COINSTAR GLOBAL DIGITAL CURRENCY

Decentralized Global Digital Currency Peer-to-Peer Finance Network

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Abstract

Global Coinstar is a new Decentralize Global Digital Currency on a Network. It's an Upgraded System of Digital Currency that allows foreign exchange easily and online payments to be sent directly from one party to another without any authority. GCS digital currency have two (2) methods to send assets through the Blockchain Technology, peer to peer transactions Provide a Digital voucher and Digital Smart card, using Cryptographic algorithm. These two methods will provide new transactions systems, Digital voucher and digital Smart card, for payments transaction Globally and Store record in blockchain.

Coinstar they can provide a Confidentiality, integrity and availability under encryption algorithm from these two methods – transaction Digital Voucher and Digital Smart card.

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Introduction

Global Coinstar (GCS) is a Global Digital Currency on a Network that is not Controlled by any particular Countries or Companies, and then Providing to Operate worldwide to make international payment Transactions Easier and Create more Economy System in the world.

the Global Coinstar (GCS) in some parts that can works similar to Cryptocurrency, is a Digital Decentralized peer to peer transactions Network and trading it peer to peer include Digital Vouchers (DV) and online Payment transaction using Digital Smart card (DS Card), under blockchain Technology.

Mission Statement

Providing Easier access for international Transactions, foreign exchange without any Intermediate Central authority or Banks; Managing transactions for particular individual or Company and then Create More Economic freedom around the world and Reducing Suffering of people in the world.

Vision Statement

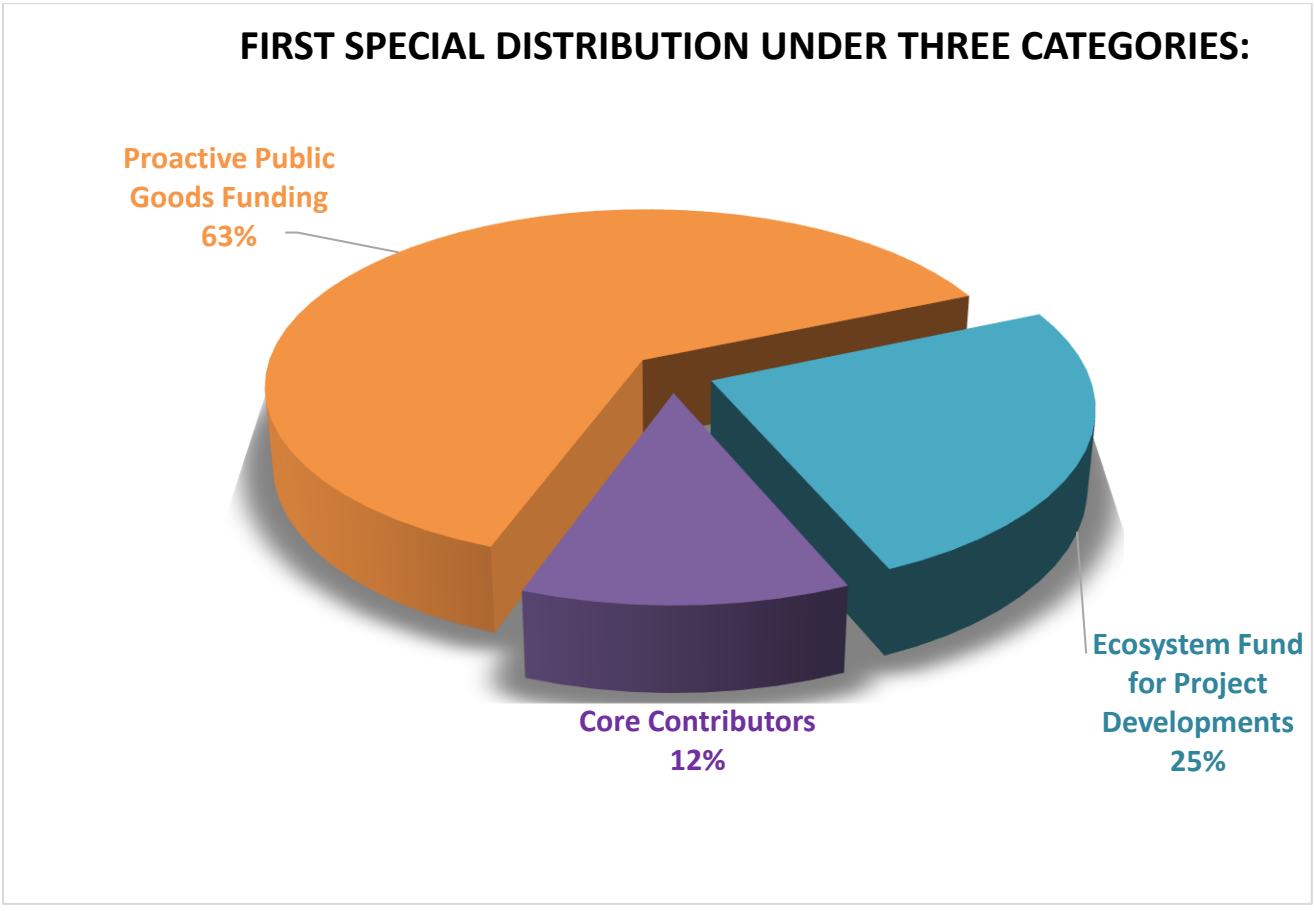
Its Vision is to become one of the best Channel of international payment transactions to Global commercial activity, foreign exchange, Buying Products, Buying Crypto, Paying Bills, paying transportations (e.g., flight tickets, train tickets etc.) and online shopping (e.g., Amazon, AliExpress, eBay etc.) and furthermore, Using Digital Smart Card (DS Card).

Currency Supply

GCS Digital Currency will Provide many rounds of Currency Supply, they have three (3) years between one Supply to another, the first-round total supply is 10 billion (10,000,000,000) and remaining rounds Supply has not specific amount yet.

Coinstar Global Currency Distributions

1. Proactive Public Goods Funding: 63%
2. Ecosystem Fund for Project Developments: 25%
3. Core Contributors: 12%



Global Coinstar Subunits

There are Currency Subunits as Follows:

1. Millicoinstar (MI) 1/100
2. Microcoinstar (MC) 1/1,000
3. AB-Coinstar (AB) 1/100,000

Transactions

In a standard banking system, for example, the state is a balance sheet, a transaction is a request to move $X from A to B, and the state transition function reduces the value in A's account by $X and increases the value in B's account by $X. If A's account has less than $X in the first place, the state transition function returns an error.

The "state" in Coinstar is the collection of all Currency (technically, "unspent transaction outputs" or UTXO) that have been mined and not yet spent, with each UTXO having a denomination address and an owner (defined by a byte's address which is essentially a wallet address or account numbers).

Global Coinstar State transactions functions as originally peer to peer transactions with another two Methods Transactions which is Digital Voucher (DV) and Digital Smart Card (DS Card), these two methods can be defined transactions as follows.

Digital voucher (DV)

A digital voucher (DV) is a new peer to peer transaction system that allow trade asset without any founded address that share, like a wallet address or account numbers, you can use the voucher to deposit asset into your wallet Accounts without sharing your founded address to receive.

Digital voucher they have an own "non-fungible voucher" (NFV) will provide voucher identity code (VID) each one and Timestamp that will not be able alteration or replace to another and an owner of the voucher who's minting a voucher. They have a user identity number (UID) to identify a minter of the voucher. They have used the identity codes to verify if the voucher is validating or invalid. Each voucher has used with hash function to

encrypted, so that no anyone can read or access the voucher code without permission of the owner.

When the User minting a voucher already will be broadcast to all nodes, they know a new voucher has initiated it will distribute voucher identity code (VID), Timestamp and voucher minter identity number (UID) to the all nodes, voucher when processing to minting new voucher, our Coinstar Virtual Machine (CVM) System they will create voucher code and voucher passcode using hash function encryption system and linked with a minter identity number (UID) and store vouchers record in blockchain.

When the beneficiary uses the voucher, they will be using with nodes access to put voucher identity code (VID) when they put a voucher code into the node, system will check if the voucher is valid and voucher was not used by any person if the voucher is validated and no anyone was used the voucher, system will take you to the next step and allow to write a voucher passcode then you allow to deposit money into the wallet/account.

Advantage of Digital voucher

Digital voucher has a lot of advantages. They have confidentiality that nobody knows Your wallet address or account numbers that you have received your transactions like a wallet or accounts digits, there is no issue of network interruption or transactions delaying, deposit at any time you want in your wallet/account.

Digital Smart Card (DS Card)

A digital Smart card (DS Card) Is a new smart digital debit card provided on a blockchain network; digital smart card can used on a digital decentralized Network for online payment transaction systems.

DS card is similar to virtual debit card (e.g., Master card, Visa card etc.) and this card will work unlike a native Debit card you know, but this digital card will provide it using Cryptographic algorithm and encrypted card with hash Code.

This card is not under the control of any authority, the owner of the card they have fully Strong control on their hand over the card, they will be able activated card when they need to use and they have the right to deactivate the card for security to their assets.

The card has a payments accessibility code that will allow to use the card for Online payments transactions. For another Security when you see symptoms of the attack to your account you have the right to Regenerate new card payments accessibility code on your DS wallet, this strategy will help People to provide strong security to their money.

To ensure the safety of people's property, we will provide DS wallet in their original wallet account which card allow to access debit money from the DS wallet, this card only Digital Smart wallet (DS wallet) can Allow to Withdraw money.

Global Coinstar Accounts

In Global Coinstar, the state is made up of objects called "accounts", with each account having some byte's address and state transitions being direct transfers of value and information between accounts. A Global Coinstar account contains Three fields:

- The **miner Account**, a miner account which is used to Store a mined currency before transfer to Storage account.
- The Account's **Storage,** which is use to Store a Coinstar currency (empty by default).
- The account's Current **Coinstar Balance,** the Coinstar Balance Account which is used for Transactions in blockchain.

In general, there are two types of accounts: **Individuals owned Accounts,** Controlled by Private keys, and **cooperate owned Accounts,** controlled by two to three Person. An **Individuals** owned account has no anyone can send a message from personal owned account by creating and signing a transaction, only the account owner can receive and send currency to internal storage. A **cooperate** accounts has created By Company/organizations to store assets Payments Transactions. Cooperate

account can allow to controlled by two to three persons they can send and receive internal messages and allow to withdraw money from account.

Network

The steps to run the network are as follows:

1. New transactions are broadcast to all nodes.
2. Each node collects new transactions into a block.
3. Each node works on finding a difficult proof-of-transaction (POT) for its block.
4. When a node finds a proof-of-transaction (POT), it will broadcast the block to all nodes.
5. Nodes accept the block only if all transactions in it are valid and not already spent.

Nodes always consider the longest chain to be the correct one and will keep working on extending it.

Mining

Coinstar global digital currency blockchain is in many ways similar to the Cryptocurrency blockchain, although it does have some differences.

The algorithm for checking if a block is valid, expressed in this paradigm, is as follows:

- ✓ Check if the previous block referenced by the block exists and is valid.
- ✓ Check that the timestamp of the block is greater than that of the previous block and less than 8 hours into the future
    - ✓ Check that the proof of transaction (POT) on the block is valid.
- ✓ Let S [0] be the state at the end of the previous block.
- ✓ Let TX be the block's transaction list, with n transactions. For all i in 0...n-1, set S [i+1] = APPLY (S [i], TX [i]). If any application returns an error, exit and return false.
- ✓ Let S_FINAL be S [n], but adding the block reward paid to the miner.

Essentially, each transaction in the block must provide a valid state transition from what was the canonical state before the transaction was

executed to some new state. Note that the state is not encoded in the block in any way; it is purely an abstraction to be remembered by the validating node and can only be (securely) computed for any block by starting from the genesis state and sequentially applying every transaction in every block.

Additionally, note that the order in which the miner includes transactions into the block matters; if there are two transactions A and B in a block such that B spends a UTXO created by A, then the block will be valid if A comes before B but not otherwise.

Scalability

Global Coinstar Scalability It is the capability of a system, network, or process to handle a growing amount of works or its potential to be enlarged to accommodate that growth.

Conclusion

Global Coinstar is a First Global Digital Currency Proposed Without relying on third party to using foreign exchange. Global Coinstar will Provide a Smart Debit Card, which is Called Digital Smart Card (DS Card) and Digital Voucher's (DV). Digital Smart Card Which Provides Strong Control by the ownership to protect the Card. We proposed a Digital Smart Wallet (DSW) in Each Accounts, which allows to Withdraw money with a Card.

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