What are Smart Contracts?

Smart Contracts

A smart contract is a term used to describe computer program code that is capable of facilitating, executing, and enforcing the negotiation or performance of an agreement using Blockchain technology.

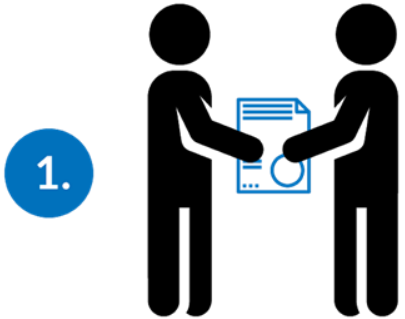
The entire process is automated can act as a complement, or substitute, for legal contracts, where the terms of the smart contract are recorded in a computer language as a set of instructions.

In general, smart contracts help you exchange money, property, shares, or anything of value in a transparent, conflict-free way while avoiding the services of a middleman.

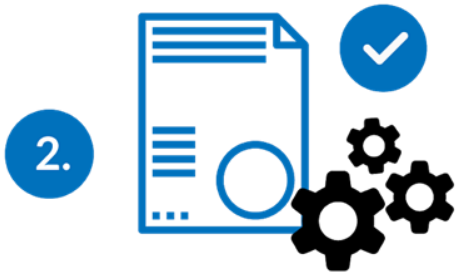
They often function as escrow facilities, ensuring that all the money and the right of ownership can be deposited in the scheme and transferred at precisely the same time to the participating parties.

A smart contract can operate on its own, but it can also be enforced along with any variety of other smart contracts.

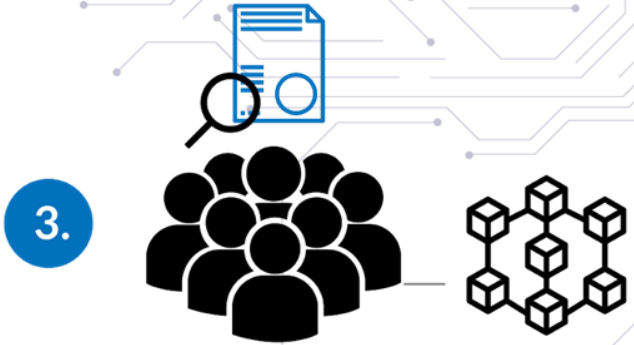
Smart Contracts



A contract between the parties is written as code and published into blockchain. Individuals involved are anonymous, but the contract is visible in public ledger.



A triggering event like an expiration date or strike price is hit, and the contract executed itself according to the coded terms.



Regulators can use the blockchain to understand the activity in the market while maintaining the privacy of individual actors positions.

Traditional Contract Vs Smart Contract

Traditional physical contracts, such as those created by legal professionals today, contain legal language on a vast amounts of printed documents.

Traditional physical contracts heavily rely on third parties for enforcement. They can be misinterpreted.

Smart contracts, often created by computer programmers using smart contract development tools.

They are entirely digital and written using programming code languages such as Solidity, C++, Go, Python, Java.

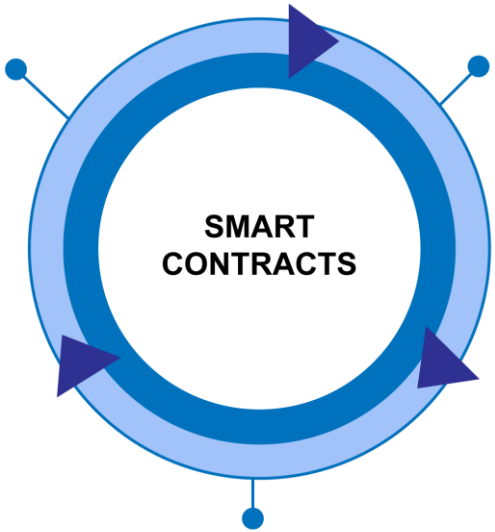
Code defines the rules and consequences, stating the obligations, benefits and penalties which may be due to either party in various different circumstances.

This code can then be automatically executed by a distributed ledger system.

How Smart Contracts Work

STEP 3: EXECUTION

One of the computers in this network of distributed ledgers receives the
code, and then each node comes to an individual agreement on the results of the code.
The network would then update the distributed ledgers to record the execution of the contract, and then monitor for compliance with the terms of the smart contract.



STEP 1: CODING

Smart Contracts are mostly written in Solidity. It is imperative that they do precisely what the parties want them to do.
This is achieved by inputting the proper logic when writing your smart contract.
The code behaves in predefined ways and doesn't have the linguistic nuances of human languages.

STEP 2: DISTRIBUTED LEDGER

The code is encrypted and sent out to other computers via a distributed network of ledgers

Components of Smart Contract

Smart Contract Code: The code that is stored, verified and executed on a blockchain.

Smart Legal Contracts: A smart contract that articulates and is capable of self-executing, on a legally-enforceable basis.

Blockchain Council™

THANK YOU!

Any questions?

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community.blockchain-council.org

You can also mail us at

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