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SMART CONTRACT IN BLOCKCHAIN

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Abstract

In blockchain we used smart contract functionality .The contract is nothing but a small agreement done by digital way. A smart contract is a self-executing program that automates the actions required in an agreement or contract. Once completed, the transactions are trackable and irreversible. The contract is more secure than the agreement on pepper. This is small code program. Contract design by node who are buy any asset on blockchain this contract is visible to all nodes. Who are agree on that contract interact that node and successfully implement that contract. This contract are done between two parties remove the intermediater. Smart contracts work by following simple "if/when…then…" statements that are written into code on a blockchain. A network of computers executes the actions when predetermined conditions have been met and verified.

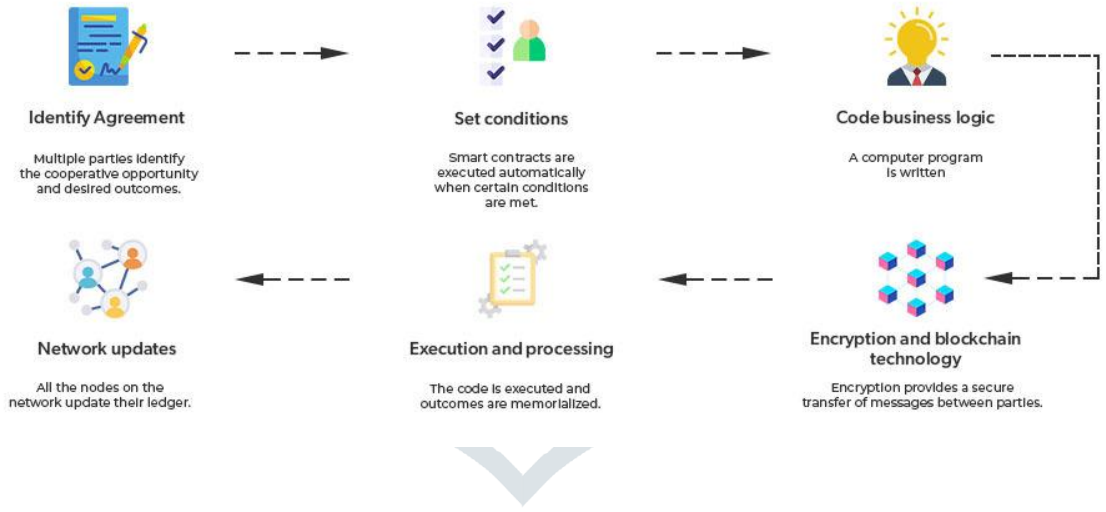
Keywords: Business Area, security, high speed, transparency.

Introduction

Smart contracts were first proposed in 1994 by Nick Szabo, an American computer scientist who invented a virtual currency called "Bit Gold" in 1998, 10 years before Bitcoin was introduced. In fact, Szabo is often rumored to be the real Satoshi Nakamoto, the anonymous Bitcoin inventor, which he has denied. Smart contracts permit trusted transactions and agreements to be carried out among disparate, anonymous parties without the need for a central authority, legal system, or external enforcement mechanism. While blockchain technology has come to be thought of primarily as the foundation for Bitcoin, it has evolved far beyond underpinning a virtual currency. Smart contract are immutable in nature. It is just agreement between two parties without any intermediater's It execute the small code program which is write any programming language like solidity, JavaScript etc. The parties involved must also decide how the smart contract will work, including what conditions must be met for the contract to execute and whether it will execute automatically creating a smart contract can be simple, but it's important to note that a poorly designed smart contract is a major security risk. It's critical to fully verify the smart contract's security during this step. That last part is important. Deploying a smart contract to a blockchain is like buying an item and intentionally throwing away the receipt. There are no returns, no refunds, and no exchanges—no exceptions. A

smart contract works by monitoring the blockchain or other credible information source for certain conditions or triggers. These triggers can include almost anything that can be verified digitally—a date reached, a payment completed, a monthly bill received, or any other verifiable event. Trigger conditions may also be met when one or more parties to the contract perform a specific action. When the trigger conditions are satisfied, the smart contract executes. A smart contract that executes automatically may perform one or several actions, such as transferring funds to a seller or registering a buyer's ownership of an asset. The smart contract's execution is immediately broadcast to the blockchain. The blockchain network verifies the actions performed by the smart contract, records its execution as a transaction, and stores the completed smart contract on the blockchain. The record of the smart contract is generally available for review by anyone at any time.

Smart contract Process in Blockchain



Step1:-In smart contract multiple parties are involved contract the parties are involved in there is no intermediate between them direct between two parties.

Step2:-Who wants to buy any assist write smart contract on her block with help of program code.

Step3:-In that small program code just determine the Term and condition regarding this.

Step4:-execute this code that not need to be execute again execute only once. That are available for all nodes in given blockchain.

Step5:-who are accept that term and conditions given in contract contact with that node and Interact directly between two parties.

Step6:-Contract are done between that nodes without any intermediater.

BENEFITS OF A SMART CONTRACT

Smart contracts offer a number of benefits to the parties involved:

- **Independence:** the participants make the arrangements themselves, i.e. the involvement of intermediaries can be dispensed with.
- **Reliability:** the contract is securely stored in a distributed network and is virtually impossible to alter or forge.
- **Security:** being in a distributed network, the contract is duplicated in all nodes of the network and cannot be lost.
- **Savings:** by cutting out intermediaries and commissions, there is a reduction in costs for all parties involved.
- **Accuracy:** this type of contract reduces to zero the possibility of errors in the terms or processing.
- **Sustainability:** contracts eliminate the use of paper in offices, notaries and registers, and pollution is reduced as a result of less travel.

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