

Technology streamlines food safety inspections for Claim Jumper Restaurants

By Cori Keeton Pope

A case study from Tripod Data Systems, a Trimble company

Every restaurant owner is familiar with the scenario: an operator juggles a temperature probe, clipboard and pencil over hot and cold dishes several times per day, jotting down details like the time, the dish and its temperature. The process is time consuming, creates mountains of paperwork which is typically shoved in a file and forgotten, and barring any problems, the information is never put to future use.

For a number of reasons, food safety is at the top of the priority list for restaurant owners across the U.S. However, until recently the only option available for monitoring food safety was to record it manually. As a result, management teams are always looking for more accurate, efficient and useful solutions for ensuring that the food they serve meets or exceeds safety standards.

It's that constant search for an even better food safety inspection process that made Dan Smith, vice president of Claim Jumper Restaurants, sit up and take notice when he received his first call from Malcolm Mitchell in 2003. Mitchell, president of IQ Scientific, a developer of electronic inspection systems, assured Smith that he had a paperless solution that could help streamline food safety inspections across Claim Jumper's 37 restaurant locations.

"We wanted to improve our food safety processes for multiple reasons," said Smith. "First, of course, our guests expect and deserve safe, high-quality food preparation. Second, it just makes good business sense. We wanted a solution that would let us spend less time performing inspections, yet collect more data and make it more accessible to us so we can continually improve our processes in the kitchen."

Prior to Mitchell's call, Claim Jumper workers recorded all food safety inspections using a temperature probe, pencil and paper, like workers in most restaurant kitchens across the country. The operator would record the temperature of required items, take whatever action was required to comply with safety regulations (the typical holding line for hot food is 140°; cold food must be kept at 41° or less), and complete all of the necessary paperwork to log the results.

While the process served its purpose – ensuring that all food met or exceeded safety standards and food that didn't was dealt with properly – the system was cumbersome and the information collected over a period of time was virtually impossible to analyze. And like all paper-based reporting systems, there were problems with illegible handwriting, missing information, incomplete and outdated forms.

"Like most restaurants, Claim Jumper had developed a process for completing food safety inspections that made the most of the resources available, which were basically a piece of paper and a pencil," said Mitchell. "But Claim Jumper is a sophisticated organization, and we knew our more automated system could save this company substantial amounts of time and money."

Today, all Claim Jumper restaurants are equipped with a rugged Recon handheld computer from Tripod Data Systems (TDS) loaded with iQuality software from IQ Scientific, which is changing the way Claim Jumper collects and uses food safety information.

An industrialized temperature probe connects directly into the Recon, and the software triggers flashing and audible alarms to alert operators when it is time to perform checks. The Recon is Web-enabled, allowing operators at each restaurant to download the latest process rules, checklists, food items, forms, critical limits and corrective actions before beginning an inspection.



The Web-functionality also means the operator can download Hazard Analysis and Critical Control Point (HACCP) data directly onto the handheld, making it easy for Claim Jumper to proactively adhere to the HACCP reporting guidelines.

At the required times, the operator completes the food safety checklists for both hot and cold food using the Recon's touch screen display and the temperature probe. The software automatically captures the probe's temperature readings, and pop-up screens alert the operator to any corrective actions that need to be taken. An additional feature, not yet deployed by Claim Jumper, allows metal tags to be located at each inspection point, and requires the operator to touch the tag with the temperature probe to access the checklist for each location. The system then automatically logs the date and time, operator and inspection location. This feature ensures operators go to every location required to complete an inspection.

At the end of each day, the operator connects the Recon to a desktop computer, where the inspection data is automatically uploaded to a centralized database at the company's headquarters. At the same time, data from the corporate office, such as recall notices, special promotions or a price change can be downloaded to each restaurant.

Reports detailing each day's food safety inspection results are automatically generated and distributed to the appropriate people via email, and company managers can also download inspection reports anywhere they have Web access. For example, a restaurant manager can now get daily email reports about safety inspection results for his or her restaurant, and district managers can get weekly summaries of violations for multiple locations. Immediate access to inspection data helps Claim Jumper managers flag problem areas early and correct them.

Although the iQuality system can run on any Windows Mobile device, IQ Scientific offers the Recon handheld computer as part of a bundled package. Unlike ordinary PDAs, the Recon meets military durability standards and is built to withstand multiple drops onto concrete, extreme temperatures and even accidental immersion.

"The Recon's ruggedness makes it an important and reliable part of the iQuality system," Mitchell said. "Restaurant kitchens are usually hot, and in a fast-moving environment things are regularly dropped. We're confident the Recon can handle whatever restaurants dish out."

Indeed, at one Claim Jumper location, an employee accidentally dropped the Recon into a large sink full of hot, soapy water. The operator fished the Recon out by the temperature probe cable, wiped it off, and resumed the inspection. Nothing was damaged, and none of the inspection data was lost.

"We have achieved all of our objectives with the TDS Recon and iQuality system. The ruggedness of the Recon means employees don't have to worry about dropping a handheld computer, and the software has completely streamlined our food testing process," said Smith.

By making better use of the data we collect, we're able to improve our processes in the kitchen, which means food isn't wasted, and we can ensure that our guests are served safe, high-quality food with the utmost confidence. The entire process has been a huge success for us."

In addition to helping Claim Jumper make better use of the information it collects, Smith estimates the company will save nearly 4,000 hours in management and labor the first year.

"We're saving several hours per week in data collection alone with the new system," said Smith. "That doesn't even take into account the time and money we're saving trying to generate meaningful reports and making sense of the information we're collecting for the health department."

Now, with the new food safety inspection system from IQ Scientific in place, workers in Claim Jumper kitchens can spend less time completing reports and more time focusing on what they do best – creating meals that keep customers coming back for more.

About Tripod Data Systems

Tripod Data Systems(TDS) designs and manufactures mobile computing systems for extreme outdoor and industrial environments. The rugged TDS Recon™ and Ranger™ handheld computers help users collect accurate field data and work more productively in public safety, field service, utilities, military and other outdoor or service-related applications. Both TDS handhelds meet military specifications for drops, vibration, immersion and temperature extremes, and with an IP67 rating, they are impervious to water and dust.

TDS is a wholly owned subsidiary of Trimble. TDS is headquartered in Corvallis, Ore., and was founded in 1987. For more information about TDS, visit www.tdsway.com, e-mail handhelds@tdsway.com or call 541-752-9000.

Cori Keeton Pope is a freelance writer covering a wide variety of subject fields. She can be reached at cori@keetonpr.com or 303-282-4981.

This case study first published in *Food Quality Magazine*, June/July 2006.