



Take Control of the Consumer Experience

Advances in facility controls help keep food fresher and consumers safe and engaged.





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he role of facility controls in the food retail and foodservice sectors has expanded greatly in recent years. Once thought of as primarily a means to provide energy management, controls technologies have rapidly evolved to provide greater degrees of supervision of temperature throughout the cold chain, and much tighter management of facility conditions that contribute to customer comfort and maintaining food quality.

Among the many drivers behind this evolution, achieving consumer mind- and wallet-share are at the top of this list. In an environment where grocery stores and restaurants are continually vying for customer attention, retailers are finding it more challenging to attract customers — and keep them coming back.

With ever-expanding shopping and dining options from which to choose, more consumers are citing the in-store experience itself — not merely the practical purpose of eating or

shopping — as a large part of what draws them into stores. This preference has led to the concept of experiential retail, a merging of entertainment and traditional shopping to offer consumers more engaging experiences.

What all this means to retailers is that providing an inviting, comfortable and safe environment is now an operational imperative — as important as maintaining productivity and profitability alike. Advanced facility management and supervisory controls are essential tools to help any retailer attempting to achieve these diverse objectives.

Energy efficiency and food safety

Supermarkets are among the most energy-intensive types of all commercial buildings, with HVAC and refrigeration systems consuming high levels of energy around the clock. While controls have long been used to optimize energy efficiencies in food retail, in today's competitive landscape this is as important as ever. Even the slightest reductions in energy consumption may have a direct impact on profit margins, as well as potentially qualify for available utility incentives.

But controlling energy alone is no longer enough. Controls in today's facilities require the flexibility to keep customers interested, engaged and returning — through both the experience and the goods sold. Food safety is both a critical element of a brand's experience and a prerequisite for consumer trust.

The challenge of food safety impacts a broader range of retailers than ever before. One common scenario in the experiential retail playbook is to offer freshly prepared foods to entice customers. For retailers with no experience in this arena, the foray into the food business (even on smaller scales) can be especially challenging.

At the same time, more commercial buildings are playing host to a variety of owned, leased or operated food outlets for the convenience of building occupants and neighboring patrons.

All told, the explosion of food offerings in both traditional and non-traditional spaces is driving a greater need for quality control and safety measures. But as we are frequently reminded, food safety is a high-stakes game where one mistake can potentially create immediate and lasting damage to a brand's reputation and profitability.

The good news is that today, the same types of control systems used to optimize energy have been improved upon to address emerging challenges. By employing the latest controls technologies, facility managers can leverage the power of internet of things (IoT) connectivity to realize greater control over lighting, HVAC and refrigeration — all while consolidating operational and system performance data to deliver insights and help immediately enable retailer actions needed to keep food fresh and safe.

Most control systems are built with open protocols to provide connectivity between various types of devices and components. However, using the same brand of system components and devices enables even greater compatibility to deliver more holistic system integration and improved functionalities.

For example, Emerson's CoreSense™ compressor controls and its Site Supervisor facility controls combine to offer a higher degree of refrigeration optimization within a facility or across an enterprise.

Consumer comfort and engagement

Beyond efficiency and food safety, retailers must also begin to think of their facilities as "stages" for delivering great consumer experiences. Just like a well-planned theatre stage can transport an audience across time and locations, today's building environments should be optimized for maximum consumer engagement and overall occupant well-being. Facility controls can help operators achieve these goals via two primary focus areas:

- Air quality Control the flow of fresh and recirculated air to help maximize comfort levels and minimize issues with indoor air quality. Specific areas of the store can be carefully optimized to offset traditional problem areas (i.e., too cold in frozen food aisles; poor ventilation in food preparation areas).
- *Lighting* Set the ambience of different parts of the facility by brightening work spaces and imparting a sense of calm (or excitement) in other areas. The effect of lighting and the ability to more deliberately leverage its contribution to the overall experience of a facility are too often overlooked.

Gain operational insights

While these benefits are invaluable for ensuring consumer safety and driving engagement, behind the scenes the use of advanced controls assists owners and operators to harvest and act on new insights helping to enable infrastructure effectiveness, cost optimization and asset management.

Powerful data aggregation tools bring together system status and equipment performance data from multiple controllers into a unified view. Operators can quickly evaluate the effectiveness of total site performance, comparing current data with historic records and best-case projections. Smart alarms alert retailer-designated responsible parties of potential system faults, providing high-level explanations, possible causes and suggested corrective actions. What's more, the majority of these supervisory controls can be accessed via tablet, phone or laptop simply using a Wi-Fi connection.

From an enterprise perspective, data from multiple sites can then be aggregated into a single view, helping to provide retailers insights on regional trends and best-performing stores while continually identifying areas for improvement.

Whether you're looking for ways to improve energy efficiencies, drive customer engagement or ensure food safety, modern facility controls provide operational insights to help retailers maintain a competitive edge.

As these technologies evolve and become more powerful and even easier to use, look for more owners and operators to leverage the power of data to address their food retail and foodservice challenges.

