





## Order up! Why your fast food is about to come even faster

**By Katy Steinmetz** 

ON A RECENT AFTERNOON IN SAN FRANCISCO, a long line trailed in front of what some patrons are calling the "robot restaurant." A sign outside Eatsa, which opened on Aug. 31, promised an eight-minute wait, despite a queue some 75 people long. "We're creating a new kind of fast-food experience," says co-founder Tim Young. "What we've designed creates a sense of mystery, a sense of intrigue."

There are no waitstaff or busboys at Eatsa. After customers punch in and pay for their orders on one of nine iPads-choosing from ingredients like lemon-herb toasted quinoa, orange miso sauce and parsnip strips—screens summon them to a nearby white wall of cubbies. A display flashes patrons' names (taken from their credit cards) and instructs them to "tap twice" to pick up their food. No humans can be seen working behind the scenes or when the cubby opens to reveal one's meatless meal. Many customers record each step of the process on their phones, relaying their experience to friends and followers on Facebook or Instagram.

Eatsa, with its sci-fi aesthetic, is definitely intriguing, but the concept is not exactly new. What Young and his founding team have built is a cashless 21st century version of the Horn & Hardart automat, early 20th century cafeterias where people could survey dishes placed in windowed compartments and pop in a nickel to serve themselves a helping of hot pie or macaroni and cheese. At one time, the famed chain blanketed Manhattan as part of what was the largest restaurant chain in the world, though the last automat closed in 1991.

Its reincarnation in San Francisco turns out to be part of a wider revival in the restaurant industry's embrace of gadgetry in a quest to get food to the customer more efficiently. McDonald's, for example, is testing Create Your Taste ordering ki-

The rise in restaurant automation is showcased by the San Francisco automat Eatsa

**PAYMENT** 

Using near field communication, which allows two devices that are close to exchange bits of information, customers with smartphones that support Apple Pay or Android Pay can settle up with a tap at eateries like Jamba Juice and Panera Bread.

## ORDERING

Big chains like Applebee's are bringing tech to the table by setting up tablets to handle orders and payments for customers.

## PREP

This year, Moley Robotics showed a "robotic kitchen" prototype complete with robotic hands that "replay" the exact movements of a master chef. The firm plans to launch a consumer version in 2017.

osks that do the work of cashiers. And apps like Caviar—now operative in 16 U.S. markets from Atlanta to Minneapolis—take digital orders and payment and then dispatch workers to restaurants that don't typically deliver, where they pick up grub before delivering it to users' doorsteps.

McDonald's and Eatsa give similar justifications for removing face-to-face interaction from the equation: to provide the customer with more control over the process and lessen dependence on error-prone humans. Of course, there are still some humans involved. Behind Eatsa's white wall, the mystery of food that appears as if from nowhere turns out to be hidden workers, half a dozen of whom assemble quinoa concoctions during the lunch rush-though they too are being directed by software. "Every person that has a role has an iPad that manages their job," Young says. This, he explains, is what allows the workers to keep up with a breakneck pace of orders.

Businesses have another reason to go peopleless: the bottom line. Software is getting smarter, and machines are getting more dexterous, as wages for low-skilled workers in the U.S. are rising to \$15 an hour and higher. Arguing against a recent landmark wage increase for fast-food workers in New York, advocacy group Employment Policies Institute took out an ad in the New York Post with a picture of a customer using a kiosk at McDonald's. The text read: MEET THE NEW MINIMUM-WAGE EMPLOYEE. Self-service and automation may one

day be part of almost every eatery.

Though some will be drawn to kiosks to avoid human contact, a social element was plainly in evidence in the line of curious customers outside Eatsa. "It's not that I'm against humans' serving food, and it's not that I'm against machines' serving food," says Deepali Agarwal, who works for socialnetwork company Skout. "It's a new concept, and being in tech, I'm just interested in how it works." Agarwal and her colleague Nikki Castellanos say with shrugs of resignation that automation is where society is headed. But Castellanos also points out that they came together. "Pretty much everyone here is with someone else," she notes. However it's delivered, a meal remains something to share.