**BLOCKCHAIN THE FUTURE OF DECENTRALIZATION**

**BLOCKCHAIN ​​AND THE END OF THE CENTRALIZATION OF DATA**

The blockchain is a technology that allows the transfer of digital data with a very sophisticated coding and in a completely secure way. It would be like the book of accounting entries of a company where all the entrances and exits of money are registered; in this case, we are talking about a book of digital events.

But also, it contributes with a great novelty: this transfer does not require a centralized intermediary that identifies and certifies the information, but it is distributed in multiple independent nodes that register and validate it without the need for trust between them. Once entered, the data can not be deleted, only new records can be added, and will not be legitimized unless most of them agree to do so.

Along with the level of security that this system provides against hacking, we find another enormous advantage: even if the network were to fall, with only one of those computers or nodes not doing so, the information would never be lost or the service, depending on the case that we speak, it would continue working.

An example that illustrates the importance of the distributed network is in social networks. With this system, blockchain would eliminate the centralization imposed by applications such as Facebook or Twitter when identifying or validating the origin of our messages, and the integrity of them would be guaranteed by the network of nodes.

"Even if the network goes down, if only one of those nodes do not, the information will not be lost."

**WHO'S WHO IN THE BLOCKCHAIN**

We will try to decipher who participates in the blockchain and how its technology works. The blockchain, as its name suggests, is a chain of blocks. Each of these blocks contains the encoded information of a transaction in the network. Before we did the analogy of the accounting book, where we noted, for example, that A went out and B entered. Well, blockchain behaves the same, but it will be the network of distributed nodes which have to certify that these data are accurate. How do they do it?

Each block of the chain carries the package of transactions and two codes, one that indicates which is the block that precedes it (except the source block, of course), and another for the block that follows it, that is, that they are interlinked or chained, so they are called hash codes or pointers. Now comes into play the concept of mining performed by the nodes, that is, the process of validating information.

In this process of mining or checking, when there are two blocks that point to the same previous block, it simply wins the first one to be decrypted by most of the nodes, that is, that most points in the network must agree to validate information. Therefore, although blockchain generates multiple block chains, the longest block chain will always be legitimized.

**WHAT IS THE FUTURE OF THE BLOCKCHAIN?**

The experts compare the arrival of the blockchain with milestones such as the integration of computers in domestic use or the development of the Internet, that is, a system that will change our way of understanding business and society.

One of its most significant potentials is in the so-called smart contracts or intelligent contracts, that is, with blockchain technology agreements and transactions can be made in a trusting manner without revealing confidential information between the two parties and without the need for "arbitrators", such as payments to distributors or, for example, the rental of a car online.

But not only this, based on the same concept, blockchain will be essential for the Internet of things. Our electronic devices can communicate with each other in a safe and transparent way, and soon we will see our refrigerator buying yogurts in the online supermarket as soon as it detects that They've finished.

The administration will have a unique advantage with this cryptography system. Issues such as electronic voting that, despite the attempts made with other technologies, has not resisted hacking, could now be a viable option for voters with the assurance that their identity will not be supplanted and the convenience of not having to move to the electoral college.

Currently, there are many projects that are being investigated to implement the blockchain as a structure to support them, so we will soon see if it becomes the technology of the future.