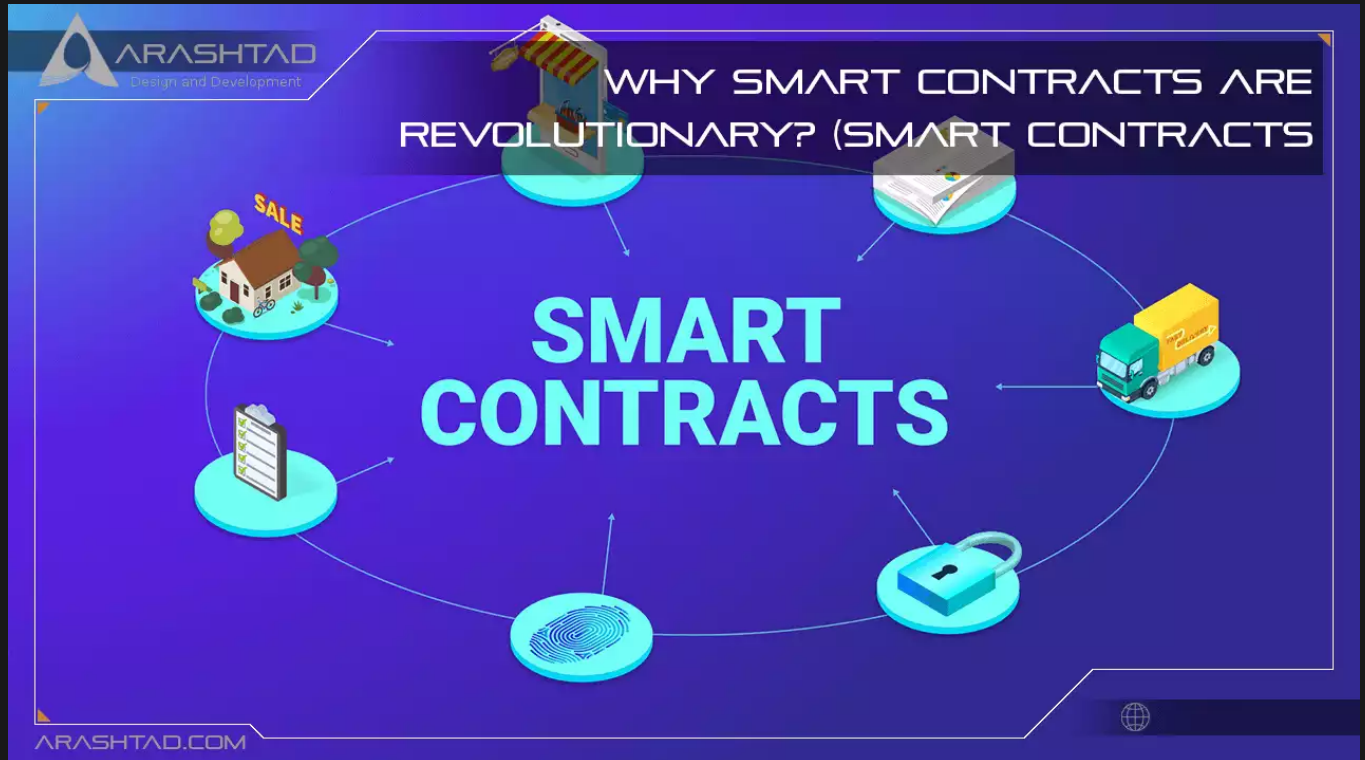


Why Smart Contracts Are Revolutionary? (Smart Contracts Use Cases)

No comments



A smart contract is a program that runs when certain conditions are met on a blockchain. An automated agreement executes so that all parties can see its outcome immediately without involving an intermediary. In addition to automating workflows, smart contracts can also trigger the next action when conditions are met. This blog discusses how smart contracts are changing the world around us and the benefits they will bring to the market in the future.

What is a Smart Contract?

The terms of a smart contract can be established in the same way as those of any other contract. However, unlike traditional contracts, a smart contract is executed as code running on a blockchain, for example, Ethereum. From loans and insurance to logistics and gaming, it offer sophisticated peer-to-peer functionality backed by blockchain security, reliability, and accessibility.

Types of Smart Contracts

Here are some types of self-executing smart contracts.

Smart Legal Contracts

The parties must meet their contractual obligations or face strict legal action in these contracts.

Decentralized Autonomous Organizations (DAO)

Its smart contract is the backbone of the DAO, coded into blockchain contracts and governed by governance mechanisms. There are various use cases for DAOs, ranging from simple to complex, depending on the number of stakeholders. They are open-source and feature transparency, and, theoretically, they are impervious to corruption. And, any action the community takes gets replaced by a self-enforcing code.

Application Logic Contracts (ALC)

Blockchain also offers Application Logic Contracts, which provide devices with the ability to function independently and securely. In addition, ALCs make transactions more automated, cheaper, and more scalable. ALCs contain application-based codes that typically remain in sync with other blockchain contracts. Using it, different devices can communicate, including the Internet of Things (IoT) combined with blockchain technology.

How Does Smart Contracts Work?

A smart contract operates by following simple "if/when...then..." statements written into code on a blockchain. A computer network carries out the actions once predetermined conditions are met and verified. The blockchain is then updated when the transaction is completed, including releasing funds, registering a vehicle, sending notifications, or issuing tickets. This means the transaction cannot be changed, and only parties who have been granted permission can view the results. In a smart contract, participants can agree that the task will be completed satisfactorily based on as many stipulations as are necessary.

To establish the terms, participants must determine how transactions and their data are represented on the blockchain, decide the "if/when...then..." rules that govern those transactions, examine all possible exceptions, and specify a framework for resolving disputes. It is then possible to create a smart contract by programming it - although, increasingly, companies are offering templates, web interfaces, and other tools to simplify the process.

Benefits of Smart Contracts

There are several advantages to using smart contracts, some of which are listed below.

1- Security

Furthermore, since blockchain transaction records are encrypted, hacking them is difficult. Moreover, the records of the distributed ledger are interconnected, so changing one would require changing the whole chain.

2- Accuracy, Efficiency, and Speed

In smart contracts, conditions are automatically met, so there is no paperwork to fill out nor time spent fixing errors that can occur in manual forms. Smart contracts are digital and automated, so there is no paperwork to fill out or time spent fixing errors.

3- Backup

Due to the duplication of all documents on the blockchain, individuals can recover originals in case of data loss.

4- Autonomy and Savings

Unlike brokers, smart contracts do not require confirmation by other parties, so there is no possibility of them manipulating the deal. Smart contracts also save money since there is no mediator.

Smart Contracts Use Cases

Let's examine how smart contracts are helpful to some businesses and how they will benefit others. Government, insurance, high security, trade, and medical research are some of their uses.



1- High Security

One real-world example of smart contract use is security. Smart contracts can streamline and enhance capitalization table management, eliminating third parties, such as security custody chains, from the process. In addition, smart contracts are helpful for stock splits, dividends, automated payments, and liability management. Additionally, smart contracts can help digitize procedures and lower operational risks.

2- Trading Activities

Settlement procedures are too expensive and dangerous for today's transactions. as a result, the purchasing party is always at risk of fraud due to the lack of assurance that the seller will keep its end of the deal. Trade authorization workflows consist of a variety of expensive and time-consuming sequential processes. Leveraged loans, for instance, may have a settlement time of up to 20 days. Using several IT systems results in inconsistencies and prolongs the settlement process, making leveraged loans extremely undesirable due to difficulties with liquidity. In trade finance, smart contract technology is essential because it significantly reduces risks by delaying transaction execution until specified settlement conditions are met. Smart contracts often automate AML, KYC, and KYC processes. As a result, operating expenses are drastically reduced, settlement times are shortened, and specific markets are more liquid.

3- Medical Research

Similarly to the healthcare industry, the medical research industry will benefit from similar advantages. As a first step, highly sensitive data like patient records can be securely encrypted with blockchain technology before being transferred between departments/research centers. Medical research patients often have sensitive medical conditions they wish to keep private, so maintaining these records is essential. Furthermore, medical research companies must keep a huge amount of data safe, including test results and new drug formulas. If they have to disclose any of this

information to a third party for any reason, smart contracts could be used to secure it. There is one example of a smart contract blockchain that could vastly benefit the medical research sector.

4- Government

Among the many operations, smart contracts facilitate, one of which is land title recording, which the government can use to transfer property. To comply with land title recording requirements, parties must transfer property efficiently and quickly. Smart contracts can reduce auditing costs, improve transparency, and automate elections, identification, and record-keeping.

5- Insurance

Insurers are one of the most frequent companies that use these contracts. It is common for disagreements to occur in the insurance industry. Let's take a look at vehicle insurance as an example. Smart contracts are used to pay insurance quickly. These contracts require the use of various technologies, such as the Internet of Things, to do so. By using a smart contract, the insurance policy can be simplified, and all the required documents, such as driving reports and driving histories, will be collected. The smart contract can execute itself immediately after an accident with the right policy, documentation, and data collection methods. Furthermore, contracts are based on the data gathered, which prevents fraud.

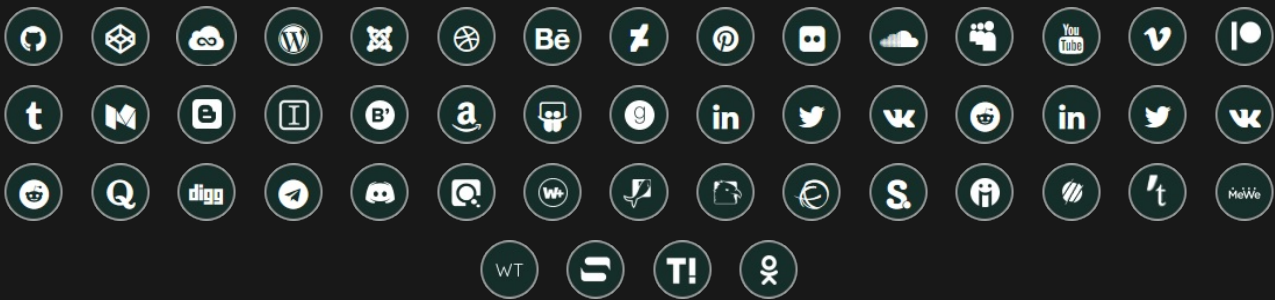
Wrapping Up

A smart contract represents an exciting opportunity for many industries. From the real estate industry to finance and supply chain, smart contracts will benefit a lot. You only need to use smart contracts in a practical way to benefit from faster, more efficient, and more secure transactions. Smart contracts offer many advantages, and entrepreneurs should take advantage of them.

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