, we have a problem. The problem is to classify a person's emotional state and link it to their performance. For the solution, we need to gather data and then see what influences performance and what does not. The system must be able to generalize from measurements retrieved from many people, but also able to generalize from measurements taken from a single person.

4.1. Data mining for emotional analysis

When gathering data, we can use various sources. Lie detectors have been used for a long time and we know their strengths and weaknesses. Our simplest data gathering devices are very similar. The different data sources convey only part of the information that we want to retrieve. Each indicator is a signal for us to analyze. Some signals might be redundant, and some may complement each other. We must only put all of them together.

4.1.1. Camera

The basic method of monitoring physiological changes is by means of a camera with resolution sufficient to determine even minor changes in the face of the subject. Subsequently, these data are converted to mathematical matrices that can be analyzed using a neural network.

4.1.2. IR camera

A thermal camera can detect temperature zones in the face and is also capable of detecting thermal changes over time as the emotional state of the subject under consideration changes. Subsequently, the data is again converted to mathematical matrices for further analysis.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

4.1.3. Heart rate

Heart rate bracelets or smart watches are commercially available to monitor heartbeat. During observation of the subject, they detect the current heart rate and the data is passed to the system for analysis.

4.1.4. Retina

The eye is one of the most complex organs of the human body and can reveal a great deal of information about the subject. In addition to changing size and the speed of responses, it is possible to monitor the view vector. Using a camera placed on glasses, it is possible to monitor the eye in close detail and then analyze the data again using the mathematical matrix.

4.1.5. Direct brain scanning

EEGs are readily available to monitor basic brain activity. The disadvantage is that the amount of EEG data is considerably limited. For a more accurate analysis of brain processes, a magnetoencephalograph (MEG) should also be used. It is currently the most advanced, real-time monitoring system for the human brain. Compared to MRI, a strong magnetic field is not used and it is possible to position a monitor in front of the subject to see the precise responses of individual parts of the brain.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

4.2. Data mining for performance analysis

Emotional signals will not be very useful if we cannot link them to performance. So, we also need to measure performance. These measurements must be tailored for a particular task. In the case of financial traders, we can compare their exact physical state with the results of their trades.

4.2.1. User annotations

A person knows only when looking back if a certain trade was successful or not. We want to provide them with a tool that records these successes or failures and creates short-term forecasts based on the processed data.

4.2.2. Stock exchange data

We can analyze historical stock exchange data to see when it was better to buy or sell at specific times. We have economic specialists on our team who know how to analyze past market events. Data gathering from stock exchange will be an important part of our system.

Absolutely clear market data is required to eliminate the risk of brokers changing fees and margins during trading. We will set up our own xApollo brokerage licensed in the EU to avoid this. It will be primarily for our own use, but we will of course also offer service to the public.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

4.3. Blockchain technology

The above-mentioned data is very personal, so it is possible to determine how a particular person actually experience emotions. This type of data must be secured to ensured its credibility. The ideal option for doing this is with blockchain technology. A closed, encrypted data system working in a blockchain designed for corporate use only is the ideal solution.

4.4. Patent

The patent application entitled “Method of predicting a subject's failure, devices for performing this method and their use” was filed on September 27, 2017 with the Industrial Property Office of the Czech Republic as file number PV 2017-591. We are solving the patent for the USA and have the preferential right to patent it anywhere else in the world for 12 months. We do expect two more patents, but require more data research first.

5. Application

5.1. Traders

The basic application for xAthena (platform) is in the field of financial market trading. Anyone who has ever participated in this knows that it is associated with a great deal of emotional effort. Situations change very rapidly and people win or lose. Emotional states are then carried into the future which influence subsequent business decisions. If a trader is in an overexcited state, he can underestimate risk and make a decision that will negate his successes. If a trader is depressed, he may be influenced by an aversion to risk and avoid potential gain.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

5.2. Aviation

Another use of xAthena can be found in transport, especially aviation. Disturbed people perform inadequately. For example, hundreds of lives depend on their decisions of air traffic controllers. An emotionally affected person has a longer reaction time than a “normal” person. A nervous person, in contrast, makes hasty decisions based on superficial information because his decision-making process is taken over by instincts.

5.3. Automotive

Most current accident prevention systems focus on external influences such as weather or obstacles to communication, and focus only minimally on the driver himself, and if so, it is usually only a fatigue check. However, the entire emotional range can affect the driver, for example, the aggressiveness of drivers on the roads is constantly increasing and this is associated with anger. If a car can detect a certain emotional response, it could warn the driver when there may be a safety issue. The devices would be very simple; pulse sensors in the steering wheel and retinal sensing and facial thermal cameras which are not difficult to install. In addition, it is possible to measure variances of driver status by their reaction to the pedals, the movement of the steering wheel, etc. The output could be, for example, to signal that it is a good idea to park for a coffee break, or, further in the future, to activate automatic car operation.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

5.4. Financial execution

Every good manager who wants to manage his team and company successfully must first know himself and be able to control himself. Athena will give the user the feedback to help him realize what he should or should not do.

5.5. Call Centers

As an example for corporate use, xAthena can be well-suited to call centers. Employees of call centers are always in contact with customers and must often listen to complaints and insults. Their negative effects can be cumulative, and the affected employee can then transfer these negative emotions to clients, thereby reducing success. If a manager has insight into the current emotional attitude of his employees, he could better assist them.

5.6. Military

xAthena also has military use as a technology that can save lives. There is a situation no more intense than a battle, not only for the soldiers in the field but also for commanders managing operations. They have to make crucial decisions with a clear mind when placing soldiers in dangerous positions, and if the commanding officer is under high emotional pressure, the wrong decision could be made. At times such as this, command can then be shifted to another officer.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

6. Profit

6.1. Profit income

There are several profit streams:

- Licensing to use the patents
- Our monitoring platform
- Our broker xApollo
- Our team of traders using our platform
- Selling monitoring equipment designed for xAthena
- Renting unused assets for commercial purposes (e.g. the MEG can be used for medical diagnoses on weekends and nights, but ONLY while we are not using it)

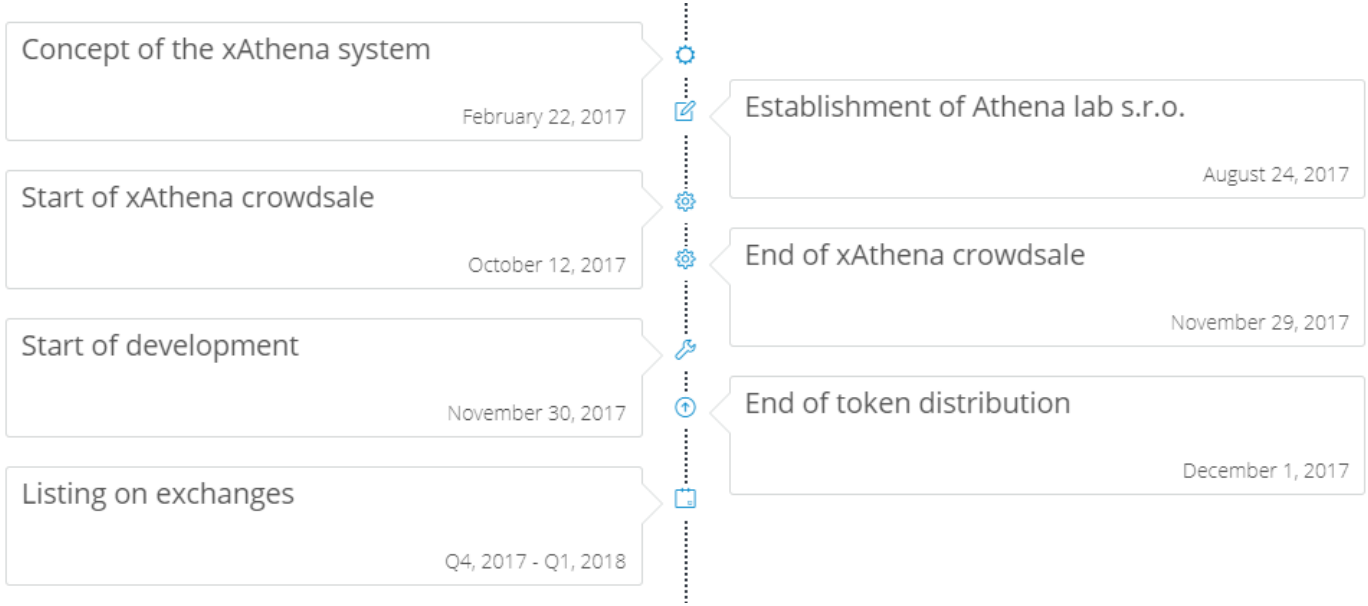
6.2. Profit distribution

The Athena lab s.r.o. declares that, if not prohibited by applicable laws, it shall use 35% of its net profit for the previous quarterly to buy Athena tokens (for the spot price on the markets) and burn such purchased Athena tokens starting from Q1, 2018

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

7. Roadmap

Roadmap for 2017:



Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

Roadmap for 2018:

Start of development for alternative uses

Development of xAthena for the automotive, aviation, and corporate sectors.

Q1, 2018

Beta version of xAthena

Estimated completion stage of the first beta product for traders. Beta will be closed to public.

July, 2018

Broker xApollo

Our licensed broker to provide xAthena technology to traders.

September, 2018

Final version of xAthena

Final version of xAthena available for public sale.

October, 2018

Beta for alternative uses of xAthena

Completion of beta products for the automotive, aviation, and corporate sectors.

Q4, 2018

Roadmap for 2019:

English audit of the company

An audit of Athena lab s.r.o. by an international auditing company will be published in English on our website.

Q1, 2019

Final alternative xAthena applications

Final releases of the xHermes, xMetis and xHephaistos systems.

Q2, 2019

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

8. Crowdsale

The Athena token is based on Ethereum technology. Only Ethereum will be accepted for the crowdsale.

Tokens cannot be traded until November 30, 2017.

Sending of tokens is provided through our smart contact and is fully automatic.

8.1. Crowdsale (ICO)

Starts October 12, 2017 at 17:00 UTC and ends November 29, 2017 at 23:59 UTC

The crowdsale (ICO) price for 1 ETH is 800 Athena tokens.

There are three bonus types for the Crowdsale (ICO): Time Bonus, Quantity Bonus and Early Bonus.

8.1.1. Time Bonus

The time bonus is awarded according to the date and time of Ethereum being credited to our account, UTC time.

1st ROUND: Oct 12 at 17:00 - Oct 15	**+ 40 % Bonus**
2nd ROUND: Oct 16 - Oct 20	+ 25 % Bonus

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

3rd ROUND: Oct 21 - Oct 25	+ 15 % Bonus
4th ROUND: Oct 26 – Oct 31	+ 10 % Bonus
5th ROUND: Nov 1 - Nov 7	+ 6 % Bonus
6th ROUND: Nov 7 - Nov 14	+ 3 % Bonus
7th ROUND: Nov 14 - Nov 29	none bonus

The bonus is automatically calculated according to the ETHs sent to Athena ethereum wallet.

Example

During the first round, if 25 ETH are received, the amount for the Time Bonus will be calculated as follows: (25 x 800) x 40% = 8,000 Athena tokens.

8.1.2. Quantity Bonus

The Quantity Bonus amount is set according to the amount of ETH sent to Athena ethereum wallet:

- For 50 ETH and more, the bonus is 5%.
- For 125 ETH and more, the bonus is 15%.
- For 500 ETH and more, the bonus is 30%.

The bonus is calculated according to the ETHs sent to our account.

Example:

For a participation of 130 ETH, the bonus amount will be calculated as follows (130 x 800) x 15% = 31,200 Athena tokens.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

8.1.3. Early Bonus

The Early Bonus is limited to a certain amount of bidders who are the first to exceed certain limits:

- For 10 ETH or more - 1 200 ATN extra (10 slots available)
- For 20 ETH or more - 2 800 ATN extra (5 slots are available)
- For 50 ETH or more - 7 000 ATN extra (5 slots available)
- For 100 ETH or more - 18 000 ATN extra (5 slots available)
- For 250 ETH or more - 50 000 ATN extra (3 slots available)
- For 500 ETH or more - 110 000 ATN extra (3 slots available)
- For 750 ETH or more - 240 000 ATN extra (2 slots available)
- For 1000 ETH or more - 500 000 ATN extra (2 slots available)

The Early Bonus does not affect the Time Bonus and the Quantity Bonus. This is a one-off amount that is sent when the condition is met, i.e., sending ETH within the given limit first.

8.2. Verification of applicants

It is necessary to fulfill two requirements to participate in the crowdsale:

- Identification and registration of the Athena buyer
- Sending Ethereum to Athena ethereum wallet

The order of events does not matter, but both must be fulfilled. In the event that only Ethereum is sent and the applicant is not be verified within 48 hours afterward, ETH will be returned, as well as tokens.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

8.3. Token supply

The total number of tokens is set at 200,000,000 Athena.

The breakdown is as follows:

- Crowdsale distribution (ICO): 192,000,000 ATN (96%)
- Bounties and giveaway: 8,000,000 ATN (4%)

Unsold coins will be burned on November 30, 2017.

Soft cap is USD 200 000.

9. Use of resources

Selected resources will be used for research and development of xAthena platforms and directly connected projects, such as xApollo. The expected allocation of funds is below:

- 5% will be used for crowdsale (ICO) promotion
- 35% will be used for core development (f.e. equipment and technology)
- 30% will be used for operational (f.e. wages)
- 15% will be used for marketing and sales
- 15% will be used for legal services

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

9.1. Level 0: Up to 0,5m EUR

Basic office equipment and to advance current development.

- 2 test subjects - traders
- 3 senior developers
- 1 tester
- 2 public relations staff
- 2 salespeople
- 1 economist

9.2. Level 1: 0,5 mil - 2 mil EUR

There will be an EEGs for traders. The entire group will be followed by a psychologist to ensure that the maximum quality of data is obtained.

- 5 test subjects - traders
- 1 psychologist
- 4 senior developers
- 1 tester
- 2 public relations staff
- 4 salespeople
- 1 economist
- 1 legal expert

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

9.3. Level 2: 2 mil – 10 mil EUR

There will be an EEGs for traders and one magnetoencephalograph. The entire group will be monitored by a team of psychologists to ensure that the maximum quality of data is obtained.

- 25 test subjects - traders
- 2 psychologists
- 6 senior developers
- 2 testers
- 3 public relations staff
- 10 salespeople
- 1 economist
- 1 legal expert

9.4. Level 3: More than 10 mil EUR

There will be an EEGs for traders and one magnetoencephalograph. The entire group will be monitored by a team of psychologists to ensure that the maximum quality of data is obtained.

- 50 test subjects - traders
- 4 psychologist
- 2 psychiatrist
- 10 senior developers
- 3 testers
- 4 public relations staff

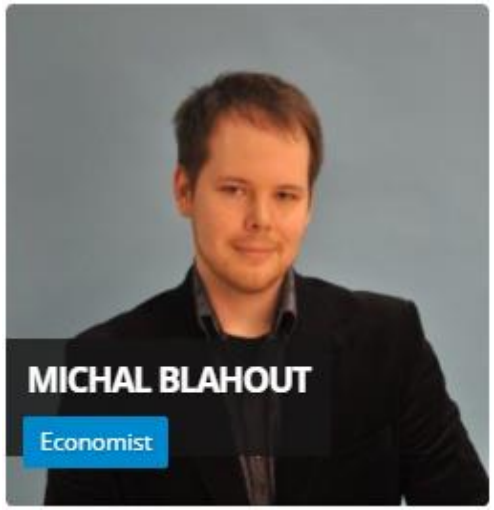
Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

- 25 salespeople
- 1 economist
- 1 legal expert

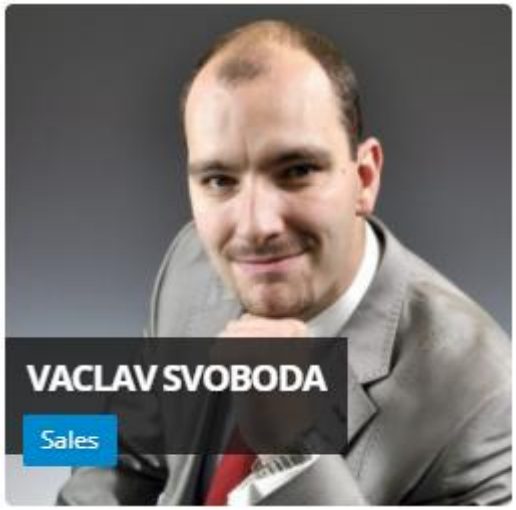
10. Athena research team

10.1. Core team

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References



Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References



Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

10.2. Advisors

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

11. Athena lab s.r.o.

We are a start-up located in Prague, Czech Republic. Our office address is Kovářská 488/16, Prague 9, Czech Republic. We are a new company created by a team of great people, experts in their professions who are excited about the project.

Office:

Address: Kovářská 488/16, Prague 9, Czech Republic

Email: ask@athenacoin.io

Main comunication: slack.athena.io

Company:

Full name: Athena lab s.r.o. (like Ltd. or GmbH)

Headquarters: Moskevská 696/70, Vršovice, 101 00 Praha 10, Czech Republic

Identification number: 06378358

File mark: Section C, file 281236, filed with the Municipal Court in Prague

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

12. Legal

INTRODUCTION / WARNING

This documentation ("**Athena Token Documentation**") has been produced to provide the potential participants in the crowdsale of the Athenas ("**Crowdsale**") as the cryptocurrency emitted by the Athena lab s.r.o, ID No. 06378358, having its registered office at Moskevska 696/70, Vrsovice, 101 00 Praha 10, the Czech Republic (" **Athena lab s.r.o.**") with the basic information regarding the Crowdsale. Should you decide to participate in the Crowdsale and to buy Athenas for Ethereum, you are supposed to base this decision on your sole assessment of the Athena lab s.r.o., its business projects and the Athenas as described in this Athena Token Documentation and relating documentation (such as the business plan of the Athena lab s.r.o.) including, but not limited to, the associated risks, as well as the conditions of the Token. You should assess yourself, with your own advisors if necessary, whether participating in the Crowdsale is suitable for you, considering your personal income, financial situation and expectations. In case of any doubt about the risk involved in participating in the Crowdsale, you should abstain from participating.

In light of the above you should particularly consider that currently there is no relevant legal regulation of the virtual currencies in the Czech Republic, that it is difficult to estimate parameters of the possible future legal regulation, that the virtual currencies are extremely unstable, that the Athena lab s.r.o. shall not assume any responsibility or guarantee for a prosperity of the Athenas, prosperity of its business itself and so on.

For avoidance of any doubt, Athena as the cryptocurrency does not constitute and / or represent any financial instrument, i.e. Athena has NOT a form of debenture nor any other security and so on.

Any information contained in this Athena Token Documentation may in no circumstances be interpreted as investment, legal or tax advice, urge or incentive.

You are urged and advised to consult your own advisors concerning the legal, tax, economic, financial and other aspects associated with the participation in the Crowdsale.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

MODIFICATIONS OF ATHENA TOKEN DOCUMENTATION

Athena lab s.r.o. reserves the right to update and modify this Athena Token Documentation at any time. Should you decide to participate in the Crowdsale, you will be required to declare to have read and understood Athena Token Documentation in the form and wording valid and effective at the time you participate in the Crowdsale. The Athena lab s.r.o. assumes no responsibility to keep you updated about changes made to this Athena Token Documentation and you are required to carefully read and familiarize yourself with the last version.

NO RIGHT OF WITHDRAWAL

Should you decide to participate in the Crowdsale, you are supposed to (i) transmit respective amount of ethereum to <will be published Oct 12, 2017> and (ii) duly complete (fill in) respective registration form (including Athena Token Order, i.e. order form containing demand for exchange of the ethereum for the Athena) accessible on <will be published Oct 12, 2017>.

Should your registration be approved by the Athena lab s.r.o., respective contract on exchange of the ethereum for the Athena is executed between the Athena lab s.r.o. and you as the participant.

Once your registration is approved and confirmed by the Athena lab s.r.o. the participant shall not be entitled to withdraw from the above contract and shall not be entitled to request a return of the ethereum offered for the exchange.

Should your registration be withheld (i.e. not approved) by the Athena lab s.r.o for whatever reason, the Athena lab s.r.o. shall transmit with undue delay your ethereum back to your wallet in the entire amount offered for exchange; provided, however, that Athena lab s.r.o. shall be entitled to deduct from respective amount the transactional cost amounting to 200.000 gas.

PERSONAL DATA

In order to duly and validly submit the Athena Token Order and the registration form (please see above) you will be supposed to provide Athena lab s.r.o with certain personal data. These personal data will comprise your full name and address, date of birth, birth number (if appropriate), telephone number, email address, relevant sides of your ID (i.e. sides with basic data, including ID number, date of expiry etc., and with photo). Such collected data solely serve the purpose of processing the Crowdsale. Moreover, such data are gathered to fulfill and meet

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

relevant legal requirements and conditions. Personal information will in no event be communicated or released to third parties. However, please be advised that in accordance with applicable Czech laws the Athena lab s.r.o. may be obliged to provide these personal data to respective Czech authorities.

In accordance with the Czech Personal Data Protection Act you grant your consent to the Athena lab s.r.o. to the processing of your personal data. This consent is given by means of filling and submitting the Athena Token Order and the registration form (please see above).

By means of filling and submitting the Athena Token Order and the registration form (please see above) you represent and confirm that you have been informed about your rights to: access and adjust your personal data, lodge written, motivated request to cease processing your personal data, lodge objection against processing your personal data, as well as that providing your personal data is voluntary.

The purpose of the above personal data processing is: (a) fulfillment and performance of contract on exchange of the ethereum for the Athenas and (b) compliance of applicable provisions of the Czech laws, in particular the Czech Money Laundering and Terrorist Financing Act.

The consent is granted for indefinite period of time. Except for the exceptions provided by the Czech law, the Athena lab s.r.o. shall be obliged to delete the personal data (a) once the purpose for which the personal data were processed expires, (b) once the consent to the processing is revoked.

RISKS

If you decide to participate in the Crowdsale without proper consultation of tax, legal and/or economic consequences with relevant advisors, taking into account your personal circumstances, you might not be able to fully assess the tax, legal and economic impacts of your participation in the Crowdsale.

Future regulation in the area of cryptocurrencies in the Czech Republic may have a negative impact on the Athena lab s.r.o. as it might have a significant negative impact on the ability of the Athena lab s.r.o. to the future developing of xAthena platform and therefore it might have a significant negative impact on the market value of Athenas.

Moreover, even legally non-binding statements of governments and public authorities can have a strong influence and effect on the market value of virtual currencies such as the Athenas.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

If you are resident in a country or territory that has declared the trade with virtual currencies or the participation in the crowdsale to be illegal, you may face administrative or criminal charges when participating in the Crowdsale.

The Athenas are not yet listed on a virtual currency exchange. A low liquidity on such exchanges or legal restrictions imposed on the tradability of the Athenas could have a material negative impact on the market value of the Athenas and your ability to trade Athenas.

The market value of the Athenas may not develop as expected. Moreover, the market value of the Athenas may be zero both at the moment of emission and whenever in the future.

Virtual currency exchange platforms are usually not state controlled. Continuous operation of these platforms cannot be guaranteed by the Athena lab s.r.o.

The Athena lab s.r.o. uses the Ethereum blockchain technology for the Athena tokens. The Athenas are therefore dependent on the future continuation of this blockchain. Also, Ethereum is a young technology. A possible hacking attack cannot be ruled out and excluded. A discontinuation of Ethereum could lead to a severe drop of the market value or even discontinuation of the Athenas as a whole.

Athenas are stored on the Ethereum blockchain which uses private keys to validate transactions. If a Participant or Token Holder loses their private keys, they might not be able to access HEROs in the future. If a Participant or Token Holder makes a transfer by accident, they might not be able to get a refund.

In light of the above risks, uncertainties and assumptions, future events described in this Athena Token Documentation or relating documentation may not occur. The Athena lab s.r.o. does not assume any obligation to update any statement or to conform these statements to actual events or developments.

All of the above risks and uncertainties shall be assumed and born solely by the participant.

NO RESPONSIBILITIES NOR OBLIGATIONS OF ATHENA LAB S.R.O.

Under any circumstances, the Athena lab s.r.o. shall not be responsible towards the participant for the market value nor prosperity of the Athenas. In that connection, Athena lab s.r.o. shall not be responsible and provide no guarantees for the prosperity of its business and its progress.

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

The Athena lab s.r.o. does not assume and shall have no obligations, liabilities or duties towards the participants in relation to the Crowdsale.

The Athena lab s.r.o. shall only be responsible for (i) execution of exchange of the ethereum for the Athena in accordance with respective Athena Token Order or for (ii) the return of ethereum offered by respective participant for exchange, if the registration of respective participant is withheld (i.e. not approved) by the Athena lab s.r.o.

Notwithstanding the foregoing, the Athena lab s.r.o. declares that, if not prohibited by applicable laws, it shall use 35% of its net profit (if reached) for the previous previous quarterly to buy Athenas (for the spot price on the markets) and burn such purchased Athenas starting from Q1, 2018.

And, further, Athena lab s.r.o. declares that it shall invest ethereum in the development of its business activities, including formation of the background, hiring employees and/or associates etc.

MARKETS

This Athena Token Documentation may only be applied, and the Crowdsale may only be realized and implemented, in / for such countries and territories where the use of and participation in the Crowdsale is not prohibited by applicable laws (the "**Accepted Markets**").

This Athena Token Documentation does not constitute an offer (to exchange ethereum for Athena) to any person located at and / or residing in any country or on any territory where emission of, trading in and/or any other handling of the virtual currencies is prohibited by applicable laws or subject to the approval any authority.

Residents of the following countries and territories are not allowed to participate in the Crowdsale:

- Bangladesh
- Bolivia
- Canada
- China
- Ecuador

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

- Japan
- Kyrgyz Republic
- South Korea
- USA

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

13. References

Allais, Maurice. "L'extension des théories de l'équilibre économique général et du rendement social au cas du risque." Econometrica, Journal of the Econometric Society (1953): 269-290.

Allais, Maurice, and Ole Hagen. "Expected utility and the Allais paradox." Reidel, Dordrecht (1979).

Ariely, Dan, and George Loewenstein. "The heat of the moment: The effect of sexual arousal on sexual decision making." Journal of Behavioral Decision Making 19.2 (2006): 87-98.

Barber, Brad M., and Terrance Odean. "Trading is hazardous to your wealth: The common stock investment performance of individual investors." The journal of Finance 55.2 (2000): 773-806.

Bobbie, Patrick O., et al. "Electrocardiogram (EKG) data acquisition and wireless transmission." WSEAS Transactions on Systems 3.8 (2004): 2665-2672.

Demuth, Howard B., et al. Neural network design. Martin Hagan, 2014.

Han, Jiawei, Jian Pei, and Micheline Kamber. Data mining: concepts and techniques. Elsevier, 2011.

Kahneman, Daniel, and Amos Tversky. "Prospect theory: An analysis of decision under risk." Econometrica: Journal of the econometric society (1979): 263-291.

Kahneman, Daniel. Thinking, fast and slow. Macmillan, 2011.

Kosko, Bart. "Neural networks and fuzzy systems: a dynamical systems approach to machine intelligence/book and disk." Vol. 1Prentice hall (1992).

Abstract
Contents
Vision
Problem
Theoretical
Solution
Application
Profit
Roadmap
Crowdsale
Use of resources
Athena team
Athena company
Legal
References

Kruger, Justin, and David Dunning. "Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments." Journal of personality and social psychology 77.6 (1999): 1121.

Kyle, Albert S. "Continuous auctions and insider trading." Econometrica: Journal of the Econometric Society (1985): 1315-1335.

Morrison, Donald G. "Measurement problems in cluster analysis." Management science 13.12 (1967): B-775.

Myerson, Roger B., and Mark A. Satterthwaite. "Efficient mechanisms for bilateral trading." Journal of economic theory 29.2 (1983): 265-281.

Raiffa, Howard. Decision Analysis: Introductory Lectures on Choices Under Undertainty. Addison-Wesley, 1968.

Simon, Herbert A. "Human nature in politics: The dialogue of psychology with political science." American Political Science Review 79.2 (1985): 293-304.

Simon, Herbert A. "Rationality in psychology and economics." Journal of Business (1986): S209-S224.