



The adoption of digital technologies is fast becoming one of the biggest drivers of competitive differentiation in foodservice and similar industries.

When it comes to the safety and quality of temperature-controlled products, technology has the power to generate huge cost savings while simultaneously improving health and quality outcomes. In other words, technology can fuel better business results even as it requires less time, labor, and resources to execute. ComplianceMate™ itself proves the power of well-designed food safety and operational technology to produce outstanding business outcomes.

To illustrate, this paper will walk through a variety of real-world cases where ComplianceMate™ helped operations in a variety of sectors—foodservice, education, grocery, and others—overcome challenges, meet ambitious goals, and sometimes outright save the day. In some of these cases, we look at brands that used ComplianceMate™ to achieve significant tangible benefits. In other cases, we examine how ComplianceMate™ could have averted disaster in situations where it hadn't yet been put into use.

Altogether, this paper should illustrate the huge variety of ways in which the ComplianceMate™ system not only bolsters existing food and product safety programs and culture, but it also generates significant cost savings, power better operational efficiencies, improve regulatory compliance, and strengthen overall risk mitigation − often all at once.

In this paper:

- 1. Saving inventory, money, and labor for a public school district
- 2. Generating business insights that can increase efficiencies and reduce costs
- 3. Better managing the risk of extreme weather events
- 4. Preventing inventory loss due to equipment failure
- 5. Preventing inventory loss due to human failure
- 6. Preventing equipment failure due to extended shutdowns
- 7. Defending against incorrect accusations of foodborne illness
- 8. Generating labor savings by minimizing staffing requirements and increasing efficiency
- 9. Ensuring quality and safety consistency between locations as the brand expands
- 10. Preventing not just equipment failure but actual fire outbreaks
- 11. Outfitting an unusually large site with plug-and-play ease
- 12. Improving visibility into store performance and accountability

Note: In order to keep information confidential about brands, the identities of the brands described in these real-life stories have been obscured. If you'd like to speak directly to current ComplianceMate™ customers about their experiences, contact information for willing references—including many of those described in this paper—can be provided upon request.



What *is* ComplianceMate™?

ComplianceMate™ is a safety compliance and operational efficiency technology platform designed to improve performance when executing compliance, risk management, and operational plans. It's a comprehensive but simple system that is easy for users, provides enormous flexibility, and simultaneously strengthens and streamlines the ability of sector and unit leaders to oversee food safety within their areas. It includes two separate functional areas – temperature monitoring and digital checklists – that can be implemented together or individually.

1: Wireless temperature sensors live inside freezers and refrigerators used to store food inventory.

It starts with wireless receivers matched to sensors in cold-holding units. These receivers log temperature and humidity data from the sensors for continuous, real-time transmittal to the cloud. From there, users can view up to the moment sensor data from any web-enabled device. Any time temperatures go out of range, customized phone, text and/or email alerts go out to unit leaders, sector leaders, and others. Paired with the ComplianceMate™ app, the system enables users to continuously monitor and record temperatures inside any cold-holding units or other temperature-controlled equipment.

2: Smart digital checklists enable staff to quickly work through the variety of checks they conduct daily.

The system can be used to perform all normal checks and gather any required information (including photos in some cases) in a digital, time stamped format. The app speeds and facilitates completion through a variety of features. For example, it autoadvances between inputs, suggests corrective actions if an entry is out of specification, interfaces directly with wireless sensors and handheld probes, analyzes entries for anomalies, and provides controls to protect against fraudulent entries. Then, any temperature and other safety or operational anomalies can automatically trigger alerts to multiple levels within the organization.





What can the ComplianceMate™ system *do*?

	Automation	Alerting	Above-Unit Visibility	Risk Mitigation
IT/Facilities	Require virtually no IT involvement beyond connecting networks for the cloud-based system. See Cases 11 & 1	Identify specific cold-holding equipment needing preventive maintenance or repair before catastrophic failure occurs. See Case 2		Prevent catastrophic loss due to fires and other issues caused by equipment malfunction. See Case 10
Finance	Reduce time spent manually monitoring temps to zero, saving significant employee time and labor costs. See Cases 1, 8, 9, 12	Reduce food waste and inventory loss due to equipment malfunction or human mishaps. See Cases 4 and 5	Highlight locations, regions, etc. that can increase efficiencies and lower costs. See Case 12	Prevent catastrophic losses due to fires, hurricanes, storms, and more. See Cases 3, 4, and 10
Operations		Scale food safety and quality assurance program across locations to ensure consistency in standards. See Case 9	Produce business intelligence that can spot trends across regions and organizational sectors, down to individual sites; and generate custom reports on any desired data point. See Cases 2, 8, and 12	Minimize the risks involved with restaurant shutdowns. See Case 6
Corporate	Produce temp logs at will for internal or external audits or defenses against accusations. See Case 7	Reduce the risk of foodborne illness and produce better food safety outcomes. See Cases 1 and 7		Makes it possible to identify and triage potential problems, leading to more effective decision making. See Case 2 and 3



1: Improve Food Safety and Prevent Inventory Loss in Schools

"Food & Nutrition will love this system, because it is another way to keep an eye on the managers and to hold the employees accountable."

- Pilot Test Impact Assessment Report

In a pilot test at one school district, ComplianceMate™ saved the school district over \$3,000 worth of food inventory in just 30 days.

The public school district initiated the pilot test shortly before summer session, with the schools each storing about a week's supply of food, milk, and juice in the equipment being monitored by **ComplianceMate™** in walk-in refrigerators, walk-in freezers, and milk coolers. Prior to ComplianceMate™, City Schools personnel measured equipment temperatures via handheld thermometer or by reading the temperature indicator on the cold-holding unit itself. They then recorded the results into a paper log.

The ComplianceMate™ system completely replaced that manual process with automated monitoring. Installation was essentially "plug and plug." They simply placed the wireless sensors in each cold-holding unit they wished to monitor and connected them to an associated internet gateway that had Wi-Fi and cellular connectivity capabilities. No new wiring or infrastructural accommodations were required.

Once installed, each ComplianceMate™ sensor logged time and temperature data every five minutes, generating 288 data points per sensor per day.

The sensors securely relay the data via the nearby internet gateway to an online dashboard that could be accessed via phone, laptop, or desktop computer by authorized school personnel. That dashboard gave the school system a complete, real-time view of all data from all equipment, with the added ability to drill down into any location or even any single piece of equipment.

Within a few days of installation, a major storm system with 60+ mph winds roared through, felling trees and power lines across the city and resulting in a power outage that affected over one million residents. City Schools didn't have to wait long for the system to be stress-tested. Two of the schools in the pilot test lost power, leaving their cold-holding units off. Complicating the situation, the storm was immediately followed by a high-pressure front and heat wave that left the area facing temperatures in excess of 100° F for several days.

Through ComplianceMate™, City Schools officials were able to see that some foods had been held at temperatures as high as 78° F (see Figure 2, next page). As a result, they knew to discard that inventory due to potential contamination. Elsewhere, they were able to demonstrate that cold-holding equipment temperatures had held within safe ranges below 40° F throughout the storm and its aftermath. Because officials were able to certify that inventory had never been exposed to unsafe temperatures, they did not have to discard those foods or beverages out of an abundance of caution, so the school system was able to save \$3,200 in frozen breakfast and lunch foods and \$270 in dairy products from unnecessary disposal.



2: Generating Business Insights That Can Increase Efficiencies and Reduce Costs

"With ComplianceMate™ supplying good data, we can use our operational experience to hypothesize what might be the cause or get our field management team to pay closer attention to specific issues. It helps you to make a better, more educated decision before equipment problems turn into disasters."

- Franchise Owner

This global burger chain originally installed ComplianceMate™ sensors strictly to monitor temperatures. Then they realized how much more it could do.

Like many ComplianceMate™ customers, this international brand initially just wanted an easy and reliable way to verify temperatures in coldholding equipment in a way that could protect customers and prevent inventory loss. However, as they began to dig into the system, they began to realize the information was illuminating previously unseen trends, fluctuations, and peaks and valleys in performance. In turn, this added insight into equipment and worker performance has fueled an ability to pivot from a reactive approach to equipment maintenance to a proactive, preventive approach — and it's all possible remotely.

By going onto the dashboard, the brand can begin to triage and diagnose problems, not only to fix existing problems but also to generate future efficiencies.

"You're looking at anything that you can do more efficiently," says one of the brand's franchise owners. They cite the example of maintenance. They found themselves paying \$150 an hour just for the specialist or maintenance person to sit on the phone with the manufacturer, who laboriously walked them through every possible fix. With data that helped point to the underlying issue, they could streamline maintenance.

It can also save on equipment costs. "We had a store that was having a fluctuation pattern in the dressing cooler, which holds the condiments for the burgers. First of all, we had so many repairs that we were about to replace the equipment. But we looked at the temperature history, and the pattern suggested that something was happening during store closure, because we are getting spikes in the middle of the night."

The system provides more than just raw data points. By narrowing down the readings to timeframes, shifts, and locations, they can begin to identify patterns.

Then, the information can provide clues as to actual failures, so when maintenance specialists come out, the brand can point them in a specific direction rather than paying them to experiment with different solutions.

"We've caught a substantial number of cooler issues thanks to ComplianceMate™," says the brand's Vice President of Food Safety and Quality Assurance. "Definitely more than we would have caught without the system." He cites simple wear-and-tear as the most common issue; with sufficient data, they can see if individual units are struggling in one way or another and then act before total equipment failure.



3: Helping in the Aftermath of Hurricanes and Other Severe Weather

"[With temperature monitoring] it's possible to fine-tune risk mitigation because we'd know exactly what we're dealing with."

- Regional Director of Operations

During periods when staff cannot be physically present to monitor and tend to cold-holding equipment, brands can be left operating in the proverbial dark.

Absent a monitoring solution, the organization simply has no direct way to know the implications if power has been lost at any point and, if so, for how long. In turn, this can leave organizations making major business decisions without good information or answers to critical questions, like how many freezer trucks to deploy and where, how much dry ice to order and where to distribute it, what inventory can be salvaged, what must be discarded, etc. With continuous monitoring, ComplianceMate™ can offer this invaluable data.

Hurricane season is a perennial concern, and when restaurants shut down, there's constant worry about whether freezers continue to run.

When Hurricane Michael tore through the country in 2018, it left a trail of devastation in its wake and necessitated shutting down restaurants in its path and leaving them empty for potentially extended periods. Michael, for example, sat over an area where this ComplianceMate™ customer had a restaurant, leaving the site unmanned for 2.5 days. "That's a long time to go not knowing whether the power goes out," says the brand's Regional Director of Operations. The only way to test power was both imperfect and indirect: call the fax line to see if there's a response. But the fax can be on, and the freezer out; and vice versa. Complicating matters, if power does go out, time is of the essence in coordinating the logistics of preserving food, e.g., figuring out when/where to send freezer trucks or replenish dry ice. Unfortunately, hurricanes are becoming both more frequent and more severe; one study found the risk of major hurricanes has increased by 15% over just the past few decades.¹

Severe weather can impose inventory costs regardless of the outcome.

In worst case scenarios, inventory will be lost outright – costing thousands or tens of thousands of dollars per store. But even in better case scenarios, the organization must deploy freezer trucks and preventive measures like dry ice, often at substantial expense and laborious staging.

ComplianceMate™ can help control costs and mitigate the financial and operational risks of severe power outages. More data about which freezers and refrigerators have lost power and for how long can help the organization to better triage and target its efforts to prevent inventory loss. "With better eyesight on more real-time data as to when the freezer actually goes off and actually comes back on, it's possible to fine-tune risk mitigation because we'd know exactly what we're dealing with," says the Director. Notably, the ComplianceMate™ temperature sensors use high-efficiency batteries so they can continue to collect temperatures during the outage and can use cellular networks for communication. However, even if communication is interrupted, the full temperature log is still being recorded, so the organization will know the full temperature history as soon as they access the unit.



4: Preventing Inventory Loss Due to Storm-Related Equipment Failure

"ComplianceMate™ helped save us from \$35,000 to \$40,000 in food product spoilage."

- Executive Chef

After a series of powerful storms swept through Nashville, Tennessee, thousands of residents and businesses were left without power.

That included one restaurant, a homegrown and up-and-coming Nashvillestyle hot chicken eatery, where a fresh delivery of food product had just been transferred into their cold-holding equipment earlier that day. Ordinarily, the equipment would have come back online as soon as power was restored, except in this case the equipment failed. Even when the lights came back on, the walk-in unit didn't. As a result, temperatures in the unit began to steadily rise, creeping up until they hit 48°F to 50°F—well above the safe zone, potentially putting their entire inventory at risk of spoilage. Worse, because the blackout had happened at night, store managers were effectively still in the dark about the equipment failure.

Once the temperatures hit a custom-set threshold, the ComplianceMate™ call center began generating outbound calls to alert the restaurant.

The restaurant had previously installed automated ComplianceMate™ temperature sensors in their cold-holding equipment, and once temperatures went out of spec, it put the multi-level alerting system into motion. "They go through a list of numbers," says the restaurant's Executive Chef. "If they don't get one person, they just move on to the next person. I got the call while at dinner at my house."

That enabled the Executive Chef to reach the store manager and – since the equipment failure struck at night and they wouldn't be able to get technicians out until the next day – to contact their food service provider to see if they could procure a refrigerated truck.

Thankfully, the restaurant's food service provider was on top of the situation: they provided a refrigerated truck into which they were able to transfer all the food product overnight.

"Because we got alerted so promptly to take action, I don't think we even had to take any corrective action before a refrigerated truck got to us and we moved everything over," says the Executive Chef. In fact, the restaurant is now planning on extending ComplianceMate™ monitoring from the walk-in units into their chicken coolers and line coolers. "If we would have waited without ComplianceMate™ the next day, then we could have very well have been forced to throw all that food away."



5: Preventing Lost Inventory Due to Human Mishaps & Mistakes

"It saved us. If the ComplianceMate™ monitors hadn't caught it, an entire truck's worth of product would have spoiled by the next morning. With the alert, we were able to get it corrected right away."

- Franchise owner

Sometimes it's a simple human error or oversight that can cause potentially catastrophic problems.

One Christmas Eve, one burger franchise's food vendor made an ordinary key drop after the store was closed and staff had gone home. "They piled it inside the walk-in cooler like they always do," says the franchisee. What happened next would cause anyone to lose their cool. The first indication of a problem was an email alert indicating that the cooler temperature had risen out of range.

At first, their team just assumed the cooler had briefly entered defrost mode, but then he got a phone call from the ComplianceMate monitoring service alerting them that temperatures had continued to spike.

He then looked up the in-store video cameras, and what he saw gave him chills: the stacked boxes of product—produce, tomatoes, meat, bacon—had fallen over and right out the cooler's door, pushing the whole unit open.

Without those alerts, that accident could have turned into a very unpleasant surprise on Christmas Day.

Thankfully, both the brand and the franchise owner are rigorous about food safety; and by catching the issue immediately, the owner was able to rush to the store and check the temperature of all of the fresh ingredients to ensure none had exceeded the brand's safety threshold of 41°F. Though it would have been possible for the franchise owner and his staff to scramble the next day to get product from other stores, it would have been a difficult process to get everything to the store in time for opening.

How much product did they end up losing?

"Nothing," says the franchise owner. "We had zero inventory loss."



6: Preventing Equipment Problems Resulting from Extended Store Shut-Downs

"The quicker you know, the quicker you can react and do what you need to prevent lost product."

- Regional Director of Operations

Sometimes it's the severity of the risk rather than its likelihood that needs to be addressed, particularly when it comes to extraordinary events.

In other words, shuttering restaurants for weeks on end due to a once-ina-century pandemic may not happen again this century. But when it *did* happen at multiple locations for one ComplianceMate™ customer, combined with power outages no one knew about, the situation led to disastrous inventory losses and financial costs that could have been entirely avoided with a remote temperature sensing system.

For example, one restaurant in the Deep South had been shut down due to the pandemic. No one visited for weeks, since the local managers had been furloughed. Then, six or seven weeks later, when it was time to reopen the restaurant, the Regional Director of Operations sent a team to begin the reopening process.

Unfortunately, at some point during the store closure – but no more than a few weeks into the period, probably during an electrical storm that passed through in April 2020 – something tripped the breaker, cutting power. When the team entered the store, they found a layer of maggots nearly two feet deep inside the 16^{\prime} x 14^{\prime} freezer.

The direct and indirect financial costs of these extraordinary events aggregate quickly – leading to tens of thousands of dollars lost per store.

•	Lost sales (time to clean and prep before reopening the restaurant, delaying by at least a week)	~\$15k
•	ServPro cleaning service	~ \$13k
•	Equipment costs (discarding all racks in the affected equipment, plus lost condenser motor due to corrosion from chemical buildup)	~ 10k
•	Store damages (including tile damage possibly due to sanitation procedures) Inventory loss	~ \$5k ~ \$25k
-	inventory 1055	YZJK

Total loss: Upwards of \$70,000

This scenario is a perfect illustration of a disaster that ComplianceMate™ would have turned into a non-event.

Even with no employees present, the ComplianceMate™ system would have generated an automated alert within 15 minutes of the temperature exceeding a pre-set threshold. The organization would have known within minutes that power had gone down and could have addressed the issue before maggots filled the freezer, and the brand had to spend upwards of \$70,000 on cleanup. "The quicker you know, the quicker you can react and do what you need to prevent lost product," says the Director of Operations. "This was a one-off, but its lessons can roll into things that happen on an actually fairly regular basis."



7: Successfully Defending Against Accusations of Foodborne Illness

"Since we were able to show [the health inspectors] all cooling and line check logs, ComplianceMate™ wiped us off the list of possible sources of the foodborne illness."

- Executive Chef

This Nashville-style hot chicken eatery ran into every fast-growing restaurant chain's nightmare: the health inspector came calling after a consumer named them as a possible culprit in a foodborne illness incident.

In this case, the inspector was simply following protocol. "By reviewing records from restaurants and stores where sick people ate or shopped," says the CDC, inspectors can identify any points of contamination. Thankfully, the brand had previously installed ComplianceMate™ wireless sensors to continuously monitor and record temperatures inside coldholding units. Further, their kitchen staff also completed ComplianceMate™-enabled digital checklists for HACCP and brand-specific compliance benchmarks, even incorporating corrective actions taken any time an out-of-spec reading or entry was indicated. "Everything that touches food is in the ComplianceMate™ system," says the restaurant's Executive Chef. "It covers all of our bases, everything health inspectors like to see."

ComplianceMate™ enabled the brand to produce an unimpeachable record of temperatures and food safety practices from the days in question.

Once the restaurant got the request from the health inspector, they simply narrowed down the date range in the ComplianceMate™ system and pulled up the relevant reports to hand over. They were able to select which readings they wanted, including time-temp logs, cooling logs, line checks, and more. The system actively alerts users to anomalies — prompting, recording, and even sometimes suggesting corrective actions. Thus, even if anomalies occurred, the ComplianceMate™ system enabled the brand's staff to take immediate action before food product would be exposed to conditions that would permit the growth of dangerous pathogens.

And because the system logs these actions alongside temperatures and other data, the system could prove it. As a result, the restaurant was able to verify it had followed robust food safety protocols before, during, and after that consumer's visit. The inspector was thus able to cross them off his list of suspects.

"Even without this data, we wouldn't necessarily be identified as the culprit," says the restaurant's Executive Chef. "But we couldn't be ruled out either. It would have been a black eye on our brand. Instead, we loved being able to get the information right away to satisfy the health inspector. It was a win-win for ComplianceMate™ and our store."



8: Generating Labor Savings by Minimizing Staffing Requirements

"We realized we didn't need to deploy as many people if we could get the ComplianceMate™ system in place, saving costs and labor."

- Director of Food Safety

Every four years, some forty thousand people from around the world gather in one of the most beautiful parts of the U.S. for a ten-day festival of community and fellowship.

Feeding those tens of thousands of hearty appetites falls to one of the leading foodservice organizations in the country. Known for its delicious food and well-run operations, they take the food they serve as seriously as the event participants take their pursuit of adventure, service, and learning. But managing that many meals across such a large event introduces huge operational challenges. Upholding their stringent quality and safety standards with so many disparate moving pieces is no easy task.

With the ComplianceMate™ system, the foodservice vendor was able to automatically monitor temperatures everywhere at all times.

Before ComplianceMate™, the foodservice group laboriously monitored and manually logged temperatures in cold-holding units at each and every individual site every couple of hours. Though they were always rigorous about this process, it was tedious and stole time from staff who had other pressing duties too. Workers were stationed at each foodservice venue, but those staff had many duties other than logging temperatures.

With ComplianceMate[™], they didn't have to divide their focus. They received automated temperature alerts if needed, and the Director of Food Safety herself could monitor from anywhere, simply by observing the real-time temperature readouts produced by the remote ComplianceMate[™] sensors. "I could look at the data on my phone every few hours and see right away if something wasn't right," she says. Then, she could simply call personnel at that location to ask what was going on. As a result, fewer people were needed overall because the task of monitoring temperatures was largely automated and could easily be handled by a smaller number.

Similarly, ComplianceMate™ allowed them to make more efficient use of their people because they could use the data produced to triage equipment problems.

The foodservice vendor had a two-person team responsible for maintaining equipment like the walk-in coolers and freezers at all venues across the park. The automated temperature readings and alerts allowed this two-person team to (1) identify which coolers had issues and, even better, (2) triage the seriousness of the issue. "It was so useful to be able to say, hey, we have an issue with this cooler, and then be able to triage how urgent it was," says the Director of Food Safety.

Since they knew what inventory was in each unit, how many compressors were in each cooler, and how the temperatures had been running up to the point of the issue, they could generate a priority list of equipment needing immediate attention. That meant they could easily handle any and all issues that arose, even with such a small team.



9: Ensuring Consistency Between Locations as the Brand Grows & Expands

"ComplianceMate™ helps us to ease some growing pains. Plus, we immediately spent 50% less time on the computer with ComplianceMate™, so I loved it immediately."

- Executive Chef

Rapid growth – especially across state lines – creates new challenges for restaurants, which already face an uphill struggle to succeed in a crowded marketplace. Specifically, this Nashville-style hot chicken brand was growing fast and wanted to ensure they could enforce consistency and equal rigor in quality and food safety practices across multiple locations. ComplianceMate™ eases the enforcement of brand standards and safety requirements as restaurants scale up in size and scope. "As we've started to expand our business, thanks to the success we've seen, I want a good QA and food safety program in place to cover all our bases," says the brand's Executive Chef. "That way we can protect our brand and continue to take advantage of new opportunities."

ComplianceMate™ fits that need perfectly: the checklist and temperature monitoring solution can enforce brand standards across an entire network of stores, while simultaneously adapting to any specific local requirements.

The challenge is that, during rapid growth and expansion, one store can develop idiosyncratic habits that might not take place at other locations.

"As a company, we want one playing field, one set of rules and procedures," says the Executive Chef. He adds that consistency might not seem like such a big deal with only one or two locations, but once you're chasing five or more locations, it becomes paramount to enforce consistency and protect the brand.

ComplianceMate[™] also offers tools that can help enforce corporate policies beyond just monitoring food temps. Specifically, a hierarchical view in the ComplianceMate[™] dashboard also enables users to see all locations at a glance and identify alerts on any issues at any given store. That helped smooth out the growth and expansion process.

Making food safety and quality assurance fast and streamlined is a critical component of ensuring everyone follows the same practices at all locations.

Checklists can be customized and completed from any handheld smart device. As they are completed, the information is uploaded to a secure cloud in real-time, so that the brand's leaders can make sure procedures are being followed in tandem everywhere. If not – if temperatures go out of spec, or if a checklist isn't completed appropriately – automated alerts can notify store managers and company executives.

"When I think about systems, it's critical to keep them as simple as possible," says the Executive Chef, "because that means it will take off faster and won't bog down our operations. Anything that eases operations make it easy for people to be successful."



10: Helping to Prevent or Mitigate Catastrophic Events Like Fires

"There's no question with a sensor in the box, we would have gotten an alert sooner. Some kind of monitoring would have helped."

- Regional Director of Operations

Some disaster scenarios can potentially be averted entirely with enough advance warning.

Consider one ComplianceMate™ customer in the Midwest, where a 2 a.m. fire raged through the 50-year-building. Made of wood and all stick-built, the building acted like a giant tinderbox. Investigators believe a cooler was the primary or original source of the fire. The temperatures had been manually checked earlier and seemed to be temping properly. As it happened, the fire was caught almost immediately by workers: two people were in the building completing the new a fire panel (ironically) when they smelled smoke coming from the waitress alley, where the cooler was located. They called the fire department immediately.

The result was direct financial losses of hundreds of thousands of dollars at minimum.

While the multimillion-dollar building wasn't a complete loss, the damage fell only one step below a total catastrophic loss, requiring a complete interior rebuild at great expense and time. In fact, the smoke damage was, in some ways, almost worse than the fire damage itself. In addition, the store faced lost inventory and equipment. They also lost revenues for the year the store – the tenth busiest in the brand – has been out of commission for rebuilding. Worse, that could mean permanently lost customers who find other favored dining options in the meantime.

In addition to immediate alerts, ComplianceMate™ could have potentially identified temperature fluctuations indicating equipment problems.

In this case, two workers were present at the time the fire broke out. If no one had been there, the ComplianceMate™ system could have served the same purpose: generating an immediate alert to prevent the entire store from burning completing to the ground, with nothing salvageable at all. Indeed, even with the workers' presence, it's possible the sensors would have caught rising temperatures even faster. "There's no question with a sensor in the box, we would have gotten an alert sooner," says the Regional Director of Operations. At minimum, that alert would have enabled the dispatched manager to find out what's going on. "Some kind of monitoring would have helped."

Moreover, it's possible ComplianceMate™ could have let the team know there was a problem *before* the fire ever started. Manual temperature checks showed nothing unusual, but a complete, automated temperature log showing temperatures every few minutes for the hours and days preceding the event might have revealed strange fluctuations or changes that might have prompted some preemptive investigation. That could have helped staff at that location identify the problem and potentially prevent it from occurring.



11: Outfit a Large Building with Plug-and-Play Ease

"I'd consider it plug-and-play."

- Director

Some sites are more technically challenging than others. This deployment required sensors to span an entire building from basement to top floor.

The top-level goal of any foodservice operation looking for remote temperature monitoring and digital checklists is to strengthen their overall culture of food safety and make food safety compliance easier for all staff to execute and enforce, and that's how success is measured. However, sometimes just getting the solution deployed is its own measure of success.

This major foodservice vendor contracts with businesses to provide snacks, beverages, and meal service. In this case, they were working with bank executives stationed throughout a high-rise building. This site presented immediate challenges. Because the space spanned an entire from the basement to the 15th floor, it immediately affected the connectivity between sensors, tablets, and the gateway and required some troubleshooting to fix.

It was also a very diverse facility in terms of food served and food stations operated (e.g., sushi, grill, salad bar, grab-n-go area, coffee bars, etc.) at each location serving different products and offering different services. That meant the ComplianceMate™ system had to accommodate a wider array of food safety protocols.

ComplianceMate™ followed its standard two-phase installation process: temperature sensors followed by checklist implementation.

First, Phase 1 began by deploying wireless sensors into each designated cold-holding or refrigeration unit and connecting the sensors to the gateway in the basement. The sensors began working almost immediately. However, intermittent connectivity issues required ComplianceMate™ to dispatch a technician, who was able to resolve the issue within a couple of days. With that resolved, Phase 2 − the checklist deployment − unfolded seamlessly.

"The support was great throughout the experience," says the site's Director.



12: Improving Visibility into Store Performance and Accountability

"Our regional directors and our corporate department can use the system to see what's going on and see if there's opportunity that they feel we need to tackle."

- Associate Director of QA & Food Safety

The digital approach to food safety and quality assurance opens up newfound possibilities in oversight and accountability. In this case, a pilot test of the ComplianceMate™ system at one store in a nationwide brand granted executives a brand-new ability to access granular performance data down to individual restaurant and even individual equipment or workers. Previously, this information simply would have been inaccessible without physically visiting the specific site. As a result, the regional director, based in a different state from the pilot test, was actually able to spot an anomaly with refrigeration before the restaurant itself even did. He had been browsing temperature charts through the ComplianceMate™ app and found readings for one piece of equipment that seemed off. He was able to initiate some quick investigation and discovered that staff members had left a drawer open for too long. That, in turn, created an opportunity to initiate some training and corrective measures. "It was very helpful," the Regional Manager says.

It's not just temperatures; the digital checklist powers greater insight into compliance with the brand's HACCP plan.

The active alerts apply when checklists go out of spec, just as when temperatures do. "That was nice," says the site's Kitchen Manager, "because that tells us, 'Hey, your checklist is not done.' It gives us a chance to follow up in a timely way." In turn, it produces a record of safety actions that can be used to substantiate and defend adherence to the HACCP plan.

"We even got so that we can pull up the reports for the health department or for our internal audits on our safety and sanitation," says the site's General Manager.

Another, subtle way of boosting accountability: making it so easy to complete checks that they are more likely to be done correctly and on time, every time.

The restaurant's management team estimate that staff would normally complete five temp checks per day, plus two quality checks (one at the beginning of each shift). They estimate each digital checklist — ordinarily a 20-to-30-minute process — could be completed 10 to 15 minutes faster. In other words, with the digital solution, these checks could be completed in as little as *half* the time of paper-based checks, or even less.

"That builds up over time," the General Manager says. "During the shift, that can be impactful. You could probably fly through it with ComplianceMate™ in 10 minutes."



Conclusion

These mini-case studies highlight and illustrate how the ComplianceMate™ system can and has generated huge savings for existing customers, not only by strengthening food safety processes but by preventing or mitigating extraordinary losses. With simple, user-friendly technology that just works, any brand can use the ComplianceMate™ solution to minimize and mitigate the types of risks that result in negative financial impacts.

It's no wonder that the industry is turning to remote sensors. Digital food safety and quality technology offers leading brands an opportunity to raise the standard to, and beyond, what the rest of the industry is doing in an environment in which staying competitive is more vital than ever.

Much of the benefit comes down to eliminating uncertainty. Knowing exactly when, where, and for how long power has been lost, the organization can make better decisions about how to respond, how to allocate resources, and often how to prevent problems in the first place.

"Having sensor tech eliminates a lot of that uncertainty," says one of our customers. "You can say without doubt if and when the freezer went out and know when the clock starts ticking. That replaces the complexity of having to get dry ice or getting people there and putting them in high-risk situations."

In other words, with better information, the brand can better triage problems and make more effective – and safer – use of its people and material resources. In the end, ComplianceMate™ and remote temperature monitoring has the power to save money and labor, make operations easier, and reduce the risk of potentially costly problems.



About ComplianceMate

Telephone:

Office: (404) 569-0419 Sales: (678) 346-0380

Online:

info@ComplianceMate.com https://ComplianceMate.com ComplianceMate™ provides the world's leading patented temperature sensor software system used to ensure regulatory compliance and operational efficiencies. The principal product offering has streamlined HACCP compliance checklists and cooler monitoring for all types of foodservice and related industries across multiple continents. With wireless temperature sensors and automated workflows, customers can view the certified data to make evidence-based decisions about operational processes. Organizations achieve improved audit scores and see a rapid ROI in just months.

The information contained in this paper is for generalized informational and educational purposes only. It is not designed to substitute for, or replace, professional business advice. You must not rely on the information in the report as an alternative to professional business advice from an appropriately qualified professional. If you have any specific questions about any relevant subject matter, you should consult an appropriately qualified professional. **CM Systems, LLC** does not represent, warrant, undertake or guarantee that the use of guidance in the report will lead to any particular outcome or result.

Copyright © 2024 CM Systems, LLC. All rights reserved.

References

 $^{^{\}rm i}\,https://www.livescience.com/climate-change-hurricanes-stronger.html$