

Smart Technology and Food Safety: Optimizing Your Business from End to End

Business owners are already aware of the Food Safety Modernization Act (FSMA), a new set of standards designed to keep food safe and uncontaminated as it travels from farm to table.¹ If the FSMA applies to you, you should also know that using smart technology can help keep food safe and lessen waste - while reducing your liability and lowering your cost of business.

If you're just getting off the ground with smart technology in the field of food transportation, read on for a step-by-step guide to setting objectives, finding a provider and developing a custom food safety solution for your business.

Setting Clear Objectives

Currently, one in six Americans becomes sick from a foodborne illness each year.¹ Preventing food contamination should be every food service business owner's goal. Since spoiled food is a loss, improving food safety also improves your bottom line. Before you begin, determine what specific processes you want to improve, strengthen or simplify to prevent food contamination and increase efficiency in your business.

Temperature control issues are the primary cause of contamination, so preventing compromised or spoiled food due to unsafe temperatures should be a primary objective. But there are other benefits of smart technology for food safety businesses, and these should be incorporated into your plan.

Here are some sample objectives to support temperature control:

- Reduce idle time and implement smart routing to save time and gas
- Prevent vehicle breakdowns and lower maintenance costs
- Integrate vehicle monitoring with product inventory to optimize future shipments

Choosing Smart Technologies

There are three primary ways food processors, distributors and retailers can use smart technology to cut costs and drive gains. A truly effective solution uses all three.

1. **Remote temperature monitoring:** Ensure products remain fresh by installing temperature probes. This technology allows fleet managers to monitor temperatures company-wide at a glance. Such devices merely represent a one-time equipment cost, after which they operate within a vehicle tracking system. If vehicle tracking is not needed, businesses can buy temperature monitoring only for a small monthly fee.



Choosing Smart Technologies (Cont.)

2. **Smart vehicle routing:** Implement vehicle tracking to reduce idle time, optimize routes and cut maintenance costs – after all, delays or breakdowns can mean spoiled food and lost cargo.
3. **Back end integration:** Depending on the solutions your business has in place, it could be possible to integrate systems to optimize operations.

Finding a Partner

Once you've identified your primary objectives and desired technology to implement, you'll need to select a provider partner.

Ask yourself the following:

- Does this provider have resources local to me?
- Do they have demonstrated expertise in smart technology?
- Can they assist with onboarding and training?
- Do they offer the best hardware and software?
- Do they provide solutions to other businesses like mine?
- Can this provider scale with my business?
- Do they provide ongoing technical support?

Customizing a Solution

Selecting the right package of hardware and software for your business is the last step. Look for packages and plans that integrate vehicle tracking with smart technology specific to food safety. For instance, remote temperature monitoring devices can be packaged as part of a vehicle monitoring system or incorporated in a monthly plan.

No matter your specific objectives, smart technology can help meet them while ensuring food safety at every step. Learn more about IoT and other business solutions from [U.S. Cellular®](#).

Sources:

1. U.S. Food & Drug Administration, Inspection and Compliance, 2018, <https://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm257978.htm>