



ADRENALINE



**CONVERT YOUR PASSION
INTO INNOVATION**



WHITE PAPER

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1. INTRODUCTION

1.1 Blockchain as a solid background for Adrenaline

Experience shows that the earlier you implement progressive technologies, the more you benefit from it.

This also applies to a blockchain – a completely new phenomenon in the world economy, that not only boosts the effectiveness of doing business and allows parties to exchange data and services almost immediately but also ensures an unprecedentedly high level of trust.

Paper money, banking systems, e-payments, e-commerce, etc. have dramatically changed the world we live in. These innovations stimulated economic activity and created systems that inspired the confidence necessary for the parties to work together, but none of them have managed to become trustless, while a blockchain is! So what does it mean to be “trustless”? Let’s take an example:

- “A” sends funds to “B” using VISA. What does this mean? First of all, that both A and B trusts to the third-party that debits A and credits B account. The third-party updates its ledger, while both “A” and “B” trust it by default.

Dealing with money always suggests entrusting to a third-party (be it VISA, MasterCard, or any other organization) that can’t fail. But things are different with a blockchain: everyone (not only “A” and “B” users but literally everyone connected to the

system) has a copy of the common public ledger, which means the system becomes trustless, as there is no need to entrust any data to a third-party. In a blockchain, everyone follows the same rules, and if a transaction violates these rules, it is rejected by other participants of the network.

The capabilities of a blockchain go far beyond the digital sphere and can have an impact on all aspects of the real economy. It replaces obsolete and restrictive business practices that harm international trade. As there’s no need in a single entity that manages the process, and the transaction data is stored in the public ledger, breaking a blockchain, especially a well-developed one with a solid hash rate, becomes almost impossible.

As a system that

- reduces risks and fees,
- ensures transparency, fast transactions, and decentralization,
- eliminates intermediaries,
- and encourages the emergence of new business models,

a blockchain was chosen to be at the core of the Adrenaline project.

Being blockchain-based, Adrenaline will not only utilize the advantages of PoS, Masternodes, and the Random Reward feature but also send a strong forward-looking message to the blockchain community.

1.2 Adrenaline as a win-win option for lovers of excitement

Along with the Proof of Stake concept and masternodes, Adrenaline provides users with the so-called Random Reward feature, which is a certain number of coins randomly distributed among masternode owners.

Under “randomly” we mean that the reward varies in both time and value.

Note that Random Reward is an additional feature and in no case affects your regular income from staking or masternodes.



2. OUR GOALS

2.1 Adrenaline Pay

We believe a steady growth of the project should be supported and followed by its integration beyond the crypto-world.

Adrenaline Pay will be used for payments both within the network – on the Adrenaline Bet platform and in the Adrenaline P2P Store and outside – on third-party betting services, exchanges, etc.

Adrenaline Pay connects buyers and sellers in the most convenient way: buyers pay for goods and services with ADN coins, while sellers receive payments in any convenient currency.

The comfortable use of Adrenaline Pay is ensured by

- a. plug-ins allowing popular CMS receive ADN payments;

- b. the gateway of an instant exchange of ADN to bitcoin or fiat through API of exchanges.

With Adrenaline Pay, the payment is simple:

- The client selects ADN as a payment option.
- The system recalculates the price of this or that good into the price in ADN coins depending on the actual average value of ADN on exchanges.
- The client pays in ADN coins, which are immediately exchanged for the currency chosen by the seller through the exchange API, and the payment goes to the seller's wallet. The seller receives his payment in a convenient currency (minus the withdrawal and transaction commission, which can be adjusted between buyers and sellers in the plug-in settings).

2.2 Adrenaline Bet

The capitalization of the international betting market is growing rapidly, and by integrating Adrenaline into the global betting system, we'll get more users on board and increase the demand for ADN coins.

1. Firstly, we will increase the awareness of Adrenaline to make it visible among big betting establishments and players. It will help us to reach out to a larger audience.
2. Secondly, we will create a global betting platform using ADN coins as the main currency as well as other currencies supported by Adrenaline Pay. Users will bet on any events and earn on it, while ADN holders will get some bonuses.

2.3 Adrenaline P2P Store

We will also launch the Adrenaline Store P2P platform where users will trade with each other, buying and selling any goods with ADN coins or any other currency supported by Adrenaline Pay.



3. TECHNOLOGY

3.1 Technical specification

Name Adrenaline

Ticker ADN

Algorithm BLAKE

Type PoS

Block time, sec 25

Block reward, ADN Floating (10-140)

Confirmations needed 6

Coins required for a masternode, ADN
10000

Masternode reward, ADN Floating (5-133)

Staking reward, ADN Floating (5-28)

Min PoS Age 60 min

Random Reward, coins/day Floating

Total supply 232 000 000

P2P Port 23202

RPC Port 23203

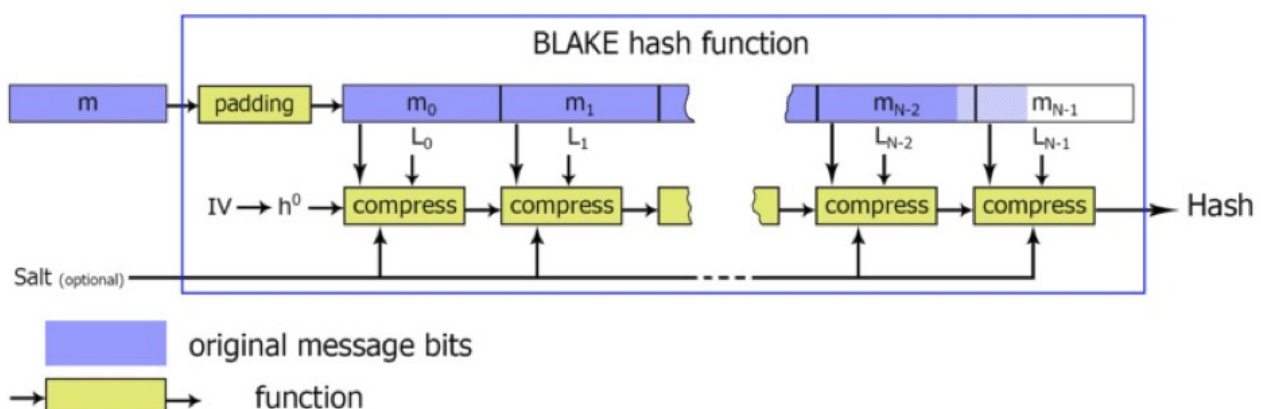
3.2 BLAKE algorithm

BLAKE is a cryptographic hash function developed by Jean-Philippe Aumasson, Willi Meier, Luca Henzen, and Raphael C.-W. Phan. It was first presented on the NIST hash function competition and became one of the five finalists. Relying on the ChaCha core function and the HAIFA structure, BLAKE is one of the simplest designs to implement.

Among BLAKE-256 and BLAKE-512, the latter was proved to be the best solution for Adrenaline. Having high-performance versatility and high-security margin, BLAKE-512 works with 64-bit words and produces 512-bit digests. It's built on the three core components:

1. The HAIFA iteration mode provides resistance to DoS attacks that tend to cause a false alarm of the protection system and thus lead to inaccessibility of the resource.
2. The internal local-wide-pipe structure protects against collisions.
3. The BLAKE algorithm is a modified version of ChaCha, which has a strong security.

However, switching to any other more productive algorithm is possible in the future.



3.3 Coin Mixing

Coin Mixing ensures high confidentiality and security of transactions by combining multiple inputs from different users in a single transaction with multiple outputs.

This makes the flow of funds almost untraceable (a slight chance to deanonymize a transaction appears only if a hacker takes control over 50% of all masternodes).

3.4 PoS as a reliable choice for Adrenaline

Developed by early enthusiasts Adam Back and Hal Finney, the Proof-of-Stake concept is widely used in advanced cryptocurrencies. Just like PoW, PoS is a way of achieving consensus among all member of the network. PoS is relatively young (used first back in 2011) and does the job that was previously done by miners, but why do we believe it is beneficial for Adrenaline members?

There are two main reasons:

Lower electricity costs. We all know the complexity of mining is growing without check, which sometimes becomes a big deal for miners who have to update their hardware in order to stay afloat. The PoS concept eliminates this problem by redefining the way in which members receive rewards. We don't want our supporters to spend their money on eternally-updated hardware and engage in the so-called arms race.

The impossibility of the 51% vulnerability along with better decentralization. Just like the controlling interest gives a shareholder dramatic influence over the actions of the company, 51% or more hash power gives a hacker a chance to double-spend his coins. The 51% vulnerability is almost impossible when it comes to a well-developed network like bitcoin, but it still bothers young blockchains with low hash rates. PoS works differently: no wealthy organization or a single member can control or attack the network, as it is economically unjustified.

Important: *an improved version of PoS, PoS 3.0 distributes rewards not only according to the number of coins/masternodes but also the time spent online. Simply put, the longer your wallet is online, the more you earn. We believe PoS 3.0 is fairer compared to the basic PoS system as it more accurately reflects the degree of user engagement.*



3.5 Masternodes

A masternode is a decentralized network server that performs functions unavailable to standard nodes.

These functions may include coin mixing, decentralized decision-making, instant transactions, etc. To run a masternode, a user has to buy a certain amount of coins and collateralize them to set up a network node configured in a special way and called a "masternode."

In practice, this means that you have to buy 10 000 ADN coins, send them to one address, and then start setting up your masternode by following our guide.

3.6 Masternode Expected Rewards and ROI

After setting up your first masternode, you will start to make some passive income. The expected value of your earnings is calculated as follows:

$$\frac{n \cdot b \cdot c}{m} \cdot p$$

where

n is number of your masternodes;

b is an average number of daily blocks

c is an actual block reward

m is a total number of masternodes in the network

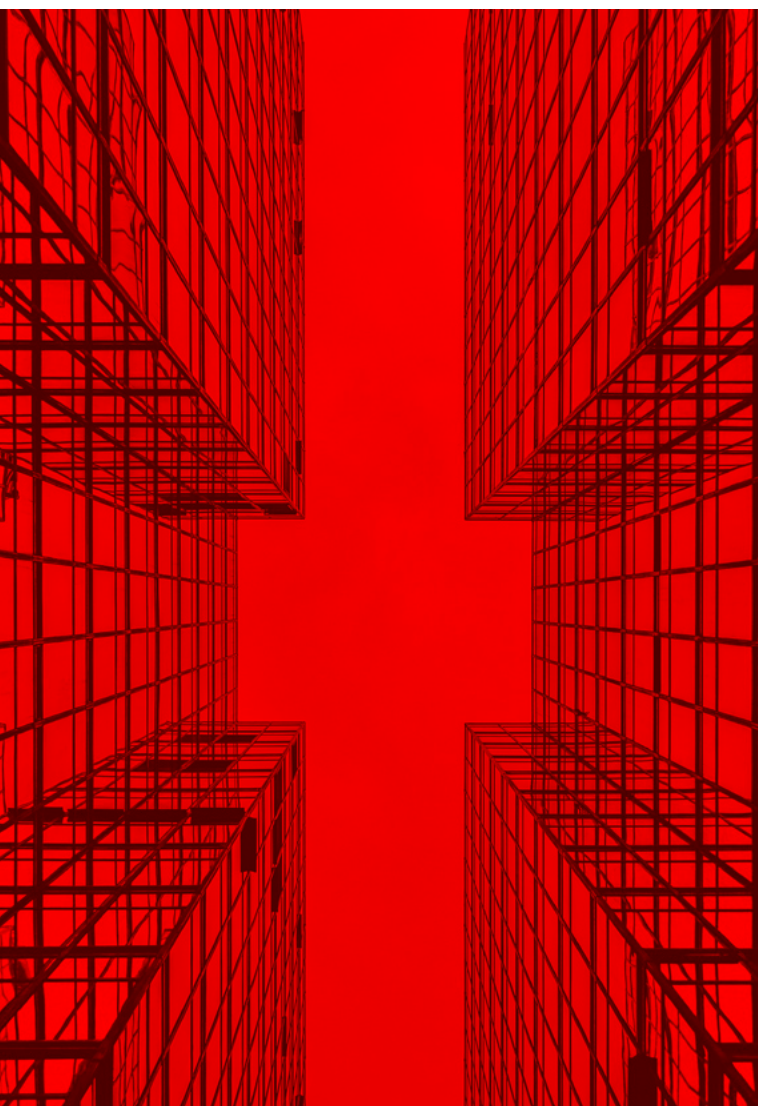
p is an average masternode payment

Thus, the fewer masternodes are in the network, the more each masternode owner gets. Given this, it's quite advantageous to be among the first onboard.

The ROI for running a masternode is:

$$\frac{\left(\frac{n \cdot b \cdot c}{m} \cdot p \right) \cdot 365}{1000} \cdot 100$$

where **n, b, c, m, p** are the variables from above.



3.7 Random Reward

Random Reward makes Adrenaline a great option for gamblers and provides every masternode owner a chance to get an additional worthy reward.

Random Reward Key Features

- Distributed 24 times a day.
- Issued randomly in between 30 minutes and 2 hours.
- A single Random Reward value starts at 400 and goes up to 2100 coins.
- The total daily fund for Random Reward goes up to 30 000.

Note that Random Reward is a bonus and doesn't reduce the amount of regular payments.

3.8 Reward distribution between masternode owners and stakers

To balance the rewards for masternode owners and stakers, as well as encourage both categories of users to support the project by holding ADN coins, we decided to change the block reward with time according to the table. The distribution is floating and will eventually come to an even number of ADN coins going to masternode owners and stakers (after the block 89857).

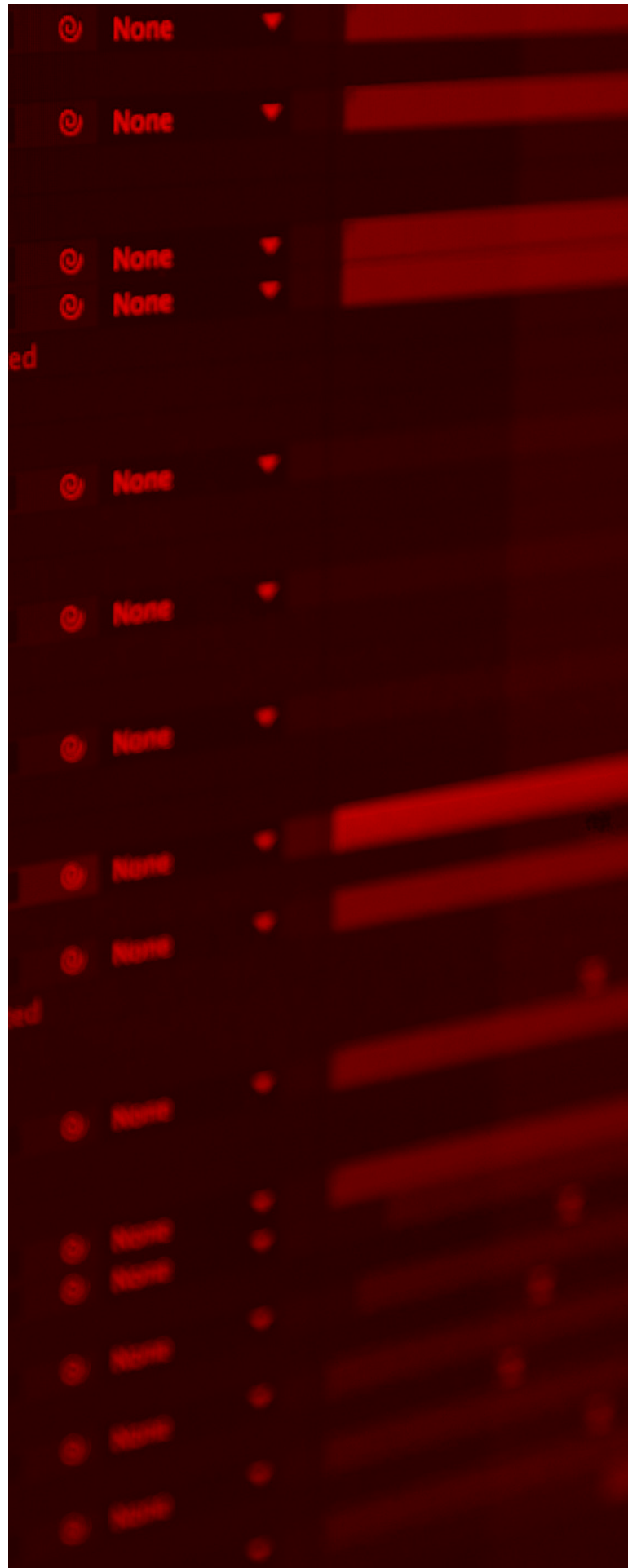
Your actual reward is proportional to the number of masternodes you run. Also, the more coins you stake, the greater the chance to receive your reward. The chosen reward distribution system will stimulate the rise of ADN in price.

BLOCK	BLOCK REWARD	MASTERNODES	STAKERS	RANDOM REWARD
2-10368	0,5	0,25 (50%)	0,25 (50%)	10
10369-17280	50	25 (50%)	25 (50%)	100
17281-20736	60	33 (55%)	27 (45%)	200
20737-27648	70	42 (60%)	28 (40%)	300
27649-31104	80	52 (65%)	28 (35%)	400
31105-38016	90	63 (70%)	27 (30%)	500
38017-41472	100	75 (75%)	25 (25%)	600
41473-48384	110	88 (80%)	22 (20%)	700
48385-51840	120	102 (85%)	18 (15%)	800
51841-58752	130	117 (90%)	13 (10%)	900
58753-62208	140	133 (95%)	7 (5%)	1000
62209-65664	100	90 (90%)	10 (10%)	10000
65665-69120	80	68 (85%)	12 (15%)	12500
69121-72576	70	56 (80%)	14 (20%)	15000
72577-76032	60	45 (75%)	15 (25%)	17500
76033-79488	50	35 (70%)	15 (30%)	20000
79489-82944	40	26 (65%)	14 (35%)	22500
82945-86400	30	18 (60%)	12 (40%)	25000
86401-89856	20	11 (55%)	9 (45%)	27500
89857>	10	5 (50%)	5 (50%)	30000

3.9 LightningSend

Considering the speed of transaction as one of the top priorities, we are proud to introduce LightningSend – a new concept for transactions, which allows users to send and receive payments almost instantly.

LightningSend is quite simple to understand: you make a transaction, then it's instantly checked by masternodes and then – upon the achieving of consensus – included in the next block. This way you can make transactions even before the block enters the network.



4. INVESTMENT POTENTIAL

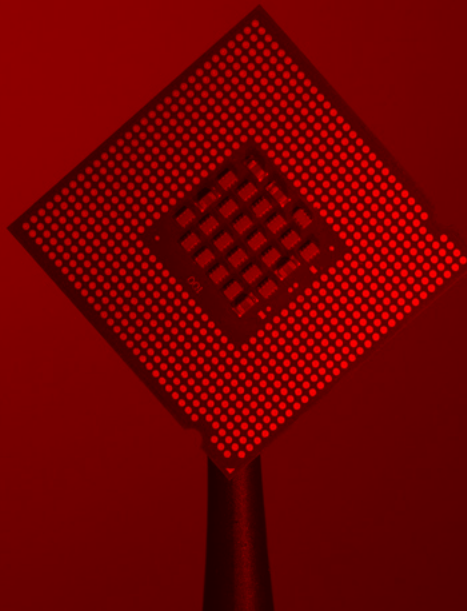
When examining the expediency of investing, one should take into account many factors, including

- current market situation;
- expected ROI;
- prospects and plans;
- financial security.

Although we can't influence the state of the cryptocurrency market, we are in charge of everything connected to our project. Given the high security of transactions and the unique Random Reward feature, which is an absolute novelty for the crypto world, we see Adrenaline as a quite attractive solution for both professional investors and novices possessing at least some technical knowledge required to set up a masternode.

Moreover, being an early investor, you have all chance to multiply your income by many times due to the specificity of the masternode reward distribution system.

The PoS concept has already proved its profitability and credibility, and we have no doubt about its high performance in terms of the popularization of the project and maintaining ADN price.



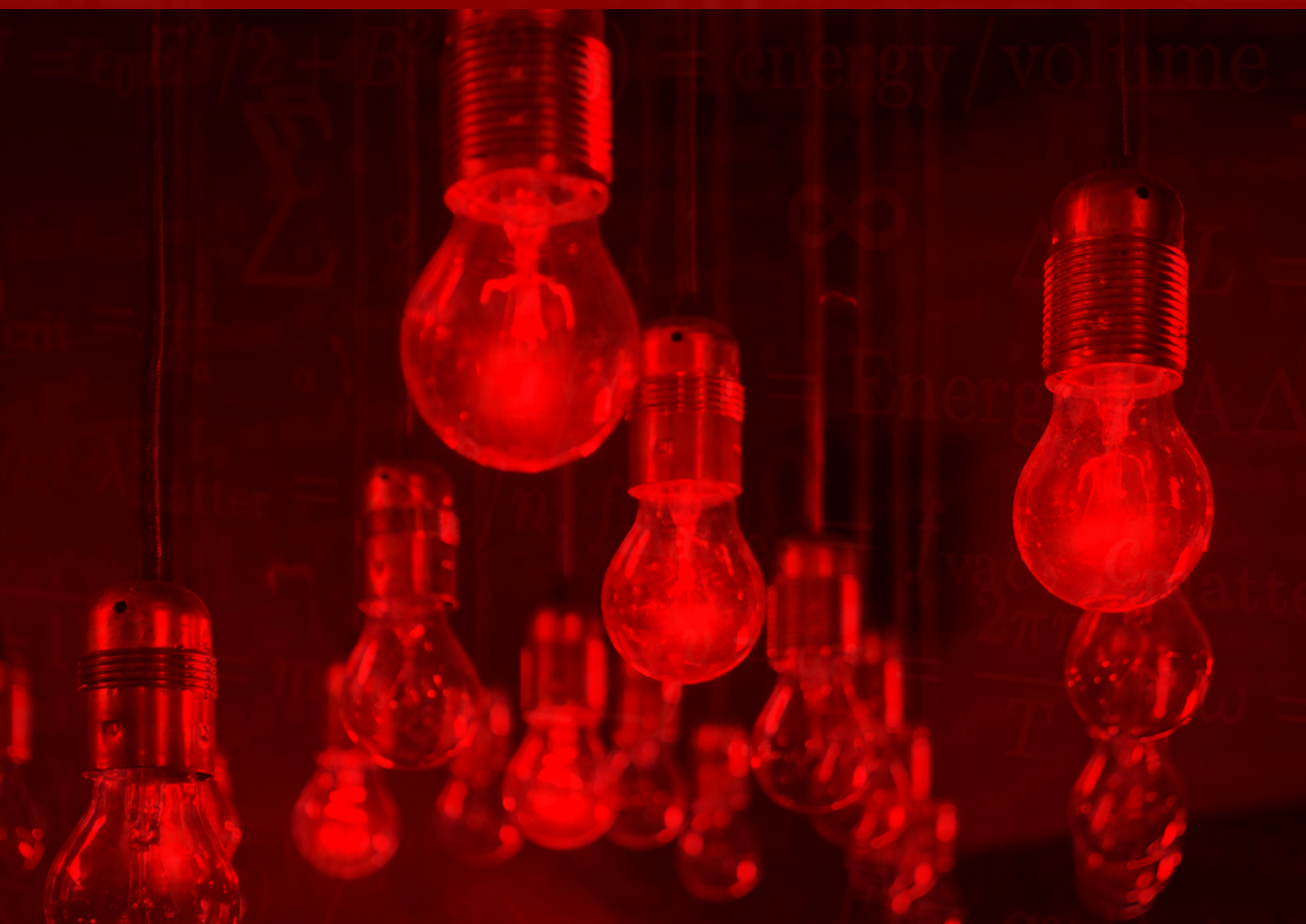
5. CONCLUSION

5.1 Summary

Blockchain-based and with Random Reward at the forefront, Adrenaline is a brand-new global betting platform (Adrenaline Bet), P2P store (Adrenaline P2P Store), and your fastest and safest means of payment (Adrenaline Pay).

Adrenaline allows investors and cryptocurrency enthusiasts to get a source of passive income and add some excitement to their lives.

Be you a gambler or a cryptocurrency lover, you get a win-win option of combining the mystery of random and the stability of PoS and masternodes.



5. CONCLUSION

5.2 Plans for the future

5.2.1 Random Reward for Stakers

Depending on the current performance of ADN and the level of success of the Random Reward feature, we plan to consider the implementation of Random Reward for staking so that stakers also get the opportunity to benefit from it. The exact mechanism will be the same excluding changes needed at the moment of implementation.

5.2.2 Decentralized Decision-Making

To increase the level of decentralization, we will consider the necessity of introducing a decentralized decision-making. We want our community to become a real power that not only gains passive income but also determines the line of its development. We expect to give a right to vote to masternode owners and probably to stakers as well, while the “weight” of a vote may depend on the number of coins (however, this is yet to be determined).

The other important point is that all future innovations will take into account (at least to some extent) the current market trends. As the history of the crypto-market shows, innovations are welcomed and adopted much faster in a bull market, so we will definitely research the market state before releasing any important information or feature. In our view, timing is paramount, so we'll try to make well-timed decisions.



Join our communication channels to get timely updates on the latest news and developments and be able to discuss all the burning issues with other participants. We are strong together!



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