

TENNESSEE FARM BUREAU FEDERATION

2018 Policy Development



Blockchain Technology

Issue

Blockchain is a buzzword in technology circles. Just like any new technology, the agricultural industry will look to take advantage of this advancement. Blockchain is a public list of transactions held on a decentralized set of computers, much like the internet is a group of interconnected computer networks. The blockchain system is not owned by any entity or individual, and anyone on the blockchain helps run it. Using the blockchain creates a transparent and secure digital ledger where a transaction can be completed without an intermediary, because everyone on the system can see and track transactions. Blockchain technology is the backbone of cryptocurrencies such as Bitcoin. This technology is already being used in food safety to pinpoint a source of contamination quickly and efficiently. Other areas predicted to be of benefit to farmers are traceability of products, reduced transaction costs and intermediary costs when trading commodities, new markets for products because farmers will not have to verify trustworthiness of buyers, and more efficient logistics in the supply chain.

Background

What is the internet? In today's world of technology this question almost seems silly. While most cannot describe the internet with an exact definition, they understand it is the tool that connects us to the world through a global computer network. But when the question of "what is the internet" was asked 30 years ago, the average American could not fathom such a concept.

So, what is blockchain? Many involved in the technology sector see blockchain as the next frontier in technology, and much like the internet, will be a normal part of the future. Also like the internet, users do not have to know exactly how it works to use blockchain. While it is unknown to what level blockchain technology will be adopted, the adoption of use by cryptocurrencies shows how this technology can potentially be a trusted tool.

A blockchain is a public list of transactions, is verified by other users, and then a transaction is added to a list for all users to see, thus making a chain. All additions to the blockchain are permanent, as other users cannot edit the transaction. Then future transactions are added to the blockchain. This public list of permanent transactions makes fraud very difficult. The transaction takes place directly between two parties, potentially cutting out the need for a middleman.

While difficult to understand, there are potential uses in agriculture. The first and simplest application would be to track a transaction from a farmer to another party. If the transaction takes place on the blockchain there would be no need for a contract, attorney, or notary. It would be the tech world's version of a handshake agreement, but everyone sees the handshake. Beyond simple transactions, food could be traced from farm to fork by consumers by following each time the product changed hands in the production process. Another potential use could be land surveys. Once a tract of land is surveyed, the information is uploaded to blockchain and cannot be edited potentially, ending property boundary disputes.

This year in the Tennessee General Assembly, Public Chapter 591 was passed which recognizes the legal authority to use blockchain technology and smart contracts in conducting electronic transactions. PC 591 also protects rights of ownership of certain information secured by blockchain technology.

Questions

1. What are the potential benefits/risks to blockchain technology?
2. Does Farm Bureau need policy pertaining to blockchain technology?
3. Does the advent of technology like blockchain, or other technological advancements, require more emphasis on the need for broadband and cellular connections?

Farm Bureau Policy

Farm Bureau does not have policy pertaining to blockchain technology.