

BLOCKCHAIN TECHNOLOGY IN AGRICULTURE

More properly called distributed ledger technology, blockchain technology allows users to securely transfer value or assets without an intermediary such as a bank or credit card company. The technology also can be used to store information that needs to be protected from hackers.

This technology is fast-growing and has broad implications in numerous industries including agriculture, trade, technology development, and government. As Jay Rempe, Nebraska Farm Bureau's senior economist, reported in January's "Economic Tidbits", blockchain technology could have several applications in agriculture, including its use to facilitate international trade.

For instance, earlier this year, the blockchain technology underpinning the cryptocurrency bitcoin was used to facilitate a shipment of U.S. soybeans to China. Another example would be farmers and elevators in Nebraska using blockchain to work directly with overseas buyers. Lower transaction costs and efficiencies could lead to increased trade and higher commodity prices. Or, farmers and ranchers wanting to produce goods for certain niche markets (i.e. organic; cage-free; etc.) can better document the attributes and perhaps command greater prices.

Additionally, some experts have suggested the FDA could use blockchain technology to better track the source of food outbreaks. Companies can contribute encrypted blocks of data that can be monitored and verified by each farmer, packer, shipper, distributor, wholesaler, and retailer of produce to draw a line from field to fork. That could result in saving time, money, and even lives.

In Nebraska, Mutual of Omaha and Cargill are among the well-established businesses that have started exploring blockchain technology. Cargill has used it in a pilot project to track Honeysuckle White brand turkeys from the farm to the store.

In the 2018 legislative session, Nebraska Farm Bureau was asked to support LB 694 and 695, Sen. Carol Blood's measures related to blockchain technology, but without grassroots discussion and direction, NEFB did not weigh in. It is likely we will see these bills again in coming sessions.



LB 694 was introduced to prohibit cities, villages, and political subdivisions from taxing, issuing fees, or otherwise regulating blockchain technology. The bill would allow for the state to issue new fees and taxes if needed but would prevent the patchwork of fees and regulation which would make it difficult for businesses to adopt emerging technologies and adapt to trends in Nebraska.

LB 695 was introduced to add blockchain and Smart Contracts to the Electronic Notary Public Act and the Uniform Electronic Transactions act, thereby clarifying that Smart Contracts, which are virtual contracts administered using distributed ledger technology, would have the same force and effect as a regular paper or digital contracts under Nebraska state law.

Question:

- I. Should Farm Bureau have policy supporting the advancement and streamlined regulation of blockchain technology and virtual contracting, especially as it relates to the uses and benefits in agriculture and trade?