

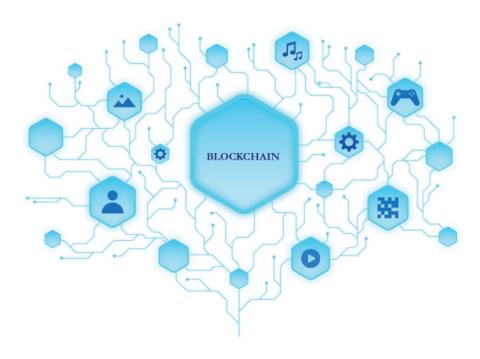
THE POTENTIAL APPLICATION OF BLOCKCHAIN TO THE LAW IN NIGERIA AND THE AFRICA CONTINENTAL FREE TRADE AGREEMENT (AfCFTA): WHAT DOES THE FUTURE HOLD?





What is Blockchain Technology?

In its simplest form, it is a digital ledger of data that is stored in digital blocks of information that are immutable and cannot easily be altered. It requires a decentralized peer to peer architecture¹ that guarantees that every bit of information stored on the block is accessible to every participant of that network. Naturally, the security that this technology provides, makes it most appealing towards the securitization of assets and the deterrence of fraud.



What are the benefits of blockchain to the Legal profession?

There are a number of obvious ways through which blockchain technology can benefit a wide range of systems and processes across different sectors. In view of the rate at which technology is developing, it is progressively becoming the international standard for businesses. No business seeks to become redundant or irrelevant, and quite a number of reputable and long-standing organizations have commenced on blockchain 'Proof-of-Concept' projects and use it for their day-to-day operations. Some of these include the shipping and marine logistics Norwegian company; Maersk and American supermarket chain; Walmart. Where there is an enabling environment, the creativity of enterprising individuals and business organisations inevitably leads to new found possibilities with the ease of doing business. In view of this revelation, here are some of the ways blockchain technology can benefit the legal profession:

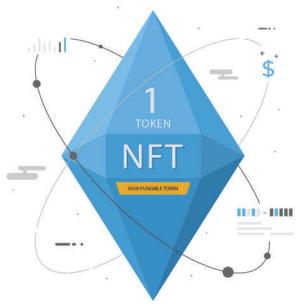
1. Smart Contracts:

A smart contract is a programmable sequence of instructions written in code that govern the execution and fulfillment of a transaction between the parties involved on the blockchain². The code is written in such a way that the transaction can only progress to the next point, upon the fulfillment of each obligation by either of the parties to the transaction. Simply put, a smart contract is a self-executing contract that requires negligible human intervention before it is executed.



2. Intellectual Property:

The Right to protection of ideas, concepts, music, literary works, graphic paintings, and many more have been revolutionized by blockchain through what is popularly known as NFT's (Non-Fungible Token). This means that the digital content is the one original digital entity that was created; as a result of this, even amidst other digital copies of the work of art, the nature of the time stamp and record of entry on the blockchain makes it possible for someone to own the very first original digital copy or an item(s) of a limited-edition collection. The ease of reference on a public blockchain, attaches immutable value to the digital content. Invariably the digital content attains the status of a digital asset, which is a new category of assets in modern business financials and investment.



3. The Lands and Deeds Registry:

The Lands Registry is one major area that could benefit from the adoption of blockchain technology for the following reasons. First, the information pertaining to the current ownership of a title deed would be recorded and remain forever on the blockchain. The second area is in reference to subsequent transactions, most especially the transfer of ownership. Due to the nature of the blockchain, the transaction history of the title deed would be recorded and there is an undisputed ledger of reference of ownership that can be used in multiple ways. Some of which include the obvious scenario of a dispute of ownership case.



4. Trusts:

A tripartite fiduciary agreement that exists between a trustor, trustee, and a beneficiary, in which the trustor entrusts assets into the trustee's possession for the benefit of the beneficiary.

How can blockchain technology solve issues with a trust?

For starters, the security of the immutable ledger makes it possible to catalogue all the assets subject to the trust, identities of the beneficiaries and the actions taken by the trustee in the instance of court-supervised trusts. In addition, smart contracts (as discussed previously) could be programmed to execute the possible conditions of the trust, such as:

- Which beneficiaries should receive what assets, and how much?
- The duration of a Trust and when and how it ends.
- The determination of the grounds for who qualifies as a beneficiary and many more.



Source: Forbes.com

5. Traceability of Goods and Services:

The precise assertation of goods and services on an immutable ledger that remains accessible to parties involved guarantees that evidence is certain in the event of disputes as to quantity, quality control, time of delivery or execution, certainty of ownership, and so and so forth.





Benefits of Adopting Blockchain Technology

The issue of jurisdiction and the cross-border nature of the internet presents a complex space to legislate for any government in the world³, especially as the law is often in a position where it legislates after the fact⁴. Modern technology has moved towards Artificial Intelligence (AI), cloud computing, blockchain and IoT5. These are mostly software-based technologies with some hardware requirements which are often based in remote locations, often times in another country with reliable and comparatively cheap energy supply⁶. Therefore, the legal framework of Nigeria provides for the adoption of blockchain technology, though in a limited capacity. Only the political will to adopt it for government agencies remains outstanding.

The African Continental Free Trade Agreement (AfCFTA):

In simple terms, the AfCFTA is a multilateral treaty initiated by the African Union (AU), through which its 54 members have agreed by ratification, to their full participation in the free trade area also known as the single market. As outlined in Article 4 of the AfCFTA, each member state is required to eliminate all trade barriers to facilitate the ease of uninterrupted trade among its members in the single market. The volume of trade that the AfCFTA provides for is significantly more than anything that has been seen in the world7.



Consequently, there would be vast amounts of information that would be required to execute the daily functions of the AfCFTA.

On the basis of this understanding, blockchain technology, also known as a 'trust-machine's, is capable of storing vast amounts of information in an immutable chronological order that is instantly available to all participants (nodes) on the network. Here are some of the ways by which the AfCFTA can adopt blockchain technology, efficiently:

1. Digital Single Market:

The AU created a Digital Transformation Strategy for Africa in collaboration with the UN Economic Commission for Africa, Smart Africa, African Union Development Agency - New Partnership for Africa's Development AUDA-NEPAD, Regional Economic Communities, African Development Bank, Africa Telecommunications Union, Africa Capacity Building Foundation, International Telecommunications Union and World Bank⁹, in order to facilitate the provisions of the strategy.

Some of the goals of the strategy include:

- Digital sovereignty fund creation and management towards the spread of wide internet access across Africa;
- Local industries manufacturing and producing phones and smart devices in Africa.



⁽Cristos Velasco 2015)

An Introduction to Law and Society (2018) https://in.sagepub.com/sites/default/files/upm-assets/86864_book_item_86864.pdf (accessed 5:50 pm January 26, 2022)

https://www.nvimes.com/interactive/2021/09/03/climate/bitcoin-carbon-footprint-electricity.html (accessed 6:00 pm January 26, 2022)

https://www.worldbank.org/en/topic/trade/publication/the-african-continental-free-trade-area (accessed 3:20 pm January 31, 2022)

https://journals.aom.org/doi/10.5465/AMBPP.2019.13603symposium (accessed 4:20 pm 31, January 2022)

https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf (accessed 9:00 am February 2, 2022) African Union: The Digital Transformation Strategy For Africa (2020-2030)



The above two goals are fundamentally crucial towards the implementation of blockchain technology because they constitute critical infrastructure for the widespread application of the blockchain on the African continent. Statistics have proven that as at January 2021, Internet penetration in Africa is estimated to be at 42% of people online¹⁰.

The possibility of the incorporation of blockchain technology is premised on available provisions of the strategy report which clearly states:

"...enable the coherence of existing and future digital policies and strategies at regional and national levels and mobilize effective cooperation between institutions.

Furthermore, '...build inclusive digital skills and human capacity across the digital sciences, judiciary and education, both technical and vocational, to lead and power digital transformation including coding, programming, analysis, security, blockchain, machine learning, artificial intelligence, robotics, engineering innovation, entrepreneurship and technology policy and regulation' ¹¹.

2. Blockchain operated insurance companies:

In a single market where there is a high velocity at which goods and services are traded, insurance is an essential business requirement for any business owner or company as a protective measure in the event of any detrimental occurrence over the course of doing business. Within the subset of insurance, there are certain facilities that are highly coveted for any insurance plan:

- · It must be cost efficient
- · It must have efficiency gains
- Transparency
- Faster payouts
- · Fraud deterrent.

The blockchain can provide for these features through 'smart-contracts'. Initially, the goods and services that remain uninsured through the blockchain, may have greater market share because their retail prices are void of an insurance premium¹². However, as a subsequent long-term enforcement measure for any goods and services traded within the single market, it is recommended that all products traded for the purposes of accountability and transparency are compulsorily registered and insured on the blockchain. Goods and services traded in this manner and style attract foreign investment for the reason that the market data is readily available for accurate business projections to be made.





3. Supply chain Management:

Supply chain management refers to the movement and oversight of all the resources therein of any product, from its source or point of origin with the supplier to a finished, retail consumer product. These resources are best maximized through blockchain technology for the following reasons. The flow of the supply chain pertains to the physical transportation of the products from the supplier to the consumer. The transition of the goods will be logged and recorded at every point of exchange. Legitimacy and authenticity are easily available for the consumers in that it can serve as a deterrent against poor business practices currently plaguing African producers of primary goods, such as child labour, economic exploitation of raw materials and promote value appreciation for the respective industries.

Conclusion

Blockchain technology is in its nascent stages yet evolving at an exponential rate. The sooner local businesses, organisations, and whole industries begin to take advantage of its potential, the sooner a more vibrant and thriving economy would be actualized.

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