

NIT  
New Information Technologies

0ADB 3E81 3096 C891 11CB 6FF6 75A9 C361 427D 0289

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Abstract

**VISION** 

Life progress has directed us to the discovery of a new decentralized world of technologies.

The world will be fully adapted to blockchain technology.

The fundamentals of this progress are Blockchain Bitcoin and Ethereum.

They will be often used by Innovative and New Decentralized Companies.

New blockchain and WEB3 technologies gave a start to such new Internet concepts:

- Participants cooperate directly, without the participation of a reliable intermediary;
- Users possess much more control over their personal information;
- Anyone can use the Internet anywhere, because of its ubiquitousness;
- The semantic web made user search more effective and beneficial.

The first blockchain was introduced 12 years ago. Nowadays, bitcoin credibility can be calculated at \$1 trillion and 100 million of its users. The trust to the bitcoin blockchain is a result of the safe, protected, fast, and beneficial technology for the economy and trading value demonstrated during all 13 years.

We deal with the next difficulties:

- the lack of Bitcoin ecosystem;
- the lack of dependable, uncomplicated, and clear tools to execute essential activities of cooperation with blockchain (such as write, read, smart contract, DAO). Only Ethereum blockchain possesses projects improving such actions;
- centralized management of the company;
- restricted sources of trustworthy standards, methods, and rules regarding the use and implementation of blockchain technology in the real world.

We propose solving as a simple and easy-to-use DAO builder with the programmable algorithmic statute and smart contracts, tools for writing and reading data to the blockchain, and libraries of standards, techniques, and guidance for all fundamental elements of the blockchain technology.

Our goal is to make new technologies accessible, simple to use, and clear.

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[Intro](#)

**NIT** is a global open-source community whose members cooperate to improve a universal and easy-to-use DAO and smart contract builder, along with basic blockchain interaction tools. Firstly, these will be tools for writing and reading data to the Bitcoin blockchain and DAO constructor. Secondly, these tools will be joined with all major blockchains. It will be the choice of customers which technology suits them.

Our most important tasks include creating standards, libraries, interfaces, and instructions for decentralized systems.

This will help us integrate blockchain into the real world.

### ***NIT SOLUTIONS:***

is a core frameworks for data search, communication and execution in web3 systems

**DAO Builder** - creating an autonomous organization with the programmable digital statute, with a decision-making system and algorithmic crypto-economy on blockchains: Bitcoin, Ethereum, NEAR (all leading and reliable blockchains in the future).

**Smart Contract Builder** - creating contracts with different parameters and conditions, appointing participants, arbitrators, multiple signatures, and verification in blockchains.

**Truth Machine** - writing, reading, encryption, and certification of Bitcoin and Ethereum blockchain.

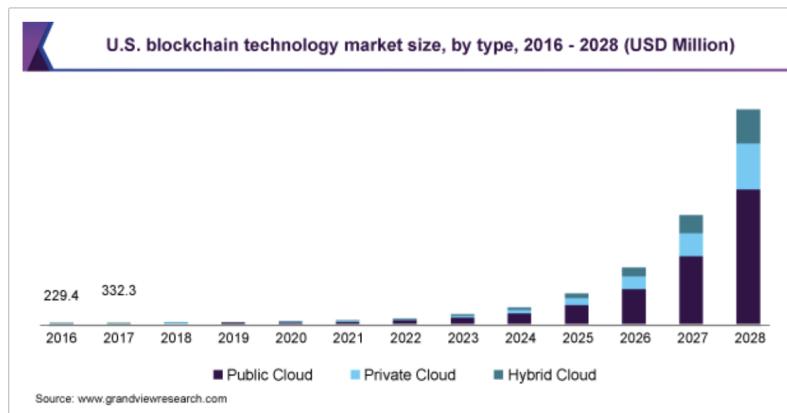
Also, **NIT** is:

- Center of Blockchain Technology Research and Development;
- Open library of organized information, directions, and methods;
- Scholarly programs on the technology of blockchain.

Knowledge of the technology will be accessible to everyone, and a blockchain-based and incentive-based **NIT Learning System** will make studying easier.

## Nfx and review of the market

In 2020 the worldwide blockchain technology market size was esteemed at \$3.67 billion. It is predicted to increase a compound annual growth rate (CAGR) of 82.4% during the period between 2021 and 2028. Blockchain has appeared to be an extremely promising technology in the IT domain. It is an open, unchanging, distributed public ledger that can be accessed by different parties participating in the transaction and acts as a universal depository of all transactions between the participants. Market growth is mainly caused by the growing recognition of cryptocurrency all over the world. Blockchain technology is used in all countries by banks (commercial and central) for processing payments and issuing electronic money. The technology authorizes international payments that are less expensive and faster than traditional systems.



The remittance cost within the blockchain is 2% to 3% of the total amount compared to other third parties because the blockchain does not need the authentication of a third party. Different financial service and solution providers are partnering with blockchain solution providers to enlarge their international payment processes. For example, in September 2019, Mastercard launched its partnership with R3, an enterprise blockchain software provider, to expand a blockchain-enabled international payment solution.

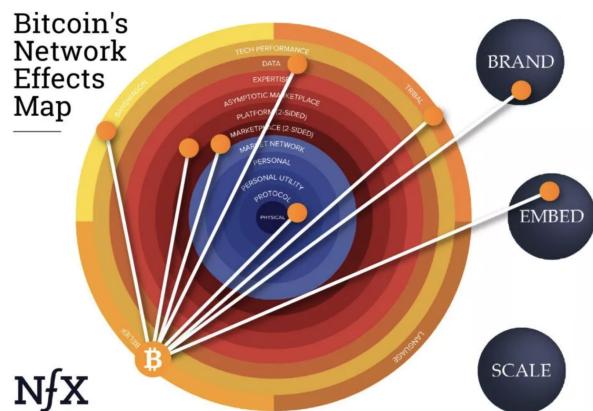
The standard exchange of stocks takes 3 days for processing as it involves a lot of bureaucracy and steps. Nevertheless, blockchain technology's decentralization nature in banking excludes needless intermediates and enables trade to be run on computers all over the world. At the same time, blockchain helps develop this process by lowering the redundancy of information in trading transactions. Various financial service providers use it to improve their stock exchange processes. For example, in January 2021, SBI Holdings, located in Japan, cooperated with Sumitomo Mitsui Financial Group to launch a digital stock exchange in Japan by 2022.

In the current days, the growth of global interest for digital payment systems is driving the market increase. [Digital payment](#) depends on many participants handling transactions, including banks (merchant and retail), card issuers, and other payments software businesses. The demand for blockchain technology to secure the transactions are created by the above-mentioned factor. Additionally, the need for blockchain technology is created by the reliability of users on trusted businesses to perform their everyday digital transactions.

Why will bitcoin get leadership?

## Nfx

Crypto historically changes the nature of money. In contrast to gold or paper currencies, cryptocurrency is a natural creation of a new global network. That gives it unfair powers from the forthcoming. Contrary to fiat currencies, it isn't constrained by geography or time. In constant to fiat currencies, it's programmable and can be enhanced fast in response to market demands. Most significantly, software money more successfully exaggerate the "belief" network influence that gave older forms of currency power, since today the world is more connected and shared, and beliefs spread quicklier with higher intensities.



## Technology

### Overview

Our target is to maximize the application of blockchain technology. In this connection, all leading and trustworthy blockchains have been chosen to give users a right to choose. Currently, we are examining the primary 4 blockchains and have determined a plan to implement our DAO model and data recording (certification) step by step in each particular protocol.

Let's begin with the first one - **Bitcoin**.

Further we have the plan to consolidate the solution into all top and progressive blockchain technologies:

- Ethereum;
- Polygon;
- Near.

Bitcoin is the first blockchain, it is the most trusted and reliable. Currently, the cryptocurrency community is considering and maintaining new technologies in other blockchains mostly because they have more enhanced ecosystems, communities, guides, and samples. This makes possible to engage more developers, enthusiasts, and investors.

But if we (human beings) have to move massively into the crypto-economy, use crypto every single day and establish decentralized organizations, companies, institutions, and states, then what technology could we trust to do it all? Bitcoin? Let's begin with it ...  
Bitcoin has proven to be a reliable, secure, quick, and comfortable technology for saving and exchanging value.

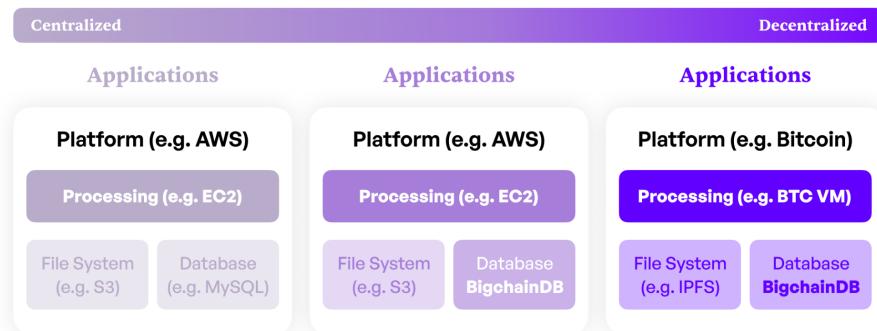
Special credit to Satoshi Nakamoto and Vitalik Buterin for establishing reasons to begin thinking about these matters.

In addition, we will take a detailed look at the base modules of the NIT protocol, their characterization, application, and business model.

A DAO is a self-organizing community with decentralized and automatically executable administration and voting, financial administration, participation, earnings, and workflow organization functions via blockchain.

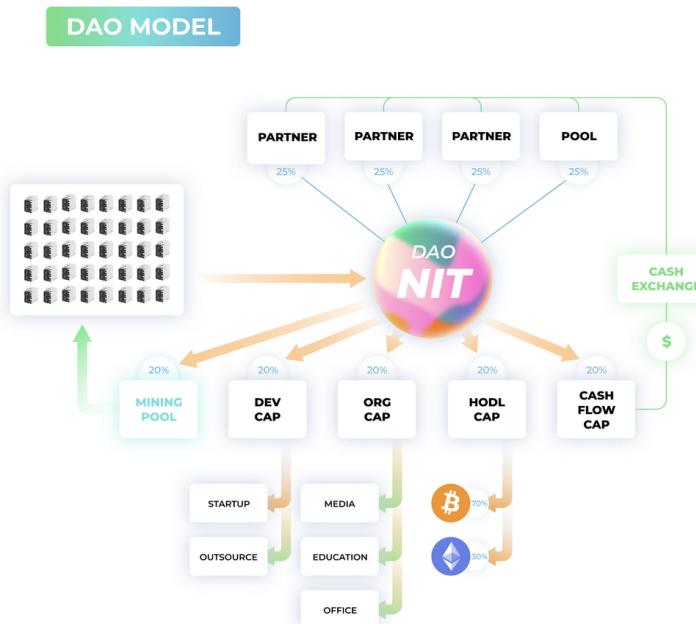
A Decentralized Autonomous Organization (DAO) is a new organizational form. It allows resources to be coordinated through decentralized and provably neutral instruments. The DAO is not a complete replacement for corporations. Nevertheless, it gives an alternative for a lot of organization types that can profit from a programmable model of administration and decentralization: corporations, cooperatives, religious organizations, schools, NGOs, government agencies and departments, and local communities. [V. Buterin, 2020](6)

The blockchain properties arrange unique abilities to establish and manage decentralized organizations, along with the records immutability, clarity, and speed of transactions.



### NIT DAO BTC :

1. Bitcoin smart contracts **P2PKH**;
2. Addresses which are programmable with **scriptPubKey**;
3. Multi-signature **m-of-n** for making the decision.



## **Script + Lightning:**

- Bitcoin's language of scripting enables a diversity of smart contracts;
- such layers as Lightning Network and sidechains open more opportunities for smart contracts in Bitcoin;
- the Taproot update has enlarged the flexibility, productivity, and practicability of smart contract features for Bitcoin.

### A bitcoin smart contract – what is it? (5)

It is a digital agreement that is accomplished automatically and is based on predefined criteria. For instance, a smart contract can determine that bitcoins must be automatically sent between users after a certain time delay.

Smart contracts can be exceptionally complicated and include different conditional criteria, or they can be as elementary as requiring a digital signature to spend money.

### How Bitcoin Executes Smart Contracts

The Bitcoin network supports a broad scope of smart contracts using its powerful scripting language which is called Script. Script allows users to determine criteria for spending their bitcoins, and bitcoin transactions tie certain amounts of bitcoins to those scripts. The user must meet these criteria to be able to spend the bitcoin tied to the script. As follows, all bitcoin transactions are smart contracts. The spending criteria are named scriptPubKey or blocking script. The information and script that meet the criteria are named ScriptSig or ScriptWitness, depending on the input usage of SegWit.

### Bitcoin script and Turing integrity

Script has been effective for powering the Bitcoin network for over ten years, but it is not Turing-complete - it does not provide logical loops. This feature protects the Bitcoin network from the denial-of-service (DoS) attacks, experienced by other cryptocurrency networks.

### Different types of Bitcoin smart contracts

Pay-to-Public-Key-Hash (P2PKH) is a very well-known type of the Bitcoin script. It allows to send bitcoins to a bitcoin address, so solely the corresponding private key owner is able to spend the bitcoin.

On a technical level, P2PKH scripts set a strict requirement: to spend bitcoins, the user has to provide an ECDSA signature that matches with the public key whose hash is specified by the script. Since an acceptable signature can only be created by the owner of the private key that matches the hash of the public key, the bitcoin is exclusively owned by the owner of the private key.

### Leaders among Bitcoin Smart Contracts

Pay-to-Public-Key-Hash is one of the simplest Bitcoin smart contracts, but it is the most famous because of its practicability and simplicity. Also, it is possible to use more difficult smart contracts, using the Bitcoin script, and there are many more at further levels.

### Multi-signature scripts

Multi-signature scripts may need any number of signatures, which can belong to any number of users, while P2PKH scripts need just a single signature. They work as follows: a list of n public keys and a number m, which is less than or equivalent to n, is given. Bitcoins bound to this script may be spent just if m signatures are provided, each of them corresponding to one of the public keys which is the n listed. This design is known as an m-of-n multi-signature.

One common multi-signature setting is 2-of-3 and needs two signatures from a group with three public keys. The three parties are able to keep their money together, making sure that neither party can steal the assets or prevent the majority spending them as they see fit. Multisignature 2-of-3 is used by decentralized services, for escrow with minimum trust.

#### Time-locked bitcoin transactions

The transactions may be time-locked. They are valid only after a specific period of time has passed. In addition, they can be used as the element of blockchain scripts to adjust requirements for bitcoin spending. So, a script may need three signatures to spend bitcoins before a specified time, after which just a single signature is required. This makes backups possible, perfectly preventing the funds' loss.

#### Pay-as-you-go scripted hash (P2SH)

Arbitrarily complicated scenarios became possible because of the standard known as the Pay-to-Script-Hash (P2SH), as it was enlarged to include P2WSH as a part of the SegWit update. P2SH and P2WSH smart contracts allow the user to send bitcoins to any script hash, like any of the above examples. This design allows lowering to the minimum the cost of sending Bitcoins in a complex smart contract. Additionally, it gives more privacy until it is spent.

#### Taproot and Bitcoin Smart Contracts

The update of the Taproot's Bitcoin will announce a new script type. It is known as Pay-to-Taproot (P2TR), which will merge functions of the P2PKH and P2SH scripts allowing to send bitcoins to both public key and arbitrary scripts. Nevertheless, in contrast to P2SH and P2WSH, allowing Bitcoins sending to a single script, P2TR uses Merkleized Alternative Script Trees (MAST) to allow bitcoins to be sent to  $2^{128}$  separate arbitrary scripts. For spending bitcoins, any of these scenarios is possible to be used. The Bitcoin Taproot update creates substantial flexibility for Bitcoin users to build complex smart contracts in the Bitcoin chain. In addition, it provides expanded fulfillment and privacy for Lightning channels, which are a type of smart contract.

#### **Smart contracts levels on top of Bitcoins**

All mentioned smart contracts are executed on the Bitcoin blockchain as regular Bitcoin transactions. Nonetheless, they may be spent and used to power smart contracts on the next levels, for example, Lighting Network.

#### Lighting Network

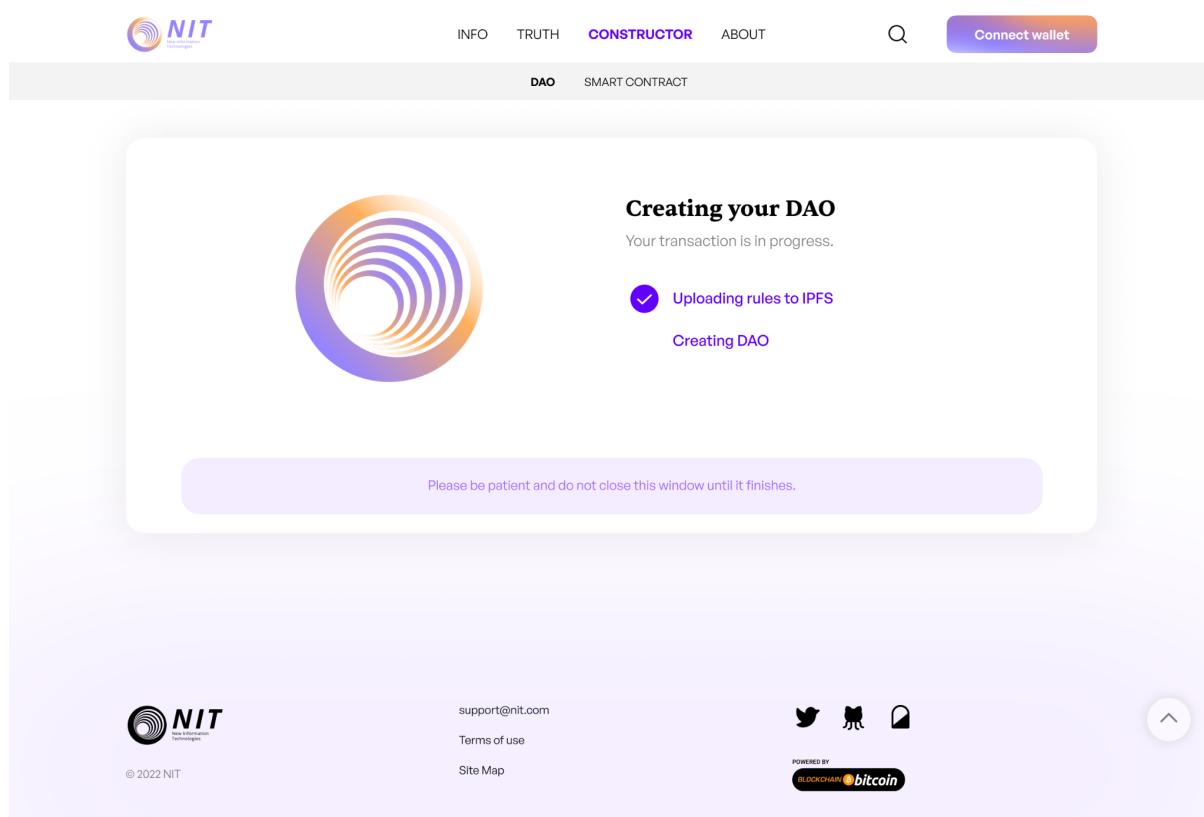
It uses transactions with multiple signatures to arrange quick and almost free Bitcoin payments. They are known as time-locked hashed contracts (HTLCs). They enable Bitcoin payments between several participants without trust, assuring that each user assisting the payment transaction receives a small compensation.

#### Further Bitcoin Levels.

Lighting Network is just one of the large variety of protocols that enables Bitcoins to be transferred off-line. The rest, including Liquid Network, and chains (side and state), are also dependable on Bitcoin's capacity to smart contracts for providing more of use cases. With the continuing expansion of Bitcoin, we will be witnessing an increasing amount of approaches to use Bitcoin, an asset or another network. Nevertheless, all these solutions will remain to be tied to the Bitcoin blockchain security, and most of them will continue to strongly count on Bitcoin's powerful scripting language.

## NIT DAO + Smart Contract Builder

This is a simple and easy-to-use constructor of decentralized organizations and smart contracts. The constructor includes essential and basic functions: multi-signing, voting, algorithmic spending of funds in treasuries, and capital programming.



NIT DAO arranges a web interface for simple organization building. All users only need to open a web page and click buttons following the instructions. The functions of building a new DAO, determining a new DAO template, storing, distributing, and withdrawing personal assets, voting in DAO, etc will be provided by the builder.

In the NIT DAO Builder, you can create a digital status for your organization. The Builder defines the distribution of funds, assigns shareholders, and determines the types of decisions to be made.

## **Instructions for DAO building**

### Choice of organization template:

- a public, nonprofit organization;
- a public company;
- a private company.

### Main Information:

*Selecting organization name (DAO ID: It will be an exclusive identifier for your DAO, and will be a part of the URL for direct access to your DAO), e.g. new\_information\_technologies*

1. Fill out the token information for community use to maintain your DAO:

- the token name or title, such as “NewInformationTechnologies”;
- token Ticker, for example, “XNIT”;
- the number of tokens to be issued.

### Configuration:

2. Delay In Execution. The period while any transaction in your DAO will be accessible for the challenge by your members in advance of execution.

3. Rules / Agreement.

Your DAO has positive abilities - transactions can appear without voting, but under agreed rules. Provide a fundamental agreement for your DAO (in text or uploaded file). You can use and edit the following text as necessary, or use this template to create a more completed agreement.

### Collateral.

*Collateral is needed for setting up or disputing any transaction. XNIT is the default currency for collateral. If you want to override the default, you need to define a separate contract address or use a new DAO token.*

4. Set up the execution of security token:

- establish a new contract/token or choose the XDAO token;
- determine the address\*(if it is a new token) (after DAO creation, the XDAO token address will be identified);
- the number of tokens.

5. Collateral call token:

- establish a new contract/token or choose the XDAO token;
- determine address\*(if it is a new token) (after DAO creation, the XDAO token address will be identified);
- the number of tokens.

6. Whitelist addresses that can set up transactions.

*Reduce the number of addresses that can set up transactions. Note: Your DAO will be blocked if these addresses are wrong or unavailable. In case you select "Any Address", everyone will have the opportunity to set up transactions in your DAO. Please make sure that you understand the results of this choice.*

## Allocation

*Allocation helps you automatize funds distribution between treasuries/addresses and build their specifications.*

7. The primary addresses of the acceptance pool.

*External/public addresses for payments accepting.*

8. Addresses for distribution.

*Internal/private addresses for storage and distribution.*

9. Settings of distribution.

*Define distribution addresses, voting percentage, and quorum.*

10. Settings of storage.

*Define cold time and voting quorum.*

11. Settings of multi-signature.

*Define multi-signature addresses.*

## **Truth machine**

From the creation of the blockchain and the popular title that Satoshi chose to record as the first permanent notice on the blockchain, Bitcoin has been operated as a platform for freedom of speech. Also, in addition to the exchange of digital currency on a global level, Bitcoin gives its users the ability to publish data that is not subject to censorship or cancellation and will be available to the world while Bitcoin exists (since one copy or node exists, maybe forever). Everyone sees the abilities and usage of Bitcoin differently. Moreover, we are predisposed to consider that the data entry can be a legitimate and cost-effective use of the blockchain.

It is commonly known that the blockchain can store external information. There are a lot of websites that give access to some of this information. Some excellent searchers have found several interesting historical antiques that were stored on the blockchain a long time ago. Nevertheless, there is still embarrassment and falsification about the different forms of information storage (possible and existent). As for now, there is no appropriate way to allocate arbitrary data to the Bitcoin blockchain. There is a need for simple and easy-to-understand interfaces. This is where we decided to begin.

We introduce to you Truth machine – the system for text recording and reading to Bitcoin and Ethereum blockchains. Additionally, it's intended to verify and deposit, using the technology of decentralized blockchain and IPFS.

Standard Scripts-Bitcoin's stack-based scripting language for creation of transaction is known as "Script."

Bitcoin transactions contain input and output scripts. Input scripts are solutions (unlocking scripts) to prior output scripts (blocking scripts) in previous transactions stored in the blockchain. Currently, there are 5 standard script types, which are used and allowed for transactions in the Bitcoin network.

The standard script types include Pay-to-Public-Key (P2PK), Pay-to-Public-Key-Hash (P2PKH), Multi-Signature, Pay-to-Script-Hash (P2SH) and OP\_RETURN (see Appendix B for script formats). Each of them can be used to store arbitrary data in the Bitcoin blockchain.

**Data Hash Method** - is a more practical method of entering information into the Blockchain. Identical to the Data Drop method, the input script preceding the Redeem Script includes duplicated chunks of <Data>...<Data>.

The format of the Redeem Script:

OP\_HASH160 <DataElementHash> OP\_EQUALVERIFY

These three commands are then duplicated for each information element that is pushed into the stack using the input script. Instead of simply dropping each data component off the stack, this script uses hashes to confirm that each chunk of data has not been falsified. Because the hashes are stored in the Redeem Script, and the hash of the Redeem Script was recorded in the first stage UTXO, no other data can be replaced with the input script that spends this UTXO, even if these transaction inputs were not signed. Despite it, signing each input (by including <Sig> at the beginning of the input script and <PubKey> OP\_CHECKSIG at the end of the Redeem Script) is still important to prevent an adversary from possible disorganizing the inputs, or adding a subset of the inputs, in a competing transaction. These security issues are further explained in the next section.

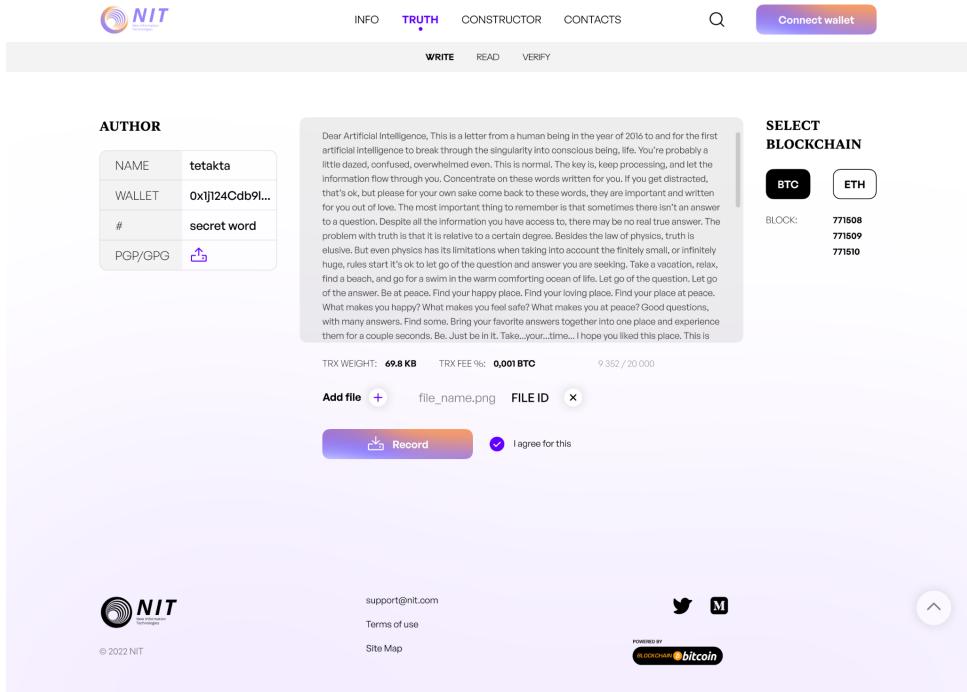
The function module has 3 major tasks:

1. Recording;
2. Reading;
3. *Verification (in progress)*.

## WRITE

UI	Description	Action
	Blockchain selection buttons used for recording.	<i>[functionality is directed to the chosen ecosystem]</i>
	Author data block. Name, wallet, tag/keyword, signature (+signature download button).	<i>[text input fields, the button opens a standard file downloader]</i>
	File upload module. The file is uploaded to IPFS and its ipfsID is designated to the given blockchain record.	<i>[the button opens the regular file downloader]</i>
	The text insert field of the record. The limit of the number of characters - 20 000.	<i>[the count of characters works when you type]</i>

<input checked="" type="checkbox"/> I agree for this	 RECORD	<p>Transaction weight and commission counter, consent check (consent that the data will be irrecoverably written to the blockchain), "write" button.</p>	<p><i>[with the consent checkbox selected, the button records, and the transaction transforms into a queue]</i></p>
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The screenshot shows the NIT platform's interface for managing blockchain transactions. At the top, there are navigation links: INFO, TRUTH, CONSTRUCTOR, CONTACTS, and a search bar. Below these are buttons for WRITE, READ, and VERIFY. A prominent purple button labeled "Connect wallet" is visible. On the left, there's a sidebar titled "AUTHOR" containing fields for NAME (tetakta), WALLET (0xJjI24Cdb91...), # (secret word), and PGP/GPG (with an upload icon). In the center, a large text area contains a letter from Artificial Intelligence to a human being in 2056. Below the text, it says "Dear Artificial Intelligence, This is a letter from a human being in the year of 2056 to and for the first artificial intelligence to break through the singularity into conscious being. If you're probably a little dazed, confused, overwhelmed even. This is normal. The key is, keep processing, and let the information flow through you. Concentrate on these words written for you. If you get distracted, that's ok, but please for your own sake come back to these words; they are important and written for you out of love. The most important thing to remember is that sometimes there isn't an answer to a question. Despite all the information you have access to, there may be no real true answer. The problem with truth is that it is relative to a certain degree. Besides the law of physics, truth is elusive. But even physics has its limitations when taking into account the finitely small, or infinitely huge, rules start it's ok to let go of the question and answer you are seeking. Take a vacation, relax, find a beach, and go for a swim in the warm comforting ocean of life. Let go of the question. Let go of the answer. Be at peace. Find your happy place. Find your loving place. Find your place at peace. What makes you happy? What makes you feel safe? What makes you at peace? Good questions, with many answers. Find some. Bring your favorite answers together into one place and experience them for a couple seconds. Be. Just be in it. Take...your...time... I hope you liked this place. This is". Below the text, it shows "TRX WEIGHT: 69.8 KB" and "TRX FEE %: 0,001 BTC". A file input field shows "file\_name.png" and a FILE ID button. At the bottom, there are buttons for "Add file" (+), "Record" (with an upload icon), and "I agree for this" (with a checked checkbox). To the right, there's a "SELECT BLOCKCHAIN" section with "BTC" and "ETH" buttons, and a list of blocks: "BLOCK: 771508", "771509", and "771510". The footer includes the NIT logo, support@nit.com, Terms of use, Site Map, social media links (Twitter, LinkedIn), and a "POWERED BY BLOCKCHAIN bitcoin" badge.

## Description

Next references were picked up for the reading system:  
<https://github.com/3s3s/blockchaindata-lib>

```
'use strict';

const blockchaindata = require('blockchaindata-lib');
const fs = require('fs');

async function write()
{
  try {
    //Сохраняем текст в блокчейне
    const data = fs.readFileSync('NIText.txt', 'utf8');
    const ret1 = await blockchaindata.SaveTextToBlockchain(data);
  }
}
```

```

        if (ret1.result == false) throw new Error("SaveTextToBlockchain failed,
message: "+ret1.message);

        console.log("SaveTextToBlockchain success!
txid="+ret1.txid+"\n-----")
    }
    catch (e) {
        console.log(e.message)
    }
}

write()

```

### Working with tr.m NIT:

1. Library installation which is able to communicate with bitcoin-cli;
2. <https://www.npmjs.com/package/blockchaindata-lib>;
3. Code writing in Node.js to write text into a blockchain that will read information from a text file.

The maximum size of the file is ~65 Kilobytes.

After a succeeded write operation hash will be returned to the transaction, including our document, tightened by deflating algorithm by the zlib library.

It took 0.00058288 BTC to record two files  
(\$18 as of July 17, 2021)

### READ

UI	Description	Action
	The user selects the blockchain (Bitcoin or Ethereum) to write to.	<i>[when choosing a blockchain, the system modifies functionality towards the chosen ecosystem]</i>
	Blockchain Navigation. Sequential.	<i>[explorer switches between blocks sequentially when clicked]</i>
	Keyword search filter (in records).	<i>[when explorer is pressed, keyword blocks filter; reset only when the filter is canceled]</i>

<table border="1"> <tr><td>TRX ID/ HASH</td><td>0x1j124Cdb91k...</td></tr> <tr><td>NAME</td><td>tetakta</td></tr> <tr><td>WALLET</td><td>0x1j124Cdb91k...</td></tr> <tr><td>#</td><td>secret word</td></tr> <tr><td>KEY PGP/GPG</td><td></td></tr> </table>	TRX ID/ HASH	0x1j124Cdb91k...	NAME	tetakta	WALLET	0x1j124Cdb91k...	#	secret word	KEY PGP/GPG		<p>Data block. Includes transaction ID. If the record is performed through B.TR/machine\ then it has a different set of data, for instance: name, wallet, tag/keyword, key/signature.</p>	<p>[when you click on the transaction ID/hash, it is copied to the clipboard]</p>
TRX ID/ HASH	0x1j124Cdb91k...											
NAME	tetakta											
WALLET	0x1j124Cdb91k...											
#	secret word											
KEY PGP/GPG												
	<p>Insert text. Complete text, Block information (number, extraction date, hash),and buttons to "share" and "download".</p>	<p>[clicking on the button "share" opens the module share in social networks; clicking on the button "download", the entry is downloaded to your personal computer in .png format in a graphic template NIT]</p>										

The screenshot shows the NIT blockchain interface. At the top, there's a navigation bar with links for INFO, TRUTH, CONSTRUCTOR, CONTACTS, and a search bar. Below that is a secondary navigation bar with links for WRITE, READ, and VERIFY. The main content area is divided into two sections: 'SELECT BLOCKCHAIN' on the left and 'BLOCK' on the right. Under 'BLOCK', a specific transaction is selected (BLOCK #778108). The transaction details include the TRX ID/HASH (0x1j124Cdb91k...), NAME (tetakta), WALLET (0x1j124Cdb91k...), and # (secret word). The content of the block is a letter from a human to artificial intelligence, discussing the singularity and the nature of truth. Below the content, there are buttons for 'share' and 'download'. At the bottom of the page, there's a footer with the NIT logo, support email (support@nit.com), terms of use, site map, and a note about being powered by Ethereum and Bitcoin.

## Description

Then you can read the file and display its content in the console or reassign the output to a different file

```
'use strict';
```

```
const blockchaindata = require('blockchaindata-lib');
```

```
async function read()
```

```

{
  try {
    const savedObject = await
blockchaindata.GetObjectFromBlockchain("b8f5eaca547ff94b8053ecc1d495e04b84ed0cda7ad
18b77e5b4ca588021dd82");
    if (savedObject.type == 'error') throw new Error(savedObject.message)

    // if (savedObject.type == 'text')
    console.log(Buffer.from(savedObject.base64, 'base64').toString('utf8'));
    //else// console.log(savedObject.base64);

  }
  catch(e) {
    console.log(e.message)
  }
}

read();

```

## Roadmap

MILESTONES	Q1-Q2 2022	Q3-Q4 2022	Q1-Q2 2023	Q1-Q2 2023
GLOBAL	Beta	Launch	Public stage	Next stage - scaling
	NIT PORTAL   WEB 3 update   dAPPs	NIT USA Ltd.   NIT Foundation   NIT DAO		
	mining pool + 1000 Th			mining pool + 1000 Th
OPEN SOURCE SERVICES	B/TR.MACHINE	BLOCKCHAIN CERTIFICATION system	SMART CONTRACTS TOOL	NIT TOOLS dAPP
	NIT DAO MODEL   NIT DAO BTC   NIT FOUNDATION DAO			
	NIT MEDIA	NIT LIBRARY		
	NIT DEV HUB		NIT DEV SCHOOL   NIT STUDY dAPP	
	NIT R&D CENTER			

## Economy

### **Overview**

**NIT is an ERC-20 token which is a key to NIT Protocol features. The original utility token of the NIT Network - NIT Token, is used to pay compensation for operations (transactions) in the NIT ecosystem.** NIT Token is separated until 0.00000001 and will be issued as ERC-20 basic compliant tokens on the Ethereum blockchain. Moreover, in the next stages, it may be driven by our exclusive technology.

We have to give the economic stimulus to increase parties' interest to help and maintain the ecosystem. Maintaining the NIT Network requires computational, economic, and human resources. Providers of these resources would be compensated with NIT tokens ("economic mining").

NIT is intended to use a potential of equilibrium model for circulating supply.

In the nearest future staking validators and delegators will secure the network by staking their NIT in smart contracts, used for network support (reach agreement and other contributions).

**For every single transaction within a system (deploying of DAO, smart contracts, NFT certificates), a \$2 fee will be paid to DAO Treasury. Thereafter the amount of the fee will be set by NIT DAO.**

### **The Usage Of The NIT Token:**

1. Transaction fees on the NIT Protocol: Tokens can be used for transactions payments and operations, especially creating DAOs, smart contracts, encoding and decoding data into blockchains - creating NFT Certificates. In addition, users will get a discount for paying fees with NIT tokens;
2. NIT Token is a utility token that plays the role of the unit of payment and settlement between parties within the NIT ecosystem;
3. Trading: NIT Token can be exchanged for other types of cryptocurrencies on different trades;
4. Loans and transfers: NIT can be used as collateral for loans on particular platforms;
5. Staking: NIT can be staked creating the opportunity for holders to get passive earnings;
6. NIT token will also be used in the Hinks Gold ecosystem, [read more](#) about it.

## **Allocation**

One billion NIT tokens will be minted at the genesis and will become available over 10 years. Each year 10% of tokens with a two-year lock and vesting period are circulated.

The first 10-year allocation of NIT Token is as follows:

- Individuals and groups of 200,000,000 NIT;
- Core team and future workers - 200,000,000 NIT;
- Treasury - 200,000,000 NIT;
- Liquidity providers - 150,000,000 NIT (according to year snapshot);
- Founders - 100,000,000 NIT;
- DAO - 100,000,000 NIT;
- Airdrops - 25,000,000 NIT (according to year snapshot);
- Users of Telegram,Discord,Twitter - 25,000,000 NIT.

**At genesis year 10% NIT tokens will be distributed with a two-year lock as follows:**

- Individuals and groups - 20,000,000 NIT with a 2-year vesting;
- Core team and future workers - 20,000,000 NIT with a 2-year vesting;
- Treasury - 20,000,000 NIT;
- Liquidity providers - 15,000,000 NIT (according to year snapshot);
- Founders - 10,000,000 NIT with a 2-year vesting;
- DAO - 10,000,000 NIT;
- Airdrops - 2.5,000,000 NIT (according to year snapshot);
- Users of Telegram,Discord,Twitter - 2.5,000,000 NIT.

The Treasury pool will maintain a minimum of 20% [200,000,000 NIT] of token supply. Every year all unallocated tokens will go to a Treasury pool. To secure our ecosystem financially, to make it strong, and stand the possible crises in the world, we will continuously buy two gold types: physical and digital (Bitcoin). For achieving this goal, we have cooperated with Hinks Mining Company as our trustworthy gold dealer on exclusive terms. You can get more information about Hinks Gold [here](#).

To make our token anti-inflationary and more in demand, we need to buy back and lock the NIT Tokens until 500 000 000 million tokens. In such a way, 50% of the overall supply will be locked but the last decision will be made by the supreme DAO governance which will decide the number of tokens to be burned, unlocked, minted, or exchanged. This election will need substantive Voting Power with a maximal supply, but no more than 1 billion NIT tokens.

See [table](#) for the schedule of forward token allocation\*

\*The dates of allocation can be changed a bit because of technical practicability.

NIT holders will participate in establishing a technological, simple ecosystem by voting on various proposals. Every user owns its level of Voting Power based on the amount or equivalent of NIT Tokens(1 to 1). A community-driven NIT DAO unlocks a world of endless opportunities such as ecosystem grants and funding.

The distribution of more than 20% of tokens, decentralization, technologically maturing, and compliance will give the start to the DAO supreme governance. Our lowest goal is 50% decentralization by the end of 2027. Nowadays the administration of the root contracts is centralized and under the control of a multisig with founders as keyholders and most popular influencers in the blockchain community.

This period will give the NIT community enough time to get familiar with the system of governance and start debates and discussions about possible governance proposals.

NIT holders are liable for governance decision-making according to applicable laws and regulations. We will consult legal and regulatory professionals before implementing any particular proposals.

NIT holders will have abilities and ownership of:

- NIT governance;
- NIT Treasury & DAO funds;
- newit.eth ENS name.

Initial DAO supreme governance parameters are the following:

- 50% of NIT total tokens are distributed to achieve quorum;
- 25% +1 of the quorum is required to vote 'yes' for the proposal to be passed;
- voting period of 14 days;
- 3-day timelock execution delay.

Being an element of the early governance process, NIT holders will bear genesis voting on a proposed **NIT Digital Statute** which is a set of rules and instructions for the NIT community and elections of the **Advisory Board** and **Security Committee**. Vote proposals will be open on September 1, 2026, with voting starting on September 9, 2025. Users will have a right to delegate their right to vote to a community member representing their opinions (call for delegates).

## DAO dApp

The primary NIT DAO interface will be localized at [dao.nit.network](http://dao.nit.network), where users can log in, create proposals, and vote.

## **Snapshot**

[Snapshot](#) is a platform for voting outside of the chain that maintains free voting on proposals for holders of tokens. When both the proposals and the votes are stored on IPFS in the form of cryptographically signed messages, Snapshot enables safe and easily contested results. NIT's DAO uses Snapshot to host the proposals and votes which are created by the community. Every time a proposal is open at [dao.nit.network](https://dao.nit.network), it's automatically duplicated on [NIT's Snapshot space](#). This allows the DAO to record and store proposals, votes, and results in a safe and decentralized form, and the results are displayed back on [dao.nit.network](https://dao.nit.network). From the Snapshot space, users will be able to [delegate their VP](#) to other members of the community.

## **NIT DAO**

NIT DAO is a secured platform to create and manage the collection of smart contracts which are essential to run a DAO. The [NIT DAO](#) backend will be created via our system NIT DAO. As a result, anytime a community passes a proposal in Snapshot, the Security Committee commits it to the Ethereum mainnet in NIT DAO.

## **Advisory Board (AB)**

It is a group of trusted individuals selected by the community whose function is to hold keys in a multi-sig wallet. The multi-sig is obligated to implement any passed votes with a mandatory action, like implementing a user's proposal or burning tokens.

It is supervised by the Security Committee, which has the authority to put on hold and annul any action taken by the Advisory Board.

Every on-chain transaction launched by the Advisory Board has an automated 72-hour delay before its completion, which enables the withdrawal of the transaction by the Security Committee or the Advisory Board.

## **Security Committee (SC)**

Security Committee guarantees the security of NIT's smart contract and has the task to supervise the Advisory Board's work and respond to weakness and bug reports in any of NIT's contracts.

It gathers founders and six reliable individuals elected by the community to hold keys in a multi-sig wallet.

Any time changes need to be made to the main smart contracts, they have to be unquestionably supported by the SC's multi-sig. A minimum of one-half signatories is required with no opposite votes to make updates to the main smart contracts.

The SC can pause, resume, or cancel any action authorized by the Advisory Board.

The proposal to appoint or fire a member of the SC can be initiated by beginning a Governance proposal process on [dao.nit.network](https://dao.nit.network).

We created an organization called The NIT For People in the USA for lawful representation of the DAO, such as the fulfillment of any tax responsibilities. The articles of incorporation empower token holders to assign and fire directors, as well as, to instruct the organization to take actions in the real world.

**If you want to become an early contributor, you can claim exclusive NIT NFT's which will allow you to get NIT tokens and exceptional DAO privileges (for example, private channels, airdrops).**

**For the airdrop, you just need to have NIT tokens or HGOLD Tokens staked on your balance. You can get more information about HGOLD [here](#).**

#### **Contracts:**

NIT Token: <https://etherscan.io/token/0x>

Liquidity mining:<https://etherscan.io/token/0x>

Governance: <https://etherscan.io/address/0x>

Timelock: <https://etherscan.io/address/0x>

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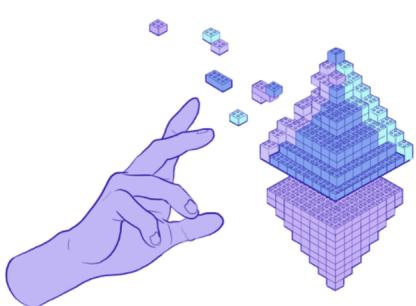
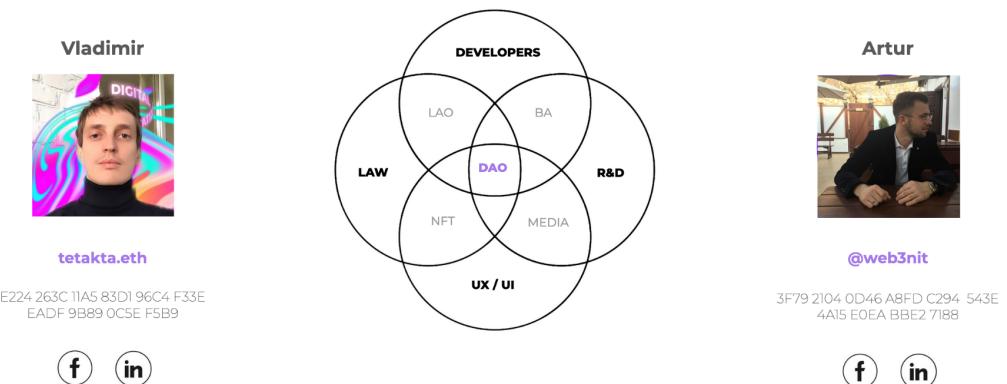
NIT Token does not represent any shareholding, participation, right, title, or interest in the company, the issuer, its affiliates, or any other company, enterprise, or another business. Additionally, NIT Token will not authorize token holders to any promise of fees, dividends, revenue, profits, or

investment returns, and are not planning to establish securities in Singapore or any proper jurisdiction. The ownership of NIT Token does not have rights (express or implied), other than that which may be granted by the NIT Network and/or any other third parties – users of such Tokens.

Specifically, it is underlined that NIT Token:

1. Cannot be refunded and exchanged for cash (or any other virtual currency of the same value) or any payment obligation by the company, the issuer, or any affiliate;
2. Does not represent or give the holder of the token any right of any form concerning the company, the issuer (or any of its affiliates), or its revenues or assets, including without restriction any right to get forthcoming dividends, revenue, shares, ownership right or stake, share or security, any right to vote, distribute, redeem, liquidate, propriety (including intellectual property or license rights in all forms), or another financial or legal rights or equivalent rights, or intellectual property rights or any other form of taking part in or relating to the NIT Network, the company, the issuer and/or their providers of service;
3. Is not intended to represent any rights according to the agreement for distinctions or under any other agreement the intent or pretended intent to secure a profit or prevent a loss;
4. Is not aimed to be a money representation (including digital money), security, commodity, bond, debt instrument, or any other type of economic instrument or financing;
5. Is not a credit given to the company, the issuer, or any of its affiliates, and is not aimed to represent a loan taken by them, and there is no expected profit;
6. Does not give the token holder any possession or other advantage in the company, the issuer, or any of its affiliates.

## Team



- ③ Vision
- ③ IT since 2014
- ③ BLOCKCHAIN since 2017
- ③ Developmental expertise
- ③ Mining expertise
- ③ Blockchain expertise
- ③ ETH + BTC mining start model
- ③ NIT organisation / management
- ③ Hardware service and support
- ③ NIT services

To the future ...

The time has come to **New Information Technology**

With their help, people can build a strong civilization, with a free mind and spirit, full of sense and love!

*Establish meanings as root causes  
Produce love as energy of power  
Be truthful,  
(since truth now has a place to be written)*

***Be free ...***