

MADE TO ORDER

How fast-casual chain Cava Grill is using high-tech sensors to redesign restaurants

By Ben Paynter

Illustration by Eric Palma



The founders of D.C.'s Mediterranean hot spot Cava Mezza embarked on a nationwide expansion with their Cava Grill restaurant chain six years ago, an experiment that has since grown to include 24 outposts with 18 more to come this year. Its growth has been fueled by chef Dimitri Moshovitis's jalapeño-infused feta mousse and roasted red pepper hummus, plus one secret ingredient: Raspberry Pi. That's the technology behind a system of sensors that Cava Grill uses to monitor everything from customer wait times to food-safety practices. Chief data scientist Josh Patchus explains how insights from the data continue to boost Cava Grill's "ROI of experience."

Leave room for deliberation

To avoid the off-putting impression of long lines and wait times, Patchus trains motion sensors (stationed in select restaurants) on customers as they're waiting to order. What he found: Lines tend to bunch up near the menu board and while people are selecting ingredients at the serving station. "The more choices you give people, the harder it is [for them] to make up their mind," says Patchus. Rather than limit customers'

options, he redesigned the menu boards so that customers know what to expect when they reach the serving station. The change has helped lines move 10% faster and hold 12% more people.

Seat customers strategically

Sensors in the restaurants' seating areas show that customers in urban locations often stay only long enough to eat, but in the suburbs they prefer to linger. "A lot of people are

driving a long way there, so the last thing they want to do is get their food and have to move back out," says Patchus. He suggested increasing seating by 30%, allowing them to accommodate large groups. Those parties boosted revenue in the redesigned stores by 20% per square foot.

Manage what you can't see

Patchus uses the sensors to monitor back-of-house

operations. Freezers can now tell managers how long they've been left open, and if there have been any temperature or humidity spikes. And after data showed that Cava's burners could heat unevenly, Patchus advised the food-prep team (who make everything from scratch) to cook certain items, like the spicy lamb meatballs, from the center of the grill out, ensuring nothing is undercooked. Since then, food-quality complaints from customers have dropped 28%.

Keep the volume down

If the cash register is too close to the serving station, customers have to shout their choices, and it can be hard for them to hear the server's response. Sensors track decibel levels in the ordering area; if they're high, Patchus suggests a remodel. "To understand our customers, we have to be around our customers," he says. With virtual tracking technology, he can be pretty much everywhere at once.

