Survey eBook

The State of Restaurant Resiliency: How Operators Maintain Reliability in a Disrupted World

New data reveals how restaurants are approaching technology management.

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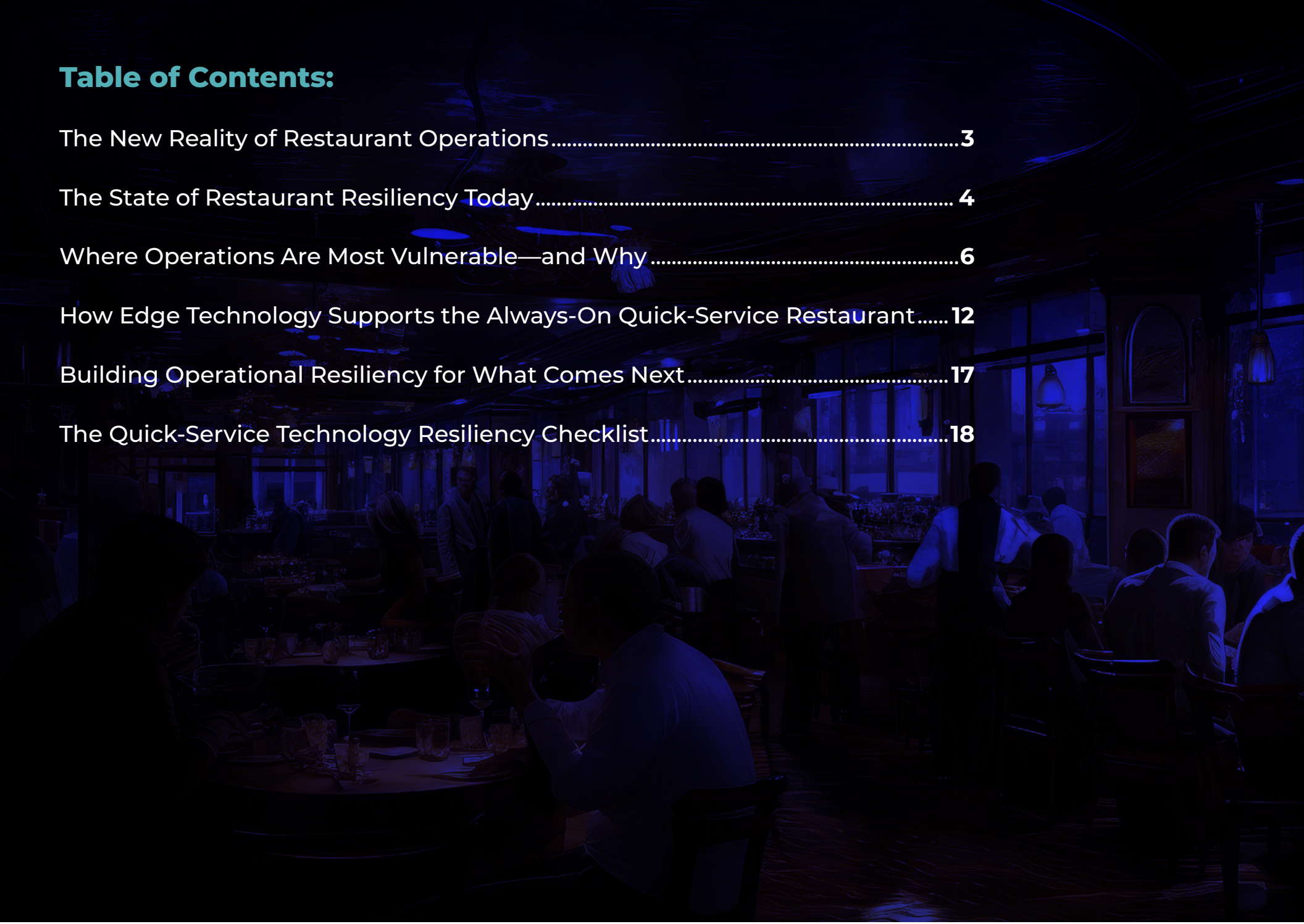


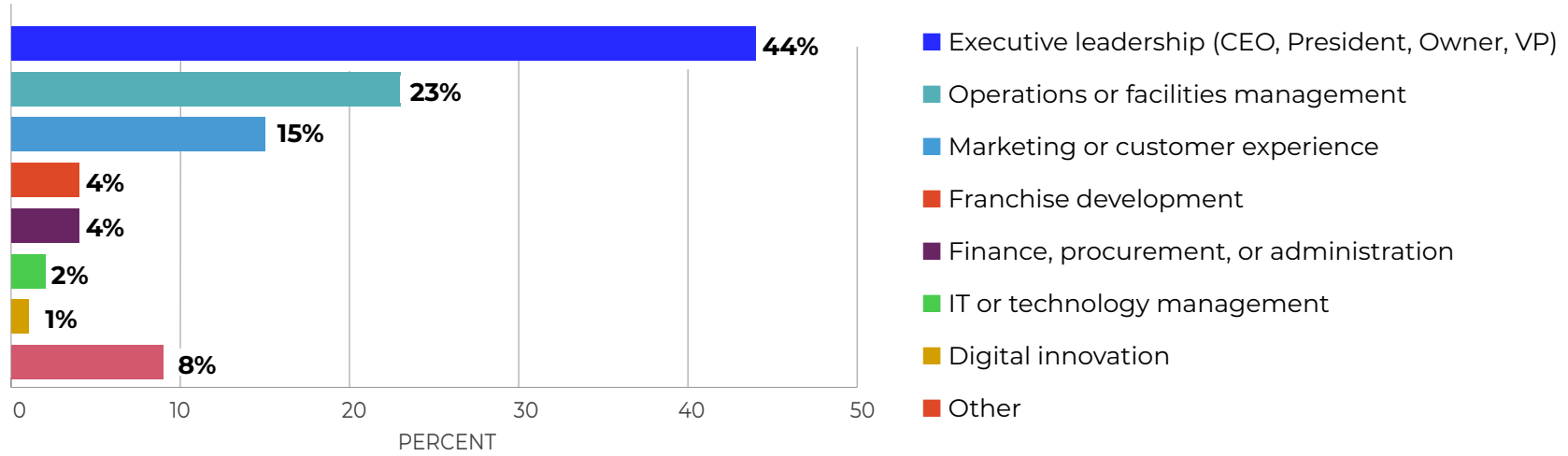
The New Reality of Restaurant Operations

Operators are constantly playing out worst-case scenarios. During the Friday night dinner rush, there are two–three callouts, and POS system issues with frustrated customers. In quick-service and fast casual, competition is measured in seconds, not minutes or hours. Technology is simultaneously addressing needs and creating more pressure as customers get used to even faster, more precise service. What happens when the Internet slows or goes down? For starters, most restaurants will immediately see hundreds, if not thousands, of dollars in lost revenue. But the softer, less measurable affected areas are customer perception, trust, and return visits.

The real question is, how resilient is restaurant technology during digital or system disruptions? This was the question posed to operators and decision makers across the quick-service restaurant industry in a 2026 survey conducted by QSR magazine on behalf of Global Payments.

With more than 100 participants, the survey captured how confident industry leaders are in their core technology processes and where there is still room for improvement. Seventy-five percent of participants run or oversee multiple locations, and nearly half (44 percent) of respondents are in executive leadership roles, while 23 percent are operations or facilities managers. The breakdown of respondents showcases how technology is no longer strictly an IT issue, but a key interest of everyone working in restaurants today.

Which of the following best describes your primary role in your organization?



From 2026 The State of Restaurant Resilience Survey by QSR and Global Payments

The State of Restaurant Resiliency Today

Resilience in the restaurant industry is paramount to success and an inherent part of customer expectations. During the COVID-19 pandemic, restaurants—especially quick-service—were labeled as essential. This framed restaurants as necessary for the well-being of economies and people. The pandemic also ushered in a period of technological necessity, one operators had often underinvested in.

It will come as no surprise, then, when restaurants became the focal point of innovation in areas like Amazon's premier conference: AWS Re:Invent. Where previously restaurants were ignored, now they were leading the conversation with discussions surrounding innovation, customer experience, and operational efficiency. The evolution can also be seen in industry-centric studies like Emerging Experiences and the Annual Drive-Thru Study from Intouch Insight. The studies measure consumers' expectations and how the largest brands are meeting, competing, and outperforming through adopting innovative technology.

This is all to say, how operators define resilience is now becoming centered around technology. When asked in the survey how participants describe resiliency, responses were focused on up-time, seamless customer experiences, and back-up plans and redundancy.

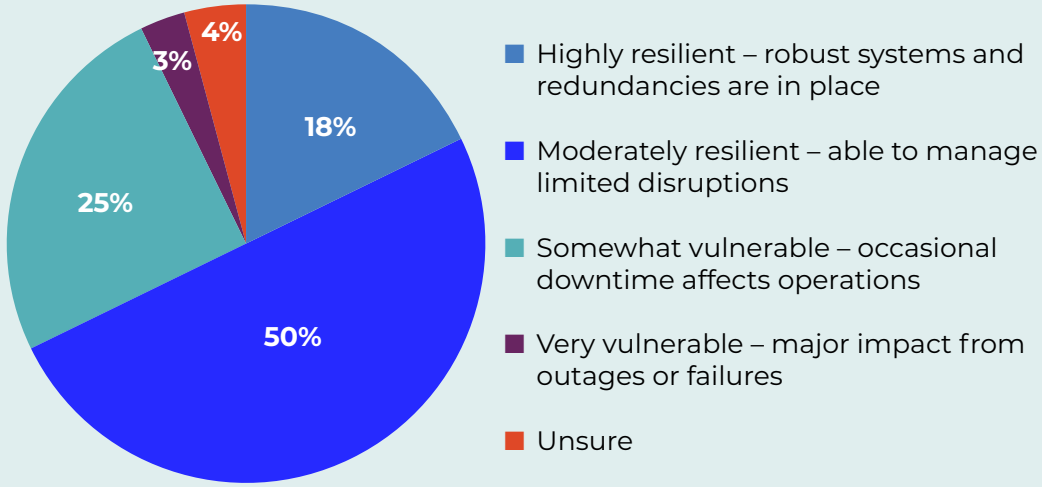
Understanding how resilient a restaurant is against disruptions can be hard to measure; how confident operators are speaks volumes. When only 18 percent of respondents answered that their organization is "highly resilient and has robust systems and redundancies in place," it is clear that restaurants need better technologies and solutions.

> **"We work to create an experience in which the guest is never touched by any background issues..."**
>
> ***– Response on what resiliency means when it comes to technology and customer experience.***

When technology or network issues arise, it can create chaos on site. Lost orders across drive-thru, kiosk, and online channels reduce visibility into customizations and limit inventory access; without proper redundancies, these issues can halt operations. In a low-margin industry, even minimal downtime (1 percent) can equate to tens of thousands in lost revenue annually.

Half of the industry leaders in the survey reported they are only "moderately" confident in the resilience of their technology. And when one percent downtime means more than $10 thousands in lost revenue and most of the participants are overseeing multiple locations, the impact to bottom lines becomes drastic. Proper redundancies and an understanding of core technology support systems is now key for operators. IT and technology partners can only go so far in support roles without the infrastructure in place to ensure when disruptions arise, business can move forward.

How would you describe your organization's current level of technology resiliency — its ability to maintain operations during digital or system disruptions?



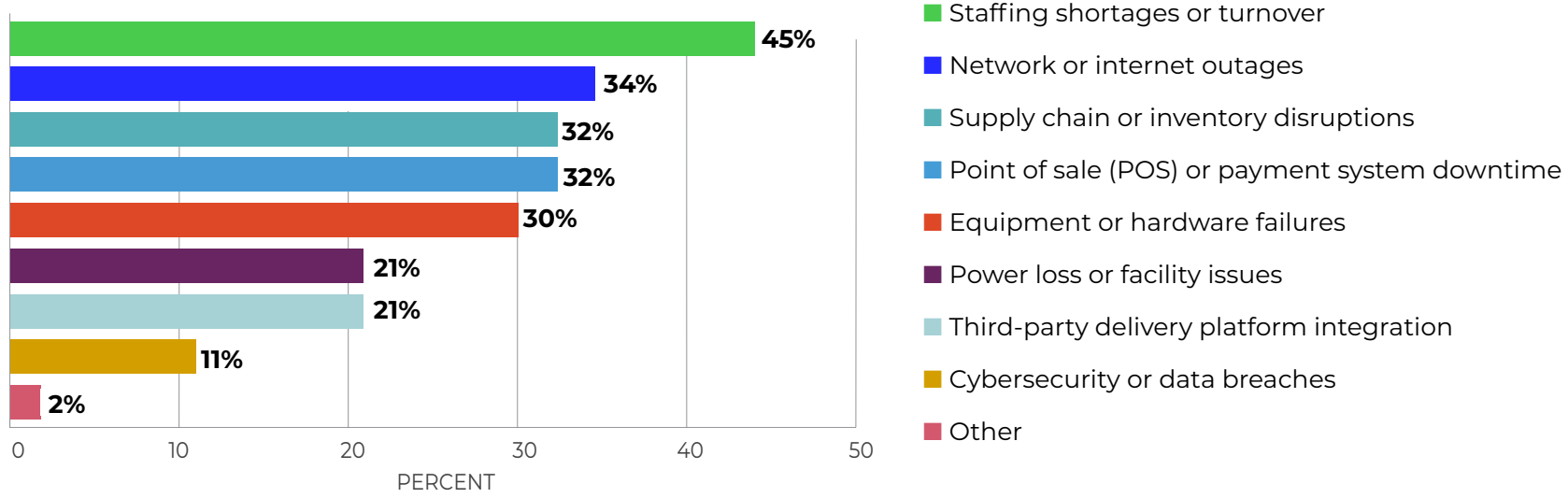
From The State of Restaurant Resilience 2026 Survey by QSR and Global Payments

Knowing what options there are for integrated operational and customer-facing systems is key. Most operators understand this if they run a cloud-based or on-premise system, but few may know about a third option: edge computing. Edge computing allows for on-site localized processing of vital data, so when the power goes out, operations continue at speed, and recover faster, making restaurants as resilient as customers expect and maintaining brand trust. Brands have invested countless hours and dollars in technology solutions, but when the core and processing power isn't backed by a solution just as powerful, innovation often fails. Vetting solutions that restaurants can count on to meet consumer and operational expectations of resilience is now essential for success.

Where Operations Are Most Vulnerable—and Why?

What are the most common disruptions to quick-service restaurants' daily service? The State of Restaurant Resilience survey revealed a number of disruptions operators will relate to, from POS system downtime to the ever-present reality of high turnover and labor shortages. Operators live with disruptions as a business reality. It will not be shocking to most that the top four rated causes of disruption in the survey were POS system downtime (32 percent), network or Internet outages (32 percent), supply chain or inventory disruptions (32 percent), and—leading it all—staffing turnover and shortages (45 percent). But what is happening behind those responses, and is there a way to ease the burden?

Which areas currently pose the greatest risk to your day-to-day operations?
Up to three options allowed.



From The State of Restaurant Resilience 2026 Survey by QSR and Global Payments

The Challenges:

Network or Internet Outages:
Network and Internet outages can be caused by several factors, like weather events, aging hardware, cyberattacks, and a surge in demand. Restaurants are expected to work under any circumstances, often being establishments that stay open or are first open when severe weather conditions occur. The networks they rely on must meet the expectations of the industry.

Knowing what is available is vital. While operators have been bombarded by technological innovation in recent years, that does not mean operators—who often have little technology background—know the technical pros and cons of the technology they rely on. Eighty-two percent of participants reported their infrastructure being either a cloud-based hybrid or exclusively cloud-based system. Cloud-based systems have become the standard for many multi-unit brands for good reason. They provide scale and standardization legacy, that on-premises systems could not maintain. However, due to cloud-based systems reliance on connectivity and centralized uptimes when issues do occur it can lead to operations failures and downtime across multiple locations.

More traditional or legacy networks tend to be on premises or a hybrid of cloud and on-premises computing. Nine percent of survey participants recorded only using on-premise infrastructure (servers and systems located on site), while 51 percent reported using a hybrid of cloud and on-premises systems. While processing can be faster and doesn't always rely on the Internet, this poses numerous risks.

ON-PREMISES NETWORKS

- Systems run locally inside each restaurant, supporting POS, payments, and kitchen operations without relying on constant Internet access
- Enable stores to keep operating during connectivity issues, but limit enterprise visibility and scalability

CLOUD-BASED NETWORKS

- Systems and data are managed centrally and accessed over the Internet to support reporting, digital ordering, and enterprise control
- Enable scale and standardization, but create dependency on reliable connectivity and centralized uptime

EDGE-COMPUTING NETWORKS

- Critical processing happens at or near the restaurant while remaining connected to centralized systems
- Reduces disruption during outages by balancing local continuity with enterprise oversight

On-premises hosting may be a good solution for single restaurants, but multi-unit brands need scalability and visibility to make informed decisions. Many key insights and answers to operational questions rely on a centralized system. Questions like: How is the new LTO performing across regions, how many callouts did a storm cause across locations, or how does revenue compare in the highest and lowest performing units? These insights require a centralized network that can aggregate and analyze information across locations—legacy capabilities, on-premises systems were never designed to support at scale.

Edge computing is quickly becoming an option that operators are adopting, considering, or want to learn about. Edge computing processes essential functions locally, allowing restaurants to operate without interruption while staying connected to centralized systems that support enterprise visibility, reporting, and multi-unit coordination. This allows operators to reduce or eliminate downtime when network and Internet disruptions occur while still scaling and having the visibility of cloud systems.

POS Systems:
Restaurants' POS systems are central to operations. These systems are handling increasingly complex ordering channels—from online, third party, and drive thru, to counter, kiosk, and app purchases—meaning constant connectivity is vital for streamlined operations. Increased complexity poses a significant risk for operators who rely on cloud-based and on-premises networks.

Thirty-two percent of operators reported POS system downtime as one of the top three greatest risks to day-to-day operations. Only 20 percent of respondents were very confident their POS system could continue operating if their network connection was compromised. For operators who rely on cloud-based systems, the issue becomes more complex due to the centralized, internet-dependent nature of these platforms. When network disruptions occur, they can impact multiple locations at once, leading to widespread POS failures and the dreaded “cash-only” exchanges customers—and often employees—are rarely prepared for.

POS failures become even more strenuous for restaurants when considering modern restaurants’ tech stacks are often fully integrated. When there are POS failures, they can affect kitchen display systems, leading to confusion and mistakes in the back of house. Disruptions can also mean missed or failed orders and a lack of communication between key systems, including inventory management.

Operators report many different obstacles to POS continuity, including budget limitations and limited vendor support, but the number one cited issue is legacy POS infrastructure. Operators are working with limited budgets and tight margins, but quick-service restaurants cannot afford the lost revenue associated with downtime, especially if it’s prolonged. Edge computing is a way brands can reinforce infrastructure and ensure when there are Internet disruptions, processes do not slow, and the POS continues processing highly complex automations alongside multiple ordering systems.

Staffing Turnover and Shortages:
Labor demands are a constant obstacle for restaurants. Finding qualified candidates, managing hiring and training processes, and covering the rising cost of labor have all become more difficult in recent years. Automated processes are helping alleviate some of that tension by reducing training times and costs, and enabling operators to focus on what matters most—the customer experience.

Edge computing's ability to support robust automated processes ensures high staff turnover and labor shortages can be more easily managed, forecasted, and mitigated. Centralized control paired with local processing allows multi-unit operators to roll out training initiatives quickly and seamlessly, update menus with new LTOs and promotions, and minimize downtime. This alleviates employee stress, and allows them to focus on customer service.

Unsurprisingly, survey participants cited staffing turnover and shortages as the most common source of day-to-day disruption, at 45 percent, which is more than 10 percent higher than any other disruption. Automation is key to mitigate labor challenges, but successful automation integrations require a technology infrastructure built to support them. As restaurants continue to navigate persistent labor pressures, investments in resilient, edge-enabled infrastructure will be critical. With the right foundation in place, operators can deploy automation at scale, adapt quickly to workforce changes, and create more consistent experiences for both employees and guests. This turns labor challenges into opportunities for long-term operational resilience.

Supply Chain or Inventory Disruptions:
Insight into the supply chain and inventory allows for managing costs, waste, and administrative labor hours. Whether a restaurant relies on an integrated POS system or a separate inventory management system, disruptions to these systems can cause havoc, from running out of key items to over-ordering, leading to increased waste. According to the National Restaurant Association, 75 percent of restaurants struggle to be profitable due to issues with food cost and inventory management. Survey participants reflected this reality, with 32 percent rating supply chain and inventory disruptions as one of the top three risks to daily operations.

Like many technologies, inventory management systems are prone to a handful of common issues. Systems may disconnect from sales or lag during high-traffic times, leading to a lack of accurate forecasting during peak times. Bringing data processing closer to the source with edge computing can be key to avoiding these errors. With this kind of speed and insight into inventory and supply chain, managers can focus on, customer-facing areas.

Ultimately, inventory and supply chain visibility is not just an operational concern, but rather, it's a profitability imperative. When systems fail or lag, restaurants pay the price in lost sales, wasted product, and strained labor. By improving reliability and processing data closer to the source, operators can reduce disruption, gain more accurate forecasting in real time, and free teams to focus on delivering consistent, high-quality customer experiences rather than reacting to preventable breakdowns.

THE TAKEAWAY

Daily disruption has become the norm for quick-service restaurants, not the exception. Whether driven by staffing shortages, network outages, POS downtime, or inventory breakdowns, these challenges compound quickly. This strains teams, frustrates customers, and erodes margins. The survey data makes clear that operators are not dealing with isolated issues, but with interconnected risks tied to the reliability of their technology infrastructure.

What emerges behind the numbers is a common need: systems that can withstand disruption without bringing operations to a halt. As restaurants continue to layer digital ordering, automation, and data-driven decision-making, resilience at the infrastructure level becomes essential. Edge-enabled architectures offer a path forward by balancing local continuity with centralized visibility. This allows restaurants to keep serving customers, supporting staff, and protecting revenue even when disruptions occur. In an environment where pressure is constant, resilience is no longer just a safeguard;it's a competitive advantage.

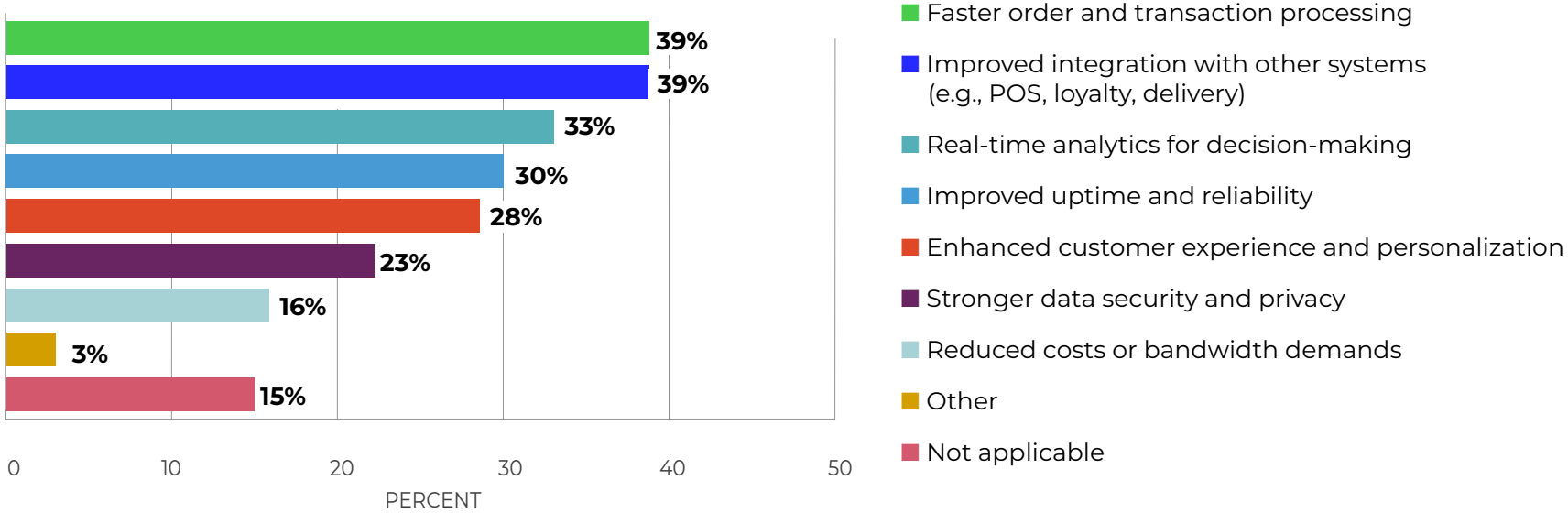
How Edge Technology Supports the Always-On Quick-Service Restaurant

Operators don't think about infrastructure models when systems are working. They think about speed, accuracy, and improving customer experiences, while maintaining food quality. But when systems slow or fail, the limits of traditional technology setups become immediately visible—often at the worst possible time. Modern restaurant operations rely on tightly interconnected systems that are not always designed to perform under constant pressure.

To meet the increased technological demands of today, some operators are turning to edge-computing. Incorporating this kind of infrastructure can ensure restaurants function consistently, even under harsh conditions.

In The State of Restaurant Resilience 2026 survey, respondents overwhelmingly associated edge computing with improved performance (39 percent), better system connectivity (39 percent), and improved reliability (30 percent). Operators need technology to reduce friction between systems and keep operations moving, especially as tech stacks grow more complex and include further automations and AI.

What benefits would you most expect from adopting or expanding edge computing or localized processing within your restaurant operations? *Up to three options allowed.*

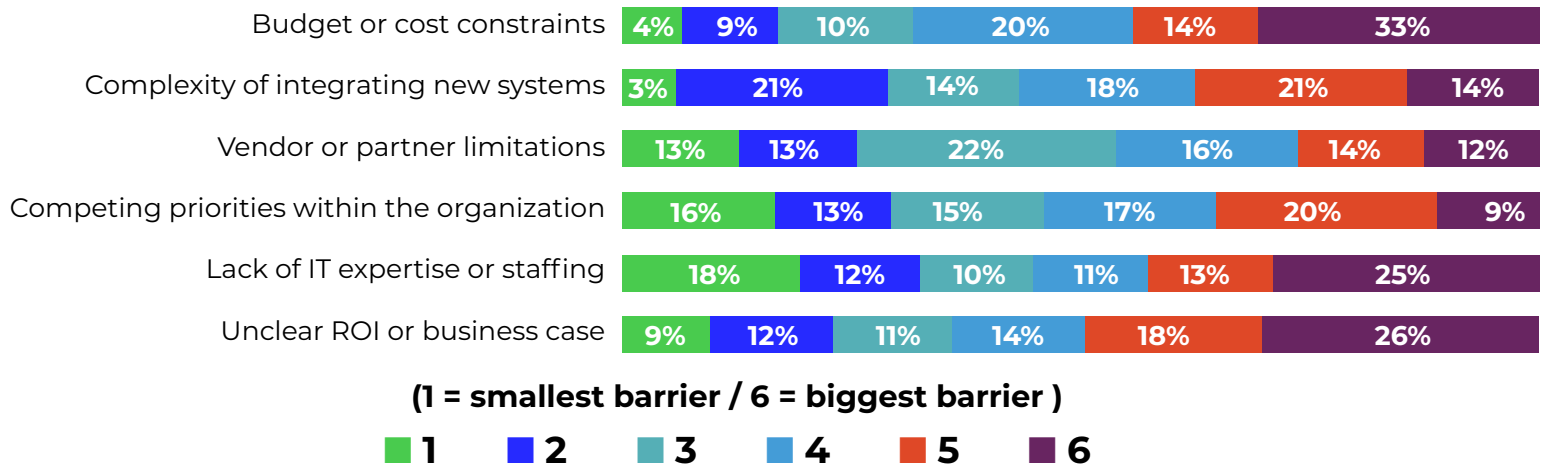


Operator Expectations for Edge Technology (Performance, Connectivity, Reliability

Performance consistency is one of the most immediate benefits. Centralized systems can struggle during periods of high transaction volume, introducing latency that slows ordering, payment processing, and kitchen coordination. When processing happens closer to the source, restaurants reduce lag and maintain throughput during peak demand. In quick-service environments where competition is measured in seconds, that consistency directly affects guest perception and repeat visits.

For many brands that chose cloud-based systems for the multi-unit insights but sacrificed security across locations, edge-enabled infrastructure can help restore a sense of operational control without sacrificing those insights. In restaurants relying solely on cloud-based systems, stores are dependent on remote IT teams or vendors to diagnose and resolve issues. Recovery can be slow, and operators are left reacting rather than fulfilling orders. Architectures that support local continuity allow restaurants to maintain core functions while upstream issues are addressed, shortening recovery windows and reducing visible disruption to guests.

Please rank the following barriers in order of how much they limit your organization's ability to strengthen its technology resiliency.

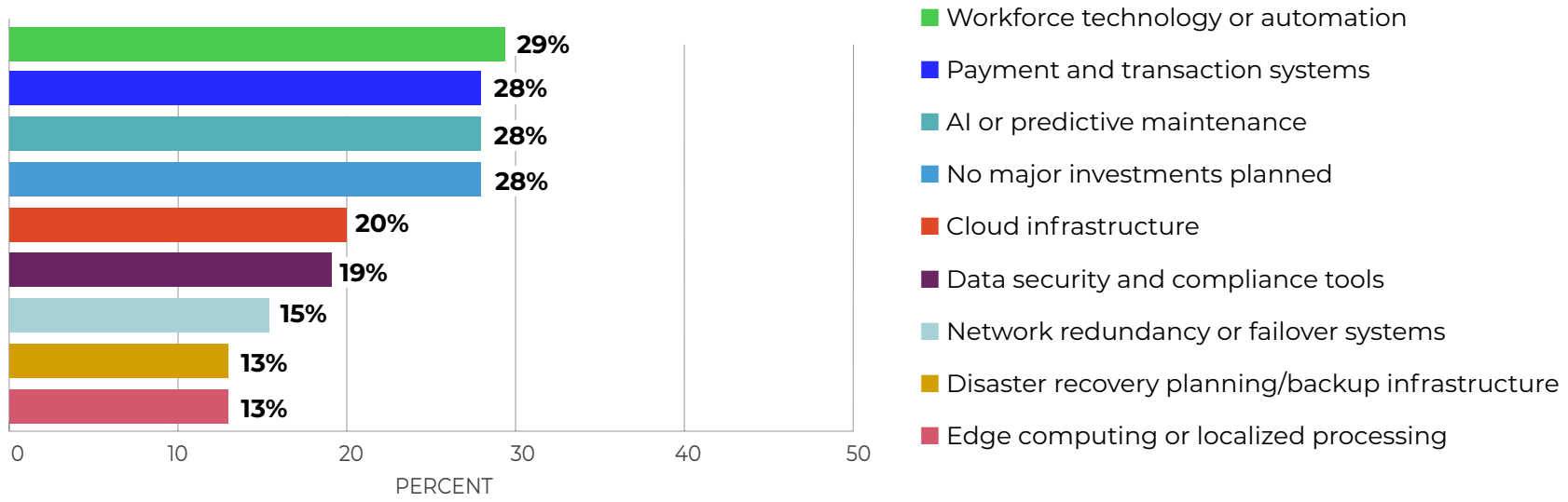


Barriers to Improving Restaurant Technology Resilience (Budget, Integration Complexity, Resources)

The survey suggests that many operators recognize the importance of this balance but are still working through the various barriers to adoption. For operators, the barriers to technology adoption will sound familiar. Respondents pointed most often to budget limitations and integration complexity. But when labor, food costs, and real estate all continue to strain restaurants, technology becomes a key solution to relieve burdens, so operators can meet expectations with fewer resources. This highlights a big reason why edge-enabled approaches are resonating. They strengthen existing environments rather than requiring a full rebuild.

As restaurants continue to invest in automation, this foundation becomes even more important. Self-service kiosks, digital order routing, AI-driven forecasting, and labor-optimization tools are increasingly prioritized across the industry. In fact, automation, payments, and AI ranked among the top technology investment priorities in the survey—showing operators know technology investments are now integral to their bottom line.

Over the next 12 to 24 months, in which areas do you plan to invest most to improve resiliency and performance? *Up to three options allowed.*



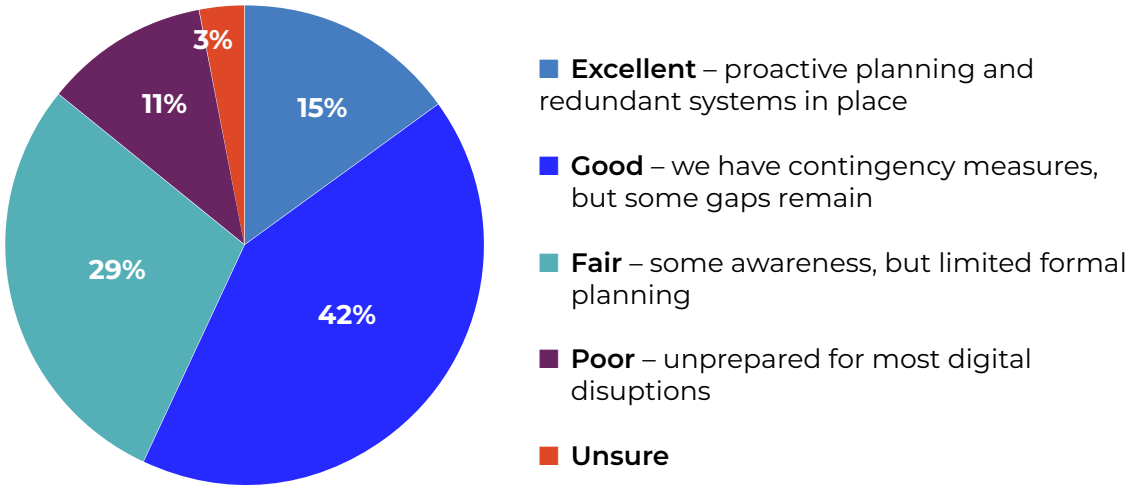
Top Technology Investment Priorities Among Restaurant Operators

However, these initiatives increase reliance on systems working at all times. When automation is layered onto unreliable infrastructure, costly mistakes and overburdened, fragile networks become the reality.

For leading multi-unit restaurants looking to integrate automation and AI across hundreds, if not thousands, of locations, an infallible infrastructure and the necessary investments become imperative. This is in large part why edge-solutions and restaurants are being thrust to the forefront of technological conversations, where expectations are rapidly shifting.

Edge-enabled processing also improves how restaurants handle data at the store level. Inventory updates, sales patterns, and operational signals are generated continuously. When systems lag or fail to sync, managers are forced to make decisions with incomplete information. Processing data closer to where it is created improves accuracy and timeliness, allowing teams to respond immediately. Over time, this supports tighter cost control and more confident decision making.

How would you rate your brand's preparedness for digital disruptions (e.g., cyberattacks, software outages, or system failures)?



Digital Disruption Readiness Levels Among Restaurant Operators

As brands scale, the value of resilience compounds. What might be a manageable inconvenience at one location becomes a material business issue across dozens or hundreds of stores. Centralized dependencies increase the blast radius of failures, while store-level autonomy helps contain issues before they escalate. Survey responses related to digital disruption readiness reinforce this point: many operators acknowledge gaps between current infrastructure and the demands of modern, multi-channel operations.

It's important to note thar edge computing is not about replacing cloud platforms. Centralized systems remain essential for analytics, reporting, configuration management, and enterprise coordination. What edge-enabled networks change is the degree of dependency. Stores no longer fully rely on perfect Internet connections or centralized systems to function. This balance—local continuity paired with centralized visibility—creates a more resilient operating model.

As restaurants continue to employ digital ordering, loyalty programs, automation, and data-driven decisions, resilience shifts from a nice-to-have to a must have. Operators are already managing constant pressure, from staffing challenges to rising guest expectations. Technology at its best reduces strain, but only when implemented thoughtfully with the best infrastructure and support systems.

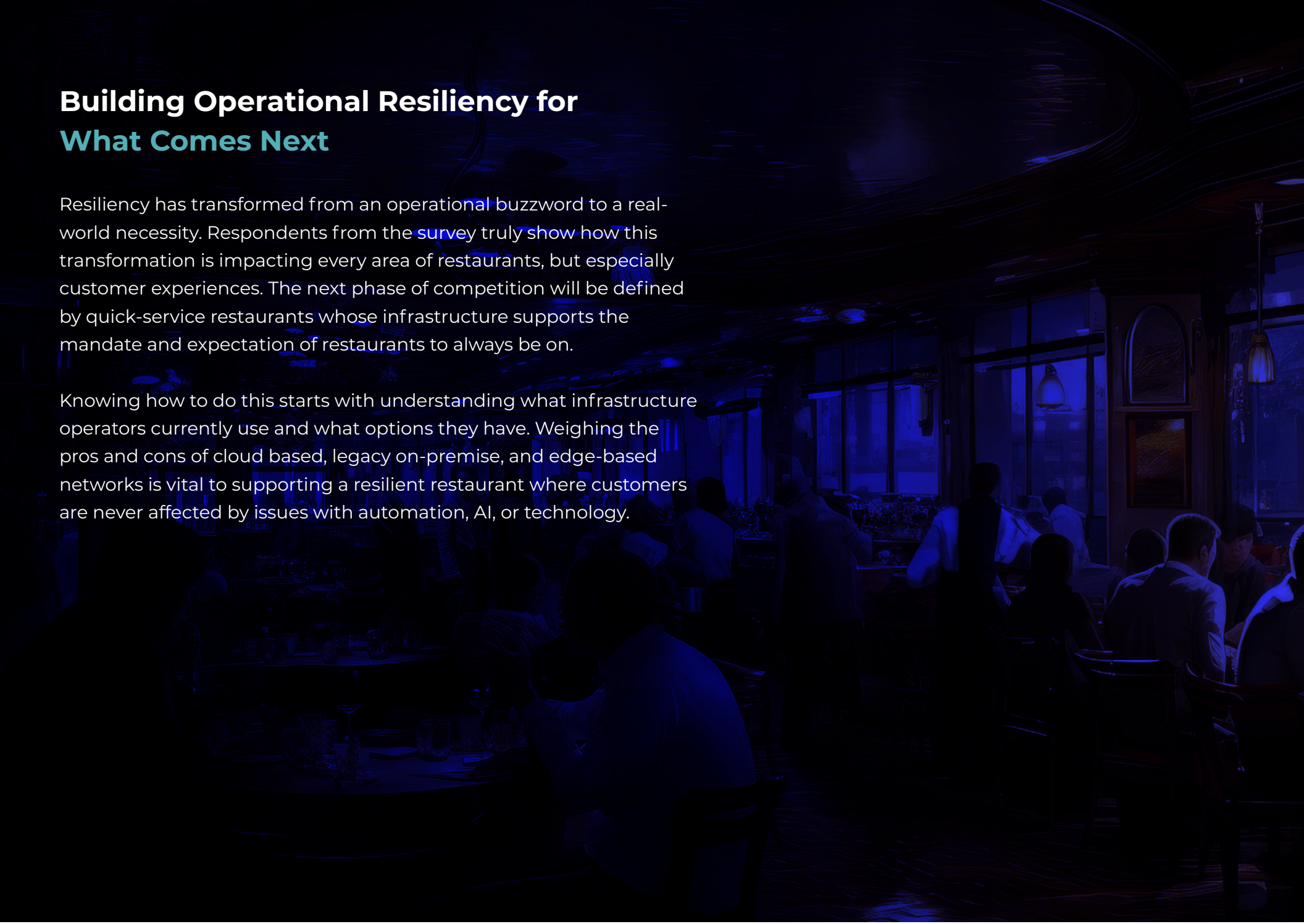
THE TAKEAWAY

Edge-enabled infrastructure helps restaurants bridge the gap between innovation and operational reliability. By strengthening performance, improving system connectivity, and reducing dependency on centralized uptime, operators can protect revenue, support teams, and maintain guest trust as complexity increases. In an industry defined by speed and scale, resilience is no longer just a safeguard—it is the foundation that allows innovation to succeed.

Building Operational Resiliency for What Comes Next

Resiliency has transformed from an operational buzzword to a real-world necessity. Respondents from the survey truly show how this transformation is impacting every area of restaurants, but especially customer experiences. The next phase of competition will be defined by quick-service restaurants whose infrastructure supports the mandate and expectation of restaurants to always be on.

Knowing how to do this starts with understanding what infrastructure operators currently use and what options they have. Weighing the pros and cons of cloud based, legacy on-premise, and edge-based networks is vital to supporting a resilient restaurant where customers are never affected by issues with automation, AI, or technology.



The Quick-Service Technology Resiliency Diagnostic

How exposed is your brand when systems fail?

HOW TO USE:
Check Yes / No. Each "No" signals real operational risk, not a future IT issue

1. Store Operations and POS Resilience

If connectivity drops today, do stores keep operating?

Yes ❑ No ❑ Stores can continue taking orders during network or cloud disruptions

Yes ❑ No ❑ POS systems function without constant real-time connectivity

Yes ❑ No ❑ A failure at one location does not impact others

Yes ❑ No ❑ Core store functions don't require manual workarounds during outages

Yes ❑ No ❑ Hardware and software health is centrally monitored across locations

Risk if "No": Lines stop moving, staff improvise, and guest frustration spikes.

2. Payments and Revenue Continuity

How quickly does money stop flowing when systems are stressed?

Yes ❑ No ❑ Payments continue during partial or full outages

Yes ❑ No ❑ No single point of failure can halt transactions chainwide

Yes ❑ No ❑ Checkout speed remains consistent during peak demand or disruptions

Yes ❑ No ❑ Payment issues don't force store closures or order cancellations

Yes ❑ No ❑ Security and compliance remain intact during degraded operations

Risk if "No": Lost transactions are immediate and unrecoverable.

3. Architecture and Integration Stability

How fragile is the tech stack you've built over time?

Yes ❑ No ❑ Core systems (POS, payments, loyalty, digital ordering) are loosely coupled

Yes ❑ No ❑ One system failure does not cascade across others

Yes ❑ No ❑ Stores are not fully dependent on centralized infrastructure

Yes ❑ No ❑ New technology can be added without destabilizing operations

Yes ❑ No ❑ Integration points are monitored and managed proactively

Risk if "No": Complexity hides failure points, until they surface mid-shift.

4. Visibility, Control, and Recovery

When something breaks, how fast can leadership respond?

Yes ❑ No ❑ Enterprise teams have real-time visibility into store system health

Yes ❑ No ❑ Issues can be diagnosed and resolved remotely

Yes ❑ No ❑ Recovery time from outages is predictable and fast

Yes ❑ No ❑ Data syncs accurately once systems are restored

Yes ❑ No ❑ Reporting gaps from downtime is minimal

Risk if "No": Outages last longer than they should, and confidence erodes.

5. Store Teams and Franchise Readiness

Who absorbs the impact when technology fails?

Yes ❑ No ❑ Store teams know exactly what to do during disruptions

Yes ❑ No ❑ Backup workflows are standardized across locations

Yes ❑ No ❑ Franchisees aren't forced to invent their own fixes

Yes ❑ No ❑ Downtime doesn't materially increase staff stress or turnover risk

Yes ❑ No ❑ Guest experience remains consistent even during outages

Risk if "No": Technology failures turn into people problems.

6. Readiness for Growth and Innovation

Is your foundation strong enough to scale?

Yes ❑ No ❑ Current systems can support automation without increasing downtime

Yes ❑ No ❑ Transaction volume can grow without degrading performance

Yes ❑ No ❑ New digital initiatives don't increase centralized dependency

Yes ❑ No ❑ Resiliency is evaluated before deploying new technology

Risk if "No": Innovation amplifies fragility instead of performance.

For every "Yes" response, give your operation one point. Add up all points at the end and refer to the scoring snapshot.Quick Scoring Snapshot

- ❑ 0–9 Yes: High operational exposure
- ❑ 10–19 Yes: Functional, but vulnerable
- ❑ 20–29 Yes: Resilient under pressure

Executive Takeaway: If your brand can't operate, take payments, and recover quickly during disruption, resiliency isn't a technical gap, it's a business risk.