

MARKET LEADER REPORT

April 2023

2023 RESTAURANT TECHNOLOGY OUTLOOK

Strategies and Insights for Transformative Investments

Presented in partnership with:



What's Next for Restaurant Tech?

The past few years have been a time of dramatic digital transformation for the restaurant industry as technology infiltrated nearly every aspect of the business. And as more sophisticated tools and solutions hit the market, the pace of change is only accelerating.

In its inaugural Restaurant Technology Outlook Report, Nation's Restaurant News Intelligence, the research and insights division of Nation's Restaurant News, set out to identify the biggest trends and potential solutions by going straight to the source. We surveyed hundreds of restaurant operators of all segments, sizes and service models to learn which trends they're watching, where they're investing, and what their biggest pain points are. The result is a data-driven look at the mindset of operators and clear hints about where the market is headed next.

The message from operators on their tech strategies was clear: Despite rough seas, it's full speed ahead. They understand that tech provides an opportunity to solve, or at least take the edge off, their biggest business challenges — and they're ready to invest. If restaurant operators were sitting on the sidelines during the last few years, they aren't any longer. Our survey reveals they almost universally agree that embracing tech is the only way forward.

The road to the tech-optimized restaurant of the future is paved with challenges: Budgets are limited, integration is elusive, and knowledge gaps around more cutting-edge capabilities remain. But despite the challenges, they're forging ahead, reimagining the customer experience, fine-tuning restaurant operations with the latest tools on the market, and cultivating a healthy curiosity around bleeding-edge innovations.

The upshot: Restaurant operators are all in on tech, and the table is set for a transformational couple of years ahead.

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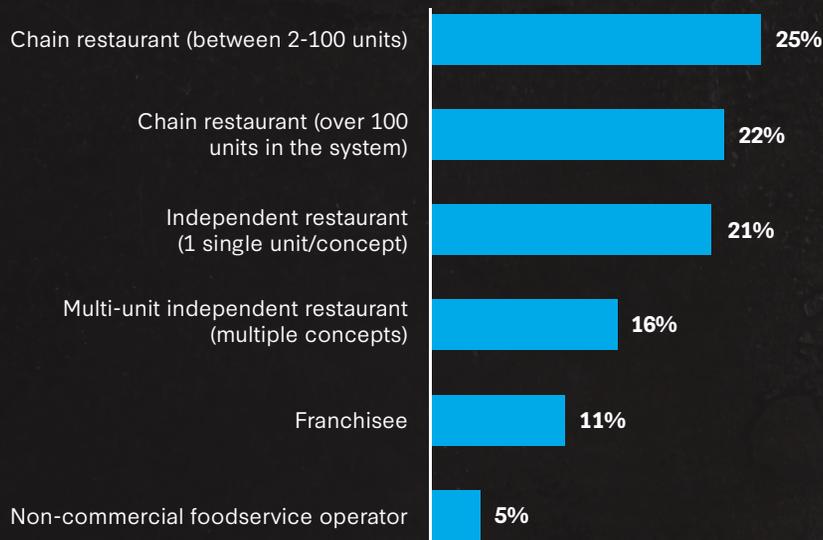
Who We Surveyed

Nation's Restaurant News Intelligence surveyed nearly 400 restaurant operators online over a three-week period in late January and early February 2023. The custom survey was promoted to Nation's Restaurant News' audience via email, editorial products and social media. Respondents provided select demographic information about their businesses, but individual results were anonymized.

Respondents all identified as restaurant operators and represent a diverse mix of industry segments. (Results from those who identified as non-operators were excluded from the sample.) The respondent base was also balanced in terms of business model (chains vs. multi-concept operators or independents), service style (full service vs. limited service) and size (total number of units). Key business decision makers were well represented in the sample, with more than three-quarters holding key executive, operations or technology roles.

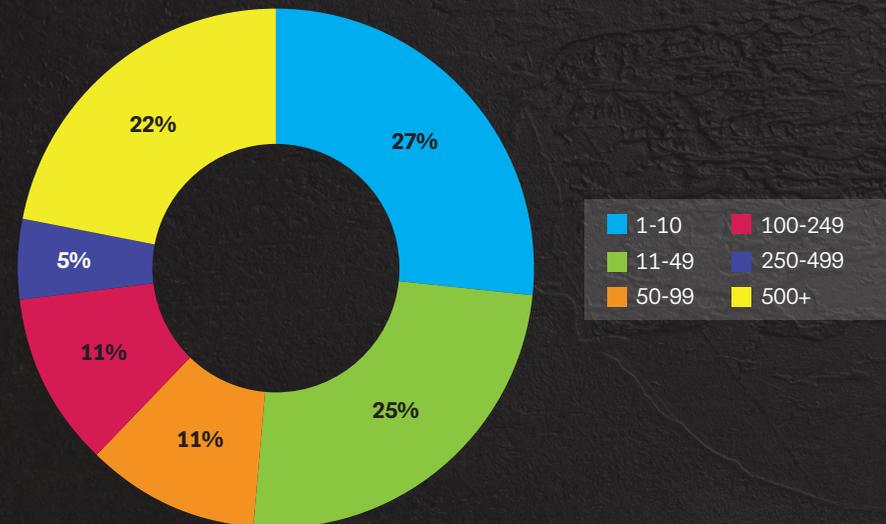
Restaurant Operation

Which of the following best describes your restaurant operation?



Number of Units

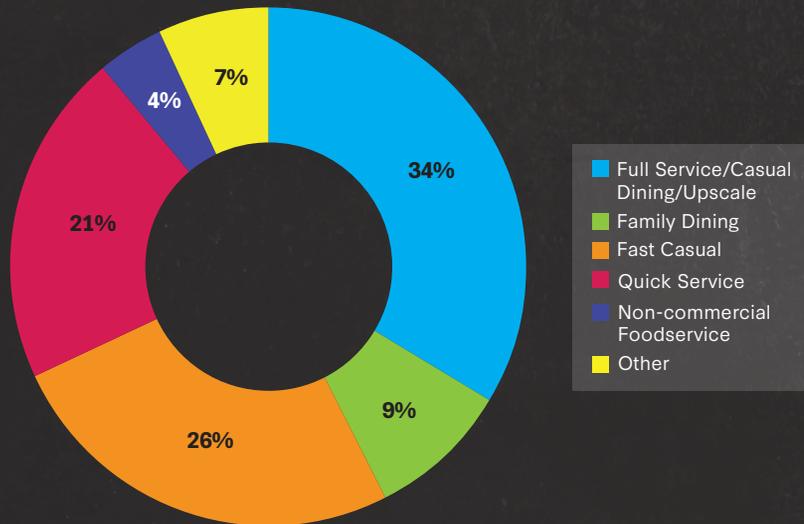
How many units are in your operation system wide?



Who We Surveyed

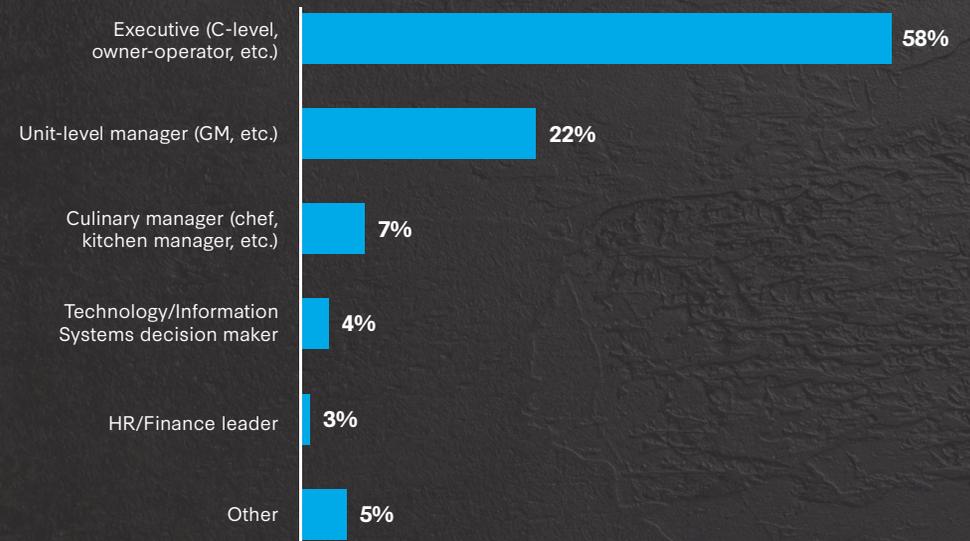
Restaurant Concept

Which best describes your restaurant concept?



Job Function

Which one of the following best describes your job function?



Key Findings



Budgets are tight

Operators broadly agree that technology will help them achieve their goals, but most cite costs as a roadblock to making needed investments. Many are also considering not only the price tag for hardware and software, but also for the employees who could implement and operate new solutions.



But they're investing anyway

Most people plan to invest in new technology over the next 12 months, mostly looking to grow sales. That top-line focus will drive interest in digital-marketing solutions like loyalty programs, but plenty of operators will look for ways to streamline operations and save on labor as well.



Integration remains a challenge

An end-to-end technology platform intrigues most restaurant leaders, but they realize that new capabilities likely add to and augment their tech stack rather than replace parts of it. Operators need solutions that integrate with their current systems and can scale as their brands grow.



Customer experience is king

Decision makers identified a better guest experience as the top priority for their tech investments. That could show up directly to customers in the form of data-driven digital marketing or indirectly through better customer service from employees whose jobs are made easier with technology.



Winning the loyalty game

Digital loyalty was the discrete capability with the most operator interest, and not just for its proven ability to improve guest frequency and satisfaction. These programs are a rich source of customer data, especially when integrated with POS systems, allowing IT and marketing to align.



Labor looms large

Restaurants are turning to technology to address the labor shortage, and that doesn't mean robotic fry cooks or servers replacing humans. Managers want solutions that will boost employee retention, improve training and operations, and use data to forecast labor needs for better scheduling.



Data is an untapped opportunity

The consensus among operators is that there's more customer and transaction data than ever — and possibly too much to optimize. Most are not confident that they're putting their information to the best use, including the self-described innovators already adopting the latest bells and whistles.



They're curious about artificial intelligence

Most restaurant leaders don't use artificial intelligence yet, but they're more likely to be interested than not in adopting AI. They don't necessarily need to run ahead to chatbots; they could likely start with tools like sales forecasting, training modules, and automated scheduling.

Cost and Integration are Major Barriers

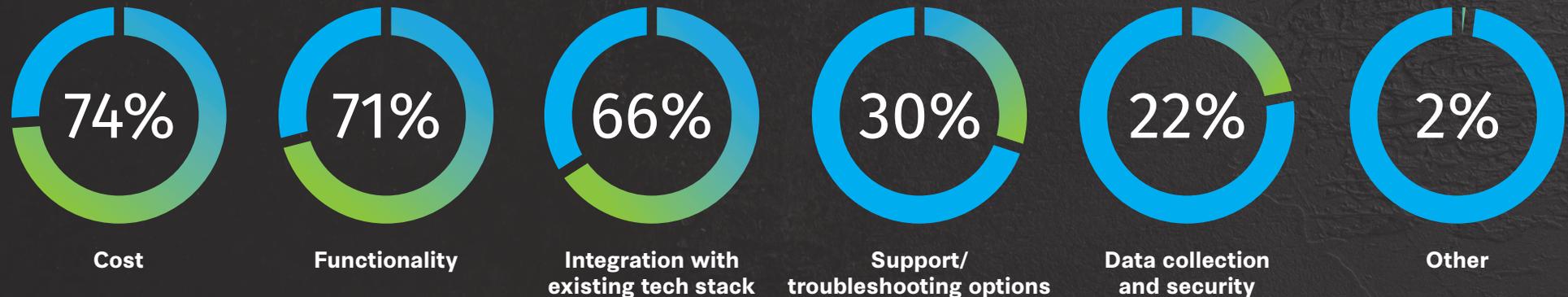
As restaurant operators grapple with a host of challenges, including rising costs, high turnover and shaky consumer confidence, a wide array of technology has emerged to address these woes. Hundreds of tech companies have sprung up in recent years offering both hardware and software that promises to help harness data, streamline operations, cut costs, keep employees happy, navigate supply chain hiccups, drive customer frequency, and automate traditionally manual tasks, to name just a few.

But despite the myriad options available, the path to a state-of-the-art tech stack is hardly a smooth one. Even as operators told us they are eager to incorporate new technologies into their businesses, they cited a number of significant challenges.

The biggest one? Limited budgets.

What Operators Want From New Tech

What are your top three considerations when vetting or investing in new technologies? *(Select up to three)*

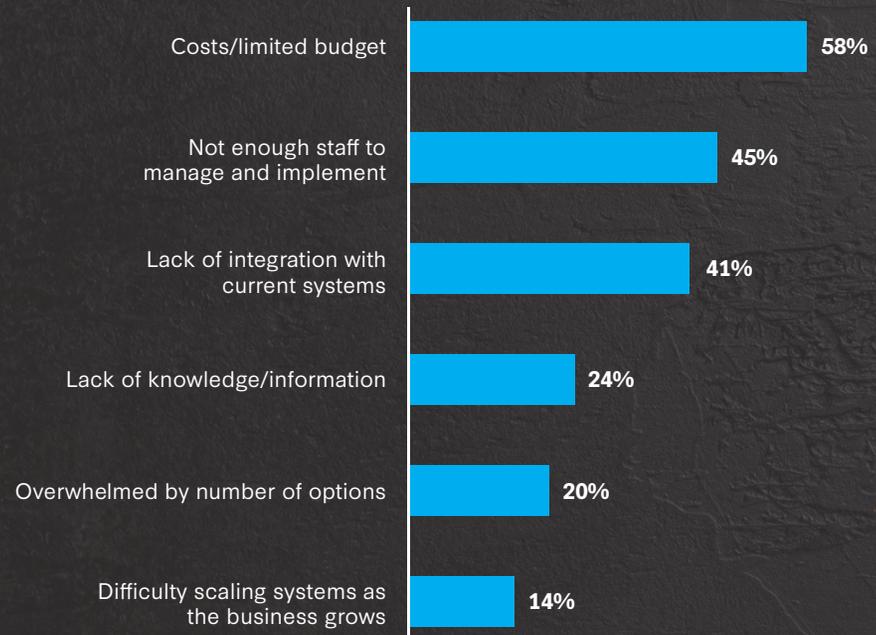


In fact, cost was the main obstacle to adopting new technologies, according to the survey, with **58%** of respondents citing it as a key concern. Rounding out the top three were lack of staff to manage and implement technology (**45%**) and lack of integration with current systems (**41%**). Respondents were also likely to say they were overwhelmed by the available options (**20%**) or had a lack of necessary knowledge about the options available to them (**24%**).



Technology Stack Challenges

What are the biggest challenges your operation faces in building its technology stack?



Difficulty integrating new technologies with existing systems was a theme that came up frequently throughout the survey results. When asked what their key considerations were when vetting potential new technologies, cost and integration repeatedly topped the list. Nearly three-quarters of respondents (**74%**) cited costs as a top-three concern, followed by functionality (**71%**) and integration with current tech stack (**66%**).

The emphasis on cost and integration highlights the reality that the vast majority of restaurant operators have relationships with multiple niche tech vendors — in some cases 10 or more — each serving different areas of the business, and more than a third (**39%**) said they expect to increase their total number of tech providers in the next year.

This comes even as they expressed an interest in integrated systems, including a quarter of respondents who said they would prefer to move toward an end-to-end solution that reduced their number of total tech partners. The ability to seamlessly blend new tech tools with legacy systems will be a key point of differentiation going forward. The brands that can employ the latest technologies without disrupting operations will be the ones to win.



But They're Investing Anyway

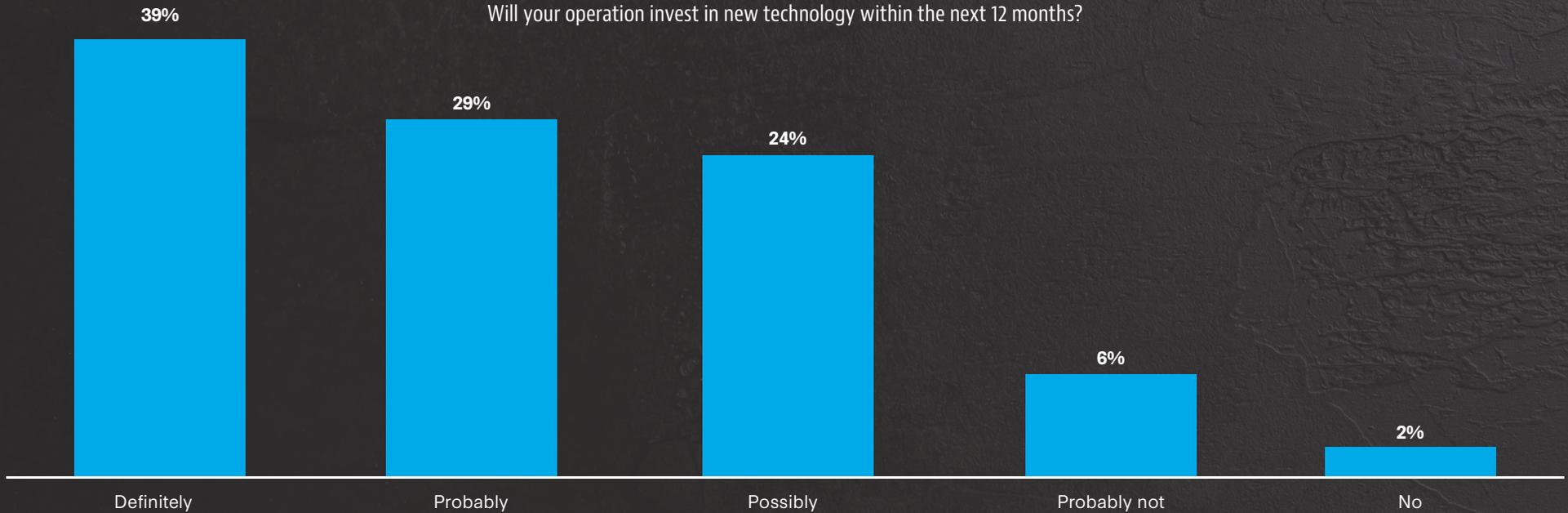
Despite limited budgets and challenges getting new tools to play nice with legacy systems, restaurant operators are not resting on their laurels: An overwhelming majority said they still plan to invest in new technology in the next 12 months.



of operators are likely to add new solutions to their tech stack in the coming 12 months

Operators' Appetite for IT Investment

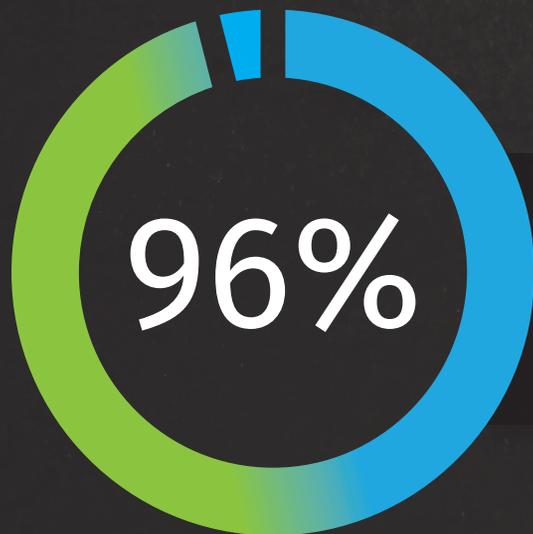
Will your operation invest in new technology within the next 12 months?



More than three-quarters (**78%**) of respondents said technology will be “very important” or “critical” to their ability to meet business objectives in 2023, with another **19%** deeming it “somewhat important.” A mere **4%** said technology was only of minor importance to their businesses.

Furthermore, only **12%** considered themselves laggards who do not prioritize technology, whereas the majority said they actively leverage tech to improve internal efficiencies (**57%**) or to provide better customer experience (**32%**).

It’s a clear statement from operators that a tech-forward restaurant is now table stakes and that most operators recognize they won’t be able to compete long-term without embracing it.



said technology would be important in meeting key business objectives



The key goals for 2023 that operators said they plan to leverage technology against were driving sales and customer frequency (**64%**), lowering operating costs (**44%**) and boosting retention and productivity (**37%**). Reducing labor costs (**33%**) and deepening customer relationships (**26%**) rounded out the top five.

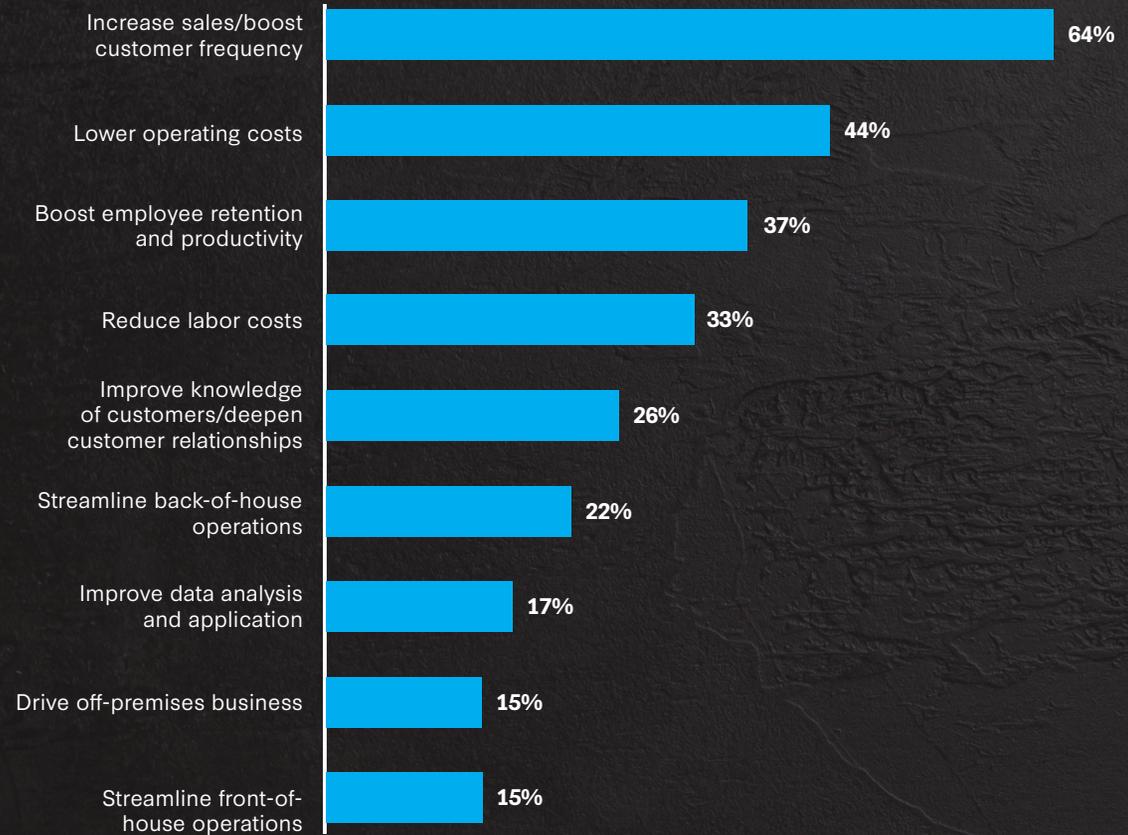
Their top two goals — increase sales and lower costs — may come as no surprise, as they’re at the core of any business’ success. But they offer a roadmap for where restaurant operators plan to direct their tech investments this year and beyond. Specifically, customer-facing tools that drive engagement and frequency — think loyalty and reward programs — were top of mind. A close second: Reducing labor costs by cutting turnover and maximizing the productivity of staff. In fact, productivity and efficiency was a key focus in general, with respondents repeatedly citing tools that streamline operations in both the front and back of the house.

One potential challenge to this momentum: inertia. Despite widespread interest in adopting new technology in the next year, significant portions of respondents said they are relatively happy with their current tech stacks and may not add new tech vendors in the coming months. More than half (**54%**) of respondents said they are “somewhat satisfied” with their current tech stack, while more than a third (**41%**) said they do not plan to change the number of tech vendors they work with this year.

Coupled with limited budgets and other financial pressures, that hesitation could stall progress, unless they see a compelling ROI for the business, or the pressure to keep up with tech-savvy competitors becomes too strong. It remains to be seen if those on the fence — that **24%** of operators that previously said they will “possibly” add new tech in the next months — will be motivated to make big tech moves soon, or if they’ll take a wait-and-see approach.

Operators’ Immediate Priorities

What are your operation’s top objectives for the next 12 months? (Select up to three.)



Helping Restaurants Navigate the Crowded Tech Landscape

Michael Schatzberg of Branded Hospitality Ventures shares how the online marketplace Boom helps restaurants access information and connections to build their tech stacks



Michael Schatzberg, founder and managing partner of hospitality investment platform Branded Hospitality Ventures, which developed the online restaurant tech marketplace Boom, spoke with Nation's Restaurant News about how Boom strives to support the industry through this transformational time, plus what it can tell us about what restaurants are prioritizing now.

Tell me a little more about Boom, and what need it serves in the market.

Boom is a platform to connect buyers and sellers. Most restaurant operators are not tech people. We're thinking about menu design. We're thinking about good food. We're thinking about lighting and music. We're thinking about everything except for technology – that's just not in our DNA. We need a place that anytime, 24/7, people can go and find tech solutions.

[Boom has] well over 500 tech partners on there, and there's about 300 in the pipeline now. Now companies can jump into the marketplace and literally onboard themselves — there's a quick vetting process on our end — and then start getting lead gen and ratings and reviews, and start talking to restaurant operators and connecting the dots.

What are the key benefits for users?

A lot of operators don't have an opportunity to go to some of these events and trade shows. Now you can just go to a site and explore on your own. Click around, find a website, go click around that website. You can mark what you like, and say, "Hey, I'd like to learn more." You do it on your terms, the way you want. It's an opportunity for decision makers, on their

terms, to search, to look for what [they] need ... to see what's happening and what's new.

Why is it important to have a tech marketplace dedicated to the foodservice industry?

If there's software out there that is agnostic to industry, it's just not going to work for restaurant operators because it's built by somebody who doesn't understand our business. Our business needs are just so different. Our business is different in the way we pay employees, our rules, our hours, our laws. You really need things that are really built and designed for the industry.

What types of technology are Boom users gravitating toward now?

Loyalty and customer engagement — that's something that we're seeing a lot. There's a lot of really cool automated tools out there to help with your email marketing and social media.

Operators have been collecting an incredible amount of data ... but we had no idea what to do with it. So getting their e-mail, getting their phone number, understanding who they are, what do they order, what do they like, what they don't like? If you don't know who your customer is and you don't

have any contact with them, it's really hard to engage with them. If we want to succeed, we're going to have to embrace some of this tech that retailers have embraced for a long time.

Purchasing, too — we're seeing a lot of people gravitate towards outsourcing their bookkeeping, inventory and invoicing, which was always a pain point. Very rudimentary, very time consuming. So now we see a lot of folks that are scanning the invoice, and throwing out the piece of paper. It's up in the cloud somewhere, it automatically goes into QuickBooks for them.

What advice would you give to growing brands that want to add innovative tech but that lack the scale and deep pockets of a major national brand?

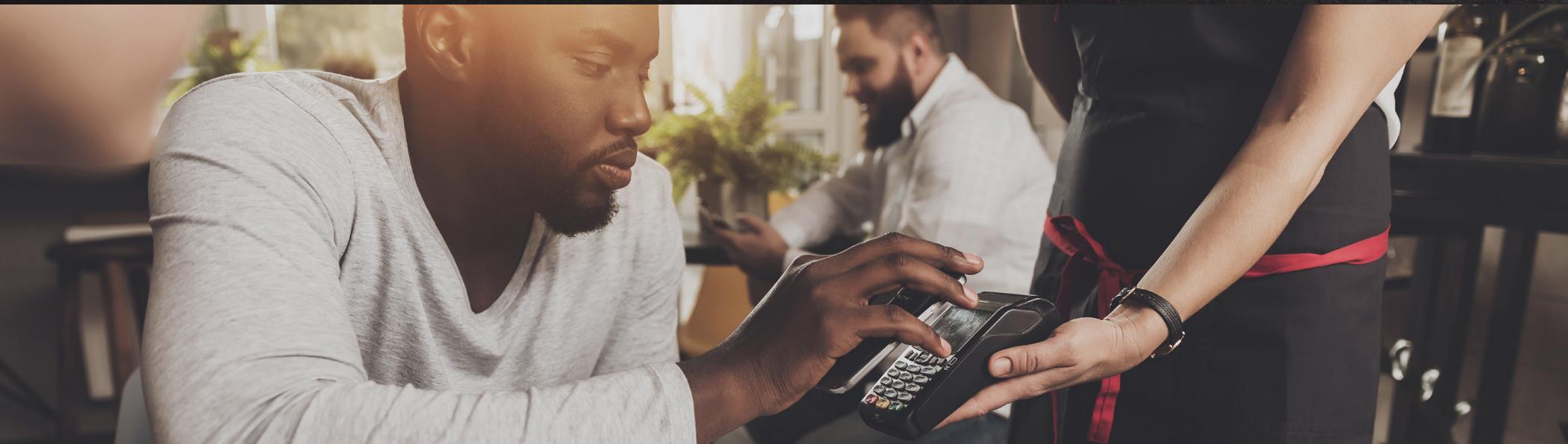
There's help out there for you. Boom is one area that you can get some help. It's a great starting point to just play around and explore and just see what's out there.

You don't have to be a technologist. You don't have to be the guy who invents it. You don't have to be that savvy, if you really know your business. So just identify what you think your

problems are that you wish you could solve for, and then go and look on a place like Boom and just see what exists.



BOOM is a digital e-commerce platform providing best-in-class technology, innovation, professional services and suppliers for the entire spectrum of the hospitality industry. For more information, visit <https://www.boom.store>.



Customer Experience is King

As they look to augment their tech stacks in 2023 and beyond, one area of focus stood out from the pack: customer experience.

Guest experience — and tools that support it like loyalty programs and streamlined digital-ordering experiences — repeatedly came up as most important. All of this aligns with the earlier stated goal of increasing top-line sales and customer frequency, as operators recognize that driving return visits from their most engaged customers is a powerful lever to pull amid a shaky economy and rising costs of goods. Asked to rank their priorities when considering new technologies, customer experience was No. 1, followed by performance and productivity, employee experience and finally business support tools.

What Restaurants Value in Tech

As you consider new technologies, rank the following priorities in order of importance

1. Customer experience
2. Performance and productivity
3. Employee experience
4. Business support



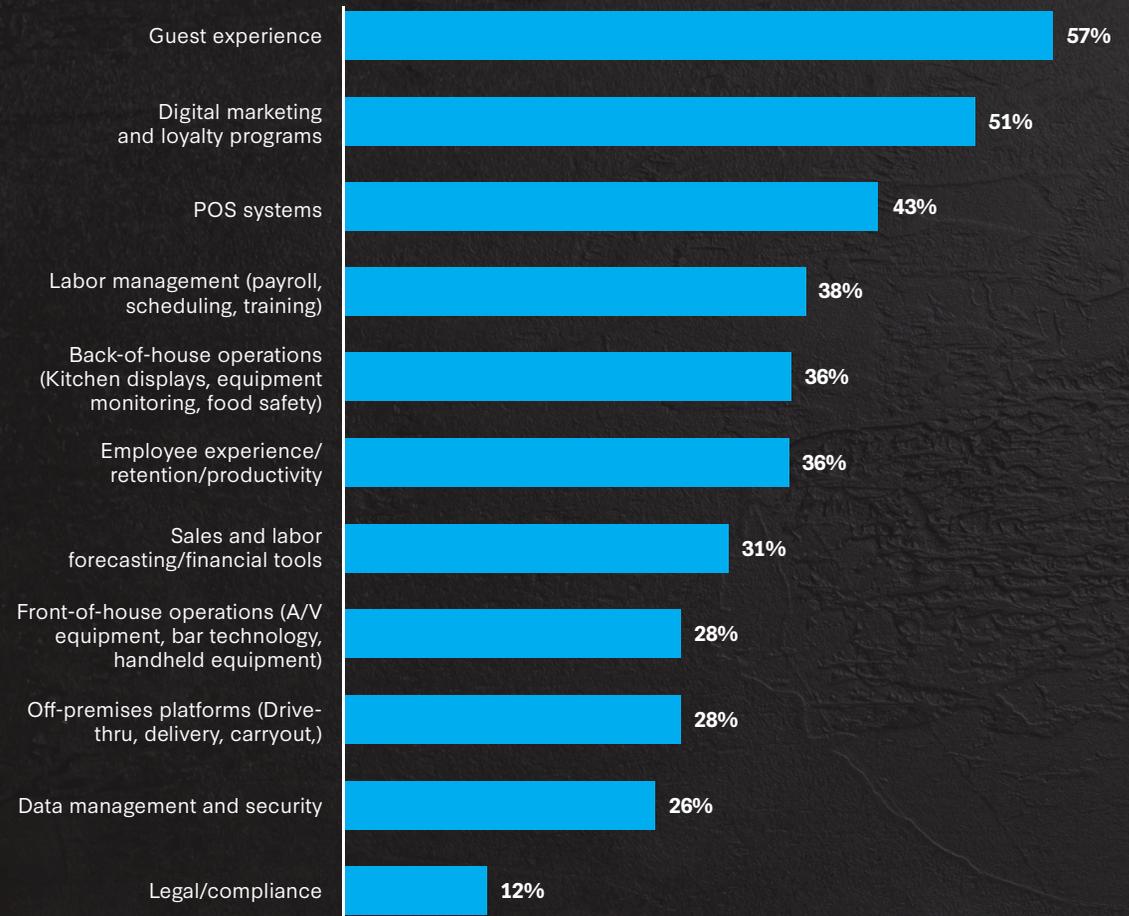
Targets of Tech Investments

What areas of your business are you most likely to support with technology investments in the next year?

When asked which areas of the business they were most likely to support with tech investments in the next year, guest experience (57%) and digital marketing and loyalty programs (51%) were the top two most cited responses. POS systems (43%), the third most-cited response, can also be correlated with guest experience to the extent that they streamline ordering and payment functions and support the employees who would provide hospitality. Those responses edged out a number of key operational concerns, including labor management, back-of-house operations, employee experience, sales and labor forecasting, and front-of-house operations.

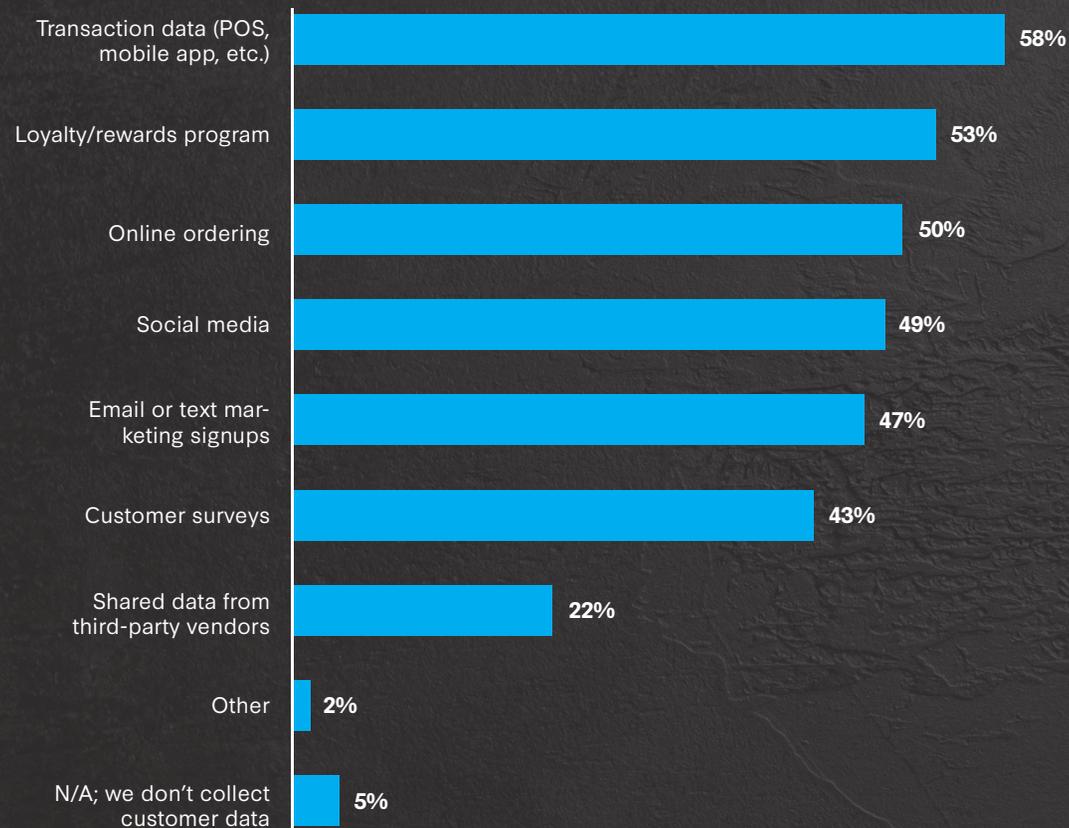
Limited-service concepts were most likely to say they will be adding technology to support loyalty programs in the next year, with 61% of QSR respondents and 58% of fast-casual respondents saying so, compared with 44% in family dining and 40% in casual dining.

Digital marketing and loyalty programs once again topped the list of technologies restaurant operators are interested in learning more about, at 41% of respondents, edging out a number of workforce and operations functions.



Primary Sources Utilized to Gather Customer Data

What are your primary sources for gathering data about your customers?



There is, of course, another key benefit of loyalty programs beyond customer engagement and frequency: customer data. When leveraged effectively, loyalty programs offer a rich opportunity to collect and apply customer data from their most engaged users.

Nearly all respondents in the survey (**95%**) said they collect at least some customer data, with loyalty and rewards programs being the second most frequently cited source. Other key sources were transaction data from a POS system or app (**58%**), online ordering (**50%**), social media (**49%**), email lists (**47%**) and customer surveys (**43%**).

Loyalty was an especially important source of data for limited-service chains, with **70%** of QSR and **66%** of fast-casual respondents citing it as a primary source. That compares with just **47%** among casual-dining and upscale brands, and **33%** among family-dining concepts.

Notably, those sources dwarfed the least-cited response, shared data from third-party vendors (**22%**), reflecting a collective understanding, developed over the last few years, that third-party relationships, particularly in the delivery space, can be useful in terms of reach and exposure, but are not lucrative sources of customer data.

As a result, there's been an active shift in the industry to engage customers on platforms where they have greater control of the relationship — and the associated data. How effectively they're applying that data remains a work in progress, as we'll explore later in the report, but there seems to be a universal recognition of the power of a restaurant loyalty program to drive sales and frequency.

Labor Looms Large

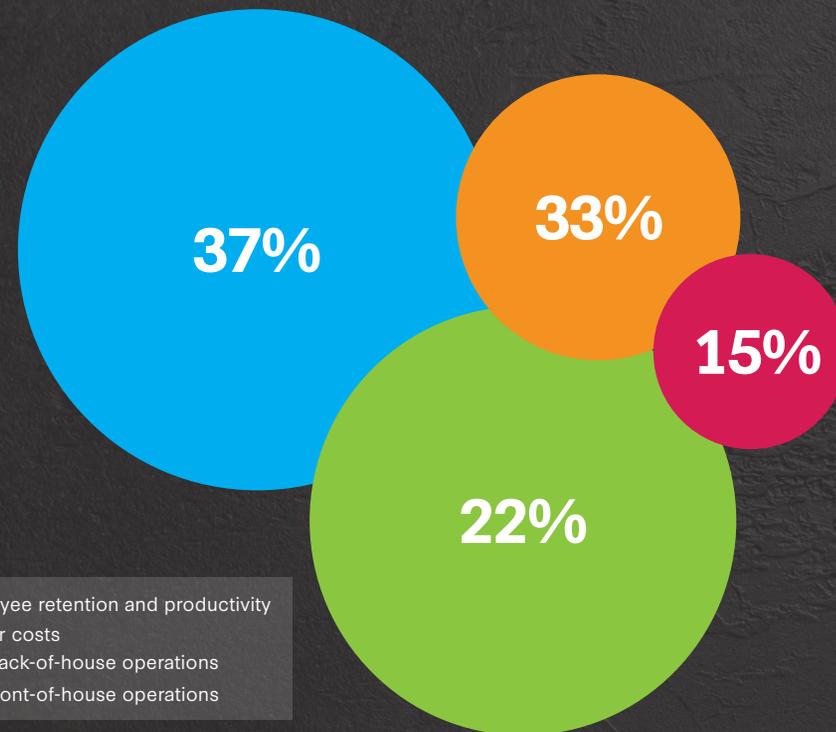
Restaurant leaders have also given nearly as much consideration to their employees and to the ways technology can improve jobs in the front or back of house.

In response to the industry's labor shortage of the past few years, operators have had to prioritize employee retention and training above other ways to trim labor costs, and their technology preferences are beginning to reflect this.



Operators' Priorities for Labor

What are your operation's top objectives for the next 12 months? *(Select up to three.)*



- Boost employee retention and productivity
- Reduce labor costs
- Streamline back-of-house operations
- Streamline front-of-house operations

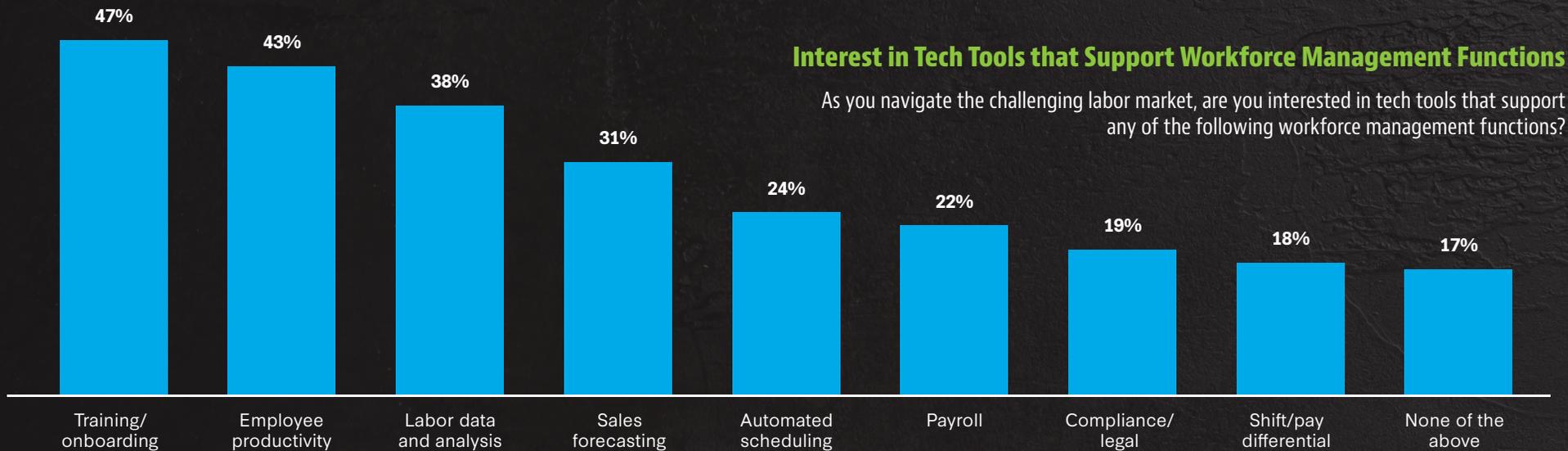
While one in three respondents indicated that reducing labor cost was a priority for the next 12 months, slightly more operators (**37%**) said improving retention and productivity among staff would be important. More than two in five leaders of casual-dining and quick-service locations emphasized the need to limit staff turnover, compared with slightly more than a quarter of respondents at family-dining or fast-casual restaurants.

Both retention and controlling labor costs far outranked streamlining back-of-house operations (**22%** of respondents) or front-of-house ops (**15%** of respondents).

Restaurateurs aren't running to robots to replace or "right-size" their staff. Sure, they're interested in automation, but their most likely labor-saving solutions would digitize the onboarding and training cycle for new hires or automate the scheduling process after analyzing a restaurant's labor hours and forecasting sales and staffing needs.

A separate question revealed that interest in labor-enhancing tools outweighed interest in automation as a general concept in casual dining, likely reflecting the premium that full-service locations place on high-touch service.

Leaders at casual-dining brands were more likely than their peers in other segments to be interested in labor management software, forecasting tools, and POS systems — with the latter presumably integrating and using the first two — as well as back-of-house tech like kitchen management systems. Among all the kinds of technology surveyed in that question, automation piqued the interest of **30%** of respondents, but no significant differences arose among segments.



How Artificial Intelligence is Transforming Workforce Management

Stephen Kirkby of LifeLenz on why machine-generated restaurant schedules can lead to happier employees, lower turnover and increased profitability



Stephen Kirkby, founder and CEO of LifeLenz, a cloud-based workforce management platform for quick-service, fast-casual and full-service restaurants, recently spoke with Nation's Restaurant News about how artificial intelligence-driven tools are empowering operations with "crazy accurate" forecasts, and how automating management tasks like scheduling can lead to lower turnover, happier teams and better margins.

Why is workforce management such an important area for restaurant operators to focus on as they build their tech stack?

[Labor] is one of the highest costs you have as a business and if you can optimize, in a compliant manner, your labor costs, you can generate a lot more profit. And there are really sophisticated – but also really simple – tools out there to optimize [labor] and turn it into sales. [Our software can] generate a 1% to 4% improvement in profit on a per location basis using machine-generated schedules. They are putting the right people who have the right skills in the right places at the right time. We make sure that we optimize headcount in accordance with demand. There's time keeping, there's compliance, there's payroll. It's a full platform in that sense. But that key value prop right out of the gate is [improved profit].

How exactly do LifeLenz's tools work?

What we've got is a platform that starts off with forecasting — what transactions will be, sales, what types of products [will move] — and you know that at 15-minute increments. It matches that with the labor models from [your] company to come up with an automated, optimized schedule. There's other types of information that comes into it: historical trends, seasonal information. And again, they're all self learning.

Interestingly, we find that when a human changes the schedules, 90% of the time they make the schedule worse. It's best if they just let the machines run it for them, let the algorithms optimize outcomes.

What is the impact on restaurant operations?

We've found a lot of our operators don't touch the [automated] schedules, so they get all that time back. All that time back from producing schedules is in their hands. So they can walk the floor so they can talk to the staff. And then as the reports and the dynamic KPI's are coming out, they can make decisions in real time in terms of how they're running their location.

The manager can see his forecasted sales. He can see his labor, he can see what's called his daily activity report. You are able to [add labor targets] and the machines would generate it for you. That manager can actually see all the time clocks, if they choose. They can see if someone's out or needs to go out on a break.

Staff members can swap shifts, they can drop shifts, they can have conversations. Staff satisfaction improves because they're finding they're not under-staffed at the wrong

times, [they're] working with people with the right skill sets. And you don't need to recruit as much because you don't have as much churn.

How will AI and machine learning impact the restaurant industry in the coming years?

What you're seeing a lot of now is what's called generative AI — the chat bots. Our self-tuning model is on the same path to being generative AI, where it's coming up with suggestions. We will see that coming to market over the next couple of years. We're going into real-time decision making [where] it's actually

being suggestive on forward-looking management processes ... to augment the owner-operator to augment the manager, to make sure that their lives are easier.

How do you communicate the potential of AI and machine-learning tools to restaurant operators?

I think the best way that we communicate is through dialogue around profit. Because they don't wanna know how we do it; they don't care. They just want to know how it impacts their business. If you can show tangible outputs, then the AI is working. You'll be judging it by staff staying happy, staff

leaving less, feeling valued. The business will be judging it by their profit and loss. And if it works, you're happy. So that's how we look at it, too.



LIFELENZ

Live. Life. Better.

LifeLenz is an automated workforce platform that leverages artificial intelligence and machine learning to address common challenges restaurants face around sales and labor forecasting, optimized scheduling and real-time shift running. For more information, visit <https://www.lifelenz.com>.



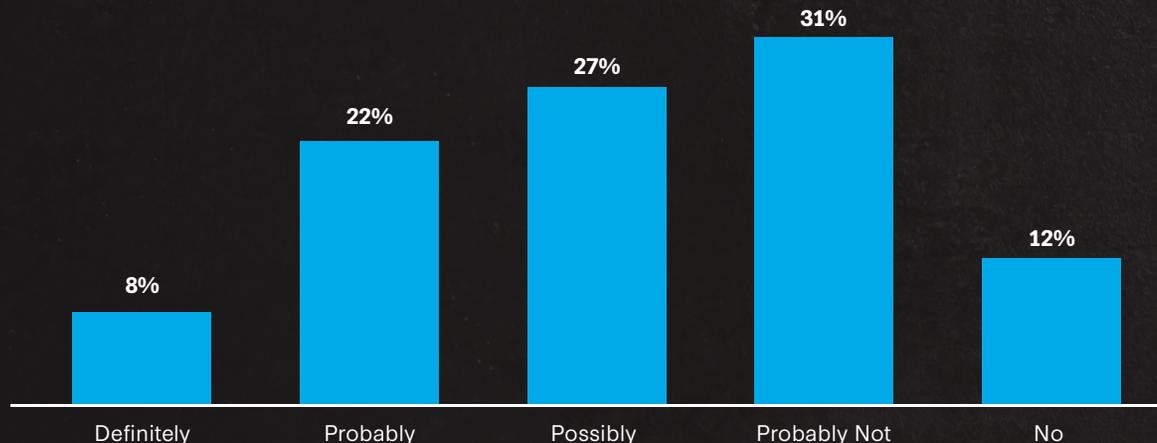
Data: An Untapped Opportunity

Where is the restaurant tech market headed next? The results of our survey offer some clues. Restaurant operators indicated several areas where they saw opportunity but were hampered by logistical challenges or potential knowledge gaps. Specifically, three areas emerged as these next frontiers for restaurants of all types and sizes: use of customer data, integration of new technologies with legacy systems, and the ability to harness the latest tools, such as artificial intelligence. These three came up repeatedly as areas that can be improved and offer an indication of where the industry’s attention — and investments — are likely to follow. **Bottom line:** The restaurants that are able to crack the code on these three areas will have a key competitive advantage in the future.

There seems to be a clear understanding among restaurant operators that customer data is an incredibly powerful tool to drive sales, frequency and engagement. We saw elsewhere in the survey that nearly everyone’s collecting it, and they’re going all in on platforms like loyalty that can collect more, and better, data. They’re gathering data from a wide variety of sources, including POS transactions, rewards programs, surveys, and even social media. **There’s just one problem:** Most of them haven’t figured out what to do with it.

Optimizing Customer Data

Do you feel that you’re optimizing the customer data you have?



7 in 10 respondents question if they are optimizing the customer data they collect.

Data use looks to be the great equalizer for the restaurant industry, as even the concepts that tend to be more sophisticated in this area — large chains and limited-service concepts — were just as likely to say they're not using their data effectively as smaller or full-service counterparts.

Improving data analysis and application was a top-three objective for **17%** of respondents overall, but it was overshadowed by more pressing business goals like driving sales, cutting costs, and managing the workforce. Fast-casual and quick-service operators were slightly more likely to say data application was a key priority, at **21%** and **19%**, respectively.

Interestingly, data security was a relatively low concern among restaurant operators with only **22%** saying it was one of their top 3 business concerns. That number is likely to rise in the coming years, however, as the sheer volume and depth of customer data from a growing variety of sources raises questions around where and how securely it's stored.

Watch for data use and application to be a major area of focus in the coming years, as the strategic application of data becomes a key competitive advantage.



Innovation vs. Integration

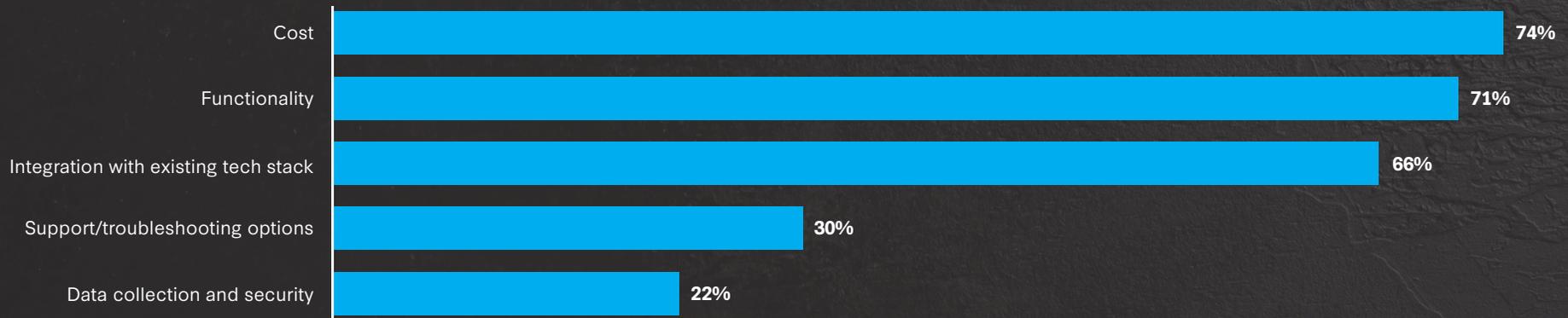
The proliferation of new technologies in the restaurant space over the past few years has given operators access to thousands of tools designed to increase their employees' productivity, streamline their kitchens, elevate their marketing, drive top-line sales and so much more.

But as they adopt problem-solving digital tools throughout their restaurants, a new problem begins to emerge: How do restaurants make all these disparate systems work together?

Even as they signal interest in embracing new technologies, operators in our survey had a clear message: It's got to work with what I've already got. Functionality and integration with current tech stack were the second and third most cited considerations when vetting new technologies, with only cost ranking higher. Nearly three-quarters of respondents (**71%**) cited functionality as a top concern, and two-thirds (**66%**) cited integration.

Top Concerns When Assessing New Tech Tools

What are your top three considerations when vetting or investing in new technologies? *(Select up to three)*

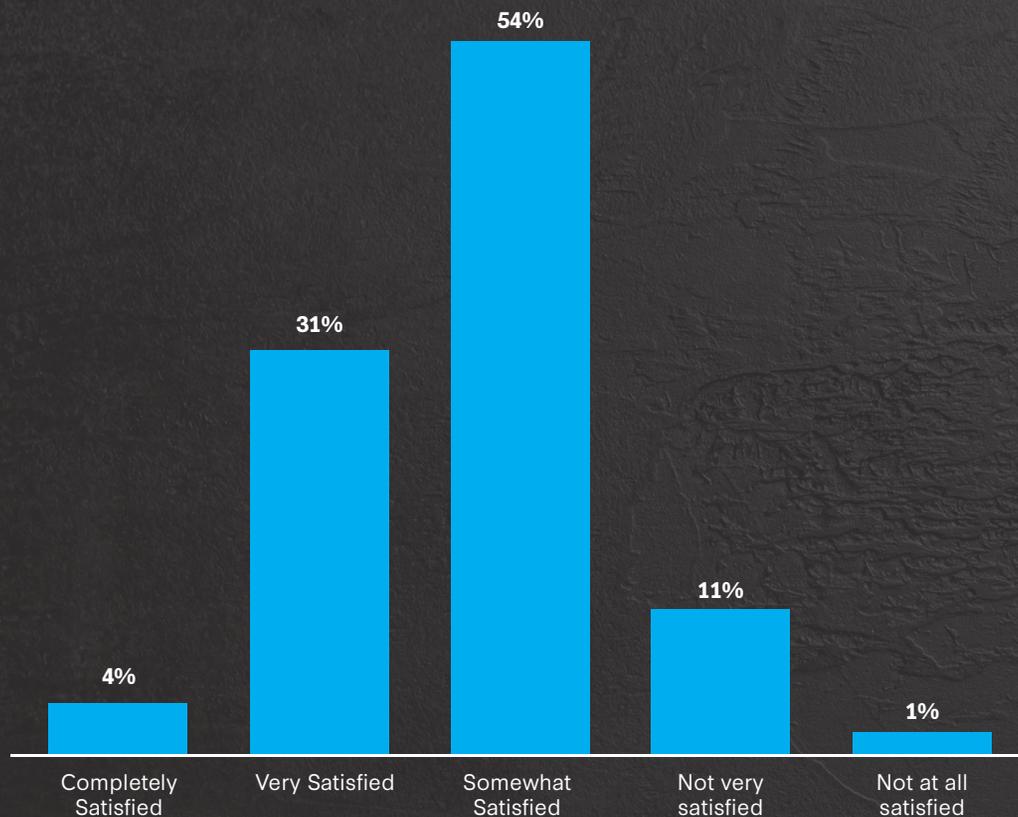


When asked about the pain points they face around their current tech stack, lack of integration with current systems was the third-biggest challenge, with **41%** of respondents citing it. Difficulty scaling systems effectively as the business grows was cited by **14%**.

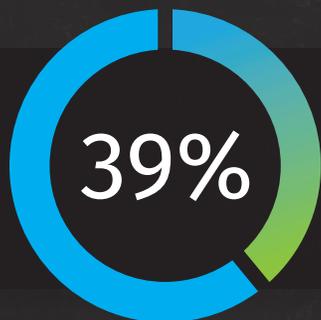


Satisfaction With Current Technology Stack

Generally speaking, how satisfied are you with your current technology stack?



Given that the majority of respondents (**68%**) currently work with at least three different tech vendors and more than a third (**39%**) said they expect their number of vendors to increase in the next 12 months, integration is likely to become an increasingly critical issue.



said they expect their total number of tech providers to increase in the next year

Those competing priorities — wanting to add new tech solutions, while also craving a more cohesive user experience — will likely fuel a shift toward end-to-end systems. The market already appears to be moving in this direction, as tech providers consolidate, platforms expand their capabilities and more end-to-end solutions emerge.

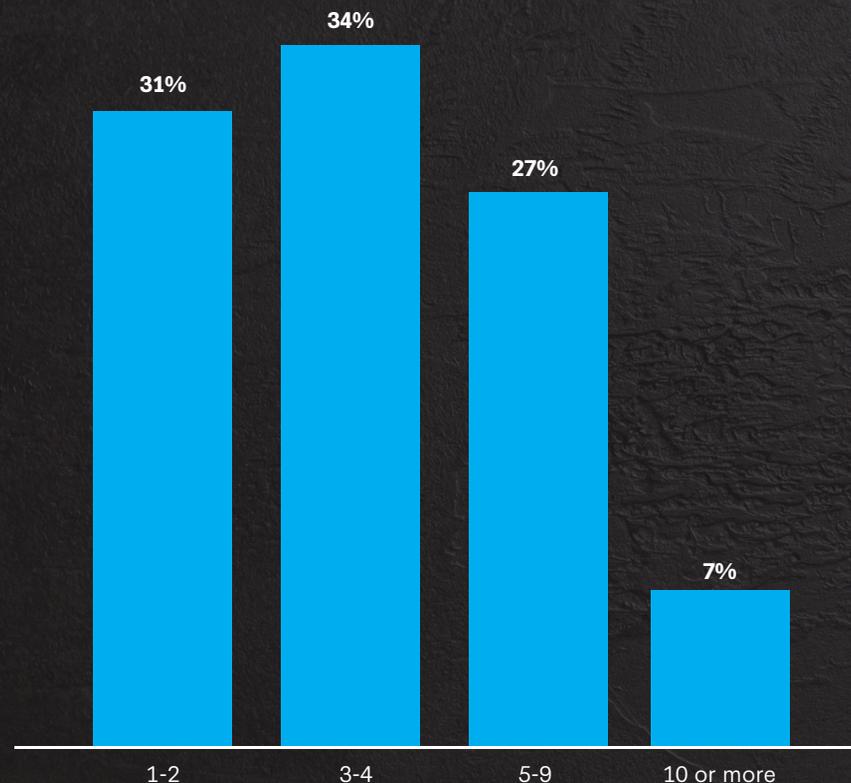
Operators in our survey repeatedly said that they're craving a more integrated experience. Two other key findings:

- A quarter of respondents said they currently work with multiple tech providers but would like to move to an end-to-end solution.
- More than half (**52%**) of respondents said they were "very" or "extremely" interested in managing multiple endpoints, (such as POS system, kiosks, kitchen display systems, etc.) via a central console.

The realities of managing larger, more complex tech stacks could present a key roadblock for some restaurant companies in the coming years. Meanwhile, those that can successfully navigate this obstacle will have a clear leg up.

Number of Tech Vendors

How many tech vendors do you currently work with?



How Integrated Point-of-Sale Devices Drive Efficiencies at High-Volume Restaurants

Jay Burdette, senior director of Panasonic Connect of North America on why the right hardware is critical for restaurants, and what the shift toward cloud-based systems means for operators



Jay Burdette, senior director of Panasonic Connect of North America, a provider of POS, drive-thru, hand-held and signage technologies, recently talked with Nation's Restaurant News about how restaurant operators can leverage networks of integrated tech solutions to drive sales and improve operations throughout their restaurants. He also discussed how the evolution of artificial intelligence and the shift toward cloud-based, fully virtualized environments are shaping the future of restaurants.

What are some of the biggest challenges facing restaurant operators today, and how can technology help address them?

We see evolving technology continuing to be the primary challenge for restaurant operators. The move to cloud-based systems is challenging, and one of the key areas for us is to provide solutions that support their transition. Our goal is to provide solutions that help protect the operators' investment in technology throughout the journey. This shift towards lightweight clients in the restaurant, in co-existence with legacy systems, is at the core of our product strategy.

Additionally, our restaurant technology solutions allow operators to use their labor resources more efficiently. The staff can be more consistent and effective in their work which can help to reduce waste and when engaging with customers.

What are some of ways Panasonic Connect helps restaurants navigate those challenges?

We offer durable and reliable POS Terminals, High-Definition Audio Drive-Thru Communications Systems, Digital Signage with Content Management Solutions, and TOUGHBOOK® tablets. These restaurant technologies allow operators to have

more control over their vast network of devices, including POS, KDS, and Kiosk.

How do those tools streamline restaurant operations? What impact can they have during a busy shift in the restaurant?

Our eco-system of technology solutions is built to handle the heavy demands of the restaurant. This highly reliable and durable equipment provides improved uptime in the restaurant. Restaurant staff does not need to stop taking orders because the headset battery needs to be replaced, or a crew member is outside changing the static menu board, or a POS terminal is out of use because it is waiting to be serviced. ... Our Attune Drive-Thru Communication System provides high-definition sound quality which enables the staff to hear their customer's orders the first time, without asking for them to repeat it and adding to improved order accuracy and increased customer satisfaction.

Our restaurant technologies benefit the industry's nature for its fast-paced and heavy demand environment. Restaurant operators require equipment that is durable and rugged yet appears sleek and stylish. With our flexible mounting options, our products can fit into the restaurant's design to meet their unique needs.

In what ways does Panasonic Connect prioritize seamless integration and connectivity throughout restaurants?

Operators want to streamline the number of vendors they work with, and we can support the restaurant's needs in many key areas. ... With our diverse product offering, we can provide comprehensive solutions that include deployment, installation, integration, maintenance and support. Panasonic Connect is a single source provider for all of these services. Our hardware solutions are operating system and application software agnostic. On our newer products, we support Android, Linux, and Windows. This gives operators the flexibility to integrate multiple software applications across any of these operating systems.

What trends are you seeing in the restaurant tech space right now?

We are seeing a move towards cloud-biased applications, virtualized environments, and the use of AI to augment the team member's productivity which directly impacts profitability and the guest experience. AI-based automated order taking, for example, augments the team member's job by enhancing their productivity and freeing them to be more focused on the customer. We are exploring options including the optimal use of AI to augment productivity, profitability, and usability.

The migration from on-premise to virtual cloud environments, is going to take some time to achieve. Some brands may require the co-existence of the two on an indefinite basis. Our systems support full legacy to part legacy/part virtual and full virtual.

Panasonic CONNECT

Panasonic Connect supports restaurants with a diverse portfolio of hardware, software and professional services designed to help their teams work smarter, faster and more efficiently in all areas the restaurant. For more information, visit <https://na.panasonic.com/us/panasonic-connect>.



The AI Learning Curve

When it comes to “next big thing” technologies, none looms quite as large as artificial intelligence. Though AI has been used in the restaurant industry for years, particularly to augment drive-thru or phone ordering, it’s gaining new buzz amid the evolution of generative AI that can create original content — the most prominent example of which is ChatGPT, which has been grabbing headlines recently.

Our survey showed that restaurant operators have a large appetite for using AI in their businesses, despite the fact that relatively few say they are using it now. Use of artificial intelligence emerged as a somewhat of an aspirational move, with **41%** saying they are not currently using AI but would like to.

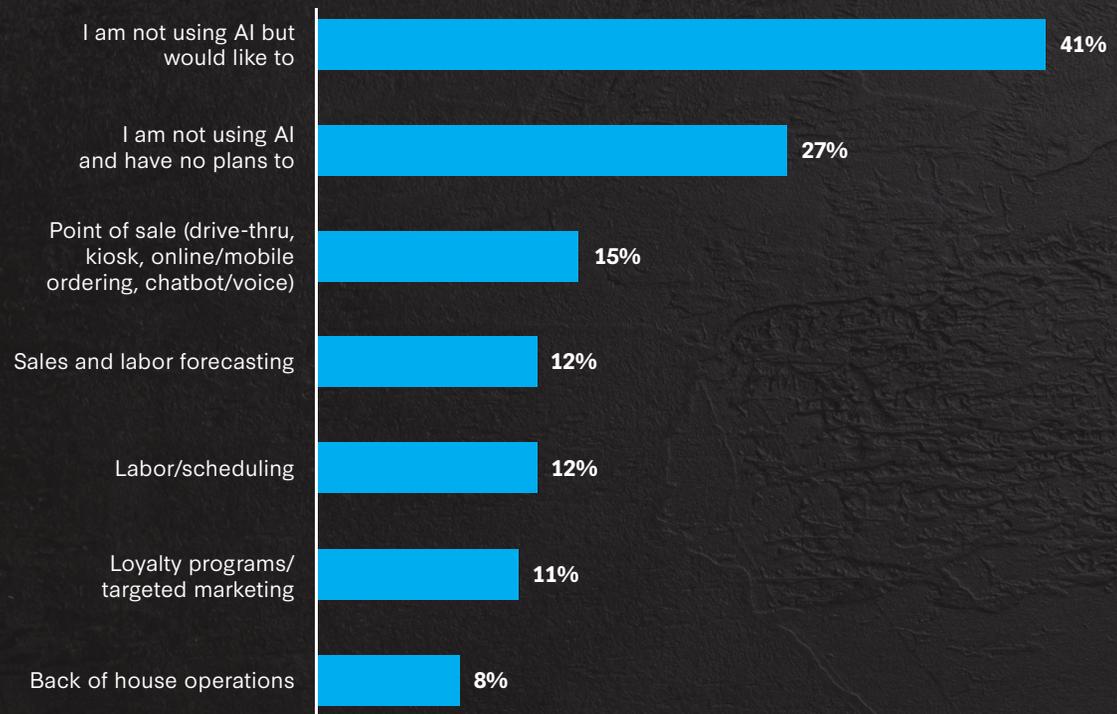
Of those who said they are currently using AI in their businesses:

- **15%** are using it at the point of sale (drive-thru, kiosk, online ordering)
- **12%** are using it for sales and labor forecasting
- **12%** are using it to optimize labor, such as through automated scheduling



The Appeal of AI

Where are you currently using artificial intelligence (AI) in your business?



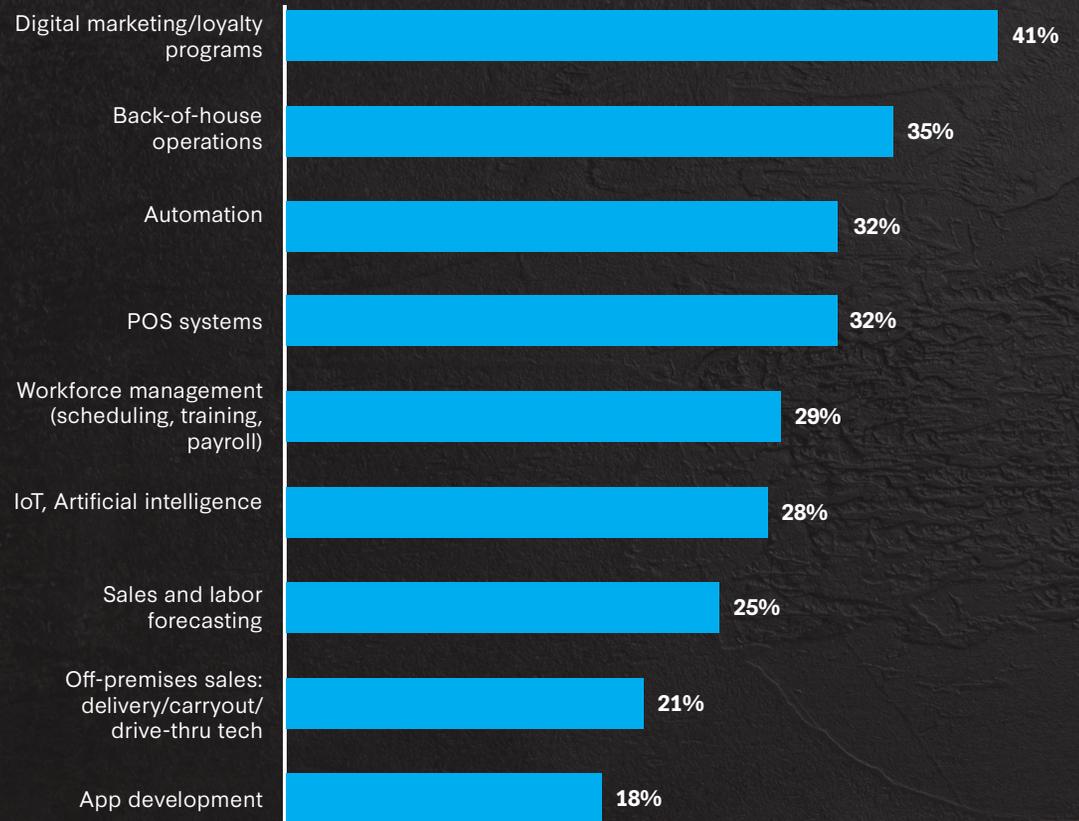
Though the share of operators who say they are currently using AI and machine-learning tools is relatively small, respondents repeatedly expressed strong interest in learning more about AI and tools that are powered by it. Less than a third of respondents (**28%**) said they were interested in learning more about artificial intelligence specifically, but they frequently showed interest in tools that are often known to employ AI, such as sales and labor forecasting, back-of-house automation, labor scheduling and sophisticated loyalty programs.

Because artificial intelligence and machine-learning is already baked into many existing software platforms, it stands to reason that some operators who said they aren't currently using AI tools might actually be using them without even realizing it, a potential knowledge gap that could hinder adoption going forward. That said, the strong interest in AI tools stated in our survey, combined with the rapid evolution of what these tools can do indicate that we are only beginning to see the ways artificial intelligence will transform the restaurant industry.



Tech Tools Operators Are Eyeing Next

What types of technology solutions are you most interested in learning more about?



About The Authors



Christi Ravneberg

Director, Research and Insights
Nation's Restaurant News

Christi has nearly two decades of experience in B2B media and content strategy, specializing in the restaurant and food retail industries. She leads the development of the Informa Restaurant & Food Group's Intelligence platform, which produces data-driven thought leadership products for Nation's Restaurant News, Supermarket News, Restaurant Hospitality and Food Management. She has bachelor's and master's degrees in journalism from Northwestern University. She lives in Los Angeles with her husband and two daughters.

She can be reached at christi.ravneberg@informa.com



Mark Brandau

Associate Director, Research and Insights
Nation's Restaurant News

Mark has spent his career covering and supporting the foodservice industry, first with a decade of reporting and editing for Nation's Restaurant News and more recently with research and insights roles at Technomic and Datassential. He has extensive experience turning complex datasets into compelling thought leadership products for business professionals. He has a bachelor's degree in journalism from Northwestern University and a master's degree in journalism from Columbia University. He lives in Grayslake, Ill., with his wife and two children.

He can be reached at mark.brandau@informa.com

This report was developed and produced by Nation's Restaurant News Intelligence, the research and insights division of Informa's Restaurant & Food Group, with support from foodservice industry partners, as part of its ongoing Market Leader product line. For more information about opportunities to participate in upcoming research reports, please contact:

Susan Szymanski

Sales Director

susan.szymanski@informa.com

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