

# Make Innovation HAPPEN



**MIH Knowledge Article:  
The impact of blockchain technology on the  
Scottish food and drink landscape**

**Scotland**  
A LAND OF  
food and drink

SCOTLAND  
IT'S TIME TO INSPIRE

The logo consists of the word 'CAN' in white text on a green vertical bar, and the word 'DO' in white text on a yellow vertical bar, positioned to the right of the 'CAN' bar.

Blockchain tech is helping food producers and retailers guarantee the provenance of their products. This will ensure a transparent food supply chain in Scotland and a more honest relationship with the end consumer. It'll also help to protect and authenticate national food and drink brands.

Research company, MarketandMarkets, recently put a price on Blockchain in agriculture. It estimated that the global market is currently worth around 60.8 million USD, and it's projected to reach 429.7 million USD by 2023.

How will the growth of blockchain affect the Scottish food and drinks sector?

## **Blockchain technology in the food industry**

It may have started off as the tech that fuelled cryptocurrencies such as bitcoin, but the blockchain revolution is pervading food and drink production.

A powerful type of database, Blockchain aims to improve traceability, transparency and food safety across the global supply chain. All product information, including farm origination, batch numbers, factory data, expiration dates and shipping details, is digitally connected to food items. This information is then entered into the blockchain at every step of the process.

Blockchain is particularly useful in the grey zone of the supply chain, such as origin labelling and organic production. Keeping data this way, could potentially prevent contamination and major outbreaks of foodborne illnesses, as well as provide a transparent food journey to consumers.

## **What's on the market?**

Start-ups, such as Pipeline Foods, Blockgrain and Provenance.org, all aim to improve the traceability system within the food supply chain using blockchain tech. These companies cover everything from the provenance of organic foods, country-of-origin labelled products, grain and soil quality, to sustainable fishing practices.

Carrefour is the first European retailer to introduce blockchain to its business model. The French supermarket keeps supply-chain data on a number of food products including chicken, eggs, cheese, milk, ground beef steak, salmon, oranges and tomatoes.

By using QR codes on product labels, consumers can scan products via their smartphones and see where the food comes from and how it was produced.

## **Blockchain and organic food**

Edinburgh Napier University has recently joined forces with Glasgow-based leading data and analytics provider, Eyeacademy. They're using blockchain technology to overcome difficulties around the provenance of organic produce, by tracking down the food supply-chain of ethically-sourced food.

The research project aims to establish the origin of organic produce through the entire supply chain and reassure consumers of the ethical sources of the organic products.

## **Scottish whisky and blockchain tech**

For Scotland, blockchain technology can be used to protect, promote and confirm the authenticity of national brands. Whisky distilleries, for example, are starting to use blockchain to verify the provenance and complex production of Scotch whisky.

Blockchain puts an extra level of security in place for the food industry across the board, and is a tech catalyst that will drive innovation throughout the entire food chain.

# Innovation support for Scottish food and drink companies

If you want to understand more about blockchain technology in Scotland get in touch with our Make Innovation Happen team who help companies innovate around process, people and product. Make Innovation Happen is a single source of innovation support for businesses involved in the Scottish food and drink supply chain.

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Scotland Food & Drink, Scottish Enterprise and Highlands & Islands Enterprise work in partnership across academia, the public sector and the industry to deliver a comprehensive innovation support service.

Make Innovation Happen can help your business by providing:

- [Access to 'connectors'](#), who can offer support, advice and mentoring, as well as direction to appropriate support
- Ideas and insights on how to innovate through articles and events
- Funding through the [Collaborative Innovation Fund](#)
- Help to access other innovation services provided by Scottish Government, [Scottish Enterprise](#), Highlands & Islands Enterprise, Interface and others

To find out more about the support available, please get in touch with the Make Innovation Happen team:

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