

Journal of Food Distribution Research Volume 50, Issue 1

Putting Food on the Blockchain: A Regulatory Overview

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Blockchain is currently being heralded as a multidimensional solution to inefficiencies in various sectors ranging from finance to agriculture. Blockchain presents an exciting opportunity to shift business interactions through smart contracts, distributed ledgers, improved transparency measures, and more secure data practices. The technology provides mechanisms for storing massive amounts of information, allowing for improved data analysis through collection of "big data," and its distributed nature allows for greater information sharing among stakeholders. In theory, blockchain offers a new conceptualization of farm-to-table and has the potential to transform an increasingly globalized agri-food industry. Notably, multiple blockchain "projects" seeking to optimize the agri-food industry have recently gained traction with partnerships like that of IBM and Maerk (utilizing Hyperledger, an open-source blockchain hosted by the Linux Foundation), which are employing the technology to strengthen traceability processes, bolster food safety measures, and increase consumer knowledge about food provenance.

The United States is grappling with policing the technology beyond its popular functionality as digital currency. While these projects seem promising, it is crucial to consider how the emerging technology will be regulated and how these regulations may interfere with the aims of ambitious projects. Examining both federal level and state-level legislation and regulation, this research adds to the existing body of literature on blockchain technology, which is heavily focused on evaluating the merits of different blockchain "platforms." The goal is to provide a better understanding of how regulatory measures may create obstacles to agri-food leveraging blockchain in lucrative ways and to determine whether the current U.S. legal approach to the emerging technology embodies a "hands-off" mentality. Moving forward, this research aims to monitor shifts in the regulatory environment to better understand how the technology will interact with regulation. Can a healthy balance of responsible regulation exist without threatening to stifle the ability of innovation to flourish and grow organically?

Keywords: blockchain, big data, decentralization, food provenance, distributed technology, supply chain data

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