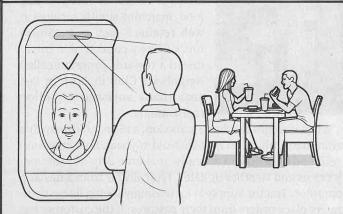
China's New Retail

Spurred by consumers who crave novelty and adapt quickly to changing technology, retailers in China are more likely to take risks than their Western counterparts, rolling out formats and features that may still be in beta mode—or face pushback in markets where privacy is more jealously guarded. Led by tech titans such as Alibaba Group Holding Ltd. and Tencent Holdings Ltd., Chinese companies are testing a range of concepts, from facial-recognition payment systems to fully automated convenience stores. The world is watching.

By Rachel Chang Illustrations by Chris Philpot

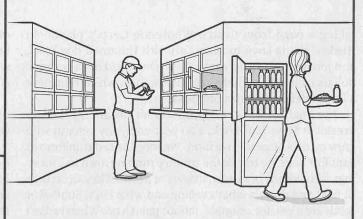


Smile to Pay

One restaurant in Hangzhou has been trialing a system called Smile to Pay that's powered by Ant Financial Services Group, Alibaba's mobile payment unit. Yum China Holdings Inc., which operates about 7,000 KFC and Pizza Hut restaurants in China, has launched a franchise called KPRO aimed at younger, higherincome consumers. KPRO serves more healthful fare, including fresh salads and panini. Diners place their order at a digital kiosk that scans their face with a 3D camera, collecting biometric data it matches with information on

Ant's servers. Users key in their mobile number for added security. The company credits the lightning-fast system with thinning lines during peak hours.

China is ahead of any other country in the deployment of facial-recognition and other biometric systems. "The issue now is getting the technology to a level where there is no error rate," says Vey-Sern Ling, Bloomberg Intelligence's senior internet analyst. "Outside of China, there is likely to be more resistance given data privacy concerns."



2 The Return Of the Automat

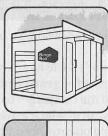
At Wufangzhai, a restaurant chain in Zhejiang province famed for its sticky-rice dumplings, the calls of fuwuyuan ("waiter" in Mandarin) that typically ricochet across Chinese restaurants are conspicuously absent-as are the waiters themselves. Since the start of the year, Wufangzhai has equipped all eight of its outlets in Hangzhou with an Alibabapowered technology that allows a diner to order food on his mobile phone or a screen at the entrance of the restaurant and then pick up his meal from lockers connected to the kitchen.

When his food is ready, the customer receives a notification

on his phone with a locker number. The cubby clicks open as he approaches.

Drinks are dispensed from smart vending machines that look like refrigerators that are unlocked by scanning a QR code on the door with a phone. After the customer closes the door again, the app automatically charges him for the bottles he takes by reading radio-frequency identification (RFID) tags attached to them. The system isn't foolproof: On one visit, some tags had slipped off the bottles.

Wufangzhai says revenue in the first half of 2018 increased 30 percent from a year earlier, while staff costs are down.







3 Boxed Ir

A Guangzhou-based startup called BingoBox has built a network of 300 fully automated convenience stores. The freestanding glass boxes, about half the size of a 7-Eleven. stock a similar assortment of merchandise, all of it labeled with RFID tags. Shoppers gain access by scanning a QR code displayed on the front of the store with the WeChat app. Selected items are placed on a counter, and an RFID reader instantly-and quite accurately, at least in tests-tallies the total. Shoppers pay only via a mobile phone. A scanner near the door verifies that a customer is leaving with only the goods she paid for. Since its founding in 2016, BingoBox has raised about \$100 million from investors led by GGV Capital and Fosun Capital.



Try Before You Buy

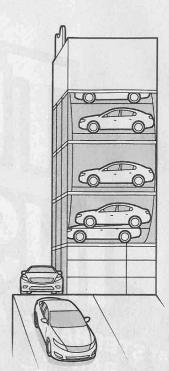
Alibaba has equipped a store in Hangzhou that sells the Korean brand Innisfree's beauty products with "magic" mirrors that use augmented-reality technology so a shopper can virtually try on different shades of lipstick or eye shadow.

The customer waves an

attached wand over her face; the mirror displays recommended products based on readings of her skin moisture, pigmentation, and wrinkling. If a shopper picks up a bottle of moisturizer from one of the smart shelves, product information automatically appears on an adjacent screen.

6 A Car Vending Machine

Car shopping in Guangzhou, China's third-largest city, became a bit less painful in March. Instead of having to go from dealership to dealership to kick the tires on models, a prospective buyer can schedule a test drive at her convenience by going online. She can then pick up the vehicle at a Ferris-wheellike vending machine built by Alibaba. The structure holds 30 automobiles in a stackincluding models by BMW, Ford, and Volvo. The fee for a threeday test drive is only a couple of hundred yuan (less than \$50), but the security deposit can go up to the thousands. Alibaba says "dozens" more of the machines are planned in cities across China.

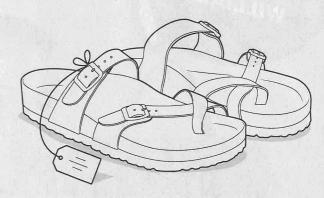




5 Let a Million Influencers Bloom

China's influencers are light-years ahead of Kylie Jenner and her ilk. Thousands of them have capitalized on their online popularity to establish clothing and beauty lines, and some even sell bigger-ticket items such as wine and cars directly to fans. They do this through a multitude of livestreaming apps that reach an audience of 398 million, according to research firm liMedia. Among those with the largest followings are Little Red Book, an e-commerce/social media site that claims 100 million users, and Meipai, a video-sharing platform that's an offshoot of selfie app Meitu, which has 152 million users. Spurred by the success of these players, Alibaba's giant Taobao marketplace added livestreaming for merchants in early 2016.

One of the most popular influencers, model Zhang Dayi, sold 20 million your (\$2.9 million) in apparel in a two-hour livestream in 2016. Unlike many American influencers, who get paid for endorsing existing brands, Zhang and many of her peers own businesses that design and sell products created around their personalities and lifestyles. According to industry researcher CBNData, China's influencer economy totaled about \$17 billion last year.



Factory Brands

A decade-long government crackdown has closed the bazaars in Beijing and Shanghai that used to peddle counterfeit bags and watches. But demand for copycats persists, as evidenced by the popularity of a shopping app called Yanxuan ("strict selection" in Mandarin). The app connects to a marketplace that displays a broad range of items from bedsheets to backpacks that are supposedly sourced directly from the same Chinese factories that produce goods for Muji, Nine West, and other international brands. A pair of sandals manufactured by "a supplier to Birkenstock" is priced at about 60 yuan (\$8.70), while the

same style sells for about \$100 on the German brand's website.

The site, which launched in 2016 and is the property of NetEase Inc., has come under fire from foreign brands. In a statement to Bloomberg, the American Apparel & Footwear Association said, "any claim that products are 'made by the same manufacturer' as another major brand is a tell-tale sign of a possible bad actor." NetEase spokesperson Zhu Yanying says, "the reason we specify which major brands the sellers supply is to let our customers know that the products on sale are from very outstanding manufacturers.