

Use Case Library

Agridigital

Executive Summary written by GBBC

Farmers around the world are being forced to rethink their business models by a variety of forces. In existing agricultural systems, farmers generally assume counterparty risk and cannot be sure they will be paid or how much they will be paid until they have delivered their goods. Further, there is a lack of quality data surrounding the agriculture supply chain process, making it difficult for buyers to determine the origin of the goods they are buying. Blockchain technology has the potential to streamline agriculture transactions and vastly improve supply chain traceability—providing critical updates to unsustainable models.

Using the AgriDigital commodity management and blockchain platforms, a pilot project created digital titles for grain and processed payment on the blockchain. The private Quorum network enabled AgriDigital to generate a digital title token based on the quantity and quality of the commodity that was delivered. Then, payment is automatically processed with smart contracts using "Agricoin," a token that is pegged 1:1 to the Australian dollar. This payment was also "parallel processed" via traditional banking so the grower is paid in fiat. This process is scalable to the entire Australian grains industry.

The Quorum network also enabled AgriDigital and CBH to gather data at different points on the grain supply chain. Specifically, they tracked organic oats from the farm, to milling, to production, and finally to the consumer. The data was analyzed at the point of sale and used to deliver the consumer a report detailing whether the oats were organic.

The AgriDigital and CBH pilot project clearly created efficiencies, reduced counterparty risk before asset transfer, and increased transparency on the supply chain. The benefits of a blockchain-based agriculture platform are multiplied when more actors are participating, though this can also lead to new challenges. An effective future pilot program would involve more participants to better ascertain how the system would function on a national or regional scale. AgriDigital is also working with Rabobank to loop the financial sector into the system.