

IBM Food Trust -- Fact Sheet December 2018

Background

The IBM Food Trust solution, built on the IBM Blockchain Platform and comprising new ecosystem members across the entire food supply chain and around the world, will now be made generally available.

Additionally, Walmart will be requiring all vendors who supply leafy greens to use IBM Food Trust to track their produce back to the point of origin, a significant sign of support for the solution by the world's largest retailer.

IBM Food Trust is characterized by its ecosystem. IBM is announcing new suppliers, retailers and third party hardware and software vendors that are joining IBM Food Trust as users and value adders as it becomes widely available across the global food industry.

Blockchain and Food Safety

Foodborne illness is a common and costly public health problem. The World Health Organization estimates that [1 in 10 people](#) fall ill due to foodborne diseases each year. In the U.S., the Centers for Disease Control and Prevention estimates that roughly [48 million get sick](#), 128,000 are hospitalized and 3,000 die of foodborne diseases each year.

In today's food system, participants in the supply chain often operate in silos. No single end-to-end view of food delivery exists, making it difficult to manage safety issues within the supply chain and causing costly delays.

Food authentication and supply chain tracking is a critical step to quickly finding and addressing sources of contamination around the world. Blockchain technology provides a permanent record of transactions which are grouped in blocks that cannot be altered. The technology could serve as an alternative to traditional paper tracking and manual inspection systems, which can leave supply chains vulnerable to inaccuracies.

The Evolution of IBM Food Trust

- In October 2016, IBM, Walmart and Tsinghua University [announced](#) a collaboration to improve the way food is tracked, transported and sold to consumers in China. By using blockchain technology to build transparency and efficiency in supply chain record-keeping, this work aims to help ensure food safety for Chinese consumers.
- IBM Food Trust was launched in August 2017 with 10 Foundation Program members, exploring the use of blockchain in food traceability and from there building out modules specifically addressing a number of these issues.
- Since it was first launched, IBM Food Trust, which is now generally available for the food ecosystem to join, has completed a number of transactions:
 - Over four million transactions entered onto the blockchain
 - More than 350 SKUs tracked
 - Nearly three million packaged food products traced via IBM Food Trust
 - 3,000 product traces completed
 - More than 50 partners are putting data into the system on some 460 products
- New members include Carrefour, Smithfield, Wakerfern, Beefchain, Topco and more.

- IBM Food Trust is a modular solution, positioning participating retailers, suppliers and growers to choose the module or modules that deliver the greatest business value based on their role in the food supply chain. Three modules are currently available with pricing that is scaled for small, medium and global enterprises:
 - Trace – The trace module allows members of a food supply chain to more securely trace products in seconds to help mitigate cross-contamination, help reduce spread of food-borne illness and reduce unnecessary waste – a process that often takes weeks using other methods.
 - Certificate management -- The certifications module digitizes essential certificates and documents and helps certify provenance of certificates. It also enables participants across the ecosystem to easily load, manage, and share food certifications digitally.
 - Data entry – The data entry and access module allows members to securely upload and manage data and access supply chain information.
 - The development of additional modules, such as consumer APIs, is underway to offer more advanced levels of traceability for multi-ingredient foods and freshness.
- On September 24, Walmart issued a mandate to its leafy green suppliers, stating that it will begin requiring suppliers to capture digital, end-to-end traceability event information using the solution. suppliers are already progressing in the onboarding process.
- Carrefour has built a consumer-facing app based on IBM Food Trust open APIs to allow consumers to learn about the details of the particular food item they are purchasing, down to the time and place it was picked.

Key Messages:

- IBM Food Trust is impacting food systems around the globe. With the addition of Carrefour, one of the world's leading retailers with more than 11,000 stores in 30 countries, to the IBM Food Trust ecosystem, consumers in Europe join Walmart shoppers in the United States in having access to transparently-traced food.
- The modular structure of IBM Food Trust enables members to select the benefits of blockchain that are most beneficial for their businesses. With several modules already in place and others being developed, IBM Food Trust can benefit participating users at any point in the supply chain.
- IBM Food Trust is designed for the enterprise. The solution provides enterprise-class security, reliability and scalability by running on the IBM Blockchain Platform hosted on the IBM Cloud. IBM Food Trust users maintain ownership over their data – even after they have entered it onto the solution.

###