NATIONAL RESTAURANT ASSOCIATION

RESEARCH INSIGHT:

DIGITAL INNOVATION

The Future of Restaurant Technology

Key insights & findings
November 2026

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INTRODUCTION

People are at the heart of every restaurant. But increasingly, technology works around and alongside them as connected infrastructure that strengthens the industry's fundamentals: hospitality, consistency, productivity, responsiveness, and growth.

Since the start of the 21st century, the pressures of changing consumer desires, shrinking labor pools, and the COVID-19 pandemic have accelerated the evolution of technology in the restaurant and foodservice industry. Moreover, during the past 25 years, restaurant technology has evolved from a collection of standalone tools that processed transactions and managed individual functions into an interconnected operating infrastructure that informs decisions across businesses. Throughout this evolution, the purpose of technology has remained consistent: reduce friction and routine work, provide employees with better information, and give them more time and capacity to serve guests.

Today, the use of technology, automation, and data is widespread across the restaurant industry, shaping operations as well as the customer experience. Although adoption varies across establishments, particularly by size and business model, few restaurants operate without using some form of digital technology or automation.

Adoption has been especially strong in back-of-house functions, where technologies such as inventory management systems, smart kitchen equipment, employee scheduling software, and other digital tools streamline operations without interfering with the guest experience. At the same time, restaurants are making greater use of data analytics to inform decisions about menus, pricing, marketing, staffing, and customer engagement.[1]

As technology has become more embedded, it has become increasingly viewed as a strategic business asset. Most operators report moderate or advanced levels of technology integration, with point-of-sale platforms, workforce management systems, online ordering tools, and data analytics among the most used technologies. Operators overwhelmingly indicate that technology adoption has benefited their businesses, helping improve productivity, enhance decision making, strengthen customer engagement, and support revenue growth.

To examine this evolution, the National Restaurant Association draws on an operator survey, interviews with leaders from several restaurant companies, and a growing body of existing research. Together, those quantitative findings and qualitative insights provide a comprehensive view of how operators are using technology to improve efficiency, address workforce challenges, and enhance the guest experience while preserving the hospitality at the heart of the restaurant industry.

The industry is now entering the next stage of this evolution: moving from connected, data-informed operations toward more predictive, customized, and intelligent decision making. Operators broadly expect technology, automation, data, and AI to become increasingly important to business success. However, realizing the full benefits of the tools requires strong data foundations, effective change management, employee training, and organizational alignment.

The challenge is finding the right technology to deliver hospitality more consistently, personally, and effectively. The central finding of this report is that technology works best not as a substitute for people or sound operating practices, but as an accelerant to both. This means the next competitive advantage in restaurants will not come from technology alone. It will come from connecting technology, operations, and people more effectively than ever before.

1 See EHL Insights (2026), Fantozzi (2026), Gruyaert et al. (2025), HungerRush (2025), and MachineQ (2026) for examples of these broader trends. Thanks to National Restaurant Association intern Madison Bryce for her excellent summaries of existing literature.

PART 1:
BY THE NUMBERS: TECHNOLOGY TAKES ITS PLACE AT THE CENTER OF RESTAURANT OPERATIONS

KEY INSIGHTS FROM THIS SECTION

- **Technology adoption is now widespread across the restaurant industry.** More than 70% of operators report moderate or advanced use of technology, with nearly all utilizing POS and integrated management systems. Online ordering, workforce management software, and digital analytics tools are also common across restaurant operations.
- **Operators are investing in technology to drive growth, efficiency, and customer engagement.** Improving the customer experience, increasing sales, reducing labor and operating costs, boosting employee productivity, and strengthening data-driven decision making ranked among the leading motivations for technology adoption.
- **Technology is generally viewed as enhancing business performance and workforce productivity.** Most operators believe technology, automation, data, and AI improves labor productivity and reshapes employee roles rather than replacing workers. More than 4 in 5 respondents report that technology adoption has benefited their businesses.
- **Data analytics and AI adoption are expanding but remain uneven.** Operators increasingly rely on sales, labor, customer, and inventory data to guide decisions. AI is most used for marketing, customer insights, labor management, and forecasting. However, many restaurant operators remain in the early stages of AI adoption and experimentation.
- **Technology, data, and AI are expected to become increasingly important to future business success, but there are adoption barriers.** Cost concerns, uncertainty about business value and return on investment, workforce skill gaps, technology integration challenges, and implementation complexity continue to limit broader deployment.

OVERVIEW OF TECHNOLOGY USAGE

Restaurant operators were surveyed between June 18 and July 18 about their use of technology, automation, and data, generating 212 responses. More than 72% of respondents described their technology adoption as either "highly advanced and integrated" or "moderate" (Figure 1). By comparison, just over one-fifth of operators reported limited technology use.

95%

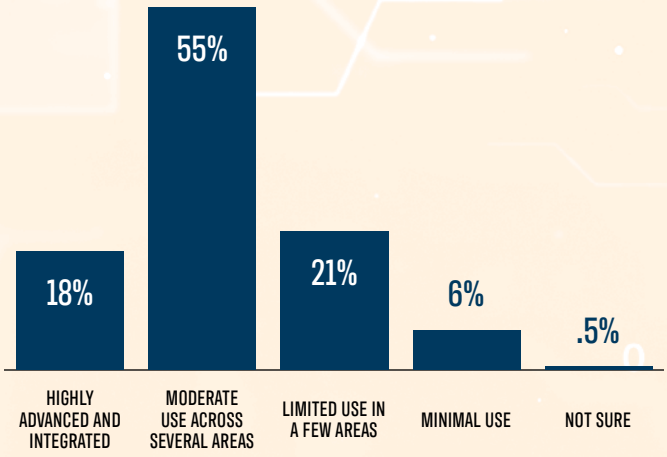
of restaurant operators use point-of-sale and integrated management systems

Nearly 95% of restaurant operators use point-of-sale and integrated management systems, making them the most widely adopted technology in the industry (Table 1). **Online ordering platforms (76.9%) and workforce management software (75.9%) are also commonplace, underscoring the sector's reliance on digital tools to manage transactions and labor.** More than half of operators use third-party delivery platforms (58.9%), kitchen display systems (56.8%), and data analytics or business intelligence dashboards (56.1%), while nearly half have adopted inventory management systems (48.5%).

Adoption is lower for newer or more specialized technologies. AI tools, such as chatbots and forecasting applications, are used by 38.6% of respondents, while 30.7% utilize customer relationship management (CRM) platforms. Use of self-service kiosks or tablets (18.3%) and automated equipment, including fryers, grills, and beverage systems (15.3%), remain relatively uncommon.

At the same time, more than 1 in 10 operators are considering adopting AI tools (12.4%), inventory management systems (12.8%), and data analytics dashboards (11.7%), pointing to continued opportunities for increased technology investment.

FIG. 1: HOW WOULD YOU DESCRIBE YOUR OVERALL USE OF TECHNOLOGY IN RESTAURANT OPERATIONS?



Source: National Restaurant Association

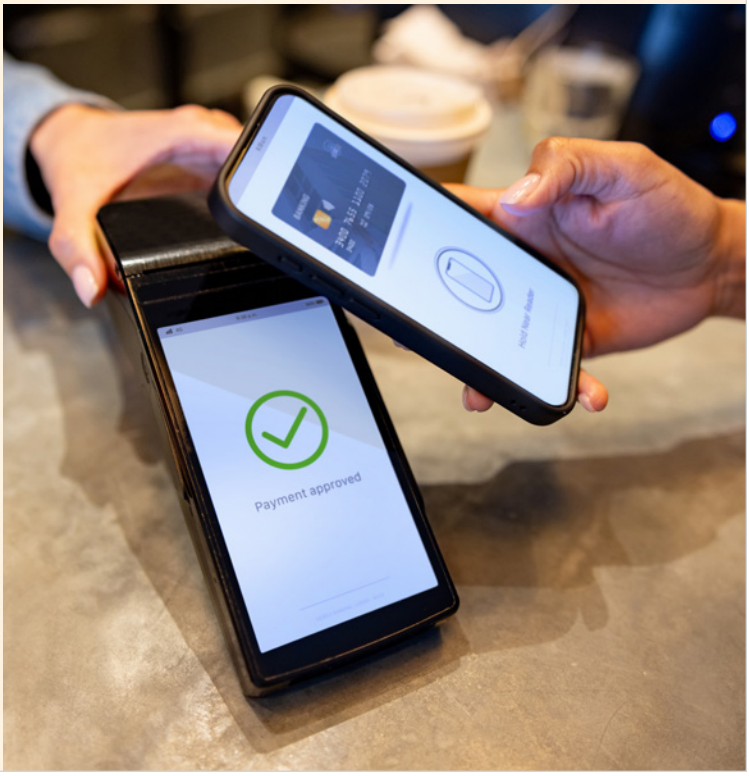


TABLE 1: WHICH OF THE FOLLOWING TECHNOLOGIES ARE CURRENTLY USED IN YOUR BUSINESS?

	YES	NO	NOT YET, BUT CONSIDERING	NOT SURE
POS AND INTEGRATED MANAGEMENT SYSTEMS	94.7%	4.8%	0.5%	0.0%
ONLINE ORDERING PLATFORMS	76.9%	17.8%	4.3%	1.0%
WORKFORCE MANAGEMENT SOFTWARE (E.G., SCHEDULING, PAYROLL)	75.9%	15.5%	7.7%	1.0%
THIRD-PARTY DELIVERY PLATFORMS	58.9%	39.6%	0.5%	1.0%
KITCHEN DISPLAY SYSTEMS	56.8%	36.9%	5.3%	1.0%
DATA ANALYTICS AND BUSINESS INTELLIGENCE DASHBOARDS	56.1%	27.3%	11.7%	4.9%
INVENTORY MANAGEMENT SYSTEMS	48.5%	36.3%	12.8%	2.5%
AI TOOLS (E.G., CHATBOTS, FORECASTING, ETC.)	38.6%	45.5%	12.4%	3.5%
CRM OR CUSTOMER DATA PLATFORMS	30.7%	53.3%	9.6%	6.5%
SELF-SERVICE KIOSKS OR TABLETS	18.3%	71.8%	8.4%	1.5%
AUTOMATED EQUIPMENT (E.G., FRYERS, GRILLS, BEVERAGE SYSTEMS)	15.3%	71.9%	8.9%	3.9%
OTHER	14.4%	50.0%	6.7%	28.9%

Source: National Restaurant Association





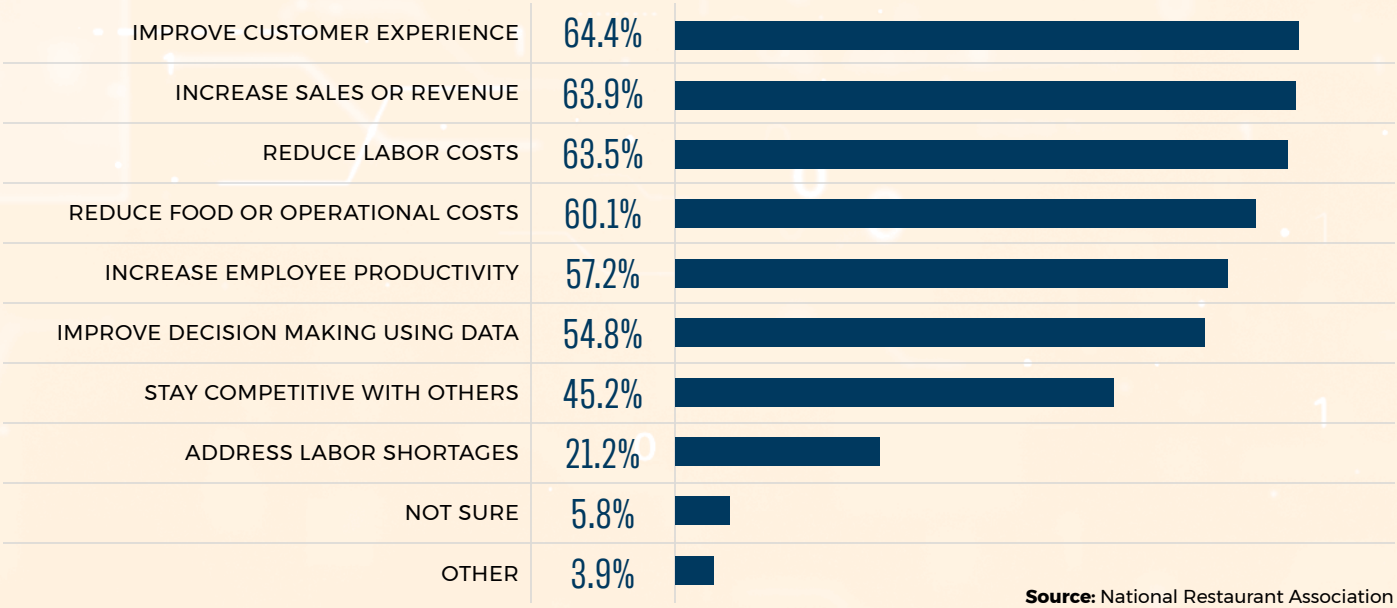


MOTIVATIONS FOR TECHNOLOGY USAGE

As Figure 2 illustrates, restaurant operators are primarily investing in technology to enhance overall customer experiences, increase revenue, and improve operational efficiency. Nearly two-thirds of respondents cited improving customer experience (64.4%), increasing sales or revenue (63.9%), and reducing labor costs (63.5%) as key motivations for adoption. Many also pointed to reducing food and operating costs (60.1%), boosting employee productivity (57.2%), and improving data-driven decision making (54.8%). Fewer operators cited staying competitive (45.2%) or addressing labor shortages (21.2%) as primary drivers.

Overall, the results suggest that technology investments are viewed not only as a means of controlling costs but also as a strategic tool for supporting growth, productivity, and customer engagement.

FIG. 2: WHAT ARE THE PRIMARY MOTIVATIONS FOR ADOPTING TECHNOLOGY, AUTOMATION, OR DATA TOOLS? (SELECT ALL THAT APPLY)

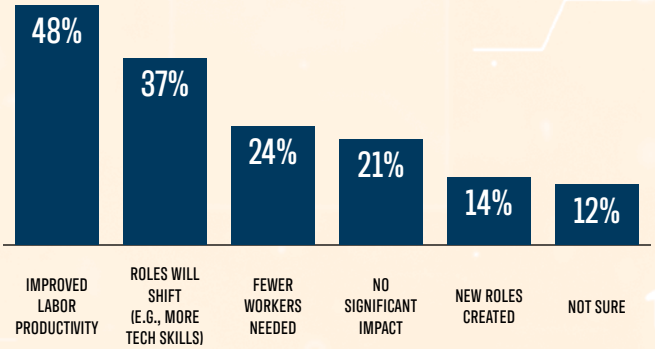


Source: National Restaurant Association

Figures 3 through 5 suggest that **restaurant operators view technology, automation, data, and AI as tools that enhance workforce productivity and business performance rather than replace employees.** Nearly half of respondents (47.6%) believe the technologies will improve labor productivity, while 37.2% expect employee roles to evolve and require greater technological skills. Although 23.6% anticipate needing fewer workers, only 20.9% expect no significant workforce impact, indicating that the majority of respondents believe that technology is more likely to reshape jobs than eliminate them.

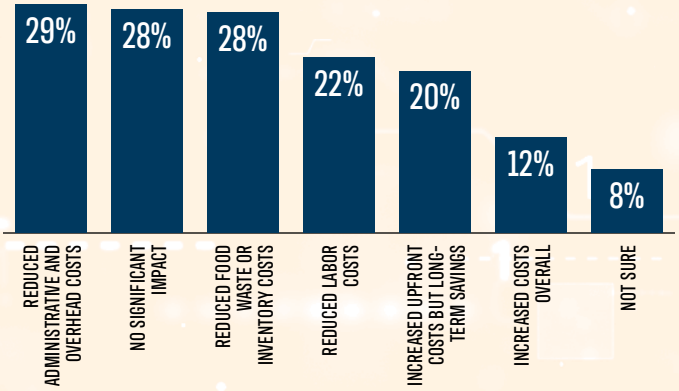
The data also points to meaningful operational benefits from technology adoption. Nearly 3 in 10 operators reported reductions in administrative and overhead expenses (28.8%) and lower food waste or inventory costs (27.8%), while 22% said technology has reduced labor costs. Another 20.4% indicated that technology investments increased upfront expenses but generated long-term savings. At the same time, 28.3% reported no significant impact on operating costs, suggesting that returns vary based on the technologies deployed and the extent of implementation.

FIG. 3: HOW DO YOU THINK TECHNOLOGY, AUTOMATION, DATA, AND AI ADOPTION WILL IMPACT YOUR WORKFORCE NEEDS? (SELECT ALL THAT APPLY)



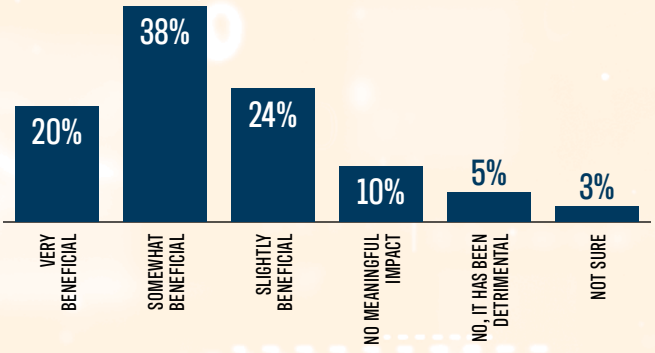
Source: National Restaurant Association

FIG. 4: WHAT IMPACT HAS TECHNOLOGY HAD ON YOUR OPERATING COSTS? (SELECT ALL THAT APPLY)



Source: National Restaurant Association

FIG. 5: OVERALL, HAS TECHNOLOGY ADOPTION BEEN BENEFICIAL TO YOUR BUSINESS?



Source: National Restaurant Association

Despite these mixed cost outcomes, restaurant operators overwhelmingly view technology adoption positively. More than 4 in 5 respondents (82.2%) reported that technology has benefited their businesses, including 20.4% who described it as very beneficial. Only 5.2% said technology adoption had been detrimental. **Taken together, the findings indicate that operators increasingly see technology as a strategic investment that improves productivity, efficiency, and overall business performance.**

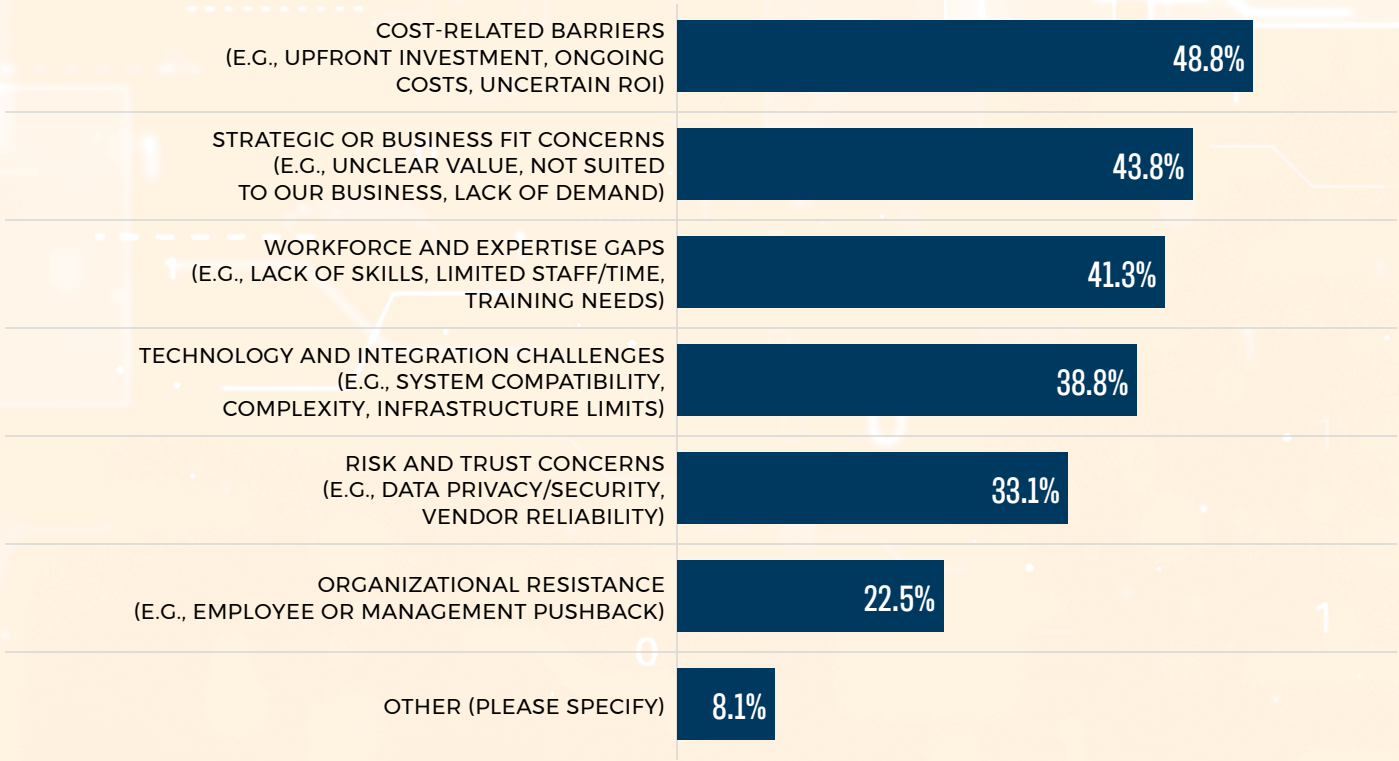
CONCERNS AND OBSTACLES

Restaurant operators cited several barriers in their adoption or expansion of technology, automation, data, or AI solutions. Nearly half of respondents (48.8%) cited cost-related concerns, including upfront investments, ongoing expenses, and uncertain returns. Strategic questions about business fit and value (43.8%), workforce and expertise gaps (41.3%), and technology integration challenges (38.8%) were also prominent. Concerns regarding data privacy, security, and vendor reliability (33.1%) further highlight the complexity of technology adoption.



Taken together, the results suggest that most restaurant operators recognize the growing importance of technology, data, and AI, but broader adoption will depend on demonstrating clear business value, developing workforce capabilities, and reducing implementation barriers.

FIG. 6: WHAT ARE THE BIGGEST OBSTACLES PREVENTING YOUR BUSINESS FROM ADOPTING OR EXPANDING TECHNOLOGY, AUTOMATION, DATA, OR AI SOLUTIONS? (SELECT ALL THAT APPLY)



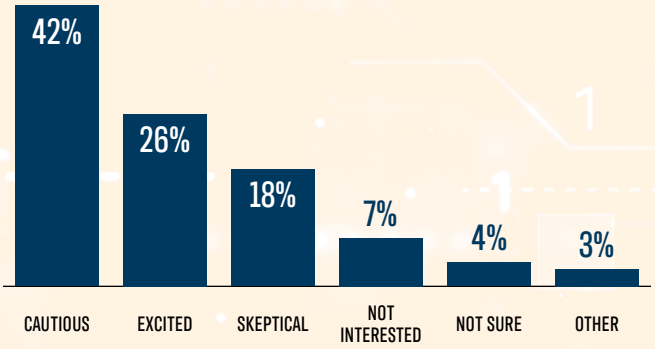
Source: National Restaurant Association



RESTAURANTS AND AI IMPLEMENTATION

While operators generally report positive experiences with technology, attitudes toward AI reflect a combination of optimism and caution. As shown in Figure 7, 42.4% of respondents described themselves as cautious about adopting AI, while 26.2% said they were excited. By comparison, fewer than 1 in 5 (17.8%) expressed skepticism, and relatively few were uninterested (7.3%) or unsure (3.7%). These results suggest that operators largely recognize AI's potential, but many remain careful about how and when to deploy it.

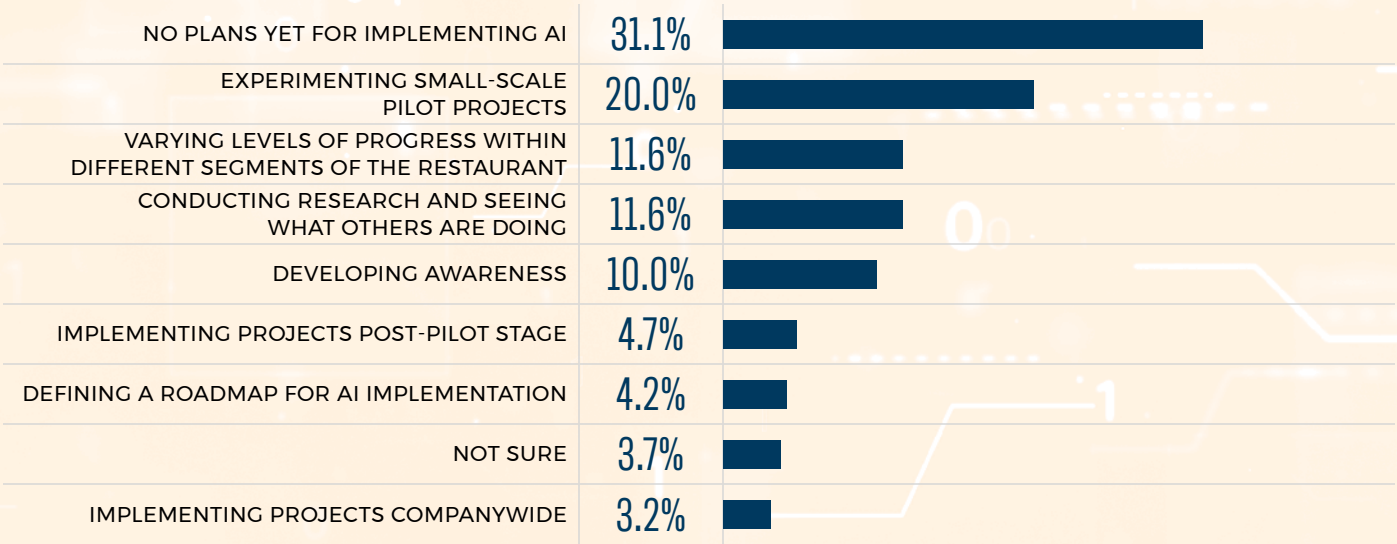
FIG. 7: HOW WOULD YOU DESCRIBE YOUR ATTITUDE TOWARD ADOPTING AI IN YOUR BUSINESS?



Source: National Restaurant Association

Reflecting these concerns, AI adoption remains at a relatively early stage across much of the industry (Figure 8). Nearly one-third of respondents (31.1%) reported having no plans to implement AI, while another 20.0% are experimenting with small-scale pilot projects. Smaller shares are conducting research, building awareness, developing implementation roadmaps, or deploying projects at scale. **The results suggest that many operators are still evaluating the business case for AI before committing to broader adoption.**

FIG. 8: WHAT IS THE OVERALL PROGRESS LEVEL FOR AI ACROSS YOUR BUSINESS?

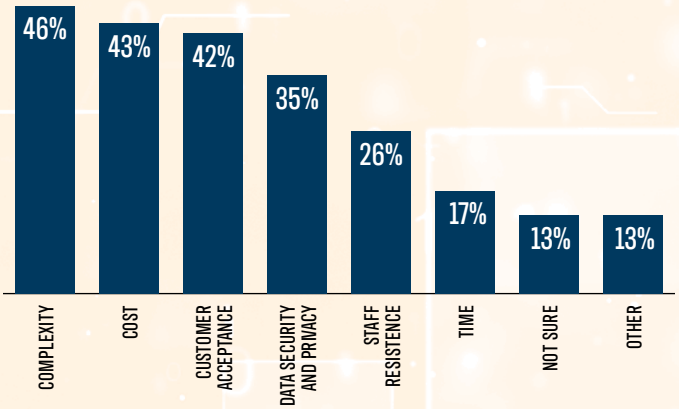


Source: National Restaurant Association

Operator caution over AI adoption appears to be driven by practical implementation concerns rather than opposition to the technology itself. Complexity was the most frequently cited concern (46.1%), followed by cost (43.5%) and customer acceptance (41.9%). More than one-third of respondents also pointed to data security and privacy concerns (35.1%). **Those findings indicate that operators are focused on ensuring that AI solutions are affordable, manageable, secure, and accepted by customers.**

Among businesses currently using AI, customer-facing and analytical functions have emerged as the leading applications (Table 2). The most common use case is personalizing marketing and customer outreach (58.3%), followed by analyzing customer feedback and sentiment (47.7%). More than one-third of respondents also use AI for labor management (37.1%) and demand forecasting (34.3%). Adoption is lower for operational applications such as inventory optimization, supply chain management, ordering and payments, and delivery logistics, although many operators are actively considering these uses. **Together, the findings suggest that restaurants are taking a pragmatic approach to AI, focusing first on applications that offer clear benefits and relatively low implementation risk.**

FIG. 9: WHAT IS YOUR BIGGEST CONCERN ABOUT ADOPTING AI IN YOUR RESTAURANT OPERATION? (SELECT ALL THAT APPLY)



Source: National Restaurant Association

TABLE 2: ARE YOU USING AI IN SOME FORM FOR ANY OF THE FOLLOWING, PERHAPS EVEN AS A TOOL IN ANOTHER TECHNOLOGY APPLICATION OR RESOURCE?

	YES	NO	NOT YET, BUT CONSIDERING	NOT SURE
TO PERSONALIZE MARKETING AND CUSTOMER OUTREACH	58.3%	12.0%	26.9%	2.8%
TO ANALYZE CUSTOMER FEEDBACK AND SENTIMENT	47.7%	19.3%	28.4%	4.6%
FOR RECRUITING, SCHEDULING OR LABOR MANAGEMENT	37.1%	25.7%	32.4%	4.8%
TO PREDICT CUSTOMER DEMAND OR FORECAST SALES	34.3%	25.7%	36.2%	3.8%
OTHER	30.4%	30.4%	13.0%	26.1%
TO OPTIMIZE INVENTORY OR REDUCE FOOD WASTE	29.0%	28.0%	39.3%	3.7%
TO IMPROVE SUPPLY CHAIN MANAGEMENT AND LOGISTICS	23.2%	36.4%	34.3%	6.1%
TO TAKE ORDERS AND PROCESS PAYMENTS	20.0%	47.6%	27.6%	4.8%
FOR IMPROVING DELIVERY EFFICIENCY AND REROUTING	13.1%	59.6%	19.2%	8.1%

Source: National Restaurant Association

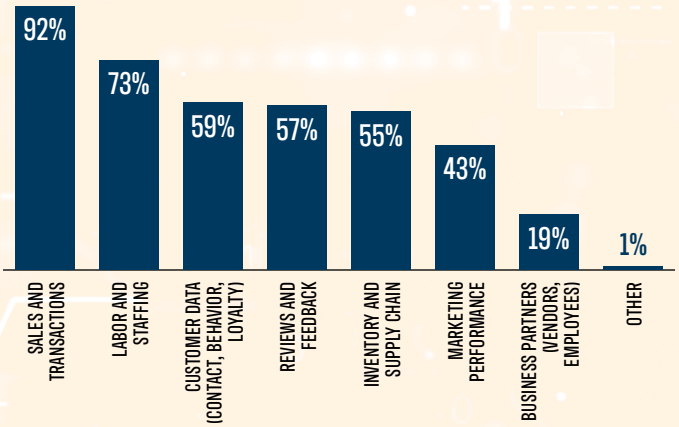
Sales and transaction data are the most widely used data source, with 91.9% of respondents actively relying on them.

92%

Figures 10 through 15 illustrate how operators are increasingly using data to support decision making while identifying clear priorities for future technology investments. Sales and transaction data are the most widely used data source, with 91.9% of respondents actively relying on them. Operators also make extensive use of labor and staffing data (72.7%), customer data (58.7%), reviews and feedback (57.0%), and inventory and supply chain information (54.7%). **These findings underscore the growing role of data analytics in both operational management and customer engagement.**

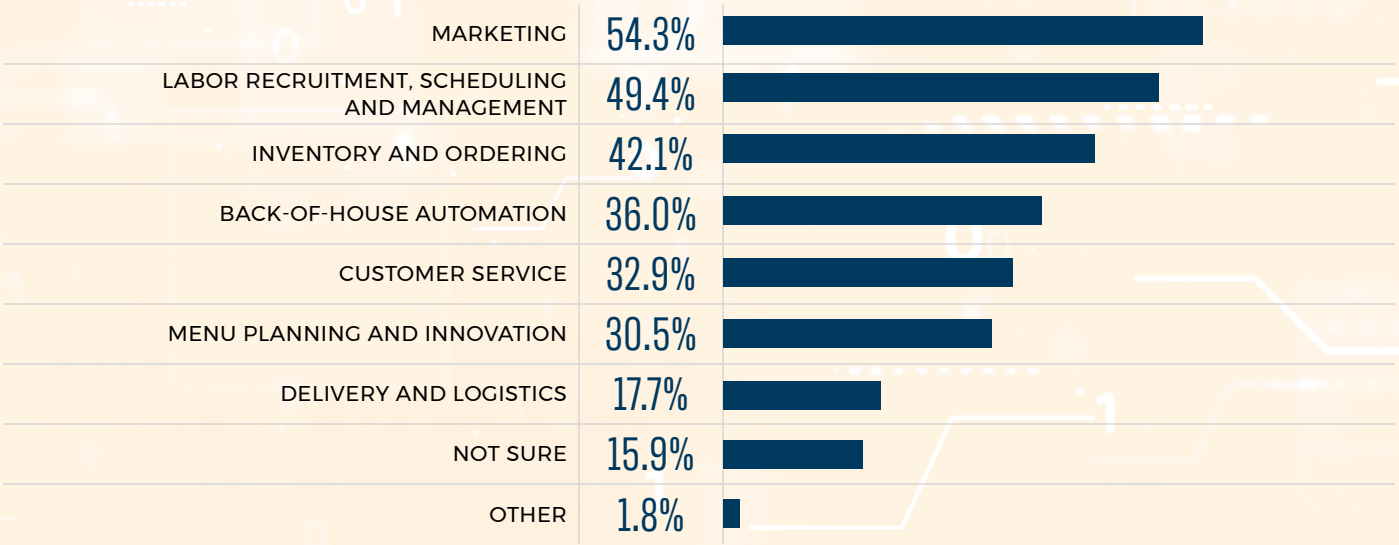
Not surprisingly, future investment priorities closely reflect these areas of focus. Marketing ranked first, cited by 54.3% of respondents, followed by labor recruitment, scheduling, management (49.4%) and inventory, and ordering (42.1%). More than one-third also identified back-of-house automation, pricing, customer service, and menu planning as priorities. **Overall, operators appear focused on technologies that can strengthen customer relationships, improve workforce management, and increase operational efficiency.**

FIG. 10: WHAT TYPES OF DATA DO YOU ACTIVELY USE? (SELECT ALL THAT APPLY)



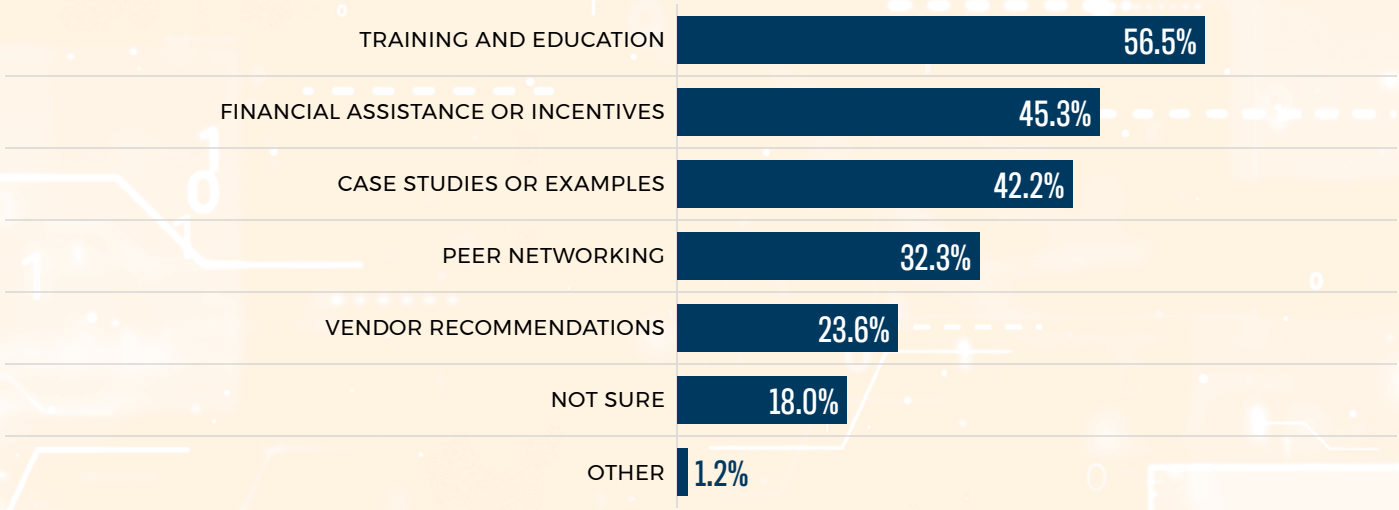
Source: National Restaurant Association

FIG. 11: WHAT AREAS OF YOUR RESTAURANT BUSINESS DO YOU SEE AS PRIORITIES FOR TECHNOLOGY, AUTOMATION, DATA AND AI INVESTMENTS? (SELECT ALL THAT APPLY)



Source: National Restaurant Association

FIG. 12: WHAT KINDS OF SUPPORT WOULD HELP YOU ADOPT TECHNOLOGY, AUTOMATION, DATA AND AI MORE EFFECTIVELY? (SELECT ALL THAT APPLY)



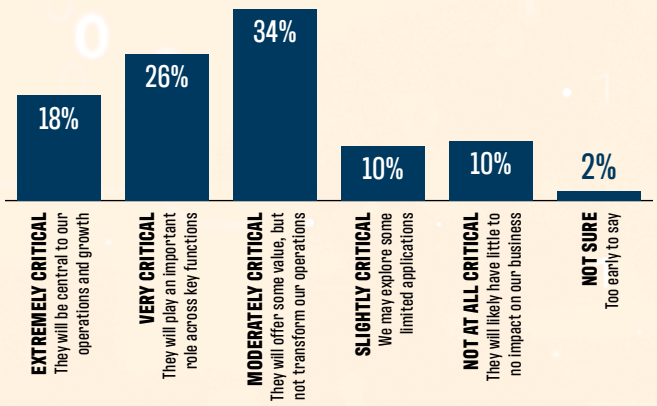
Source: National Restaurant Association

To accelerate adoption, operators identified several forms of support that would be particularly valuable. Training and education topped the list at 56.5%, followed by financial assistance or incentives (45.3%) and access to case studies and real-world examples (42.2%). **These findings suggest that many businesses are interested in expanding technology use but need additional knowledge, guidance, and resources to do so effectively.**

Looking ahead, most respondents believe technology, automation, data, and AI will become increasingly important to their businesses. More than three-quarters (77.9%) said the tools will be at least moderately critical over the next five years, including 44.2% who expect them to be either very or extremely critical. This broad recognition of technology's strategic importance reinforces the industry's continued movement toward digital transformation.



FIG. 13: HOW CRITICAL DO YOU THINK TECHNOLOGY, AUTOMATION, DATA AND AI WILL BE TO YOUR BUSINESS OVER THE NEXT FIVE YEARS?



Source: National Restaurant Association

PART 2: OPERATOR PERSPECTIVES: CONNECTING TECHNOLOGY, PEOPLE, AND PERFORMANCE

KEY INSIGHTS FROM THIS SECTION

As part of this analysis, eight restaurant leaders were interviewed to illustrate how each incorporated technology, automation, and data into their businesses. The following key insights were gathered from those conversations.

- **Technology is being used to enhance hospitality, not replace it.** Operators consistently emphasized that the best technology reduces friction for customers through faster service, seamless ordering and payment, greater convenience, and more personalized experiences, while allowing employees to spend more time engaging with guests.
- **Data, automation, and AI are driving significant operational efficiencies.** Restaurants are leveraging forecasting tools, labor management systems, inventory platforms, kitchen technologies, and predictive analytics to improve productivity, reduce food waste, strengthen decision making, and optimize performance across the business.
- **AI is moving from experimentation to practical business applications.** Operators are deploying AI to personalize marketing, improve demand forecasting, optimize staffing and inventory, streamline ordering, analyze customer feedback, and accelerate access to business insights.
- **Successful technology adoption depends on people, processes, and data foundations.** Restaurant leaders stressed the importance of data quality, system integration, employee training, change management, and organizational alignment in realizing the value of technology investments.
- **Future restaurants will be more predictive, personalized, and data-driven, while remaining fundamentally people-centered.** Executives expect technology and AI to play an increasingly strategic role in operations and customer engagement, but they overwhelmingly view these tools as complements to employees and hospitality rather than substitutes for them.

59%

Technology remains a significant factor for 59% of limited-service and 54% of fullservice restaurant customers.

ENHANCING THE OVERALL CUSTOMER EXPERIENCE

Across restaurant segments, operators increasingly view technology, automation, and data not as substitutes for hospitality, but as tools that enhance it. Business leaders emphasized that the greatest value of technology lies in removing friction from the customer journey, freeing employees to focus more attention on guests while improving convenience, accuracy, speed, and personalization. Rather than pursuing innovation for its own sake, restaurants are investing in solutions that make the dining experience more seamless while reinforcing the human connections that remain at the heart of hospitality.

Although technological innovation has been reshaping the restaurant industry for decades, the pandemic dramatically accelerated adoption out of necessity. "Before COVID, Taichi operated entirely through in-store ordering and did not offer delivery, mobile ordering, kiosks, or even phone orders," Kelvin Chen, co-founder and partner at Taichi Bubble Tea, explained. "The pandemic accelerated digital adoption, pushing us to evolve."

Other operators similarly described the pandemic as a turning point, not only for technology adoption but also for the rapid expansion of off-premises dining. Consumers were forced toward takeout, drive-thru, and delivery options that became routine. The growing use of frictionless payment technologies further reinforced these shifts, helping reshape dining habits in the years that followed.[2]

2 For more on this, see National Restaurant Association (April 2025), *Off-Premises Restaurant Trends 2025*.

TABLE 3: % OF RESTAURANT CUSTOMERS WHO SAY THE AVAILABILITY OF TECHNOLOGY OPTIONS FOR ACTIVITIES LIKE ORDERING AND PAYING IS IMPORTANT TO THEM WHEN CHOOSING A RESTAURANT

	ALL ADULTS	GEN Z ADULTS (18-29)	MILLENNIALS (30-45)	GEN XERS (46-61)	BABY BOOMERS (62-80)
ORDERING FOOD OR BEVERAGES FOR DELIVERY	77%	77%	82%	79%	68%
ORDERING FOOD OR BEVERAGES FOR TAKEOUT	66%	77%	79%	66%	45%
ORDERING FOOD OR BEVERAGES FROM A DRIVE-THRU	65%	75%	76%	64%	46%
GOING OUT TO A LIMITED-SERVICE RESTAURANT*	59%	70%	74%	63%	36%
GOING OUT TO A FULLSERVICE RESTAURANT	54%	66%	69%	58%	33%

Source: National Restaurant Association, *2026 State of the Restaurant Industry*

TECHNOLOGY CLOSES THE SERVICE GAP

The consumer shifts that emerged during the pandemic have translated into lasting expectations around convenience and digital engagement. Consumer demand for technology in restaurants is increasingly driven by a desire to reduce friction in the ordering and payment process. According to the 2026 *State of the Restaurant Industry* report, technology-enabled options are particularly important for off-premises dining occasions, with 77% of delivery customers, 66% of takeout customers, and 65% of drive-thru customers saying the availability of technology for ordering and payment influences their restaurant choice (Table 3). While technology is somewhat less critical for on-premises dining, it remains a significant factor, cited by 59% of limited-service and 54% of fullservice restaurant customers.

These preferences are not evenly distributed across customer segments. The importance of technology is especially pronounced with Gen Z and millennial consumers, who consistently report higher levels of interest than Gen X and baby boomer customers. Beyond general access to technology, most consumers express a willingness to use digital tools, such as smartphone apps, websites, self-service kiosks, and tabletop tablets for ordering and payment, underscoring the growing role of technology in enhancing convenience and shaping restaurant selection decisions.



One of the most immediate customer benefits of new technologies is faster, more reliable, service. Grant Krueger, vice president of operations and training at Union Hospitality Group, identified handheld point-of-sale devices as one of the industry's most impactful innovations because they allow servers to transmit orders directly from the table. By eliminating the need to return to a stationary terminal, these devices reduce delays and minimize communication errors between the dining room and kitchen. Krueger also noted that handheld technology significantly shortens the time between when an order is placed and when food preparation begins.

The perspectives of restaurant operators largely align with broader consumer attitudes toward technology adoption. **While consumers broadly support technologies that simplify ordering and payment, enthusiasm varies considerably across different applications.** Most consumers report they would use familiar digital tools such as smartphone apps (74%), restaurant websites (70%), self-service kiosks (68%), and tabletop tablets (67%) to place orders and make payments (Table 4). **Acceptance declines, however, as technologies become more automated or less personal.** Although 62% of consumers would place an order by speaking with a live person on a video screen, only 39% would interact with an AI-generated persona in the same setting.

Similarly, 46% would order through a website or app while interacting with an AI chatbot, though acceptance rises to nearly 6 in 10 among Gen Z and millennial consumers. Generational differences are particularly pronounced for emerging technologies such as robotic or drone delivery, which are acceptable to most Gen Z adults but to only about 1 in 5 baby boomers. **These findings suggest that consumers generally embrace technologies that increase convenience and efficiency but remain more cautious about innovations that replace direct human interaction.**

For his part, Sashi Kommineni, vice president for data and analytics at Fogo de Chão, where tableside ordering is in pilot testing, explained that tableside ordering technology creates virtually "no gap" between a guest placing an order and the kitchen receiving it, enabling restaurants to respond more quickly and accurately to customer needs.

TABLE 4: PERCENT OF CONSUMERS WHO WOULD USE THE FOLLOWING OPTIONS IF THEY WERE OFFERED BY A RESTAURANT, COFFEE SHOP, SNACK PLACE, DELI OR FAST-FOOD PLACE IN THEIR AREA

TECHNOLOGY	ALL ADULTS	GEN Z ADULTS (18-29)	MILLENNIALS (30-45)	GEN XERS (46-61)	BABY BOOMERS (62-80)
ORDER AND PAY USING AN APP ON YOUR SMARTPHONE	74%	80%	89%	80%	54%
ORDER AND PAY USING A RESTAURANT'S WEBSITE	70%	75%	75%	76%	60%
ORDER AND PAY USING A SELF-SERVICE ELECTRONIC KIOSK	68%	81%	78%	69%	53%
ORDER AND PAY USING A COMPUTER TABLET AT THE TABLE	67%	74%	77%	72%	53%
ORDER BY TALKING TO A LIVE PERSON ON A VIDEO SCREEN	62%	58%	65%	64%	64%
ORDER ON A WEBSITE OR APP WHILE INTERACTING WITH AN ARTIFICIAL INTELLIGENCE (AI) GENERATED CHATBOT	46%	57%	58%	44%	32%
ORDER FOOD OR DRINKS THAT GET PREPARED IN AN AUTOMATED ASSEMBLY LINE	45%	60%	57%	42%	28%
ORDER BY TALKING TO AN ARTIFICIAL INTELLIGENCE (AI) GENERATED PERSONA ON A VIDEO SCREEN	39%	49%	43%	38%	33%
ORDER FOOD OR DRINKS THAT GET DELIVERED FROM A RESTAURANT BY A ROBOT	38%	53%	48%	36%	21%
ORDER FOOD OR DRINKS THAT GET DELIVERED FROM A RESTAURANT BY A DRONE	35%	53%	45%	33%	17%

Source: National Restaurant Association, *2026 State of the Restaurant Industry*

BEHIND-THE-SCENES TECHNOLOGY, FRONT-OF-HOUSE BENEFITS

Technology is also improving coordination behind the scenes, creating a smoother dining experience for guests. Krueger explained that modern kitchen display systems synchronize production across cooking stations and help ensure that dishes with different preparation times arrive at the table together. **What once depended heavily on staff experience and verbal communication can now be managed through automated workflows.**

At Wingstop, Chief Operating Officer Raj Kapoor highlighted the company's AI-enabled smart kitchen platform, which uses restaurant-level demand forecasts to optimize production. Technology helps ensure food is fresher, more accurate, and more consistent for customers, while also reducing waiting times in some locations. The benefits have been significant: customer dissatisfaction scores have improved, and key measures of food quality, delivery speed, and overall satisfaction have, too.

AI and predictive analytics are increasingly helping restaurants anticipate customer demand before it becomes visible. AI-powered computer vision systems can monitor food levels in real time while incorporating incoming drive-thru, mobile, and online orders to forecast near-term demand. By analyzing these data streams, operators can better determine what should be prepared next and in what quantities, helping ensure products are available when customers want them. This enables a more responsive guest experience while also improving operational efficiency and reducing potential food waste.

Customization has emerged as another major way that technology enhances customer engagement. Restaurant operators are increasingly using loyalty, ordering, and customer data to better understand guest preferences

30% of payments are digital

and deliver more relevant recommendations and experiences. The goal is to make interactions as customized and relevant as possible, strengthening customer relationships and encouraging repeat visits. For instance, Wingstop has leveraged AI-driven customer relationship management tools and loyalty data to personalize offers and communications. Kapoor characterized this approach as moving toward "segment of one marketing," where technology identifies the next best action for each customer and creates experiences tailored to individual behaviors and preferences.

For many operators, convenience has become an essential component of customer satisfaction, with payment technologies playing a particularly important role in reducing friction. James McGehee, chief financial officer at Dave's Hot Chicken, argued that consumers increasingly expect "seamless transactions" across ordering, payment, pickup, and delivery channels. Kiosks, mobile ordering, contactless payments, and digital wallets simplify transactions and reduce waiting times. More importantly, from the operator perspective, in-store kiosks can do more than help with customer ordering during busy periods. McGehee noted that they also have a sizable return on investment, with customers ordering 5% to 6% more on kiosks than from a traditional cashier.

On the payment front, Stephen Stoll, chief operating officer of the DineAmic Hospitality Group, highlighted digital payment platforms that enable guests to pay quickly while also providing immediate feedback on their experiences. Currently, 30% of payments are digital, and an immediate tie-in with Google reviews after the payment has significantly boosted their overall review counts and search engine optimization (SEO). They have also leaned heavily into delivery and takeout, with sizable increases in sales and traffic as a result.

At Fogo de Chão, where tableside payments are in test, servers use tablets to process payments tableside, eliminating delays associated with traditional check settlement. Meanwhile, Golden Corral is developing solutions that allow tour bus companies around the world to prepay, bypass checkout lines, and proceed directly to seating, according to Chief Information Officer Dawn Gillis. Collectively, these technologies streamline the customer's journey by removing transactional bottlenecks while preserving personal service.

USING TECHNOLOGY TO DEEPEN HOSPITALITY

Technology is also helping restaurants deliver more personalized hospitality rather than simply more efficient transactions. At Fogo de Chão, reservation systems capture information about birthdays, anniversaries, graduations, and other special occasions, and provide relevant information to staff before guests arrive. Kommineni explained that the objective is to equip employees with the context needed to "deliver on the promise of creating an exceptional moment for the guest." Stoll similarly believes customer data will increasingly allow restaurants to recognize preferences, tailor recommendations, and create meaningful "surprise and delight" moments. In both cases, technology operates largely behind the scenes while enabling more thoughtful and individualized guest interactions.

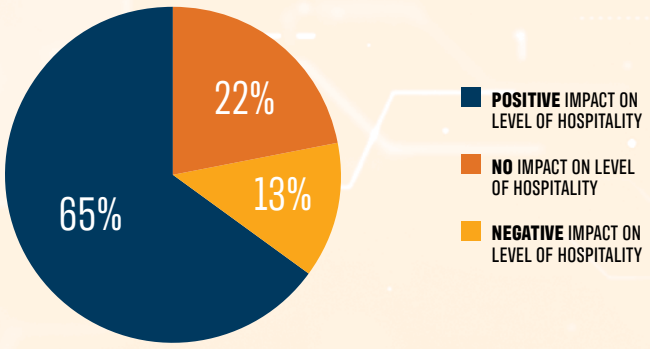
Data and automation further enhance the customer experience by improving food quality, consistency, and operational reliability. Krueger highlighted wireless temperature-monitoring systems that continuously track refrigeration equipment and alert managers when temperatures move outside acceptable ranges, allowing restaurants to address problems before food quality is affected.

A clear takeaway from the interviews was that technology can enhance the overall hospitality experience. Whether through faster service, predictive food preparation, customized loyalty programs, frictionless payments, or improved operational execution, technology is helping restaurants create experiences that are more convenient, reliable, and responsive, while preserving the human interaction that remains central to dining out.

IMPROVING OPERATIONAL EFFICIENCIES

Technology, automation, and data analytics have become central to restaurant operations, enabling operators to improve efficiency, reduce costs, and make faster, more informed decisions. **Restaurant operators are far more likely to view technology as enhancing, rather than diminishing, the guest experience** (Figure 14). Nearly two-thirds (65%) of operators say the use of technology has a positive impact on the level of hospitality their restaurants provide, while just 13% believe it has a negative effect. These findings suggest that most operators see technology as a tool that can support better service, improve efficiency, and help staff meet customer needs more effectively without compromising hospitality.

FIG. 14: HOW OPERATORS SAY THE USE OF TECHNOLOGY IMPACTS THE LEVEL OF HOSPITALITY THAT RESTAURANTS PROVIDE TO CUSTOMERS



Source: National Restaurant Association, *2026 State of the Restaurant Industry*

The restaurant leaders who were interviewed consistently described technology not as a standalone function but as the operational backbone of the modern restaurant. Krueger noted that restaurant management has evolved from paper-based processes to integrated cloud-based platforms that provide real-time visibility into sales, labor, inventory, and performance metrics. He described that as a major "gamechanger" for his business. Similarly, Gillis emphasized that successful technology strategies begin with centralized, accessible data, which serves as the foundation for business intelligence and AI applications.

One of the most significant areas of impact is labor management, long viewed as both the largest controllable expense and one of the industry's greatest challenges. Modern workforce management systems allow operators to align staffing with anticipated demand, often down to the hour. Gillis explained that Golden Corral integrates scheduling, timekeeping, payroll reporting, and employee communication into a single ecosystem, reducing administrative burdens while improving workforce flexibility.

By analyzing real-time and historical data, AI-powered labor optimization tools can identify potential overstaffing or understaffing situations and generate recommendations that help managers balance service quality with labor costs. Many operators report that these tools enable more disciplined labor deployment while freeing managers to focus on team development, customer service, and day-to-day operations.

Technology is also reshaping hiring, onboarding, and employee administration.[3] Cloud-based workforce management systems have largely replaced paper-intensive processes, allowing employees to complete onboarding, update payroll information, and access benefits digitally. Krueger observed that these tools have dramatically reduced administrative work for managers while improving the employee experience. Companies are also beginning to use AI-enabled recruiting tools to screen applicants, automate candidate communications, and accelerate hiring.

3 For more detailed conversations on this topic, see National Restaurant Association, *Transforming Restaurant Recruitment & Retention: Leveraging Technology in a Shifting Workforce Landscape* (March 2025), and *Hiring & Staffing: How Onboarding, Managers, & Technology Drive Restaurant ROI* (April 2026).

In back-of-the-house operations, digital tools are improving both speed and execution. Kitchen display systems (KDS) have replaced paper tickets in many restaurants, providing real-time order sequencing, prioritization, and production management. Krueger cited handheld ordering devices and kitchen display systems as major innovations because they reduce order-entry errors and help ensure that menu items with varying cook times are completed simultaneously. At DineAmic Hospitality, Stoll noted that KDS technology has also created new operational visibility by generating detailed kitchen performance metrics, allowing managers to analyze ticket times, workflow bottlenecks, and staffing requirements.

At Taichi Bubble Tea, technology serves as a key tool for maintaining consistency and efficiency across locations. "A lot of the machines or the technology that we are using inside our store for our employees is helping them keep the standard the same from location to location as well as take some of the workload off of their shoulders," Chen explained.

One example is the company's new cloud-based automated tea machine, which allows headquarters to upload recipes directly to each store. The machine reads QR codes and automatically dispenses the correct amount of tea, ensuring drinks are prepared consistently regardless of who is making them. Taichi Bubble Tea also uses automated nondairy creamer dispensers and is testing a rice-dispensing machine for its sushi burritos. Beyond improving consistency, these technologies help streamline operations and reduce preparation times, an important benefit for customers who expect quick service, Chen noted.

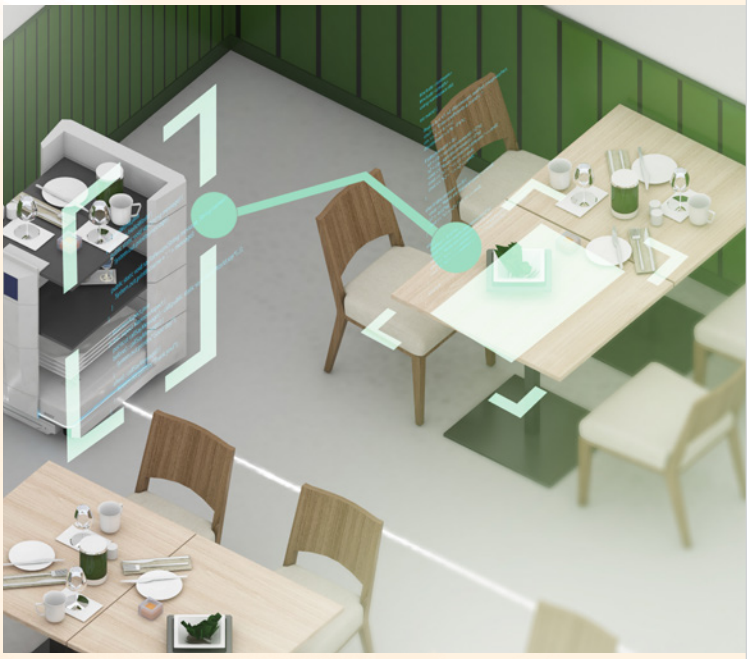
AI is increasingly embedded into kitchen operations and food production. As noted earlier, some restaurants use computer vision and predictive analytics to monitor serving lines, track food depletion rates, and recommend what products should be prepared next. These systems anticipate future demand rather than reacting only to what appears depleted at a given moment, helping improve freshness while reducing stockouts and waste.

Wingstop has adopted a similar strategy, leveraging AI-driven customer relationship management tools and loyalty data to customize offers and communications. Kapoor characterized this approach as moving toward a "segment of one marketing," where technology identifies the next best action for each customer and creates experiences tailored to individual behaviors and preferences.

Technology is also driving significant gains in sourcing, procurement, and inventory management. Digital inventory systems provide real-time visibility into food costs, purchasing patterns, and inventory usage, replacing manual processes and static spreadsheets. Krueger described actual-versus-theoretical inventory tracking as the "holy grail" of restaurant analytics because even small improvements in food cost can have a meaningful impact on profitability. Golden Corral has implemented centralized purchasing systems that integrate ordering, invoicing, and reconciliation, while DineAmic Hospitality has used inventory management software to identify redundant SKUs and increase purchasing leverage across its restaurant portfolio.

AI and advanced analytics are also beginning to enhance procurement decisions. At Fogo de Chão, Kommineni explained that AI tools compare supplier invoices against contracted rates, automatically flagging discrepancies and potential billing errors. Similarly, Taichi Bubble Tea, which sources many ingredients internationally and faces long lead times, has leveraged AI to improve ordering and inventory forecasting. Chen noted that these tools incorporate seasonality, inventory trends, historical sales, planned store openings, and anticipated demand to generate more accurate forecasts.

Other companies are exploring image-based inventory technologies and computer vision systems that automate inventory counts and improve accuracy. These innovations not only strengthen cost controls but also enhance supply planning, reduce waste, and improve operational efficiency across the business.



MOVING FROM REACTIVE TO PREDICTIVE OPERATIONS

Underlying many of these operational improvements is the growing importance of data analytics and forecasting. Executives consistently emphasized that predictive analytics enable restaurants to move from reactive management to proactive decision making. Forecasting tools now support workforce scheduling, production planning, inventory ordering, and supply chain coordination. Wingstop's AI forecasting engine, for example, generates product-level demand forecasts in 15-minute increments, while White Castle uses predictive models to anticipate operational needs and optimize staffing and inventory. These capabilities allow restaurants to improve efficiency, reduce shortages and overproduction, and respond more effectively to changing demand patterns.

Despite rapid advances in automation and artificial intelligence, restaurant leaders overwhelmingly view technology as a complement to employees rather than a replacement for them. Many see AI serving as a digital assistant that helps managers prioritize scheduling, staffing, training, and other operational responsibilities. Across the industry, operators are increasingly using technology to support employee development, improve decision making, and enhance productivity. As a result, technology is often viewed as a tool for elevating workforce performance and strengthening the overall employee experience.

As such, executives agreed that the greatest value of technology lies in removing repetitive administrative work, improving visibility into operations, and enhancing decision making, allowing managers and employees to devote more time to leadership, customer service, and hospitality.

ARTIFICIAL INTELLIGENCE IN ACTION

AI is moving rapidly from experimentation to deployment across the restaurant industry, enabling restaurants to deliver better hospitality while operating more efficiently.

Many restaurant brands are using AI to create more personalized customer experiences based on their loyalty and digital ordering activities, allowing restaurant operators to develop one-to-one relationships with guests. Rather than presenting identical offers to every customer, these systems can suggest frequently purchased items or complementary products, deepening engagement while increasing sales. Similarly, Kapoor described how the company's loyalty platform uses AI and data from approximately 60 million users to support "segment of one marketing" and individualized "next best action" recommendations.

AI is also reshaping customer-facing interactions, particularly at drive-thru locations. While the technology remains relatively limited in scope, AI-powered ordering systems are increasingly capable of handling a significant share of orders without employee intervention. These systems can improve speed and accuracy while also helping address language barriers by supporting multiple languages. As a result, they can reduce pressure on employees and allow staff to focus on other aspects of the guest experience. Adoption and customer acceptance vary by market and other factors, however, and many operators continue to provide customers with the option to speak with a human employee when preferred.

Similar AI-enabled technologies are also being deployed and tested in self-service kiosks, where they have the potential to streamline ordering, improve accuracy, and personalize the customer experience.

White Castle has taken a similar approach with its AI voice assistant, "Julia," which uses natural language processing to handle drive-thru orders. As Susan Carroll-Boser, its chief information officer explained, technology helps "bridge that gap" between customers and restaurants by reducing friction and enabling greater personalization. At the same time, she acknowledged that developing AI-enabled drive-thrus has been a complex learning process, requiring companies to account for variations in speech patterns while filtering out background noise and other distractions that can affect accuracy.

For fullservice operators, AI is often used to enhance hospitality rather than automate it. At Fogo de Chão, reservation and customer data systems provide employees with information about guests' preferences, special occasions, and prior visits before they arrive. Kommineni observed that restaurants will increasingly "know a lot more about our guests when they walk into our restaurant," enabling staff to personalize service and create memorable experiences while preserving the industry's essential "human-to-human connection."



TURNING FORECASTS INTO OPERATIONAL ACTION

Among the most tangible applications of AI in the restaurant industry is demand forecasting. Beyond the customer experience, AI is becoming an important operational tool. Krueger explained that many restaurant technology platforms already incorporate AI capabilities to analyze historical and real-time data, forecast sales, and improve workforce scheduling. By applying predictive analytics to demand patterns, restaurants can make more informed staffing decisions, reduce waste, and improve service execution. AI is also increasingly integrated with technologies that monitor food safety, manage inventory, optimize kitchen workflows, and identify operational issues before they become costly problems.

Wingstop's smart kitchen platform uses forecasting algorithms and more than 200 data points to estimate product demand. These real-time, location-specific forecasts help restaurants optimize production, improving freshness and accuracy while reducing customer wait times. As Kapoor noted, forecasting now occurs "every 15 minutes by location," allowing operators to better match supply with demand and minimize both stockouts and food waste.

Restaurants are also using AI to strengthen supply chain management and inventory control. McGehee explained that Dave's Hot Chicken employs generative AI tools alongside its data warehouse to improve demand forecasting, manage inventory, and coordinate planning with suppliers across hundreds of restaurants. At Fogo de Chão, AI is used to validate supplier invoices against contract pricing. According to Kommineni, these tools help identify discrepancies automatically and provide greater visibility into sourcing costs, while AI-driven analysis of customer reviews helps managers identify emerging issues before they affect guest satisfaction.

ACCELERATING INSIGHT AND DECISION MAKING

The most transformative applications of AI may occur at the corporate level. Gillis emphasized that technology investments must be linked to broader business goals and supported by strong data governance. She noted that Golden Corral has significantly expanded its technological capabilities without increasing staffing levels, calling it "a huge win when it comes to productivity enhancement."



Similarly, McGehee described encouraging employees to experiment with generative AI through recurring "Date with Claude" sessions, saying that AI is fundamentally changing the nature of financial analysis. At Fogo de Chão, executives use AI to generate business insights in real time, allowing questions that once required days of analysis to be answered during leadership meetings. As Kommineni summarized, AI has dramatically improved the company's "speed to insight."

Operators also increasingly use AI to analyze customer feedback from review platforms and digital channels, translating thousands of individual comments into actionable insights that help managers identify emerging issues and make improvements more quickly. These tools allow restaurants to deliver a more consistent experience while responding more effectively to customer expectations.

Finally, by automating routine tasks, improving decision making, and streamlining operations, these technologies can free team members to focus more on customer service, coaching, problem-solving, and other higher-value activities. For example, Gillis described a future in which AI assists Golden Corral managers with scheduling, staffing, and operational priorities, freeing them to spend more time with employees and guests.

Overall, these interviews suggest that restaurants are adopting AI in three interconnected ways: **enhancing customer engagement through personalization and automated ordering, improving operational performance through forecasting and analytics, and increasing employee productivity by accelerating information processing and decision making.** Across all applications, executives consistently emphasized that AI works best as an enabler of strong operations and hospitality, helping employees focus less on routine tasks and more on serving customers. As McGehee succinctly observed, **technology should be viewed as "an accelerant, not a foundation."**

TECHNOLOGY STRATEGY BEGINS WITH ORGANIZATIONAL READINESS

Findings from the interviews consistently indicate that organizational factors, rather than technological constraints, represent the most significant impediments to technology adoption in restaurants. Gillis said technology investments are constrained by the industry's thin margins and must be aligned with clear business objectives rather than individual preferences. Particularly in franchise systems, successful implementation requires broad organizational buy-in and a shared understanding of what technology is expected to accomplish. As she noted, operators must first agree on "what technology is going to do for the business" before pursuing large-scale deployments.



Data readiness is another challenge. Gillis and several other executives stressed that AI and advanced analytics are only as effective as the data behind them. Ambitious AI initiatives often outpace the quality and accessibility of available data, forcing operators to first invest in centralized data systems, standardized definitions, and data governance. As one executive summarized, "AI is as good as the data coming in," reinforcing the enduring principle of "garbage in, garbage out." **For many operators, building a reliable data foundation proved to be a prerequisite for realizing the benefits of AI.**



System integration also emerged as a significant hurdle. Krueger observed that restaurant **leaders often spend considerable time managing disconnected technology platforms and resolving communication failures between systems.** The growing number of point-of-sale, inventory, scheduling, reporting, and training platforms can create complexity alongside efficiency. His experience suggests that operators should evaluate technology not only on individual functionality but also on interoperability. Without integration, the productivity gains promised by digital tools can quickly be undermined by operational friction.

Technology creates the greatest value when it is tied to clearly defined operational problems, supported by strong data infrastructure, integrated into existing workflows, and embraced by employees.

DESIGN TECHNOLOGY AROUND PEOPLE AND PROCESSES

AI-powered ordering systems and other automated technologies can successfully handle many routine tasks but often continue to require human oversight and intervention. The objective is typically to reduce the burden of repetitive work so that employees can focus more on coaching, problem-solving, and guest engagement. Across the industry, automation is increasingly being viewed as a means of enhancing employee productivity and effectiveness rather than eliminating roles.

Customer acceptance can be just as important as technical performance. While AI-enabled ordering technologies are often well received in some markets, adoption rates and customer comfort levels can vary across regions and demographic groups. In addition, language, local terminology, and ordering habits often require systems to be customized and refined for specific markets. Operators also note that customer-facing interactions can become highly complex when guests make personalized, conversational, or highly customized requests. These experiences underscore the importance of extensive testing, local adaptation, and realistic expectations when deploying customer-facing technologies.

Many operators have also found that automation often depends on standardized processes and disciplined operations. Technologies, such as image recognition, computer vision, and automated inventory management typically perform best when products, workflows, and data are organized consistently. In practice, technology cannot fully compensate for operational inconsistencies. As a result, process discipline and standardization are often prerequisites for realizing the full benefits of automation and generating meaningful value.

Change management emerged as one of the most important determinants of success. White Castle executives said companies frequently underestimate the organizational effort required to implement new technologies. Projects often take longer than expected, and overly ambitious deployments can overwhelm staff and hinder adoption. Their advice was to keep implementation scopes manageable and focus heavily on employee engagement. As one executive warned, “Help your people through the change or you’re going to fail on all of your projects.” Training was considered equally critical, with several leaders emphasizing that deploying advanced tools without investing in user education is like “giving a Ferrari to someone who doesn’t know how to drive.”

The interviews also highlighted considerations related to governance, privacy, and regulatory compliance. White Castle’s AI voice-ordering initiative required the company to address biometric privacy requirements and continuously monitor evolving state regulations. Many states have specific laws about the use of AI in hiring and employment decisions. More broadly, several executives acknowledged that organizational policies for AI remain a work in progress, describing current experimentation with generative AI as somewhat of a “Wild West.” These experiences suggest that successful AI adoption increasingly requires governance frameworks, legal oversight, and clear usage standards in addition to technical capabilities.

Taken together, the interviews suggest that **the most successful restaurant operators view technology as a long-term strategic capability rather than a collection of tools.** Technology creates the greatest value when it is tied to clearly defined operational problems, supported by strong data infrastructure, integrated into existing workflows, and embraced by employees. Strong operations, hospitality, and execution remain the foundation of restaurant success, while technology serves as a powerful tool for enhancing those capabilities when deployed thoughtfully and with patience.

THINKING ABOUT THE FUTURE OF RESTAURANTS

Restaurant leaders consistently described a future in which restaurants become more data-driven, predictive, and personalized, while preserving the human hospitality that remains central to the dining experience. Across concepts ranging from quickservice to fullservice, executives viewed technology not as a replacement for people, but as a tool to remove friction, improve decision making, and enable employees to focus more on guests.



A recurring theme about the future was the growing role of AI in restaurant operations. AI, automation, and digital tools can greatly improve both guest satisfaction and operational performance. Indeed, many restaurants are already experimenting with AI voice ordering and predictive cooking systems that combine real-time demand signals with operational data to anticipate production needs. Rather than relying solely on employee intuition, future systems will increasingly forecast demand, optimize food preparation, reduce waste, and improve execution.

Executives also emphasized that AI's full potential depends on strong data foundations. Gillis at Golden Corral, said the future of restaurant technology will be built on integrated data ecosystems rather than standalone tools. In her view, organizations must modernize their technology architecture and eliminate data silos before advanced analytics and AI can deliver meaningful value. As a result, technology transformation is becoming as much an organizational and strategic initiative as a technical one.



On the customer side, many industry leaders expect personalization to become significantly more sophisticated. Digital channels are increasingly being used to recognize individual preferences, recommend relevant purchases, and tailor offers based on customer behavior and engagement patterns. Advances in AI, data analytics, and loyalty platforms are enabling a shift toward highly individualized marketing, where customers are treated according to their unique preferences. As a result, loyalty programs are expected to evolve from simple rewards mechanisms into powerful tools for customized engagement, customer retention, and long-term relationship building.

Several interviewees suggested that technology will make hospitality feel more personal, not less. Stoll stressed that restaurants will increasingly "know a lot more about our guests when they walk into our restaurant," enabling customized experiences and unexpected "surprise and delight" moments. Operators described a future in which technology helps recognize returning customers, recall preferences, and empower employees to deliver more meaningful interactions at scale.

At the same time, executives repeatedly cautioned against allowing technology to undermine the human element that defines the restaurant industry. Gillis noted that Golden Corral intentionally avoids technologies that could diminish guest interactions, focusing instead on solutions that eliminate transactional hurdles while preserving hospitality. One executive summarized the concern succinctly, warning against "leveraging technology to the point where service loses some of the soul and it just becomes transactional." Across interviews, the prevailing view was that technology should augment hospitality rather than replace it.

Operationally, restaurant leaders expect greater automation and real-time management capabilities. Krueger highlighted labor management, scheduling, food cost control, and performance monitoring as areas where integrated technology platforms will become indispensable.

He said cloud-based systems have already transformed restaurant management by providing real-time visibility into business performance, allowing operators to make faster and better-informed decisions from virtually anywhere.

Interviewees also expect AI to expand beyond forecasting into decision support. Carroll-Boser of White Castle described generative AI as "the ultimate UI upgrade," transforming complex analytics into plain-language recommendations that managers can act on immediately. Rather than simply producing dashboards and reports, future systems are expected to explain trends, identify risks, and suggest actions, helping managers focus more on leadership, coaching, and guest engagement.

Taken together, these perspectives point to a future in which restaurants are simultaneously more technological and more personal. AI, predictive analytics, automation, and digital engagement tools are expected to streamline operations, improve forecasting, and deepen customer relationships. Yet executives consistently claimed that technology is only an enabler, not a substitute for strong operations and hospitality. The winning restaurant brands, they said, will be those that use technology to become better, smarter, and faster while preserving the human connections that keep guests coming back.





PART 3:
CONCLUSION

Over the first quarter of the 21st century, technology moved from the edges of the restaurant business to the center of it. More than 4 in 5 surveyed operators said technology adoption has benefited their businesses, but the experiences of restaurant leaders show that its value extends beyond the adoption of any individual tool. Handheld ordering can close the gap between the dining room and kitchen, integrated platforms can give managers real-time visibility into labor and costs, and predictive systems can help restaurants anticipate what customers will order before demand becomes visible. Technology is becoming part of how restaurants operate, make decisions, and deliver hospitality.



The next stage will be defined not by how much technology a restaurant adopts, but by how effectively it connects technology, data, operations, and people. That shift is already underway. Restaurant operators are increasingly using predictive analytics, artificial intelligence, and real-time data to improve forecasting, optimize production, personalize customer engagement, and support better decision making across the organization. These tools enable operators to anticipate demand, identify operational inefficiencies, tailor offers and experiences, and transform data into actionable insights more quickly than ever before. Together, these applications point toward restaurants that are not simply more automated, but more predictive, responsive, informed, and customer-focused.

Technology alone, however, will not determine which restaurants realize that opportunity. Across the interviews, leaders repeatedly emphasized that advanced tools depend on reliable data, integrated systems, disciplined processes, employee training, and organizational alignment. Technology cannot compensate for weak operations, and automation cannot succeed without preparing people for change.

The restaurants best positioned for the future will be those that use technology not to remove people from the experience, but to give them greater capacity to create it. Maintaining the humanity in hospitality is essential not only to the success of individual restaurants, but to preserving the industry's place at the heart of American life, where connections are formed, memories are made, and communities take shape.

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