# Blockchain Powered Land Registry in Ghana with BenBen

BenBen is addressing problems in government technology in Ghana, with a focus on land and property ownership rights, management and issues.

## ORIGIN STORY

- BenBen's founders, Daniel Bloch and Emmanuel Noah were early true believers in Bitcoin and blockchain technology. Both worked at Bitbox, the second Bitcoin exchange in North America, at its inception while at the University of Michigan in 2013. Daniel also cofounded the Blockchain Education Network, a US nonprofit that still exists.
- While attending an event at the University of Kenya, they became aware of the land and property rights issues endemic to much of Africa and focused their efforts on addressing these in Ghana.

## MAIN PROBLEMS THEY ARE ADDRESSING

- It is virtually impossible to collateralize property rights in Ghana because there is no meaningful registry of land ownership. The lack of a registry meant payments could never be facilitated.
- Land records that are recorded, sit in a centralized database with no additional benefits than a paper registry. Payment transactions are not accurately recorded.
- This results in an ongoing cycle of poverty, in which much of the population is never able to emerge, due to unattainable property rights and the financial leverage and credit such rights generate.

## HOW THEY ARE ADDRESSING THE PROBLEM

- Utilizing blockchain technology, BenBen is creating a top-of-stack land registry CRM tool and verification platform for financial institutions that provides verified data related to transactions.
- BenBen will work with these institutions to update current registries and enable smart transactions and private keys in order to allow for an automated chain of property transactions between all parties.

"BDB and IPFS are the first blockchain as a service companies." Before you only had the option of using a product and now there's a service aspect to facilitate all this"





#### HOW BIGCHAINDB IS HELPING

- BigchainDB has worked with BenBen to provide solutions and guidance around the integration of IPFS for document storage and the construction of a blockchain database using BigchainDB technology.
- In so doing, BigchainDB has facilitated the agile development of the BenBen product essentially supplying all of the technological and development tools.
- By leveraging BigchainDB, BenBen will allow for the management of data, enable reporting, smart land transactions, queries and analytics.
- BigchainDB's scalability facilitates the database to hold all attributed data including zone, acreage, usage, ownership, occupation and more.

## LOOKING AHEAD

• The BenBen team is in conversations with organizations in Nigeria, Mozambique, and Colombia to identify potential markets where the same system could be launched after Ghana.



#### **About the User:**

Daniel is the cofounder and COO of BenBen. He was introduced to the blockchain in 2011while working at Bitbox, one of North America's first Bitcoin exchanges. From there Daniel cofounded the College Cryptocurrency Network (now the Blockchain Education Network) to fill the educational gap on Blockchain at University campuses. He is based in Accra leading product development, partnerships and client integration at BenBen.



#### **About BenBen:**

BenBen is a team of motivated engineers and innovators dedicated to improving government technology in Ghana, BenBen is a digital land database that leverages blockchain technology to provide fast easy access to trusted land content. Focusing on land and property management, BenBen aims to create a reliable land information and transactions system by coupling the latest in geomatic services with blockchain technology.



