



Archetype Network

White Paper v1.0

10/10/2017

Information Markets & Memetic Economies

Powered by Ethereum, & IPFS



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Abstract

This paper introduces and explains Archetype, a decentralized economy of networked information and the corresponding system of Ethereum smart-contracts and IPFS hosting nodes which supports it. Here will be elaborated what the Archetype Network accomplishes, how it does so, and why it is a valuable tool for the emerging information economy.



Table of Contents

Introduction	3
Archetypes & Subtypes	4
Meme Generation Engine (MGE)	5
Information Decentralized Exchange (IN-DEX)	5
Noosphere	5
Applications	6
ARX Token & IBO	6
Roadmap	7
Technical Specifications	8 - 9
Philosophy	10 - 11
Citations	12



Introduction

Memes are an increasingly powerful force in the shaping of our world. The advent of the information age allows for the creation, transmission, and evolution of memes to occur at ever increasing rates of change. Individuals who master the power of memetic exchanges are at distinct advantages to those who are carried along by the eddies of global information flows. The major companies which provide the medium through which memes are disseminated have irreversibly disintermediated information industries of all kinds. Twitter, valued at \$13 billion, lets anyone's thoughts be an impactful news source. Reddit, known as the 'front-page of the internet', has turned user-generated content aggregation into a \$1.8 billion business. Steem-it, a reddit-analogue with blockchain integration, has reached a market cap of \$250 million. Perhaps the most evident example is Facebook, which has by networking together much of the world's population into a single information matrix achieved a valuation of over half of \$1 trillion.

These companies have each revolutionized the ways in which humans interact and exchange information. However, the very information networks atop which these platforms are built are in many ways stifled by the platforms themselves. Users cannot easily share in the wealth

which their freely provided information generates. Censorship is rampant, and increasingly enforced in a seemingly arbitrary manner by AI. While profiting off of the incredible network effects of free information, large centrally controlled companies are stifling their very foundations by seeking to monopolize information flows. Archetype answers these problems by providing a decentralized canvas onto which anyone can create and monetize an individual unit of information, and atop which useful information-based services can be built.

The development of blockchain technology has allowed information to be stored into an immutable and uncensorable ledger. The Ethereum blockchain provides a platform atop which such data can be exchanged by smart-contracts to perform useful services. The IPFS network provides a secure, decentralized storage system into which data can be stored and retrieved. Existing cryptocurrencies such as Dogecoin have set precedent for the viral success of meme-oriented financial communities. Using these innovations Archetype has created a powerful yet user-friendly platform for users to create, trade, and organize information while retaining the economic value of their service and creativity.



Archetypes, Subtypes, & Tags.

The Archetype Network is built upon a three-tiered information paradigm. The first two tiers of information are created as Ethereum tokens which follow the same basic rules of the network, but are separated by a few key differences in function. The third tier increases informational connectivity.

The first tier is called Archetypes, which are decentrally distributed information tokens representing large ideas non-specific to an individual user and are often referenced. For example, the meme of 'Doge', 'United States' or 'Blockchain' are large, general concepts that might be best represented as Archetypes. Archetypes are distributed via decentralized auctions where users pay Ether to receive a percentage of the total token in question, relative to the total amount of Ether in the auction bounty. This ensures that all users have the potential to own shares in popular Archetypes without a single user hoarding them all. Inherently decentralized in nature, the Archetypes form natural markets around the interest in the information which they represent.

The second tier is called Subtypes. Subtypes are generated by individual users who receive the entire token balance of their creation. Subtypes can be individual memes, works of art, shares of a private business, or any other user-centric information token one might imagine. All Subtypes must be registered under a corresponding Archetype with a small fee paid to the Archetype Network to onboard the information and prevent spam. The default Archetype is the ARX Token itself.

When creating a Subtype, users will have the option to include a number of Tags embedded in their token. Tags operate similarly to hashtags on Twitter and increase the connectivity of the token to other tokens throughout the Archetype Network while using search functions. Archetypes, Subtypes, and Tags together create a sprawling memetic topology – an interconnection of memes and information, the network effect of which is the information economy.



Meme Generation Engine (MGE)

The Meme Generation Engine is the source of new information nodes in the Archetype Network. The MGE is comprised of Ethereum smart-contracts which allow users to register new Archetypes and Subtypes.

Most users will use the MGE for Subtype registration. Users will determine the unique name of the token, its corresponding Archetype, the locked supply of their token, any relevant tags, and have the option to upload a media file to be stored on the IPFS network with that file's hash embedded in the token.

Archetype registration is handled in a decentralized process. Firstly, a user will declare an Archetype registration for a unique name. Then the Archetype to be registered will enter a decentralized auction process. Users will bid Ether to the new Archetype contract address. After a bidding period of 48,400 blocks (roughly 2 weeks), the Archetype will be distributed proportionally to all bidders. The first owning addresses of the new Archetypes will then have 24,200 blocks (roughly one week), to vote on a media file to represent that Archetype. Trading the Archetype does not effect the media voting process: each original address is entitled to one vote with a weight of their original token distribution, regardless of the amount held at the time of voting.

Information Decentralized Exchange (IN-DEX)

Users can trade all Archetype and Subtype tokens on the Information Decentralized Exchange (In-DEX). The In-DEX is comprised of a collection of smart contracts which enable users to posts bids and asks for the ARX Token on the Ethereum blockchain. These market orders are embedded in the blockchain itself, with no other counterparty risk or intermediary involved. The collection of bids and asks for all Archetypes and Subtypes form the In-DEX.

Noosphere

Noosphere is the first content aggregation platform atop the Archetype Network. Noosphere functions as both a block-explorer for Archetype Network tokens and a content aggregation service such as Reddit or Steem-it. A fully customizable front-page allows users to sort content by factors such as overlying Archetype, relevant phrases in the Subtype or Tags, content age, and so forth. Users can also log into accounts and view their Archetype Network token balances and upvote content on the network. All tokens will have readily viewable market data and links to their In-DEX pages to buy and sell them.

Future upgrades to the Noosphere platform will include custom user-generated content aggregations for uses cases such as private 'subreddits' and art galleries, and individual comment threads for every token



ARX Token & IBO

The ARX Token is native to the Archetype ecosystem. All orders on the In-DEX will be mediated against ARX Tokens (additional compatibility with Ether and all other Archetype Network tokens is possible in a future update). The ARX Token will help to stabilize the internal framework of the Archetype information economy against price fluctuations of outside cryptocurrency systems by providing a standard for information and memetic trading.

The burn will take place between November 20th and December 31st in six week-long tranches. This will be accomplished by using the proof-of-burn mechanism to provably transmute value into Archetype. A selection of 12 existing cryptocurrencies and tokens are selected to provide opportunities for individuals to burn for a proportional amount of ARX Token. This process is referred to as an Initial Burn Offering, or IBO.

The IBO will take place as follows. Starting November 20th, Archetype will determine a market value equivalency, based on a 24-hour average on coinmarketcap.com, for each item to be burned in exchange for ARX Tokens. In the first week of 2018 users will receive their ARX Token at the Ethereum address which they supplied. This allows for an 'open burn' against a fixed token supply – similar to the manner in which Archetypes are generated. Users will be able to check the percentage of ARX Token they own at any time on the Archetype website.

During the first week of the burn, ARX Token rewards will be at 1.5x value of the cryptocurrency burned. Each week the reward will decrease by 10%, with the final week being 1x value. Relative cryptocurrency values will be updated every 24 hours. The accepted cryptocurrencies will be Bitcoin, Ethereum, BitcoinCash, Litecoin, Dash, NEM, Ethereum Classic, Dogecoin, CounterParty, PepeCash, Monacoin, and Rare. Archetype will acknowledge the precedent set by previous cryptocurrencies who have paved the way for the Meme Economy. As such, an additional 10% bonus will be rewarded to users who participate in the IBO with Dogecoin, Monacoin, Pepecash, or Rare.



Roadmap

- **2017**

October 23: Archetype network live, public testing period.

November 20: IBO launch date

December 31: IBO period ends

- **2018**

January 1 - January 7: January 7: ARX Token distributed, Archetype Mainnet Launches (MGE + In-DEX)

February 12: Noosphere platform launches

April 2: Upgrades to Noosphere platform



Technical Specifications

The Archetype platform is built with trustless, permissionless, and scalable technology to efficiently cater to the ever expansive information economy. Smart contracts and IPFS media storage are accessed via the medium of the Ethereum blockchain to provide a truly decentralized solution. The services will exist indefinitely without the central control of any authority. All Archetypes and Subtypes will be generated with ERC-20 standard compliancy in mind.

1. Meme Generation Engine (MGE)

- *Meme Name Service*
 - 1** - By using a boolean mapping, we insure that generated meme names are unique.
 - 2** - Testing the Meme Name Service will return only the authentic, provably rare created information tokens.
- *Beta MGE will be available to test before the initiation of the IBO.*
- *Hosted on web3 and directly connected to a smart contract, this service will run serverless.*
- *A simple dashboard allows users to drag and drop media for seamless IPFS storage*
- *User fuels the smart contract with a small amount of Ether*
- *The specified Ethereum address is credited with the entire token issuance.*
- *The In-DEX & Noosphere are instantly updated with support of the user's unique information token*



2. Information Decentralized Exchange (In-DEX)

- *All Archetypes and Subtypes generated through the MGE will be tradeable on the In-DEX.*
- *All markets are traded against the ARX Token.*

3. Noosphere Network Explorer

- *Decentralized log-in*
- *Online Archetype token wallet*
- *Token explorer*
- *Token aggregation with voting and curations*
- *Sortable token feeds*
- *In-DEX links*



“Our picture is of mankind labouring under the impulsion of an obscure instinct, so as to break out through its narrow point of emergence and submerge the earth; of thought becoming number so as to conquer all habitable space, taking precedence over all other forms of life; of mind, in other words, deploying and convoluting the layers of the noosphere. This effort at multiplication and organic expansion is, for him who can see, the summing up and final expression of human pre-history and history, from the earliest beginnings down to the present day.”

Pierre Teilhard de Chardin, The Phenomenon of Man



Philosophy

A meme is to our collective infospace as a gene is to the biosphere. In other words, a meme is the simplest unit of an information system. It is useful to think of memes in this context as simple ideas. These ideas propagate, compete, combine, and evolve. The emergent domain of the world's constantly morphing thought-matrix is referred to as the noosphere - literally, the domain of ideas. Thus a meme might start as a single, simple unit of information, but be rapidly transformed in meaning and context as it is passed around from different human nodes in the noospheric network. After enough cycles of such evolutionary feedback (and often, without any), a meme will usually either die - be removed from noospheric circulation - or reach an island of stability. Once a meme carves out such a space for itself in the collective mind it becomes a self-propagating entity; a new stable platform for the transference of meaning.



Citations

1 - Twitter:

2 - Reddit:

3 - Steem:

4 - Facebook:

5 -

6 - *The Phenomenon of Man. Pierre Teilhard deChardin - Harper Perennial Modern Thought -2008*



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