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?