Private Blockchain Independent of Public Land Administration - Viable in The Nigerian Real Estate Industry?

Omolade Afonja

Precis

According to Businessday's publication of June 14, 2021, opportunity in the Nigerian real estate industry is worth an estimated US$56billion. And yet, the potential has barely scratched the surface of possibility. Contemporary real estate deals are limited to the most basic transactions conducted by the brave, at considerable risk. Unreliable record keeping is widespread across the country, and unscrupulous middlemen make it difficult for stakeholders to make informed commercial decisions.

As a decentralized digital ledger of transactions, there is no doubt that blockchain technology can solve the challenges of inadequate records and dodgy middlemen. But this knowledge alone does not seem to have sufficiently sparked government interest in establishing a blockchain system that is integrated into public real estate administration. This article explores the viability of an autonomous, private sector driven, ensuite blockchain-enabled real estate ecosystem, independent of the public land administration regime.

Challenges in the Nigerian Real Estate Industry

The process of registering transactions at a Nigerian land registry is riddled with shortcomings, of the type that make an airtight due diligence highly problematic. Public land administration keeps mostly manual records which are cumbersome to administer, error prone, and easily subject to manipulation and fraud. This dissuades many would-be Registry clientele. Many would rather the risk of postponing registration of their interest, or not registering at all. However, this risk, when it crystallizes, may itself prove to be very expensive and irredeemable even by the courts. The justifiable wariness within the real estate industry has consequently, and regrettably, tethered land transactions in Nigeria to operating at a very basic level.

The most common transactions in land are lease agreements, purchase -at the buyer's risk-, and some mortgages. But much more could be done with real estate. An example is developing a secondary market, allowing investors to buy existing mortgages at discount from mortgage banks and other similar creditors. This solves liquidity issues for the mortgage banks, giving them immediate access to funds that can be cycled back into the market and used to fund other deserving projects – thus creating a virtuous circle of economic value. But in the absence of reliable information to conduct their due diligence, investors cannot make sound decisions. So, what can be done?

Blockchain Technology

So much has been said in the contemporary media about blockchain. Although it is largely linked to cryptocurrencies and Non-Fungible Tokens (NFTs), its application could be deployed in diverse contexts including the media, arts, finance, fashion, transportation, and even supply chain management.

Blockchain is simply a digital ledger of transactions, distributed across a network of computer systems. It is a means of recording transactions so that, once those transactions are validated by majority of nodes in the network, they cannot be changed, reversed, or deleted. Once authenticated and approved on the network, the transactions are tamper-proof (i.e., immutable).

Blockchain's biggest attraction is quite obviously the promise of transparency, trust, and immutability. These qualities have led many industries to leverage blockchain technology to

improve customers' trust in their products. For instance, supply of ethically sourced diamonds can be assured by storing information at every stage within the supply chain on the blockchain: from mining to the jewelry store. The possibilities are endless. But can blockchain solve the records problem in Nigeria's real estate industry?

Creating the 'Ensuite' Real Estate Blockchain Ecosystem

As a distributed ledger, the question of whether blockchain is relevant to the recording of land transactions is redundant. Blockchain can not only record all transactions carried out in respect of properties, but it also has the added advantage that such transaction information is immutable and accessible to the participants. However, information on the blockchain is only as good as the data fed into it. The fact that information on the blockchain is immutable or cannot be deleted does not mean that it is free from human error, or even fraud. To reduce this, many advocate limiting -as much as possible- human interference in the whole value chain. This means an 'ensuite' blockchain ecosystem with all the infrastructure necessary to consummate entire land transactions, with minimal outside interference. This could be achieved via smart contracts; an in-built blockchain feature.

Smart contracts are simply programs built on blockchain, triggered by meeting pre-set conditions or logic*: "if this, then that"*. They are intended to be self-executing, run automatically, and without the intervention of intermediaries; like the unscrupulous middlemen discussed previously, or even lawyers and courts. Embedding smart contracts into the real estate blockchain ecosystem means that both the payment system, the independent escrow feature, and the contract transferring interest in land (e.g., the Deed of Assignment) are embedded in the blockchain; and participants within the ecosystem subject themselves to the 'enforcement' and governing mechanism provided by the smart contract. The next question then, might be: how enforceable is a smart contract in land transactions, outside the instrumentality of the public system?

This question takes on particular relevance considering its applicability to land as a physical asset outside the blockchain ecosystem. This is unlike where the asset is digital, for instance, a digital picture, music video, etc. Access (via e.g., set of codes acting as digital key) to such digital assets can be triggered digitally by fulfilling pre-conditions as programmed in the smart contract. This can also apply to smart cars (or perhaps, smart houses) which have been pre-programmed on the blockchain. But the situation is different with a plot of land or most houses. Putting it into context, a seller of a plot of land may, upon receipt of payment on the blockchain, refuse to provide access to the plot of land or handover the physical keys to the house. Unlike the court with its inherent power over the public and its ability to physically deploy public resources to enforce its orders, smart contracts lack this inherent ability; thus, creating an argument for integrating the blockchain ecosystem, together with all its infrastructure, into the public legal system.

It even goes beyond this, considering that 'perfection of title' is necessary for determining priority of ownership and interest in land. Title perfection connotes that the Governor has given his consent to a land transaction, and it has been entered into the land registry, as required under the Land Use Act. By ascertaining the exact time when the Governor's consent is given on mortgages, the court can -in the case of competing interests in a property- safely determine whose interest prevails. Therefore, it is desirable that the government would consider leveraging blockchain for its land registry, in order to both

sanitize the system, and simultaneously facilitate the judicial resolution of disputes and enforcement of contracts in land transactions on those platforms.

But a government blockchain project may not be immediately realizable. Apart from being capital intensive, the project will require multi-agency collaboration with its attendant bureaucracy. If committed to the course, the private sector cannot afford such potential delays and uncertainty. So, although it is most desirable to integrate blockchain into the public land administration system, the private sector may want to in the meantime consider an ecosystem that is self-sufficient, self-governing, and somewhat independent of the public system. How then to make it work?

An Autonomous Blockchain Ecosystem

A fine strategy would be to leverage the principle of *Private Ordering*; a situation where private actors create a system -outside the public legal order- for regulation, enforcement, and dispute resolution. Participants within this ecosystem create for themselves the rules governing the ecosystem and subject themselves to these governing rules. Private ordering comes into play where there are no or insufficient laws regulating the industry and has been the basis for the evolution of Terms of Use popular within the technology industry. As such, by simply relying on the fact that the transaction has been carried out on the ensuite blockchain, participants can safely -and without recourse to the external public land administration system- carry on within the blockchain further strings of transactions in relation to the land, despite the delay in perfecting the previous titles or interest in the land.

Now, whilst this article does not in any way advise that parties disregard perfection of titles, the crux of the independent ensuite blockchain ecosystem is that possible land transactions such as mortgages and secondary market transactions can still be reliably carried out pending the time titles are perfected with the public system. Participants 'trust' each other to rely on the validity of the transactions on the blockchain without resorting to the public system.

Trust itself is based on the blockchain's restriction to only certain active stakeholders (a closed network) within the real estate industry, as against the full-on public or even occasional participants. Admittance into the blockchain ecosystem would be based on strict requirements, for instance, volume of past land transactions and limitation to a certain type of property. The ecosystem may also have power to impose 'sanctions' such as blacklisting participants who breach the internal rules, thus making others wary of dealing with them; or completely denying erring participants access to the blockchain. It may also adopt within its smart contract an 'escrow' feature such that payments made are not released on the blockchain until certain conditions are met, e.g., until the buyer confirms access to the property. These features create a trustworthy ecosystem within which land transactions can thrive independent of the public land administration system; at least pending the time the government creates a real estate blockchain that is integrated into the public system.

Now, this does not mean the use of the ecosystem leaves no room for dispute. Rather, it means that by its Terms of Use, the ecosystem prescribes medium of dispute resolution. This may mean resorting to the high courts for issues relating to declaration of titles on lands that are subject to statutory right of occupancy. But such suits (if any) are greatly reduced by the in-built trust features of the ecosystem. The court will most likely treat Terms of Use of the ecosystem like any other contract between parties. Likewise, smart contract of interest in land created by blockchain (e.g., the Deed of Assignment) are treated by the court like any other

land instrument, which if it is yet to be perfected will be deemed to be equitable, subject only to legal interest. Again, any participant which seeks to wrongly take advantage of the yet-to-be-perfect title will be faced with the internal sanctions of the ecosystem- a risk not worth taking by a participant that is active in the industry.

It is intended that the private sector collaborate with the government to gradually integrate the ecosystem into the public land administration. This may include granting the relevant government agencies access to the records of transactions on the ecosystem to generate its own land records; automatic deduction and remittance of Stamp Duties and Capital Gains Tax to the requisite authority; and creating features for electronic Governor's consent within the blockchain. Taking complete ownership of the blockchain ecosystem by the government will be upon agreement of the private sector and the government and may require commercial financial compensation to the private stakeholders that have invested capital in the ecosystem to enable them to recoup their investment.

Conclusion

It is perhaps foreseeable that, given its immense benefits, an ideal land administration system would do well to upgrade to blockchain technology to ensure accuracy of records, eliminate middlemen, ease land administration, and facilitate speedy administration justice in the real estate industry. It is therefore important for the government to consider this as part of its agenda. However, while the government is considering it, the private sector may want to build its own real estate blockchain ecosystem that is self-governing and independent of the public administration. This possible by embedding within the blockchain features of smart contract and escrow thus creating a self-enforcing ecosystem that can be trusted by the participants for carrying out land transactions.

Lagos: 1, Perchstone & Graeys Close, off Remi Olowude, Lekki Epe Expressway, Lagos; Tel: +234- 1-3429131, 7611051

Abuja: D3, Jima Plaza, 1627 Ahmadu Bello Way, Area 11, Garki Abuja; Tel: +234 92919191, 07045984792

Benin City: 40, Adesogbe Road, Benin City, Edo State; Tel: +234 70685518650, 07045984776

Email: editor@perchstoneandgraeys.com; counsel@perchstoneandgraeys.com

Website: www.perchstoneandgraeys.com