



COULD IT
CATCH ON?

Sweet on Automation

Artificial intelligence could speed up production, increase precision and make bakeries more profitable.

Food delivery via drones. Robots programmed to make burgers. Highly automated restaurants staffed by screens instead of people.

Sound like science fiction? It's not. All of those artificial intelligence-based possibilities currently exist or are in development—and could someday become the norm in the foodservice industry.

Because robots and other AI-fueled devices are highly accurate and excel at repeatable processes, such as pouring cupcake batter into tins, they can potentially aid in the baking process and increase quality assurance, according to Paul Deady, automotive segment manager for Stäubli in North America, who currently executes solutions for food industry and other clients at the robotics provider.

"Robotics help manufacturers of all types operate more efficiently by increasing the availability, speed and quality of their processes," Deady says. "There are a number of indirect cost reductions as well, such as recruitment costs for labor from reduced turnover."

Because robotic automation reduces the chance for human error—resulting in more high-quality items and less waste—companies embracing AI may see a reduction in operating expenses. The technology could also free up bakery labor to focus on other tasks, like product innovation.

The use of robotics in foodservice is still relatively new; yet the technology is poised to offer considerable value in the future, ranging from enhanced sanitary conditions to quality control.

"Human beings are not as inherently clean as a machine that's purposely built for [a food] environment," Deady says. "Quality is assured, and you've got increased efficiencies; robots are able to work without a break—there are tons of advantages."

— Erin Brereton

Is the
baking
industry
ready for a
technology
revolution?

*Ice cream sandwiches
up bakeries' cool factor.*

THE

Whatever the combination—ice cream with cookies, gelato with brioche, sherbet with donuts—one thing is clear: Ice cream sandwiches have never been cooler.

"Portable, robust and indulgent, ice cream sandwiches are well-suited to capitalize on the snacking trend," says Alex Beckett, global food and drink analyst at market researcher Mintel.

Because you can't make a sandwich without "bread," bakeries are perfectly posed to exploit the ice cream sandwich surge—and claim a chunk of the \$4.4 billion frozen novelties market, which boasts profit margins of nearly 50 percent.

"The bakery sector has been a rich source of innovation inspiration for ice cream companies. Not only for textured pieces in or on top of the ice cream—like brownie chunks, cake pieces and cookie crumbles—but also as the carb element of the sandwich," says Beckett.

Beyond combining nostalgia with indulgence, bakeries should stick to a few best practices, says Claudia Sidoti, a food consultant and recipe developer who advises Sweetery, a New York City-based dessert truck.

THE WHOLE

BEST
PRACTICE

1 Crunch the Numbers

To successfully go wholesale, bakeries have to budget for **more equipment** and **higher labor and transportation costs**.

"Distribution is the hardest piece of the puzzle," says Wendy Achatz, owner of Achatz Handmade Pie Co. in Michigan. To sustain growth of partnerships with grocery stores, Achatz bought two refrigerated trucks. Solid planning ensures bakeries can forecast expenses, budget accordingly and avoid unexpected costs.

INNOVATION STATION

CHILL THRILL



QUALITY COUNTS: "Ice cream sandwiches are pretty simple, so it's all about the ingredients," Sidoti says. At its three Chicago stores, Snow Dragon Shavery & Yogurt serves ice cream sandwiches made with French macarons in flavors like green tea and cookies and cream.

TEXTURE IS PARAMOUNT: "If the cookie is too hard and the ice cream is too cold, it's hard to eat. You have to find the right texture cookie or cake and the right texture and temperature ice cream," Sidoti says. Preparing the sandwiches to order gives bakeries more control over temperature and allows guests to create custom treats.

CREATIVITY IS KING: "If you're a little creative and like experimenting, the sky's the limit," says Sidoti, citing the example of savory ice cream sandwiches made with crackers instead of cookies. In 2014, for instance, a pop-up ice cream parlor in London served a savory sandwich made with blue cheese ice cream and cream crackers.

STAY COOL: Bakeries serving made-to-order ice cream sandwiches may want to invest in an ice cream freezer. Another option is wrapping pre-made sandwiches in plastic and storing them in a conventional freezer.

— Matt Alderton

SHEBANG

Going **wholesale** boosts sales and brand recognition, but it comes with new challenges. Learn from been-there-aced-that wholesale veterans.

2 Scout Good Partners

Sonia Chang has whole-saled granola to the L.A. Arboretum's Peacock Cafe, as well as local coffee shops and restaurants. The owner of My Sweet Cupcakes bakery and Chef Sonia's California, a cottage food operation, both in Southern California, says, **"Start with the places you already patronize.** You know the owners and what they sell, and they might be more likely to talk with you since you support them."

3 Streamline Deliveries

Wholesale orders fluctuate as much as retail sales. Achatz says pie sales in January may be **10 percent** of her November and December totals. However, deliveries require the same amount of gas, car maintenance and driver pay. To ensure each drop-off breaks even, Achatz set a minimum order of \$125. Clustering deliveries also helps. "I can do five deliveries in one area on Monday and three in the next area on Wednesday."

4 Block Bottlenecks

Closely monitor processes to pinpoint and **eliminate potential slowdowns.** Achatz worked backward—from distribution to packaging to production. "Our bakers can bake 80 pies at a time, with one hand tied behind their backs," she says. "But we only have one production line for gluing together boxes. We were making a pile of pies and they weren't going anywhere, because we could only box one pie at a time."

5 Read the Fine Print

Some stores expect bakers to buy back unsold product. Bakeries that agree to buybacks should have input into **how products are stocked and displayed,** Achatz says. Those that decline may need to be flexible to secure partnerships.

6 Move Wisely

When bakeries outgrow their retail locations, many mistakenly move to larger retail spaces. Rent for an **industrial location** can be one-fifth that of a retail space, Achatz says. Delivering from industrial spaces can be easier, too.

— Kate Rockwood

