

# SECURE PAYMENT PLATFORM



# MENUVA

**THE ONLY PLATFORM THAT ADJUSTS  
TO YOUR NEEDS**

# TABLE OF CONTENTS

## 1. Introduction

## 2. Menuva Overview

## 3. What is an Ethereum Smart contract?

3.1 How smart contracts work

## 4. Problems and Solutions

4.1 Large Fees

4.2 Irreversible payments

4.3 Limited payment options

4.4 “Fixed” payment rules

4.5 Crypto value fluctuations

4.6 Manipulative trust system

4.7 Slow dispute resolution

## 5. PRINCIPLES OF WORK

5.1 Payment

5.1.1 Direct payments

5.1.2 Escrow payments

5.2 Smartcontract creator

5.3 Currency conversion (DACP-Dynamically Adjusted Currency Protocol)

5.4 Dispute resolution

5.6 P2P chat system

## 6. MNV Token

6.1 ICO DETAILS

6.1.1 Menuva token

6.2 Budget allocation

6.3 Timeline

## 7. Partnerships

## 8. Competition and problems

## 9. Team members



# 1. INTRODUCTION

*From ancient history, human civilization has needed to trade and exchange their goods for something useful.*

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At first, there was a direct exchange between two parties without any mediator and the problem was that one could only trade goods for goods as there was no universal value. Later on, gold was introduced but it was not easy to carry those heavy metals around.

Then we got to the currencies we use today. However, that also is not a perfect solution since you have multiple currencies in a system which the government heavily manipulates and you do not know what happens behind the curtains.

*That is why we have the next big thing – cryptocurrencies.*

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Recent years have shown an enormous increase in blockchain technological developments in general but most notably cryptocurrency. These technologies stimulate the movement towards decentralization and democratization of the financial sector and the society in general. The emergence of **Ethereum** (*a platform for developing decentralized online services based on blockchain with the use of smart contracts*) should be given particular attention.

Ethereum offers tremendous opportunities for the realization of projects aimed at vast audiences and mass implementation of blockchain into everyday life. One of the main advantages of Ethereum is the easy and fast distribution of your token on an already existing blockchain. We are happy to present Menuva, an all-round crypto payment platform aimed to serve the users. Menuva brings the best from decentralized and centralized systems. Sellers can accept various payment methods and currencies without paying fees. Menuva allows complete automation of trades due to use of smart contracts and its exchange concept.

The application continuously processes incoming payments, which guarantees the delivery of purchased products to the buyer and the buyers satisfaction. Furthermore, the vendor does not have to worry about keeping and protecting information about the product – all necessary data is stored on blockchain with a decentralized P2P solution.



## 2. MENUVA OVERVIEW

**Menuva** is a secure payment platform for selling/buying/exchanging cryptocurrencies or digital products and services based on smart-contracts on the Ethereum blockchain. Menuva allows seamless transactions with custom payment conditions. At that, all the data is stored as a smart contract on the Ethereum blockchain. The use of smartcontracts and payment plugins allow automatization of payment processing.

In the simplest cases, creating an escrowed transaction is done with only a few clicks and requires no additional effort from the buyer or seller. Buyers make all payments in their desired cryptocurrency without any fees. Creating sale offers, as well as buying products are done with the use of software based on **MyEtherWallet** – one of the most popular Ethereum online wallets. That allows the service to be used on both desktops and mobile devices.

### Our Main Competitive Advantages:

- ✓ Low fees
- ✓ Possible conversion of funds to FIAT
- ✓ Fast transactions
- ✓ Decentralized data storage
- ✓ User-friendly and convenient service to customers and vendors
- ✓ Rating and verification system that will provide extra safety for both sellers and buyers
- ✓ Support for multiple currencies

### 3. WHAT IS AN ETHEREUM SMART CONTRACT?

New technology made possible by public blockchains, smart contracts are difficult to understand because the term partly confuses the core interaction described. While a standard contract outlines the terms of a relationship (usually one enforceable by law), a smart contract enforces a relationship with cryptographic code.

*Put differently; smart contracts are programs that execute exactly as they are set up to by their creators.*

First conceived in 1993, the idea was initially described by computer scientist and cryptographer Nick Szabo as a kind of digital vending machine. In his famous example, he explained how users could input data or value and receive a finite item from a machine, in this case, a real-world snack or a soft drink.



In a simple example, ethereum users can send 10 ether to a friend on a specific date using a smart contract. In this case, the user would create a contract and push the data to that contract so that it could execute the desired command.

*Ethereum is a platform that's built specifically for creating smart contracts.*

However, these new tools aren't intended to be used in isolation. It is believed that they can also form the building blocks for 'decentralized applications' and even whole decentralized autonomous companies.

### 3.1 HOW SMART CONTRACTS WORK

It is worth noting that Bitcoin was the first cryptocurrency support basic smartcontracts in the sense that the network can transfer value from between people. The network of nodes will only validate transactions if that meet certain conditions.

*However, Bitcoin is limited to the currency use case.*

By contrast, Ethereum replaces Bitcoin’s more restrictive language (a scripting language of a hundred or so scripts) and replaces it with one that allows developers to write their own programs.

Ethereum allows developers to program their own smart contracts, or ‘autonomous agents,’ as the Ethereum whitepaper calls them. The language is ‘Turing-complete,’ meaning it supports a broader set of computational instructions.

#### Smart Contracts Can:



Function as ‘multi-signature’ accounts, so that funds are spent only when a required percentage of people agree.



Provide utility to other contracts (similar to how a software library works)



Manage agreements between users; for instance, if one buys insurance from the other.



Store information about an application, such as domain registration information or membership records.

## 4. PROBLEMS AND SOLUTIONS

### 4.1 LARGE FEES

For each received online payment today, sellers have to pay an average fee of about 3.5% and selling fees for some online payment systems exceed 5-10%. More than that, users usually should pay a fee for transferring money out from the payment system to the bank account. Besides, payment systems charge additional money back fees, inactive account fees, cross-border transaction fees, annual (*monthly*) fees and so on.

You also have the problem of deceitful services promoting themselves as “feeless,” but at the same time having their exchange rates which often differentiates hugely from the current market rates. They only show the amount one needs to pay but not at what rate it is calculated (*since most products are shown in USD value and then calculated to the BTC price*).



#### Solution

Menuva will solve this problem with the next solutions:

Menuva will keep the fee below 2% per sale, depending on the currency used. This includes buyer and seller fee.

Before you make Your purchase You will instantly be notified what the fee will be with no hidden fees or expenses.

You will also be notified of the current exchange rate of the desired cryptocurrency.

We will maintain these fees as we will completely fund our company with the money we earn from ICO and future profits from our token as we develop and grow because we are confident in our work, product and token

The earned fee will then be distributed to all our token holders every month depending on the amount they are holding at the time and the total fees that the platform has processed.

## 4.2 IRREVERSIBLE PAYMENTS

One of the main advantages of cryptocurrencies is that they are not reversible. That means You do not need to be afraid of chargebacks and fraud attempts. However, that is a double-edged sword. While it may be excellent for vendors the buyers are left in the dark. In case of some dispute between a seller and a buyer (with the traditional cryptocurrencies), buyers will often lose to dishonest sellers. On the other hand, plenty of buyers will try to gain advantage and profit through various social engineering attempts.



### Solution

Menuva offers an escrow system never seen before. Sellers will be able to accept payments which will be secured by a smartcontract. Those smartcontract will be highly customizable for various needs, ranging from physical products which require shipping info all the way to virtual assets. This unique approach will significantly improve the current status of all cryptocurrencies to being more adopted.

## 4.3 LIMITED PAYMENT OPTIONS

If You ever tried purchasing something online with a cryptocurrency, you were probably limited to BTC or few other major cryptos. Lately, we can see all the bad sides of that approach with networks being congested with transactions as they are not able to scale to the needed size. Even though only a few services allow accepting multiple currencies, their fees are very high and they mostly pay out sellers in Bitcoin which then requires additional fees. There are also other hidden fees that those services are not honest about, and use their own exchange rates that highly favor them as they reap further profits from the seller.



### Solution

Menuva will provide a game-changing mechanism that will support multiple cryptocurrencies depending on their popularity and usage. Those currencies will be exchanged at the best offered current rate at the lowest fee possible. All those will be presented to the buyer (i.e., sender) so that he can see how much the seller will really receive. We are already developing that mechanism and are negotiating with few big exchanges so that we can bring the cost down. In the future, we will bring the cost down even more by using decentralized exchanges and atomic swaps (with coins that support that technology).



## 4.4 “FIXED” PAYMENT RULES

Many current payment systems and platforms are rigid about their rules and are not suitable for all transactions. They are for either physical products or digital merchandise. This brings much confusion as their centralized system is fixated and is not adjustable to the customers' needs.

So, for instance, many bigcentralized systems are not providing any protection for virtual items. That market solely is worth more than 20 billion US dollars!!!



### Solution

Menuva provides highly customizable smartcontracts. Buyer will beforehand set all the conditions before sending the payment.

Those conditions require no programming skills, and the process is intuitive. We will also provide predefined smartcontracts for the most used conditions.



## 4.5 CRYPTO VALUE FLUCTUATIONS

*One of the biggest things keeping cryptocurrencies from a large scale use is the price fluctuations.*

Anyone who has ever sent even a cent to purchase something has experienced this, mainly if the payment was halt for various reasons (verification, products out of stock, ...). That means that the seller needs to quickly convert the crypto assets to FIAT if he wants to keep the value of those tokens.

Those steps imply even more fees as he needs to withdraw the money and deposit to some service and then again pay for converting it. By our calculations, current crypto to crypto to fiat would cost minimally 10% (in the ideal case) without taking price fluctuations in consideration.



### Solution

We will offer a unique mechanism where the seller will be able to transfer the escrowed value (locked in a smart contract) to FIAT value and store it like that. This will ensure that the seller indeed receives the intended amount. We will use an opensource solution called Bit-Shares, which has helped us a lot to bring our idea to realization. We are currently watching the market for the most suitable solution so we might change this system in future but the current one provides the most stability at the lowest cost possible.

All of this will be just an option for the receiver and available only in escrowed transactions since those transactions can take a long time. Just imagine purchasing something from China and waiting for it to arrive your home in Germany. Those shipments can take up to a month, and the price changes 50% in the meantime. While you may gain a financial advantage, you could also lose and regulars buyers and sellers are not willing to “gamble.” This solution is unique and will be upgraded continuously as the blockchain technology advances.

## 4.6 MANIPULATIVE TRUST SYSTEM

Most of the time before, purchasing something, we will check the seller for any negative feedback he might have received or if there are any signs that there could be a problem with the transaction. Those rating systems can be extremely manipulative and the rating you see may not represent the real rating of the seller. All the big e-commerce stores are trying to battle against this, but since the transactions are not publicly available it is not possible to decide if some transactions really happened.



### Solution

Learning from the mistakes of e-commerce systems, we came up with a never seen solution in the cryptoworld. We will use a system that calculates the ratio between transactions which have been successfully finished with transactions where an intermediate needed to step in to resolve an issue. Those will represent on buyer and seller side so everything will be transparent to minimize any possible manipulation. Our ICO buyers will also have a special note so they can be recognized as early adopters and even further earn trust.

## 4.7 SLOW DISPUTE RESOLUTION

It is inevitable that sooner or later, you will buy something that won't meet your expectations and you will not be able to agree with the seller. In that situation, most payment platforms are extremely slow and can take 30 days for you to receive the money back. Often, there is no possibility to even talk to the seller in a way that everything is recorded and visible. All those things hinder the dispute resolution in a fair way, and the third party who has to rule in one's favor has a hard time choosing the outcome. Also, the intermediate in the centralized system has nothing to lose if he is wrong.



### Solution

We believe that the power should be in the hands of the people as this is the central concept of the cryptocurrency world. Users with good trust rating will have the ability to take a part in the dispute system and rule in someone's favor. That way, they will help the community and be rewarded appropriately for their effort. Everything will be resolved promptly. We aim to keep the dispute resolutions below 72 hours!

## 5. PRINCIPLES OF WORK

### 5.1 PAYMENT

The payments will be possible through our webwallet, a smartphone application or website plugins that we are currently working on. There will be two modes of sending payments: direct payment and escrow payment. All the payments will support multiple currencies which will be possible to convert in a single click to FIAT or any other cryptocurrency with our unique DACP (*dynamically adjusted currency protocol*).



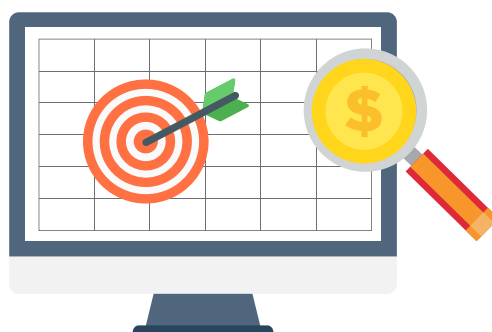
#### 5.1.1. DIRECT PAYMENTS

This mode of sending payments requires no further steps. You only enter the address you want to send the payment to and you will automatically see the fees associated with the transaction. The receiver receives the money into his or her wallet where he or she has the option to store it as some other currency or just keep it in the form received.



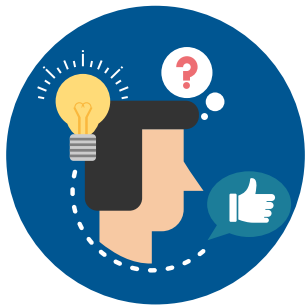
#### 5.1.2. ESCROW PAYMENTS

This mode of sending payments requires no further steps. You only enter the address you want to send the payment to and you will automatically see the fees associated with the transaction. The receiver receives the money into his or her wallet where he or she has the option to store it as some other currency or just keep it in the form received.



## 5.2 SMARTCONTRACT CREATOR

This part is the vital part of our platform. We will simplify the usage of the smartcontracts by providing an out-of-the-box solution with already precompiled contracts. Those precompiled smartcontracts will cover various fields. Currently, we are working on smartcontracts for virtual assets (in-game currencies, skins, keys), software development (milestone money release), and physical items (tracking information).



We will listen to our users and provide even more ready-made solutions, while also making it possible for users to create their custom smartcontracts to suit their needs by providing a “Smartcontract creator.”

Anyone will be able to generate a smartcontract (*escrow rules*) by his or her individual predefined requirements. Simple tutorials will accompany all of this for first time users!

## 5.3 CURRENCY CONVERSION (DACP-DYNAMICALLY ADJUSTED CURRENCY PROTOCOL)

Conversion of various currencies was a tough task for us. In the time where the fees are sky high we needed to provide price stability and lower the fees as much as possible. Using our DACP and with the help of BTS, we were able to achieve that. All the transactions will be carried out in the currency chosen by the sender. In case of escrow payments the money will be held in a smartcontract in a FIAT volume so the receiver gets the money at the exact value as the date when it was sent.

Many features will be tried out in our alpha period later in 2018, according to our planned roadmap. All of this is possible through exchanges and decentralized exchanges. As the technology advances, so will our platform adapt.

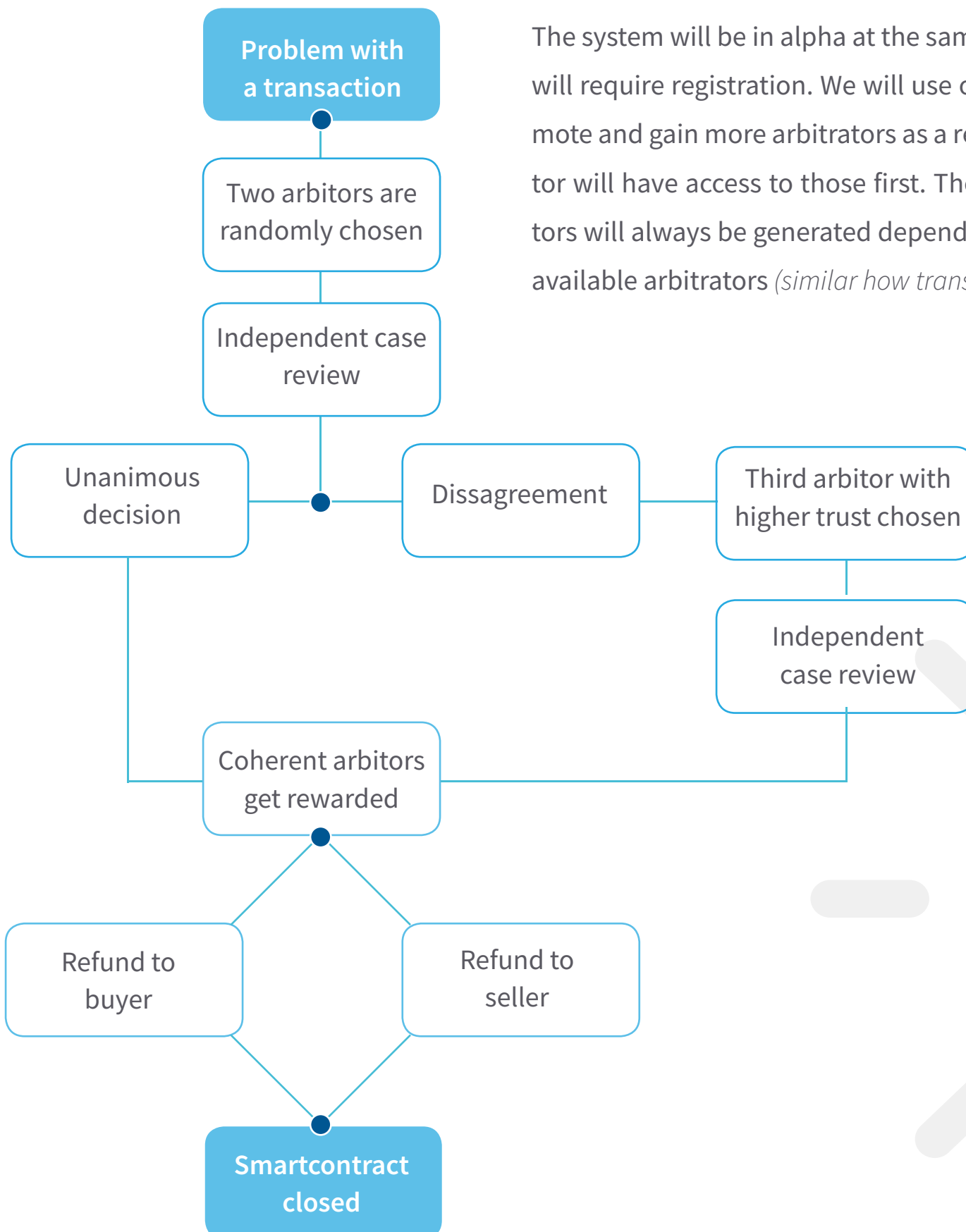
We are already testing atomic swaps and are waiting for it to be embraced by other cryptocurrencies.



## 5.4 DISPUTE RESOLUTION

For resolving any disagreements between buyers and sellers, we opted out for arbitration. The dispute will be decided by two persons (arbitrators). If both arbitrators agree on the resolution, the case will be closed and ruled in the agreed favor. If those two arbitrators do not agree, then a third arbitrator with higher trust is chosen and will rule in one's favor.

We will incentivize the arbitrators to carefully chose the right outcome as they will lose the reward in case of wrong decisions. The system will be in alpha at the same time as our wallet and will require registration.



The system will be in alpha at the same time as our wallet and will require registration. We will use our tokens at first to promote and gain more arbitrators as a reward and our ICO investor will have access to those first. The reward paid to arbitrators will always be generated depending on the workload and available arbitrators *(similar how transaction fees work)*.

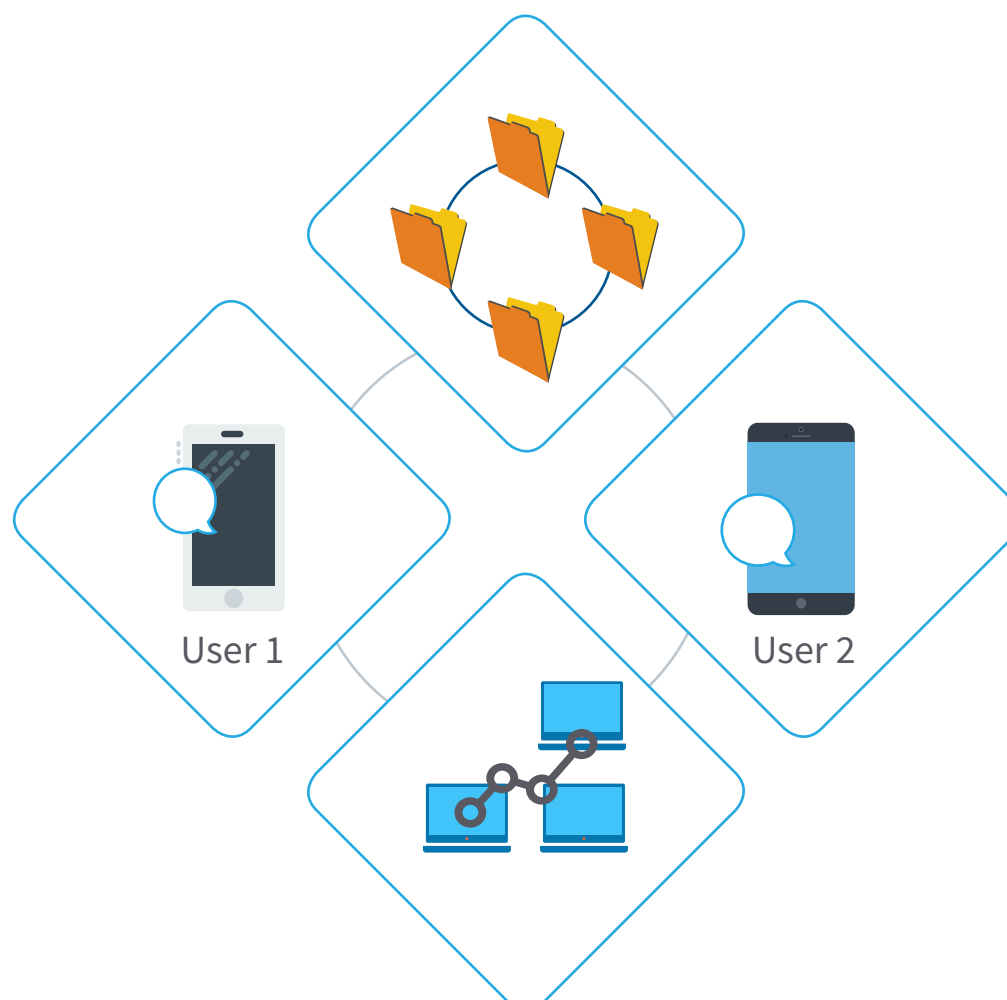
## 5.6 P2P CHAT SYSTEM

One of the most important things for keeping the buyer satisfied is the constant communication between sellers and buyers. We also need to keep in mind that those transactions need to be kept private so the use of the decentralized solution is critical. **IPFS** (InterPlanetary File System) is the solution for keeping all the chat decentralized and secured. After you send an escrowed transaction you connect through a P2P connection. If the instant access to data is not required all information is being stored to the IPFS-based decentralized storage network (DSN). Thus, all user data remains protected from interference. The encryption protocol used for this part is called MTPProto.

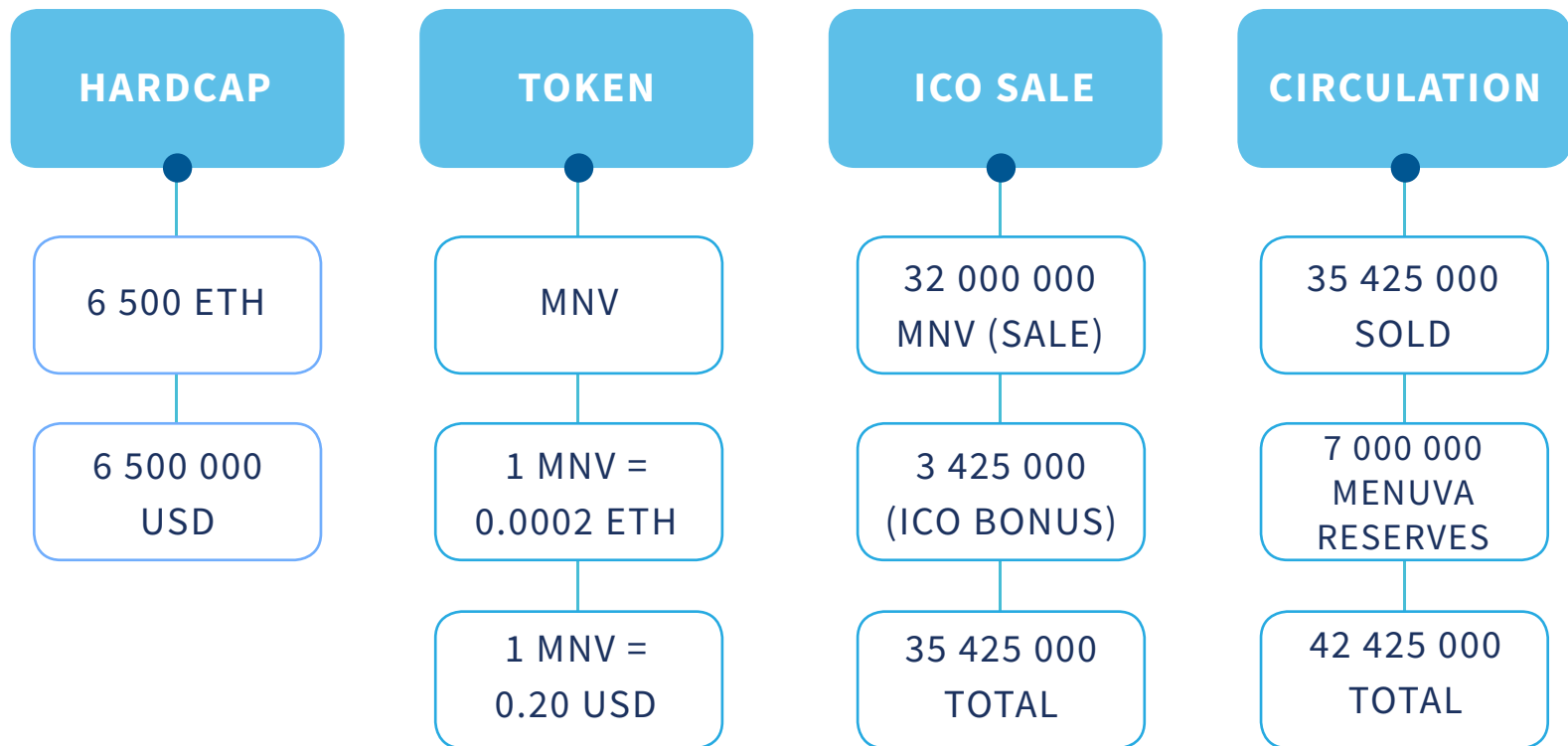
This protocol has the following features: High-level component (API query language): defines the method whereby the API queries and responses are converted to binary messages.

*Cryptographic (authorization) layer defines the method by which messages are encrypted before being transmitted through the transport protocol.*

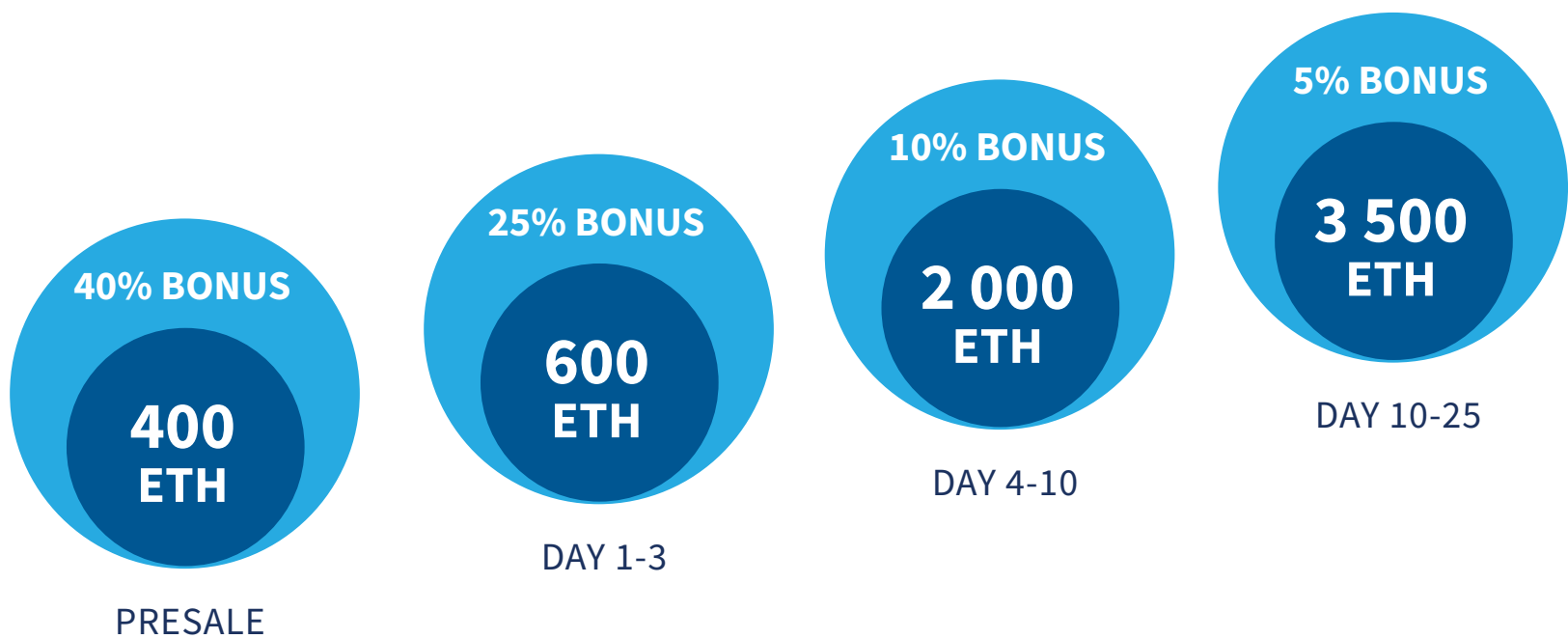
This **P2P chat system** is crucial to the dispute system as it maintains the privacy and will be visible to arbitrators when needed and only the information that is necessary for them to make the judgment will be visible!



## 6. MNV TOKEN



### 6.1 ICO DETAILS





### 6.1.1. MENUVA TOKEN

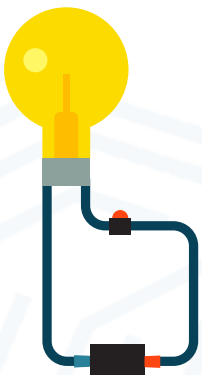
*ICO contributors will have numerous advantages:*

#### PROFITS DIVIDED QUARTERLY

– All the fees (excluding GAS and dispute fees) will be divided quarterly between all the token holders and they will be paid out in ETH. Considering the low amount of tokens, we plan to release to circulation this is an excellent opportunity for long-term investors. You can see the date of the first payout in our roadmap.

#### EARLY BIRDS GET REWARDED

– Our ICO supporters will have a special notation in our reputation system thus gaining more trust from users.



#### WHAT NEXT?

– We believe that our platform should be adjustable to users so we will design an exclusive closed forum where we will listen to the ideas of our contributors and have special polls and promotions.

#### FREE USE OF THE PLATFORM

– That is right. With the MNV tokens You will be able to buy without any fees so stock up on those.

#### LIMITED AVAILABILITY

– We do not plan to introduce more tokens to the system. That is why we opted out for a smaller coin count.

#### TOKEN BURN

– Any unsold tokens will be burned thus lowering the total count of MNV tokens in circulation.

#### BUYBACK

- If the price of ETH changes considerably (>10%) from our current rate of 1000\$ per ETH, we will use the excess money to repurchase our tokens and burn them as we will be transferring the collected funds to USD!

## 6.2 BUDGET ALLOCATION

### DEVELOPMENT

– Currently, we have two developers constantly working on technical documentation. We are looking to spend around 1.5m USD on hiring 4-5 top class: Frontend&backend web devs, a security expert in the blockchain area and blockchain advisor. As we are working on other projects implementation, we will need to have some reserves for possible bills.

### ADMINISTRATION & LEGAL

– As we are based in Germany the laws are strict and to pay our staff after the finalization we will need to pay taxes and have our lawyer so we can focus on development.

### OPERATIONAL EXPENSES

– In the future, we plan to fund self-fund by collecting fees based on the percentage of MNV tokens we hold. Until then, we will need to pay all our HQ bills ranging from webhosting to program licenses.

### PROMOTIONS & PARTNERSHIPS

– As You can see, it takes more than 1m \$ from our budget but we find this utterly crucial since without the platforms acceptance, there will be no future and our efforts would be wasted. We already have plans and agreements on promotions with various websites which will use our platform.

### RESERVES

– We have a long road ahead of us and various unplanned things can happen, so We need a little “room to breath.” The cryptoworld is unpredictable but we are here to bring the stability!



## 6.3 TIMELINE



**2018**

**Q1:**

ICO (details on website)  
“What next?” program launch and exchange listings  
Finalization on technical requirements  
WEB wallet development  
“Direct transaction” development  
DACP integration  
P2P chat integration



**2018**

**Q2:**

Android and iOS SDK  
Dispute and escrow system development  
Reputation system development  
Payment plugin release (OpenCart, WordPress, ZenCommerce)  
BETA web wallet release



**2018**

**Q3:**

Transaction testing  
System testing  
BETA product  
Smartcontract creator  
Implementation in partners systems



**2018**

**Q4:**

Further partner expansion  
First fee payout



**2019**

Further technical upgrades as blockchain technology advances

## 7. PARTNERSHIPS

### SELLERS

We are currently in talks with two websites that are selling virtual gaming assets like cosmetic upgrades and keys. They will introduce our system in the summer/fall of 2018 as planned on our roadmap. We are working on various initiatives for embracing our platform.

We are also negotiating with one cosmetics webshop which generates more than 50m \$ in revenue yearly. We will soon have a final agreement with them.



All of our partnerships will be announced when concluded and secured since we do not want to promote anything prematurely. Many websites have shown a massive interest in switching to accepting cryptocurrencies but were afraid of the enormous fees, constant price fluctuations and complicated procedures.

### DEVELOPERS

We are hugely thankful for the support from OpenCart and WordPress by providing technical support with their commerce platforms. We already have on board one dev from OpenCart and are working hard to bring our first OpenCart plugin, which will be free to use.

We are looking to bring our payment solution soon to Magneto, Shopify, and ZenCommerce as well. Huge thanks to our colleagues from other projects who work with us day and night on building a vast ecosystem which will benefit to everyone.

All information will be available on our website and official communication media.

## 8. COMPETITION AND PROBLEMS

*We are well aware of our several competitors in this area but we do not think that it is a bad thing as it will only result in a better cryptocurrency security and acceptance.*

We do not want to name any service by name since we think it is not a healthy way to promote ourself. The main problem with those services are:

**HIGH FEES** – Many of those services project themselves as without any fees but they compensate that with exchange rates that are different from the real current rates.

**CENTRALIZATION AND DEPENDANCE** – There are currently two finished ICOs that tackled the similar problem with cryptocurrencies but none of them is genuinely decentralized and depend on some centralization.

**VERIFICATION** – Many payment processors require ID, selfies and similar stuff to raise limits and at the same time limit regular users.

**DISPUTE RESOLUTION** – We all know the flaws of the current dispute resolution systems. The ones based on cryptocurrencies currently do not work (We tried two solutions but they are in an early testing phase and not operational). Centralized dispute resolution systems are slow and inefficient.

**RATING MANIPULATION** – Current rating systems are easily manipulated by bots and do not reflect the real picture



## 9. TEAM MEMBERS



**Stephen Scholz** - *Ceo and founder*

Stephen is a serious entrepreneur in the area of ICT. He has founded a dozen of IT and tech companies in the last 20 year while also advising a good number of German startup companies. With a financial journalism degree and interest in IT technology Stephen is set to succeed. With all the experience he gathered over the years he can recognize and lead a project like Menuva to success.



**Christopher Eichel** - *Developer*

A full stack developer with 7 years of experience in building various applications. He previously worked at DVB Bank and numerous startup projects which specialised in cryptocurrency. Christopher comes with excellent skills and understanding in developing both frontend and backend systems, being fluent in several modern web frameworks and languages.



**Nicolas Bethmann** - *Android developer*

Nicolas has 7 year of experience in developing Android applications. He is highly proficient in Javascript and C++ programming languages, having multiple applications already accepted by the Google store. Nicolas is a proud owner of a Hasso-Plattner-Inst. Potsdam university degree which brought him a lot of connections in the German IT world.



**Angela Böhm** - *Marketing*

Angela has been responsible for a variety of internet crowdfund planning, organized diversified line of on-site events and helped achieve campaign goals for numerous projects. Specialized in promotion execution of internet campaigns and e-sports events she obtained a lot of experience in marketing management and promoting.



**Simon Böckler** - *Developer and UI design*

It's Simon's job to not only make the GUI look good, but function smoothly. Responsible for the 'look and feel' of the Menuva GUI, Simon brings over 6 years of experience in GUI design to the project from various other successful companies that he worked for, most recent being German engineering company SimScale.



**MENUVA**