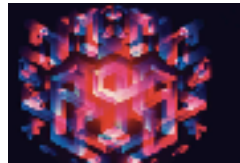


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DUBAI is going Blockchain

We can't leave 2017 without pointing out Dubai's announcement to turn it self into the first Blockchain-powered government in the world by 2020.

This means that the Emirates is targeting to move all of its operations and activities into the Blockchain environment which yields to various benefits. Over time, this will yield to reduction (and eventually elimination if it met the target of 100%) for lawyers, accountants, bankers, immigration officers, government officials.

Dubai will be first
Blockchain-
Powered
government in the
world by 2020

Dubai estimates that by putting its 100 million documents each year onto the Blockchain, they will save 25 million man hours and \$1.5 billion in tax dollars.



This is what the government is aiming for. But to begin with, what is Blockchain? And how it can affect our lives today?

Understanding Blockchain

To understand Blockchain, let's take a quick view on some pillars that forms our daily life today.

Contracts, transactions, and the records of them are among the defining structures in our economic and legal systems. They protect assets and set organizational boundaries. They establish and verify identities and chronicle events. They govern interactions among , organizations, communities, and individuals.

And yet these critical tools and the bureaucracies formed to manage them have not kept up with the economy's digital transformation. Like having a Ferrari to "just" drop your kids to school. So these administrative tools had to change in order to keep up with the modern digital transformation highway.

That's where Blockchain came to the rescue

With Blockchain, we can imagine a world in which contracts are embedded in digital code and stored in transparent, shared databases, where they are protected from deletion, tampering, and revision.

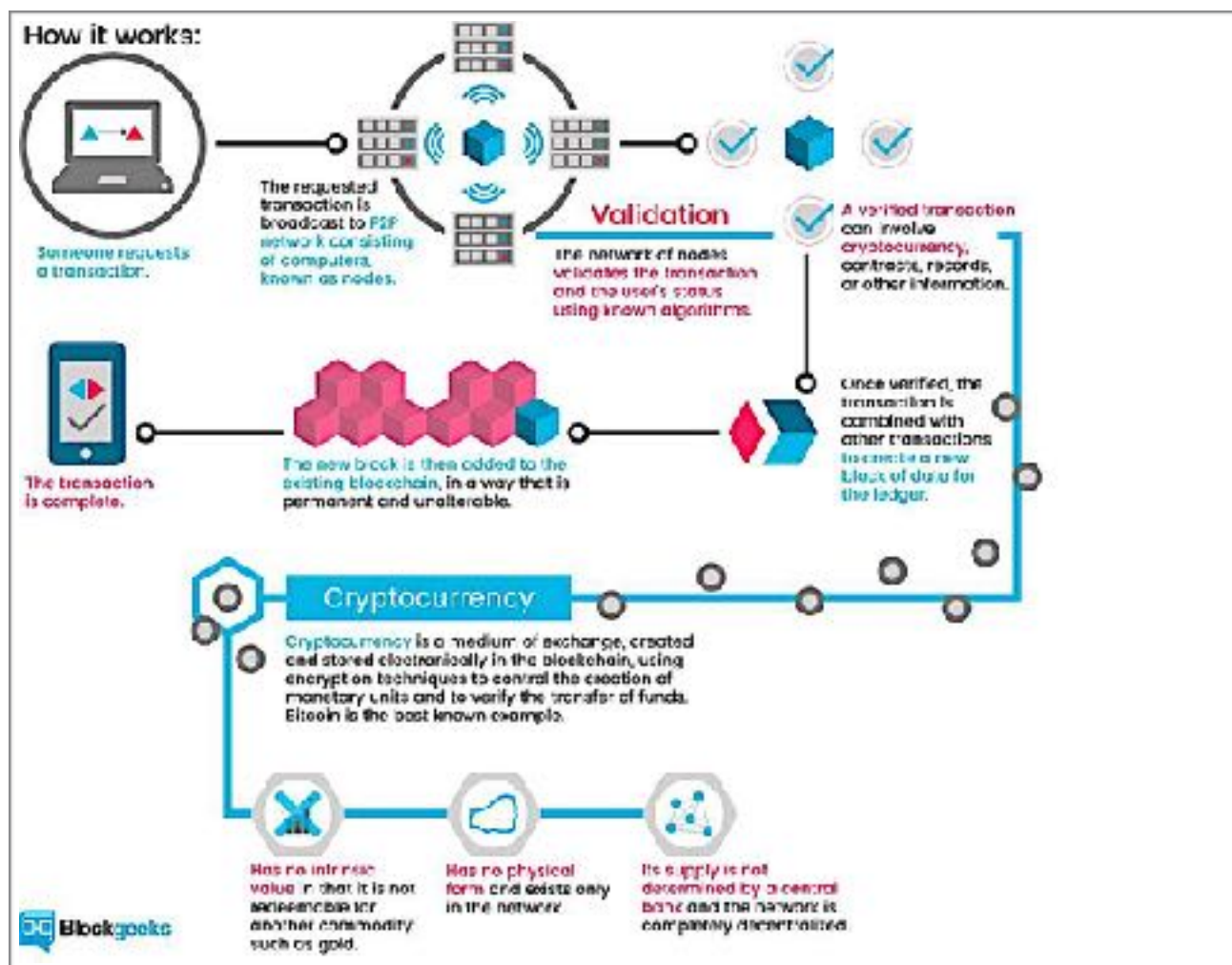
In this world every agreement, every process, every task, and every payment would have a digital record and signature that could be identified, validated, stored, and shared. Intermediaries like lawyers, brokers, and bankers might no longer be necessary. Individuals, organizations, machines, and algorithms would freely transact and interact with one another with little friction. This is the immense potential of Blockchain.

So, What is Blockchain?

Blockchain is a continuously growing list of records, called "**blocks**" which are linked and secured using cryptography.

Each block typically contains a pointer as a link to a previous block forming a "**chain**" the hash is a timestamp (date and time) and transaction data.

Below is a simple diagram that explains how a typical transaction can be performed in Blockchain environment.



What does that mean? And how it differs from the traditional way of storing and sharing data?

First of all, normally we store data in a single location (be it a data-center (Cloud) server database, or your Server/computer (On-premise)), and with this, you "mostly" just keep the latest version of this data.

While in Blockchain scenario, the data and all of its history, modifications and entities that interacted with it, are stored in a big network in the form of peer to peer, where it's simultaneously updated, verified and stored.

Think of it as an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way.

Will Blockchain disrupt our current systems and businesses?

True Blockchain transformation of business and government, is still many years away. That's because Blockchain is a **foundational** technology (not disruptive technology): *"It has the potential to create new foundations for our economic and social systems."*

The process of adoption will be gradual and steady, not sudden, as waves of technological and institutional change gain momentum.