

Reduce Waste, Improve Food Safety + Decrease Foodborne Illness

– THiNaër IoT use case –



Real-time Food and Ingredient Tracking

Know real-time location of food products and ingredients at any point in agricultural and food cold chain.



Reduce Food Waste Due to Spoilage

Leverage environmental condition monitoring to manage and maintain temperature and humidity across the cold chain.



Ensure FDA Compliance

Leverage real-time and historical data to report out on environmental conditions to ensure compliance with the Food Safety Modernization Act's Final Rule.

Challenge

Food producers, shippers and distributors all face similar challenges when it comes to ensuring ingredients and food products are kept at the right temperature all along the cold chain. According to the Food and Agriculture Organization of the United Nations, nearly 33% of all human food produced is lost or wasted each year due to poor controls around temperature and environmental conditions.

Lack of insight into conditions and poor integration across systems leads to unnecessary waste and missed opportunities to correct situations that could contribute to foodborne illnesses.

Solution

Using the THiNaër IoT Platform, the national food producer could easily monitor ingredients and food products all along the cold chain. Using a series of environmental sensors, temperature and humidity can easily be logged during production, packaging, shipping, delivery, storage and distribution.

The THiNaër solution includes a centralized data storage that can be shared across users so that farmers can monitor plant health during growth, producers can manage ingredient health during harvest and packaging, shippers can monitor product health in transit and distributors can manage food health up to the moment it hits the consumers' hands.

Food safety data like temperature and humidity is available for use in real-time monitoring, system integration and ITTT logic via RESTful API and at-a-glance reporting for lightweight data analysis. End users can also easily view comprehensive product health and configure triggers and alerts to notify everyone downstream of potential disruptions along the cold chain.

To gain real-time insights into the ingredients and food products, sensors and gateways are installed at various points along the cold chain, from farm and truck to palettes and grocery stores. Those sensors and gateways detect and report current and out-of-range environmental details so that interested parties can take action or automated triggers can alter current courses and prevent spoilage and future foodborne illness.

Results

Reducing foodborne illness and waste are two vastly different use cases but both can be solved using the same technology. According to a 2010 study called "Food waste within food supply chains: quantification and potential for change to 2050", an estimated 1.3 billion tons of food is compromised each year during transportation and distribution.

Leveraging the THiNaër IoT Platform technology for cold chain would substantially reduce that number substantially by enabling automatic environmental condition monitoring and automated alerting of out-of-range values.

Today's methods of gathering temperature and humidity data are often manual tasks prone to human error and delayed responses. Leveraging the THiNaër IoT Platform allows everyone along the cold chain to be confident that food and ingredients remain at the correct temperatures. Further, the THiNaër technology ensures the right people are notified at the right times to take action should environmental conditions fall out of range.

Reduce human error, waste and foodborne illness all at once with a simple, affordable way to monitor and manage the food cold chain without disrupting current workflows or incurring major infrastructure overhauls by leveraging THiNaër.

To learn more about this use case and other solutions powered by THiNaër, [contact us](#).

3000

Americans die each year due to foodborne illness

Key Takeaways

Customer

- a national healthy food producer

Industry

- agriculture

Challenge

- national producer of fresh foods and salads wants to decrease foodborne illness and waste while improving overall food safety and FDA compliance

Solution components

- THiNaër platform
- Bluetooth/BLE beacons
- Enterprise-grade gateway
- **Sonar dashboard**
- THiNaër or partner implementation services

Results

- potential annual decrease of 1.3 tons food waste
- immediate compliance with 2-year FSMA reporting requirements
- reduction of the annual 48 million Americans suffering from foodborne illnesses

Contacts

- info@thinaer.io (email)
- [online](#) (form)

If you could solve even one problem today, what would it be?

THiNaër is helping organizations save money and increase revenue with IoT solutions that can be deployed today and enhanced tomorrow.

Contact info@thinaer.io to customize your IoT solution