

**ARVALEX WHITE PAPER  
PRESENTATION**

## **ABSTRACT**

This technical whitepaper discusses key decisions behind the implementation of Arvalex. It is a Metaverse protocol for NFT trading, Services exchange structured on automated market maker (AMM) with Decentralized exchange and Non Fungible Token marketplace built on the Avalanche Blockchain. Arvalex allows participants of the Blockchain to exchange goods and services in the metaverse using its decentralized marketplace. This whitepaper describes the mechanics of Arvalex contracts including the swift integration of None Fungible Tokens (NFT) and the ease of swap between varying coins in the Metaverse while curbing high gas fee.

# **INTRODUCTION**

## **The Necessity of Massive Cryptocurrency Adoption**

Cryptocurrency is the more secure alternative version of the physical currency that we use today. It uses cryptography protocols, which are extremely complex code systems that are used for encrypting sensitive data transfer. They are the ultimate secure units of exchange for completing online transactions for e-commerce business.

Cryptocurrencies use Blockchain technology, which is the master ledger of a sort that keeps track of all transactions and activities in order to confirm the possession of all chunks at any given time. Considering the user angle, the currency holder has a private key that authenticates their identity and allows them to exchange or swap units. Thus, this depicts the fact that cryptocurrency has an infinite well, notwithstanding, a limited number of cryptocurrency can be mined.

## **ABOUT**

Arvalex is a Metaverse protocol for NFT trading, Services exchange built on AMM Protocol. This protocol is created to enable smooth flow of trades in the metaverse. The aim is to make the exchange of other tokens a seamless one. Our token is built under the avalanche ecosystem and it will serve as a stable coin for exchange just like the use-case of USD Tether and other stable coins. Hence, We boast to be the first decentralized Marketplace which makes exchanging goods and services in the metaverse as easy as possible. Our Protocol also powers a standard NFT platform that is well-adapted to the metaverse. Easily swap NFTs between different protocols in the metaverse and save on gas fees.

## **OUR MISSION**

To create a base where transactions are carried out seamlessly, using the avalanche ecosystem as a bedrock so that everyday people and those who access the metaverse will have seamless transactions and less volatility.

## **OUR VISION**

To make exchange of tokens seamless in the metaverse and to enable easy swapping of Non-Fungible Tokens (NFT).

## **GOAL**

To enable commerce in the metaverse. Users can exchange other tokens using ours as means of Interchange. Also buy and Trade NFTs on our platform. Pay for services rendered and earn interest from yield farming.

## **WHY ARVALEX?**

The metaverse needs crypto in order to operate as advertised, and hence there's need for a stable transactional token. Now let us take a look at just why this is.

Blockchain is immutable. Blockchain and blockchain platforms have proven, to this point, to be unhackable and immutable, which is critically important if any virtual reality platform is to achieve mainstream adoption. Specifically, if an individual or group of individuals are going to be engaging with other people in a virtual environment there needs to be some form of assurance that these transactions are secure.

Hacks and data breaches occur on a frequent basis, but if people are going to be expected to engage in a wholly online and virtual environment, the underlying platform on which they are going to be using needs to be secure.

## **WHAT YOU NEED TO KNOW ABOUT AVALANCHE ECOSYSTEM.**

Ava Labs launched the Avalanche ecosystem in 2020. This ecosystem is a flexible smart contract platform that facilitates the creation of custom blockchains - including private blockchains and decentralized applications (dApps).

\$AVAX is the native token of the Avalanche blockchain, which is used for paying transaction fees and for staking in Avalanche's consensus process. Interestingly, Avalanche's target is to become the infrastructure to support build the "internet of assets." The main goal is to support a single universal platform where sending any asset becomes easy, cheap, and secure.

Avalanche boasts 4,500 transactions per second (TPS) with less than a three-second finality. Ethereum on the other hand processes 15-30 transactions per second with over 1-minute finality. Moreso, transaction fees are a lot more desirable on Avalanche compared to Ethereum. Hence making Avalanche the best base for our token.

## **THE AVALANCHE MINTING FUNCTION**

$R_j$  is total number of tokens at year  $j$ , with  $R_1 = 360M$ , and  $R_1$  representing the last year that the values of,  $2 R$  were changed;  $c_j$  is the yet un-minted supply of coins to reach 720M at year  $j$  such that  $c_j \leq 360M$ ;  $u$  represents a staker, with  $u.S_{amount}$  representing 85 the total amount of stake that  $u$  possesses, and  $u.S_{time}$  the length of staking for  $u$ .

$$R_j = R_1 + \sum_{\forall u} \rho(u.S_{amount}, u.S_{time}) \times (c_j/L) \times \left( \sum_{i=0}^j \frac{1}{\left(\gamma + \frac{1}{1+i^\lambda}\right)^i} \right) \quad (1)$$

where,

$$L = \left( \sum_{i=0}^{\infty} \frac{1}{\left(\gamma + \frac{1}{1+i^\lambda}\right)^i} \right) \quad (2)$$

### **NOTE :**

*Our token is still in development, this is a presale. Bear in mind that you cannot sell or trade your tokens until January when our platform will be ready or late December when we will be listed on Pancakeswap*

## **WHAT IS THE METAVERSE?**

The metaverse is a digital reality that integrates various aspects of social media, augmented reality (AR), virtual reality (VR), online gaming, and cryptocurrencies to allow users to interact virtually. Augmented reality overlays visual elements, sound, and other sensory input onto real-world settings to enhance the user experience. In contrast, virtual reality is entirely virtual and enhances fictional realities.

The growth of the metaverse will create online spaces where user interactions are more multidimensional than current technology supports. Instead of just viewing digital content, users in the metaverse will be able to immerse themselves in a space where the digital and physical worlds converge.



## **OUR ECOSYSTEM**

### **ONE EXCHANGE**

Whether you are looking to trade your NFTs, cryptocurrencies, Digital art, services, or any other service, we provide a unified exchange powered by the Avalanche Blockchain that will enable ease of exchange.

### **INTO THE METAVERSE**

We attempt to simplify the confusion that comes with the new metaverse paradigm by providing an interface that you are familiar with and that is easy to operate.

### **AMM BASED PROTOCOL**

Our protocol is based on Automated Market Maker which replaces traditional order books by liquidity pools that are pre-funded on-chain for both assets of the trading pair. This also enables our early participants to earn passive income.

### **DECENTRALIZED ACCESS**

Participate in a decentralized financial marketplace that is open and accessible to everybody in the metaverse.

## **PROBLEM**

With the implementation and integration cryptocurrency usage on the metaverse, the high need for stability in exchange rate for transactions keeps sprouting. The high volatility of many tokens being adopted into the metaverse has posed the need for a solution and made the demand for a stable coin for transaction to skyrocket as more adoption hits the metaverse space.

## **SOLUTION**

We are providing a stable coin to mitigate the triggers emanating from high volatility and unstableness of other coins in the metaverse when used in exchange. Our leverage point is the Avalanche Blockchain which uses the proof of stake consensus mechanism to validate cryptocurrency transactions. This hence implies that scalability, stability, security and sustainability is assured.

Our goal to make things seamless will be actualized through our democratized and decentralized exchange for both NFTs and Tokens. With the community we are creating, our NFT marketplace will be solidified.

## OUR PLATFORM

### A DECENTRALIZED PLATFORM

Democratized and Decentralized exchange of NFTs, Tokens, Services and cryptocurrencies

- Participants can swap coins using our liquidity pool that makes swapping so easy. No need for all the hassles typically associated with swapping tokens and cryptocurrencies.
- Participants can earn more tokens or buy more AVAX by pooling funds in our liquidity pool and earning rewards from other participants borrowing from the liquidity pool.
- Participants will be able to use our token to pay for services and goods bought and exchanged on the platform without any recourse to fiat.
- Participants can list their NFTs for sale on our exchange (in development) and have an easy and less-confusing interface to trade and barter for it.

## **MVP**

### Our Minimum Viable Product Features

- Powered by Avalanche (AVAX) platform, ARVALEX Protocol is your passport into the exciting world of the metaverse.
- Participants have access to the blazing speed of Avalanche with our protocol being built on top of it. Transactions are confirmed in seconds.
- Deploy NFTs and other DeFi's that fit your own application needs. Build on top of our protocol and reap all the benefits provided by our platform while retaining full control of your project.
- Earn rewards on our liquidity pool by staking without any risks of losing your funds or not getting the commensurate rewards.
- Enjoy transactional thorough-put greater than 4,500tps, with a proof-of-stake Sybil protection, and an 83% parameterized safety threshold.

## PROTOCOL SUMMARY

START TIME

**15th November, 2021**

TOKEN SYMBOL

**AVRL**

END TIME

**20th December, 2021**

TOTAL CIRCULATING SUPPLY

**50M**

CROWD SALE

**10M**

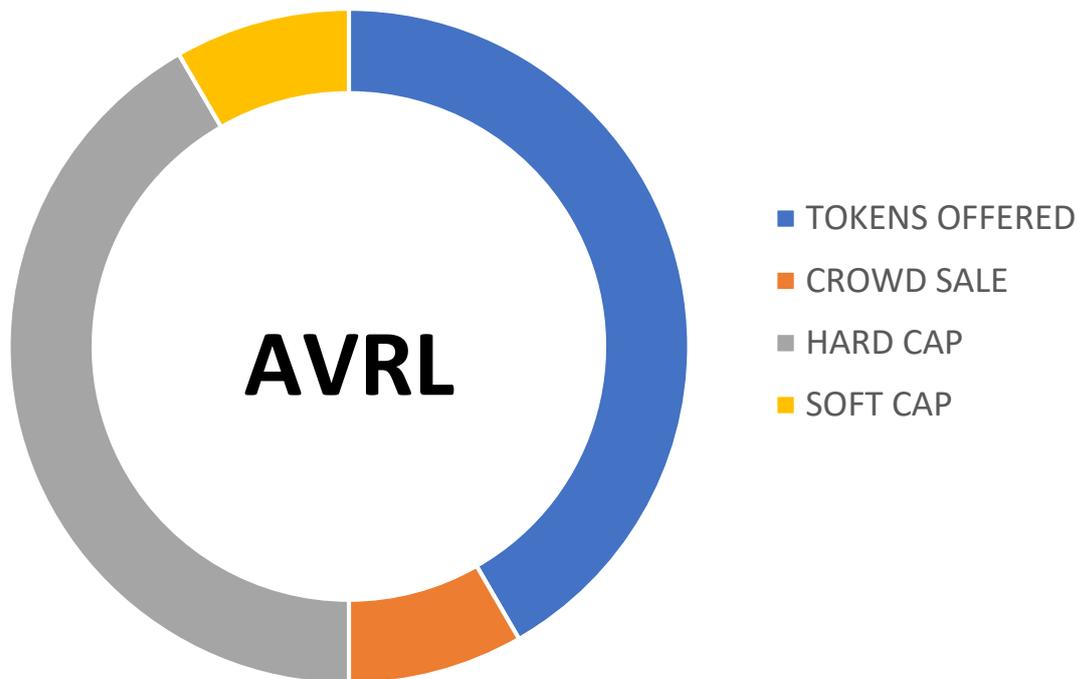
SOFT CAP

**10M**

TOTAL CAP

**50M**

PROTOCOL SUMMARY CHART FOR AVRL TOKEN



## Tokenomics

The distribution of Arvalex tokens has been carefully designed to create a decentralized, community-driven DeFi protocol that is not controlled by a small group of actors.

Below is the breakdown of the tokenomics:

Total Number of Tokens = 50Million

Hard Cap = 3759 AVAX

Token to be distributed for presale 10M (20%)

Minimum Purchase = 4AVAX

Maximum Purchase = 400AVAX

1 AVAX = 2660 Tokens

1 AVAX = 93 USD

1 Token = 0.000375AVAX

1 Token = 0.04 USD

# OUR TOKEN ROADMAP

Arvalex is being developed with clear and well thought out plans.

## CYCLE ONE

- Initial Official Token Presale.
  - Whitepaper presentation.
  - Start of Platform development.
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## CYCLE TWO

- Public Sale
  - Stage 2 of Initial Offering
  - Snapshot.
  - Beta testing.
  - Listing on Coin Marketcap and Coingecko
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## CYCLE THREE

- Listing on 5 exchange platforms.
  - Decentralized Exchanges launch.
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## CYCLE FOUR

- Integration of Marketplace functionalities for NFTs and DeFis
  - Listing on 5 new other Exchange Platforms
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## CYCLE FIVE

- DeFi Platform Launch.
- Further Airdrop.

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**CYCLE SIX**

- Full launch of DEX platform.
- Integration with the rest of the metaverse.