

Al:

How you can use it right now to simplify your restaurant operations and ease pain points







Every industry is talking about artificial intelligence (AI). Whether it's automation, generative AI or machine learning, businesses in every sector are trying to figure out how they can harness this technology to increase efficiencies and reduce costs.

The restaurant industry is no different. Eight in 10 operators say restaurant tech provides a competitive advantage. A recent survey found that 95% of restaurants use some form of AI in their operations, and 89% of operators feel positive about technology. Despite the seeming widespread use of AI, however, restaurants still aren't yet making the most of it throughout the business—and risk falling behind.

That delay in adoption is understandable. Despite forecasted growth in 2025, the restaurant industry continues to face challenges from labor shortages and rising food and labor costs.³ Even if restaurants can benefit from efficiencies gained by using Al technology, they are also risk averse and can't afford to integrate technology that might not meet their needs.

Additionally, restaurant operators may lack the technical knowledge to recognize use cases where an AI solution could make an immediate impact or confidently select the best options.

Although the delay in adopting Al is understandable, it can also lead to missed opportunities to improve efficiencies, lower costs and improve customer service.

This guide can help. By gaining a foundational understanding of AI and its applicability specifically to the restaurant industry, restaurant owners and operators can identify real-life situations where AI can streamline and improve business operations.

In addition, this guide will look at how companies like DIRECTV are advancing the future of AI, and what restaurant operators can prepare for what's next.



When people think about artificial intelligence, they may think about "strong" AI, like the cyborg character in the movie, The Terminator. But that's not the level of artificial intelligence we're talking about here, explains Sam Short, chief strategy officer at BYOD, a company that develops AI-driven solutions for the restaurant industry.

Most AI is "weak," or more task driven, using machine learning and automation. These types of AI help translate data and insights into action in real time, he says, "like when your AI is connected to your Bluetooth thermometer and can tell you that your cooler door is open, or that your compressor is going down. AI can hook up to your point of sale to help with sales and some labor data."

Restaurants traditionally have used "weak" or reactive technology versus proactive technologies, Short says. Until recently, Al-driven predictive technology, deep learning and machine learning have not been accurate enough to be superior to human skills in the restaurant industry.

Common Al-related terms⁴

Artificial intelligence or AI is an umbrella term describing computers and machines that simulate human intelligence processes. From chatbots to social media recommendations to finding the best route to a destination, AI tools can "learn" and perform better over time.

Al automation directs machines to make decisions and complete repetitive tasks without human intervention. Examples of Al automation are self-checkout machines that scan and process payments and spam filters that follow rules to determine which emails should go into the inbox

Machine learning (ML) is a type of artificial intelligence. It uses algorithms to analyze data from past decisions or to find patterns. Machine learning can help make product recommendations or predict sales and ordering volumes.

Generative AI (Gen AI) is also a type of artificial intelligence, but it goes beyond analyzing data. It can generate original content, including images, songs, stories, and even fake videos.







As AI evolves, the ability to refine predictions will be instrumental and will move AI from reactive to proactive, Short says. "In the next decade in restaurants, I do think this really will be a change. It will be a slow change because we must shift mindsets and thinking to get there."

Short gives the example of sales. Right now, restaurants predict sales based on historical data. They know how much in sales they made last Tuesday and can use that to anticipate how much they'll make this Tuesday, he says. "Where we struggle is when any external force comes in to act on this change"—such as a snowstorm, a leak in the dining room or an oven that won't turn on.

The result is that you may have to close a few tables or the dining area—or even the entire restaurant. While AI cannot anticipate all these possibilities, it can draw on additional data to create better predictions.

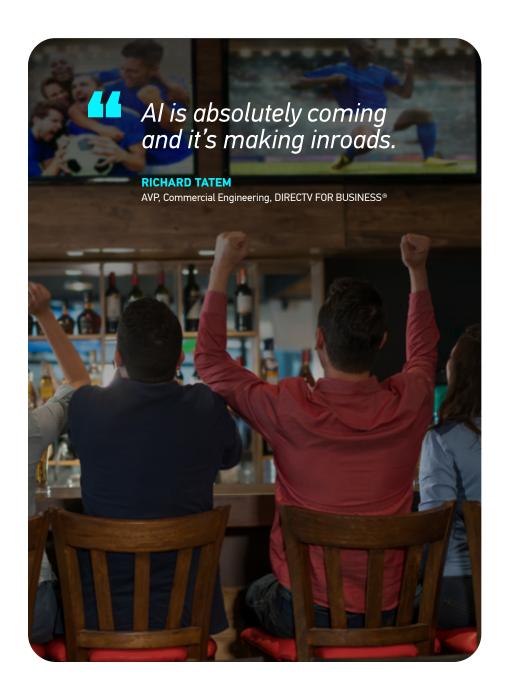
Al models, like BYOD's virtual restaurant assistant, MABEL, do this, he says. "We use historical data. We connect to the National Oceanic and Atmospheric Administration (NOAA) for the weather. In addition to giving a prediction on a snowstorm, Al can also add that on the last four Tuesdays when it snowed, sales dropped off 30 percent."

Short says AI can connect to the events calendar to help predict customer traffic changes or send maintenance alerts on restaurant equipment before a breakdown can occur. Although these checks could be done by humans, it is extremely time and resource-consuming.

Considering how AI technologies are advancing rapidly, restaurant leaders must continuously assess how AI—and which AI tools—will provide the data insights and recommended operational changes so their restaurants can be more productive.







"Al is absolutely coming and it's making inroads," says Richard Tatem, AVP, commercial engineering at DIRECTV FOR BUSINESS®. Al can be most easily adapted in the hospitality industry to help tackle restaurant owners' biggest challenges.

Reducing the impact of labor shortages

A common concern about using artificial intelligence is that it will take away jobs. However, the restaurant industry constantly faces a labor shortage and rising labor costs, and it has the highest percentage of quits of any industry. With that in mind, AI can help restaurants handle more tasks with fewer people. It frees employees from repetitive tasks, so they have more time for guest interaction, Short explains. Instead of thinking of artificial intelligence as a way to cut jobs and decrease the bottom line costs, his company thinks of AI as "augmented intelligence"—a tool to help people do their jobs better to drive topline performance.

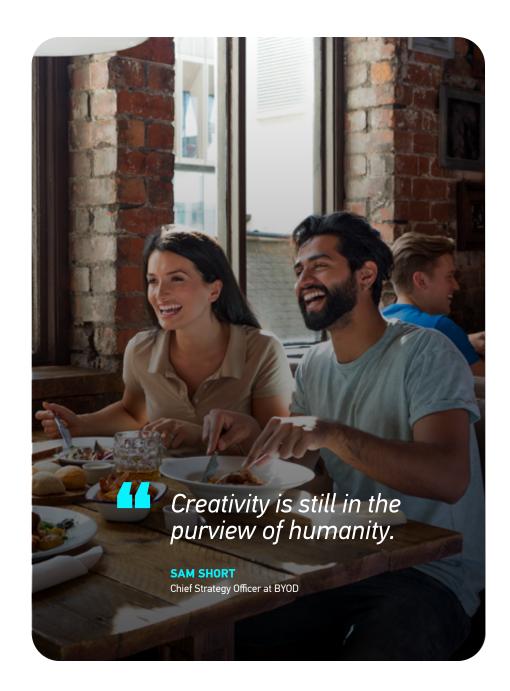


Addressing operational efficiencies

Al can collect data and develop insights to help restaurants staff more efficiently. For example, using Al data on schedules, meal prep and delivery time, a restaurant manager can see that on Tuesday, extra people were scheduled, but the restaurant was slow that evening. However, on Wednesdays, the kitchen staff gets behind on prep. With these insights, it's easier to determine how to reallocate staff. Furthermore, Al can fold in data from other traffic builders, like marketing promotions or sporting events, to predict scheduling, food and supplies.

With high employee turnover, restaurant hiring is an endless task. Managers can use AI tools to generate job descriptions and polish emails, Short notes. "In three minutes, you can have a full job description that you can post on LinkedIn and to hiring sites. This is not insignificant, especially if you're hiring for multiple positions or locations."

Al can help grow the business by developing marketing campaigns, including video promotions. With good prompts, ask an Al chatbot tool to build a digital marketing campaign. A word of caution: Al, even generative Al, is still not creative and relies on people. It takes information that already exists and combines it, often in new ways. "Creativity is still in the purview of humanity," Short says. "Because of that, the things that you put into Generative Al, the more creative you are, the more thoughtful you are with them, the better and more impactful."







Elevating the customer experience

When guests come to a restaurant, they want more than food and drinks. They want excellent service and the right atmosphere. Al can help create that outstanding customer experience. It's well documented that employee satisfaction impacts customer satisfaction. Al can help improve the employee experience. Shifting repetitive tasks to Al—such as fielding reservations or answering basic questions about the establishment or services—is a winner with employees, Tatem says.

"It takes your staff and helps them deliver something that Al can't, and that is a personalized experience. It gives your employees something memorable and meaningful as they learn about who your customers are. That feedback, engagement and loyalty are irreplaceable, and Al can't address that." Tatem adds. Al can also help create the right atmosphere or vibe in a restaurant, Short says.

Although entertainment draws in customers, selecting the right programming for individual establishments at the right time is also essential. A restaurant would dampen its customers' mood and not meet their expectations if it showed a sitcom instead of a hotly contested football game.

Short says some advanced AI tools can help restaurant leaders keep the right atmosphere going. "It literally pulls television listings, channels, games, everything that's happening. You put in a couple preferences early on specific to a location to generate a schedule of what should be on your TV and when, and program a channel change or have the bartender change it." This takes one more planning task off of the busy staff and helps your programming match quests' expectations.







For all that AI currently offers, even more innovations are down the line. "The DIRECTV product and engineering team is using AI to help address the entertainment challenges specifically within the restaurant space," Tatem says.

Some of the projects that will integrate AI and DIRECTV include:



Crowdsourcing or web scraping to better understand the guests based on the genre of sports they're interested in. "The result is a dynamically adaptive sports mix channel that can be available on different TVs in an establishment," Tatem says.



Providing awareness of engagement to determine if people are actively watching the programming being shown—information that provides value for the owner. "How can we best serve our partners and customers and offer programming packages that are better tailored to the genre of experiences that they want to have," Tatem says.



Creating awareness of which ads are watched and which are ignored, to help better target messages to the audience.



Filtering out ads that shouldn't be shown—for example, a commercial featuring a competitor.

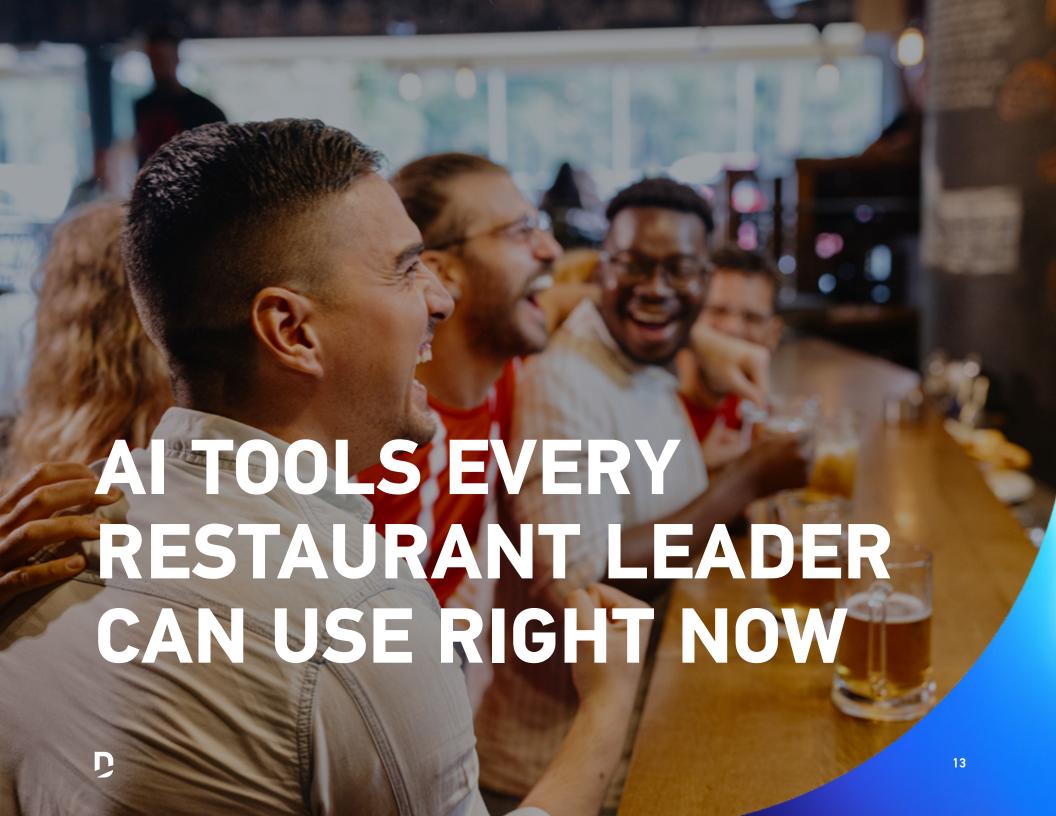


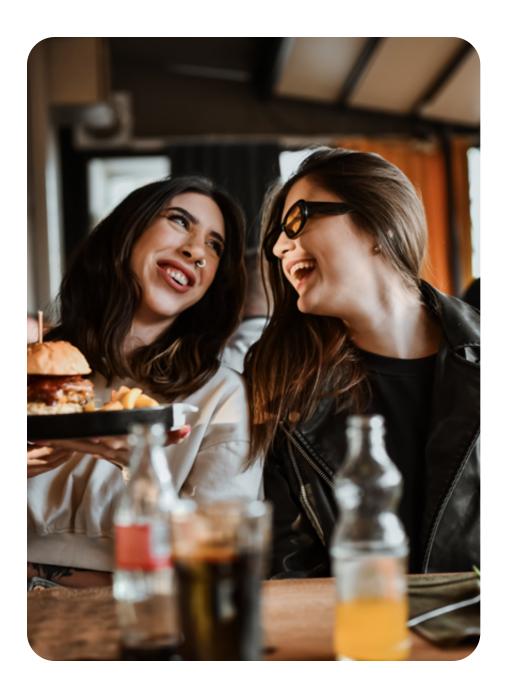
Integrating with local sports programming to stream games, personalizing at a hyper-local level.



Solving bandwidth issues when the internet, point-of-sale equipment and other back-office systems are running at the same time.







Future aside, the idea of selecting AI tools to use in the present can be daunting. Many options exist and it can be hard to find the time to learn all about them. Start by thinking of the problem that needs to be addressed first, and the AI solution second, Tatem advises.

Tatem says three areas where AI can provide tangible benefits from the start are the customer guest experience, business and operational efficiencies, and revenue optimization.

"The biggest bang is engaging with your customers. It's asking, how do you improve that experience?" Tatem says. Managing information and making it easy for customers to find the location is important. Tatem also explains that restaurants should focus on customer engagement and can use AI to cull through existing data to identify areas of improvement.

He adds that AI can help with operational efficiencies, such as managing staffing levels in the front of office and back office.

Tatem says that restaurants can use AI to look at data insights to determine where to optimize or improve, whether upselling or creating pricing, packaging, and promotional offers.



Even as restaurant leaders may focus on the specific areas Tatem describes, Short suggests also finding opportunities to experiment with AI tools in daily work. Although they may take a few minutes to learn, ultimately, they give time back:



Chat generation or document generation engines



Generative AI video creation tools to expand your brand on social media, or use for training

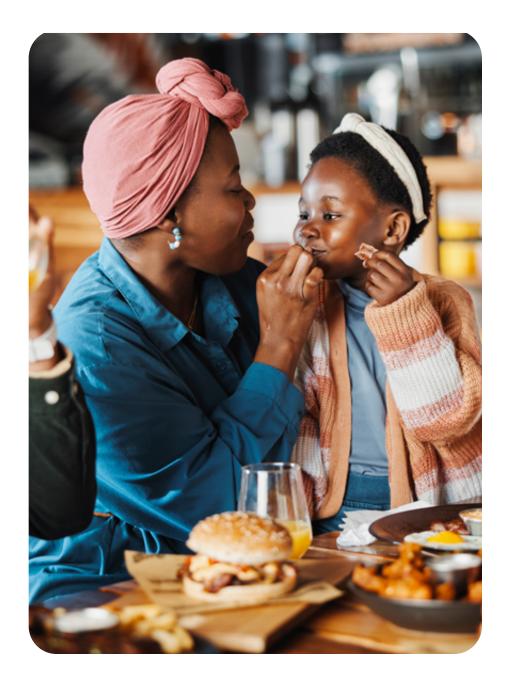


Generative image producers to create images from texts or prompts



Al search engine optimization (SEO) tools to ensure your website and social media posts have the right keywords to reach the audience

Whether it's AI for the present or future, there's a lot of information and options for restaurant leaders to consider. The reason to do it is simple, Short says: "Take the mundane tasks off the shoulders of humans. Get managers back out on the floor engaging people. Get bartenders talking to you. That's the stuff that we want in a restaurant."







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