

# Pandemic Wave Of Automation May Erase Jobs

Casselman, Ben . New York Times , Late Edition (East Coast); New York, N.Y. [New York, N.Y]04 July 2021: A.1.

[ProQuest document link](#)

---

## FULL TEXT

The need for social distancing led restaurants and grocery stores to seek technological help. That may improve productivity, but could also cost jobs.

When Kroger customers in Cincinnati shop online these days, their groceries may be picked out not by a worker in their local supermarket but by a robot in a nearby warehouse.

Gamers at Dave & Buster's in Dallas who want pretzel dogs can order and pay from their phones -- no need to flag down a waiter.

And in the drive-through lane at Checkers near Atlanta, requests for Big Buford burgers and Mother Cruncher chicken sandwiches may be fielded not by a cashier in a headset, but by a voice-recognition algorithm.

An increase in automation, especially in service industries, may prove to be an economic legacy of the pandemic. Businesses from factories to fast-food outlets to hotels turned to technology last year to keep operations running amid social distancing requirements and contagion fears. Now the outbreak is ebbing in the United States, but the difficulty in hiring workers -- at least at the wages that employers are used to paying -- is providing new momentum for automation.

Technological investments that were made in response to the crisis may contribute to a post-pandemic productivity boom, allowing for higher wages and faster growth. But some economists say the latest wave of automation could eliminate jobs and erode bargaining power, particularly for the lowest-paid workers, in a lasting way.

"Once a job is automated, it's pretty hard to turn back," said Casey Warman, an economist at Dalhousie University in Nova Scotia who has studied automation in the pandemic.

The trend toward automation predates the pandemic, but it has accelerated at what is proving to be a critical moment. The rapid reopening of the economy has led to a surge in demand for waiters, hotel maids, retail sales clerks and other workers in service industries that had cut their staffs. At the same time, government benefits have allowed many people to be selective in the jobs they take. Together, those forces have given low-wage workers a rare moment of leverage, leading to higher pay, more generous benefits and other perks.

Automation threatens to tip the advantage back toward employers, potentially eroding those gains. A working paper published by the International Monetary Fund this year predicted that pandemic-induced automation would increase inequality in coming years, not just in the United States but around the world.

"Six months ago, all these workers were essential," said Marc Perrone, president of the United Food and Commercial Workers, a union representing grocery workers. "Everyone was calling them heroes. Now, they're trying to figure out how to get rid of them."

Checkers, like many fast-food restaurants, experienced a jump in sales when the pandemic shut down most in-person dining. But finding workers to meet that demand proved difficult -- so much so that Shana Gonzales, a Checkers franchisee in the Atlanta area, found herself back behind the cash register three decades after she started working part time at Taco Bell while in high school.

"We really felt like there has to be another solution," she said.

So Ms. Gonzales contacted Valyant AI, a Colorado-based start-up that makes voice recognition systems for

restaurants. In December, after weeks of setup and testing, Valyant's technology began taking orders at one of Ms. Gonzales's drive-through lanes. Now customers are greeted by an automated voice designed to understand their orders – including modifications and special requests – suggest add-ons like fries or a shake, and feed the information directly to the kitchen and the cashier.

The rollout has been successful enough that Ms. Gonzales is getting ready to expand the system to her three other restaurants.

"We'll look back and say why didn't we do this sooner," she said.

The push toward automation goes far beyond the restaurant sector. Hotels, retailers, manufacturers and other businesses have all accelerated technological investments. In a survey of nearly 300 global companies by the World Economic Forum last year, 43 percent of businesses said they expected to reduce their work forces through new uses of technology.

Some economists see the increased investment as encouraging. For much of the past two decades, the U.S. economy has struggled with weak productivity growth, leaving workers and stockholders to compete over their share of the income – a game that workers tended to lose. Automation may harm specific workers, but if it makes the economy more productive, that could be good for workers as a whole, said Katy George, a senior partner at McKinsey, the consulting firm.

She cited the example of a client in manufacturing who had been pushing his company for years to embrace augmented-reality technology in its factories. The pandemic finally helped him win the battle: With air travel off limits, the technology was the only way to bring in an expert to help troubleshoot issues at a remote plant.

"For the first time, we're seeing that these technologies are both increasing productivity, lowering cost, but they're also increasing flexibility," she said. "We're starting to see real momentum building, which is great news for the world, frankly."

Other economists are less sanguine. Daron Acemoglu of the Massachusetts Institute of Technology said that many of the technological investments had just replaced human labor without adding much to overall productivity. In a recent working paper, Professor Acemoglu and a colleague concluded that "a significant portion of the rise in U.S. wage inequality over the last four decades has been driven by automation" – and he said that trend had almost certainly accelerated in the pandemic.

"If we automated less, we would not actually have generated that much less output but we would have had a very different trajectory for inequality," Professor Acemoglu said.

Ms. Gonzales, the Checkers franchisee, isn't looking to cut jobs. She said she would hire 30 people if she could find them. And she has raised hourly pay to about \$10 for entry-level workers, from about \$9 before the pandemic. Technology, she said, is easing pressure on workers and speeding up service when restaurants are chronically understaffed.

"Our approach is, this is an assistant for you," she said. "This allows our employee to really focus" on customers. Ms. Gonzales acknowledged she could fully staff her restaurants if she offered \$14 to \$15 an hour to attract workers. But doing so, she said, would force her to raise prices so much that she would lose sales – and automation allows her to take another course.

Rob Carpenter, Valyant's chief executive, noted that at most restaurants, taking drive-through orders is only part of an employee's responsibilities. Automating that task doesn't eliminate a job; it makes the job more manageable.

"We're not talking about automating an entire position," he said. "It's just one task within the restaurant, and it's gnarly, one of the least desirable tasks."

But technology doesn't have to take over all aspects of a job to leave workers worse off. If automation allows a restaurant that used to require 10 employees a shift to operate with eight or nine, that will mean fewer jobs in the long run. And even in the short term, the technology could erode workers' bargaining power.

"Often you displace enough of the tasks in an occupation and suddenly that occupation is no more," Professor Acemoglu said. "It might kick me out of a job, or if I keep my job I'll get lower wages."

At some businesses, automation is already affecting the number and type of jobs available. Meltwich, a restaurant

chain that started in Canada and is expanding into the United States, has embraced a range of technologies to cut back on labor costs. Its grills no longer require someone to flip burgers – they grill both sides at once, and need little more than the press of a button.

"You can pull a less-skilled worker in and have them adapt to our system much easier," said Ryan Hillis, a Meltwich vice president. "It certainly widens the scope of who you can have behind that grill."

With more advanced kitchen equipment, software that allows online orders to flow directly to the restaurant and other technological advances, Meltwich needs only two to three workers on a shift, rather than three or four, Mr. Hillis said.

Such changes, multiplied across thousands of businesses in dozens of industries, could significantly change workers' prospects. Professor Warman, the Canadian economist, said technologies developed for one purpose tend to spread to similar tasks, which could make it hard for workers harmed by automation to shift to another occupation or industry.

"If a whole sector of labor is hit, then where do those workers go?" Professor Warman said. Women, and to a lesser degree people of color, are likely to be disproportionately affected, he added.

The grocery business has long been a source of steady, often unionized jobs for people without a college degree. But technology is changing the sector. Self-checkout lanes have reduced the number of cashiers; many stores have simple robots to patrol aisles for spills and check inventory; and warehouses have become increasingly automated. Kroger in April opened a 375,000-square-foot warehouse with more than 1,000 robots that bag groceries for delivery customers. The company is even experimenting with delivering groceries by drone. Other companies in the industry are doing the same. Jennifer Brogan, a spokeswoman for Stop & Shop, a grocery chain based in New England, said that technology allowed the company to better serve customers – and that it was a competitive necessity.

"Competitors and other players in the retail space are developing technologies and partnerships to reduce their costs and offer improved service and value for customers," she said. "Stop & Shop needs to do the same."

In 2011, Patrice Thomas took a part-time job in the deli at a Stop & Shop in Norwich, Conn. A decade later, he manages the store's prepared foods department, earning around \$40,000 a year.

Mr. Thomas, 32, said that he wasn't concerned about being replaced by a robot anytime soon, and that he welcomed technologies making him more productive – like more powerful ovens for rotisserie chickens and blast chillers that quickly cool items that must be stored cold.

But he worries about other technologies – like automated meat slicers – that seem to enable grocers to rely on less experienced, lower-paid workers and make it harder to build a career in the industry.

"The business model we seem to be following is we're pushing toward automation and we're not investing equally in the worker," he said. "Today it's, 'We want to get these robots in here to replace you because we feel like you're overpaid and we can get this kid in there and all he has to do is push this button.'"

### Photograph

At a Checkers drive-through near Atlanta, customers are greeted by an automated voice designed to understand their orders – including special requests – above left, and feed the information to the kitchen, right, and cashiers; SHANA GONZALES, a Checkers franchisee who turned to automation when she couldn't find enough workers.

(PHOTOGRAPHS BY LYNSEY WEATHERSPOON FOR THE NEW YORK TIMES) (A13)

## DETAILS

**Subject:** Customer services; Social distancing; Workers; Manufacturing; Pandemics; Productivity; Franchisees; Service industries; Automation; Restaurants; Inequality; Economists; Wages & salaries

**Business indexing term:** Subject: Customer services Workers Productivity Franchisees Service industries Automation Restaurants Economists Wages &salaries

**Location:** United States--US Atlanta Georgia

**URL:** <https://www.nytimes.com/2021/07/03/business/economy/automation-workers-robots-pandemic.html>

**Publication title:** New York Times, Late Edition (East Coast); New York, N.Y.

**Pages:** A.1

**Publication year:** 2021

**Publication date:** Jul 4, 2021

**Section:** A

**Publisher:** New York Times Company

**Place of publication:** New York, N.Y.

**Country of publication:** United States, New York, N.Y.

**Publication subject:** General Interest Periodicals--United States

**ISSN:** 03624331

**Source type:** Newspapers

**Language of publication:** English

**Document type:** News

**ProQuest document ID:** 2548051126

**Document URL:** <https://www.proquest.com/newspapers/pandemic-wave-automation-may-erase-jobs/docview/2548051126/se-2?accountid=44910>

**Copyright:** Copyright New York Times Company Jul 4, 2021

**Last updated:** 2021-07-04

**Database:** U.S. Major Dailies

---

Database copyright © 2021 ProQuest LLC. All rights reserved.

[Terms and Conditions](#) [Contact ProQuest](#)