Smothered in a special sauce, the "Keithadilla" was a breakout hit for Chipotle Mexican Grill in the first quarter. It also gave the company indigestion.

The twist on Chipotle's traditional quesadilla was invented by a popular TikTok food influencer as an off-menu "hack." Soon, the Mexican fast-casual chain was overwhelmed by custom orders. The item took longer to make and its mix of ingredients flustered workers, especially when the sauce—a combination of sour cream and chipotle-honey vinaigrette—ran out. When some staffers refused to make the off-menu item, customers began posting angry reviews online.

Chipotle faced a decision: Give in to the whims of TikTok or risk losing business. The Keithadilla is now a permanent menu item. "We want to be at the pulse of culture," said Chris Brandt, the chain's chief marketing officer.

TikTok has become an unavoidable consideration for anyone running a consumer-facing business today. Owned by Beijing-based ByteDance, the social app has proved a force in marketing and media, and helped brands monitor consumer trends. According to CEO Shou Chew, five million businesses use the platform.

For all its mind-reading insights, the platform has also become a disruptive force in research and development, upending conventional wisdom about product cycles, testing, differentiation and manufacturing.

Companies scramble to mass-produce products, or fix existing ones, based on feedback that often has a very short shelf life. It's a gamble—one that many executives say is necessary if they want to win over younger shoppers and keep up with the competition. Even though the app faces bans in the U.S., businesses are shaping their product decisions around it.

"Every single merchant and designer is looking at TikTok," said Corey Robinson, chief product officer for fashion retailer Abercrombie & Fitch, who calls the platform "a billion-person focus group."

Tarte Cosmetics has been taking TikTok trends into account as it develops new beauty products. Last year, employees noticed that color-shifting products were going viral on the platform.

Producing the Maracuja Juicy Lip and Cheek Shift, which the company says changes its hue based on the skin's pH levels, meant taking 2 a.m. calls with Korean factories said Anna Sponaugle, a senior vice president. Maureen Kelly, Tarte's founder and chief executive, cleared her schedule.

The product came together in three months. Sponaugle described the process as chaotic, given most cosmetics take more than a year.

According to the brand, the Maracuja Juicy Lip and Cheek Shift is its fastest-selling product of all time. Three months of inventory sold out in four weeks.

The company failed to launch a body-glitter product inspired by TikTok's interest in beauty looks from the 2000s. Tarte located a supplier that could make biodegradable glitter—a nod to today's environmental concerns—but the lead time was too long.

"You have to get things out right when they are trendy," Sponaugle said. "If you do it too late, it's not even worth it."

TikTok collaborations can be harrowing for even the gutsiest startups. WYOS, a personal-care company that launched in February, thought it would be a good idea to share its new moisturizer, which comes in stick form, with TikTok influencers to see what they made of it.

The company discovered creators were planning to upload videos that featured them popping the moisturizer into the freezer to show audiences how it could be used as a face-massaging tool.

WYOS co-founder Wendy Charland said the moisturizer isn't designed to withstand freezing temperatures, and could burn the skin if applied afterward. WYOS scrapped the influencers' videos, though it is consulting with its lab about creating a freezer-friendly formula while also weighing how such changes would undermine a year's worth of product development.

"We want to be careful about what we tweak," Charland said. "You have to know what's a fleeting trend and what's a trend that lasts."

The story of how "Pink Sauce" went from viral sensation to the shelves of retail giant Walmart is a good example of the TikTok roller coaster.

The Pepto-Bismol-colored dressing was created by Veronica Shaw, a 30-year-old social-media influencer and private chef based in Miami who is known as Chef Pii. Shaw's sauce became an online phenomenon last summer thanks to a slew of TikTok videos that featured her smothering different foods—from chicken wings to french fries to shrimp to tacos—with a fluorescent concoction that got its color from dragon fruit.

After Shaw began selling her sauce directly to consumers online, some customers complained on TikTok that her nutrition labels contained mistakes, or that the sauce was spoiled when it was delivered.

Shaw acknowledged a packaging issue with the first shipment and that some bottles got damaged, but said it involved fewer than 50 packages. "Just like any other up-and-coming brands, they go through trial and error," said Shaw.

Dave's Gourmet, a Dallas-based specialty food company, saw an opportunity, according to Chief Executive David Neuman. The company formed a partnership with Shaw giving Dave's responsibility for the product's commercial formula, manufacturing, distribution, sales and marketing—outside of digital media. Shaw receives a royalty from each sale and continues to be responsible for driving social media buzz.

Dave's tweaked the formula to make the sauce vegan, less complicated and suited for mass distribution. At one point, Dave's had to slow down production because its supplier ran out of dragonfruit. Local investigators from the Food and Drug Administration seized samples of the sauce to be tested for any issues. Neuman believes the product satisfied all the regulators' needs because he never heard back. The FDA declined to comment.

Dave's turned the TikTok trend into a nationally distributed product in 90 days, something that usually takes more than a year. Neuman is happy with the result, but said he still has "night tremors" when he thinks about how fast they had to move.

For decades, brands like H & M and Zara copied fashion trends and churned them out in a matter of weeks. Now, a new generation of fast-fashion retailers makes clothes in days, finely tuning their machines to the TikTok algorithm that dictates what's in style.

Edikted, a fast-fashion company, releases 150 monthly styles based on viral TikTok clips, said the founder and chief executive, Dedy Shwartzberg. The company has technology that monitors popular TikTok videos and identifies which styles to copy, as does its team of trend experts.

"For us, it's like a lab," Shwartzberg said. "Retailers in the past looked at [forecasting firm] WGSN, catwalks, fashion week, and tried to guess what the trends will be. We don't need to guess when we have TikTok."

To keep up with the app's rapid trend cycle, these companies manufacture on an on-demand basis—a model used by other fast-fashion brands, including Shein. They subcontract to third-party factories, often in China, and place orders in small batches, keeping inventory levels low. Shwartzberg said Edikted averages a 12-day turnaround.

With fast fashion moving at rapid speed—and TikTok fashion moving even more swiftly—the gamble for a brand like Edikted is that it might produce a lot of duds. These must be disposed of quickly, often through steep discounting.

In December, Edikted rolled out silver miniskirts and shiny bomber jackets, hoping to jump on an '80s metallic trend, but by February it phased them out. For the past few months, Edikted has been selling backless T-shirts, rolling out new colors and sleeve lengths regularly after watching the style take off on TikTok. It trialed a dress version of the shirt a few weeks ago, but the item bombed and Edikted quickly discontinued it.

"Most of the trends fade within weeks," Shwartzberg said, "But some can last years."