

# **Blockchain: The solution to corruption?**

Blockchain, the same technology that powers cryptocurrency, creates opportunities to deliver new services in new ways that previously were not possible. It also has the potential to bring transparency, security, accountability and efficiency to existing government services. This is because blockchain allows users to verify the legitimacy and validity of fund transfers without trusting a third-party to maintain account balances or relying on a single user to authorise.



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The decentralised technology is the solution South Africa has been searching for, providing the ability to enable our government to deliver services to its citizen in a manner that is faster, more reliable, secure and transparent. In short, the arrival of blockchain should be welcomed by citizens and the public sector alike, for its potential to prevent financial crime and eliminate the opportunity for corruption and mismanagement of public funds.

While such a system can effectively be used by South African government in many different applications, before this kind of technology can be adopted, leaders first need to understand how blockchain works to see why such technology will be so beneficial.

### The potential to stop corruption

As it stands currently, public administration of funds is a mysterious, time-consuming business. When government announces an annual budget, this needs to be spread across different departments, which all have different allocations earmarked for various expenditure. These intra-government transactions are arduous and it takes months to submit documents, get budgets, and have these verified and audited. This situation would be entirely different on blockchain – and the allocation of funds would be almost instantaneous, once approved. Since blockchain technology is all validated and auditable and stored in a non-erasable format, it becomes an easier task for government to see and show what they have allocated and spent, and where. This ensures no expenditure is inexplicable and removes the possibility of financial crime. Finally, the citizen will be able to call for accountability in public spending, and know that with blockchain technology in play accountability will be delivered.

## The potential to remove silos in government

Public-sector offices tend to generate their own silos of data and information-management protocols which prevents other government departments from viewing them. One of the most important functions our government performs, is the

maintenance of a record of trusted information about individuals, organisations, assets, and activities. Local, provincial, and national public service agencies are tasked with maintaining records, that could include, for example, birth and death dates, information about marital status, business licenses, property transfers, health records and even criminal activity. The use, sharing and management of this data can get complicated, especially as certain records exist only in paper form.

Consequently, amendments to official registries require the individual to appear in person at the government institution to apply for such changes, which is inconvenient and time-consuming. So, can blockchain enable a transparent South African government that shares data between departments? Furthermore, does this technology have the ability to guard such data against unauthorised access or manipulation, protecting the citizen's right to privacy.

#### The potential to restore trust in government

Since, blockchain is an encoded digital ledger that is stored on multiple computers in a public or private network, the very nature of blockchain enforces transparency and accountability. As each block in the blockchain cannot be changed or deleted at the whim of a single actor, each amendment or action taken must be verified and managed by multiple stakeholders using automation and shared governance protocols. This eliminates the possibility of any public sector misconduct, as the entire process of managing important public records is visible and auditable.

Such a system has already been successfully piloted in Ghana, and they have begun placing the land registry record on blockchain. Solving a deep-rooted problem of corruption, the land registry is no longer paper-based, nor is it situated solely with one agency, where details could be deleted or changed at whim. Now, if there is a transfer of ownership of land, it is clearly verifiable on the land registry record – blockchain has helped to restore the integrity of an important public record.

In addition, blockchain technology can empower faster decision making and roll out of government services to citizens. By issuing citizens their own digital key, situations that require identification to be verified will be made much easier and more secure, preventing identity theft, fraud and any other financial crime. Whether it be filling out government forms, accessing healthcare information, tax returns or land ownership records, having digital identities stored online removes the need for any physical signatures. Applications or amendments could be processed entirely online reducing time spent queueing, for example, at Home Affairs or the vehicle licensing or labour departments.

In short, blockchain is the key we've been waiting for that will help us restore the balance of public power. Government organisations worldwide are exploring the possibilities of using blockchain to improve operations, cognisant that the ability to record transactions on distributed, secure ledgers is a surefire way for the public administration to improve transparency, assure accountability, stamp out corruption and re-establish trust between the people and its government.

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