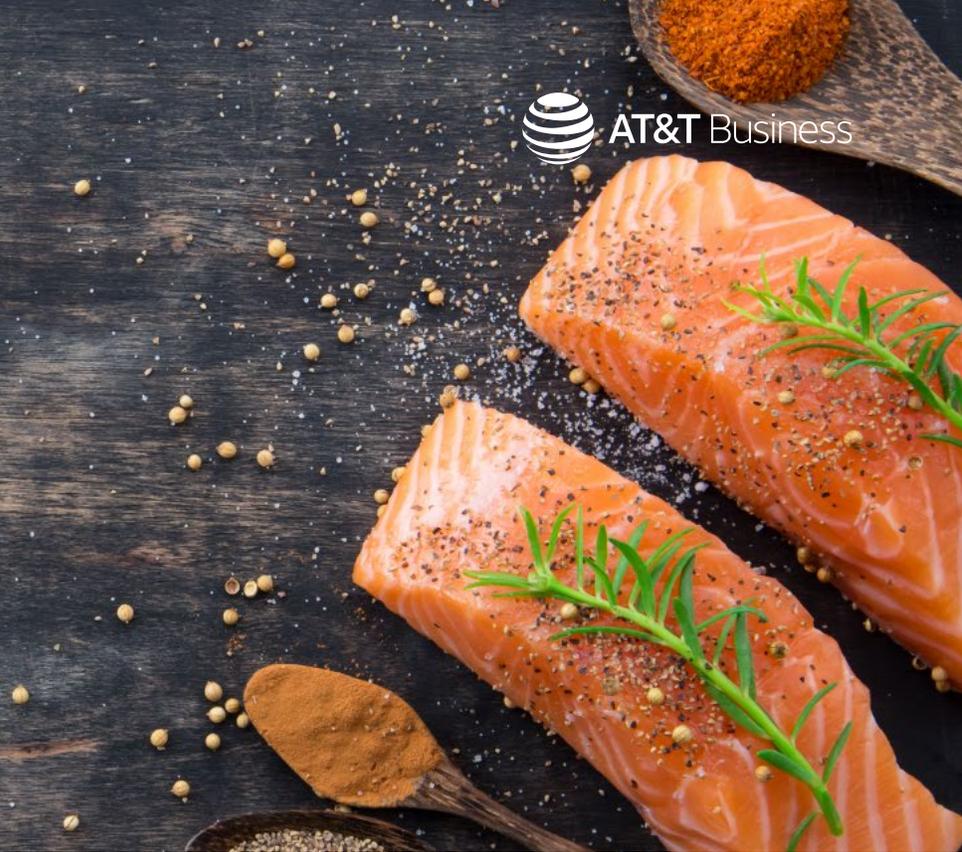


VeriSolutions serves up connected restaurant solutions that promote safety and savings



- **Business Needs** - Ensure food safety, comply more easily with government regulations
- **Networking Solution** - Automated monitoring solution uses smart sensors to collect temperature and humidity data and send near-real-time alerts
- **Business Value** - Improved consumer safety, increased efficiency, savings
- **Industry Focus** - Food Service
- **Size** - Privately held startup

About VeriSolutions, LLC

Atlanta-based VeriSolutions, LLC, creates connected restaurants. Founded in 2015, VeriSolutions offers an intelligent network of sensors, firmware and software to help restaurants prevent inventory loss, optimize staff efficiency and improve customer safety.

The Situation

In the wake of several high-profile food poisoning incidents, many restaurant owners searched for more effective ways to ensure food safety. Most of the processes restaurants use to keep food safe, such as physically inspecting the temperature and humidity in coolers, have been in use for decades, but they're often inefficient, costly and subject to human error. Restaurant operators needed a better way to protect customers, prevent inventory loss and operate more efficiently.

The Solution

VeriSolutions created an intelligent network that uses AT&T Internet of Things (IoT) technology to gain insight into the conditions in restaurant kitchens. Automating the inspection process saves time, helps to ensure food freshness and prevents inventory loss; it also helps restaurants comply with federal regulations and protect their brands.

Adding Value to Restaurant Operations

Food safety has been in the spotlight recently since several high-profile restaurant chains experienced food poisoning outbreaks that sickened patrons. The problem is not limited to a few restaurants – the U.S. Centers for Disease Control and Prevention estimate that one in six Americans gets sick each year by consuming contaminated foods or beverages.

Restaurant operators recognized that they need better ways to ensure that food is safe to eat and help them meet federal food safety regulations. However, many of the processes designed to keep food safe are time-consuming, inefficient and not always reliable. In many cases, chefs, kitchen managers or other staff must physically inspect conditions in coolers and freezers multiple times each day. Recording temperature and other metrics using pen and paper can be costly and subject to human error, which can lead to inventory loss, customer safety issues and operational inefficiencies.

Michael Crocker, founder and CEO of VeriSolutions, recognized the possibilities offered by Internet of Things – that massive global infrastructure



of physical and virtual devices communicating with one another. “Internet of Things technology is allowing for increased automation and the gathering of massive amounts of data,” he said. “With the combination of this new technology and the outdated manual processes that are still widely used in the food service industry, along with recent customer and food safety issues flooding the news, we felt there was a tremendous opportunity to add value to restaurant operations at a very low cost.”

Crocker developed an intelligent network of sensors, firmware and software to help prevent inventory loss, optimize staff efficiency and improve customer safety. The only missing piece was a global network solutions provider to help it transmit food safety data.





Good, Fresh Food is Key to Restaurant Success

After evaluating several service providers, VeriSolutions decided to work with AT&T to automate inspection processes and simplify compliance with food safety guidelines. “The fact that AT&T had a solid local presence in Atlanta, a dedicated IoT group and a rep who we connected with early on made them a logical choice,” said Mat Barnwell, VeriSolutions VP of Sales & Marketing.

Using AT&T cellular service instead of a restaurant’s wireline or Wi-Fi network simplifies the operation and avoids any problems with Payment Card Industry data standards designed to ensure a secure environment for credit card transactions.

“Everyone knows good, fresh food is key to a restaurant’s success,” Barnwell said. “But most don’t know the measures restaurant managers must take

to ensure customers have the best quality.” For example, equipment problems can create costly and potentially dangerous problems. “One of the worst things for restaurant owners is finding that their walk-in refrigerator has malfunctioned,” he said. “With our connected solution, they are notified when the cooler temperature is out of threshold range – helping prevent a potential loss of thousands of dollars’ worth of inventory.”

IoT makes it easier for restaurants to collect the information they need to operate safely and fulfill their health reporting requirements at an affordable price. VeriSolutions’ platform features a temperature monitoring solution that uses AT&T IoT technology to gain insight into equipment. The VeriSolutions platform consists of:

- sensors with an embedded AT&T Global SIM that collect temperature and humidity data;
- a data analytics hub that collects and aggregates sensor information;
- and a user interface, powered by AT&T Control Center, that monitors the sensors, provides near real-time diagnostics and provisioning, and sends alerts, notifications and reports on their activity.

This connected restaurant solution lets employees to take immediate action on unusual sensor activity, Barnwell said, which saves time and money and, most important, helps prevent food contamination. It alerts staff to problems like malfunctioning refrigeration and food spoilage, and automates compliance with the Hazard Analysis and Critical Control Points (HACCP) System, a management system that addresses food safety through the analysis and control of biological, chemical, and physical hazards. “It frees restaurant staff to spend time improving their customers’ experience instead of logging temperatures,” Barnwell said.



Increased Efficiency, Consumer Safety

VeriSolutions' customers benefit from increased visibility into their operations and the ease with which the VeriSolutions platform can scale. This is especially valuable for multi-unit restaurant chains in which it can be difficult for stakeholders to have a true grasp on operations. "I keep hearing that data is the new natural resource," Barnwell said. "While that's true, data is only valuable if you're providing the right data to the right people at the right time. A restaurant hierarchy can make this very difficult."

VeriSolutions has designed a system that gets actionable data in the form of alerts, notifications and reports to the people who can act on it. Restaurants can receive the data on mobile devices, tablets and through a web dashboard, depending on their preference. The VeriSolutions platform consists of a mesh network of sensors for data collection, a hub for data collection and distribution using a 3G cellular network, and the VeriSense Cloud for data aggregation and analytics.

One executive chef reports that VeriSolutions saves him at least 30 minutes per day, since he no longer has to log the temperature and humidity of each food storage device multiple times daily. He added that the solution had paid for itself four times over within one month.

Soon after introducing VeriSolutions, the manager of another restaurant received real time notifications of two temperature increases and a power outage. He was able to transfer food from the non-compliant devices into other refrigeration units on site, saving inventory and keeping their customers safe. "Based on his experience,

this manager anticipates annual inventory loss prevention of more than \$15,000," Barnwell said. "The ROI is easily quantifiable. The improvements in operational efficiency alone would more than justify the cost of the solution."

"AT&T lets us offer our customers a solution that is very easy to install, always on, and much more affordable than other solutions available."

Mat Barnwell

Elegant Simplicity, Easy Installation

ATT IoT technology has allowed VeriSolutions to differentiate its products in the marketplace. "AT&T lets us offer our customers a solution that is very easy to install, always on, and much more affordable than other solutions available," Barnwell said. Some vendors charge thousands of dollars per location to install similar but less effective systems, many that offer poor user experiences. By contrast, VeriSolutions has created a solution so elegant that anyone can install it and begin using it in as little as five minutes. The restaurant manager simply accesses the VeriSolutions portal to answer a few questions and specify the temperature thresholds for each device to be monitored. VeriSolutions programs the sensors and labels them with the names the restaurant supplied, packages them with a data hub and ships them direct to the restaurant. Restaurant personnel just plug in the sensors and data hub and download the VeriSolutions app. "It's as simple as possible," Barnwell said. "They're up and running in about 5 minutes. The feedback we've



gotten from customers is that it's very easy." Managers can decide which employees will receive alerts if a cooler goes outside the temperature threshold. Managers of multiple properties may not want to receive a text every time a device in one of their locations goes outside its defined threshold; in that case, they can opt for onsite personnel to get the alerts, and they can choose to receive daily or weekly reports, or use the mobile app or log on to VeriSolutions portal to see trends at their convenience. The system also lets users create custom reports quickly for inspectors, making life easier for the kitchen managers and the inspectors. Barnwell, who is an attorney, notes that the solution could help restaurants mitigate liability. "It can help them show that they are proactively working to ensure food safety," he said.

"AT&T's IoT solutions enable VeriSolutions to differentiate our solutions in the marketplace," Barnwell said.

Differentiating Itself in the Marketplace

VeriSolutions' experience with AT&T has been very positive, Barnwell said. "Our representative has been attentive and flexible in putting up with us, as we are still a startup, constantly changing plans and trying to accomplish a million things at once," he said. Its early success has made it certain that VeriSolutions will continue to develop solutions on top of and around its exceptional sensor infrastructure. "The Internet of Things and sensor technology have really come into the forefront in the past few years," Barnwell said. "And there are thousands of use cases for different verticals we can go after, but we're determined to stay focused on restaurants in the near term," Barnwell said.

Manufacturing its own hardware will make it easy for VeriSolutions to create solutions for other industries. "It's a very flexible platform," he said. "And the fact that we use wireless instead of Wi-Fi will give us flexibility to take our solutions into verticals like transportation and logistics among others."

