McKinsey & Company

How Chinese consumers are changing shopping habits in response to COVID-19

An analysis of point of sale data for over 100 million shoppers shows four key trends that are likely to persist post-crisis.

By Xin Huang, Dymfke Kuijpers, Lavonda Li, Sha Sha, Chenan Xia



China is ahead of the curve in its recovery from the recent COVID-19 outbreak, with many provinces slowly returning to normal levels of activity. Factories are restarting production and consumers are beginning to spend again. However, the crisis has had a dramatic and lingering impact on the nation's shopping habits, with implications for brands in China and globally.

McKinsey worked with MIYA, a leading mobile payment solutions provider, to set up a sample tracking analysis engine based on MIYA's 130,000 merchants, 500 million+ shoppers and 5 billion+ transactions. The sample tracking analyzed point-of-sale (POS) data from 31,000 stores, covering 150+ cities, including Wuhan and Hubei, and 100 million+ shoppers. The data, which has been updated to May 10, reveals four key shifts that are persisting even as the peak impact of the virus abates.

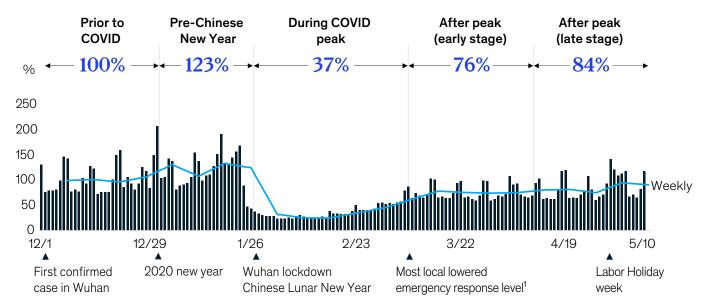
1. Offline shopping is slowly recovering, but discretionary spend, night-time shopping, and epicenter spend are lagging

Offline consumption is slowly recovering, after falling to around 37% of normal levels during the peak period of the outbreak. Many local authorities loosened restrictions in the first week of March, giving shops an opportunity to welcome customers who had been isolated in their homes for as long as six weeks. By May 10, offline consumption had picked up to around 84 percent of pre-crisis levels. And in the two weeks leading up to May 10, consumption rose by 105 percent over pre-crisis levels, driven by the Labor Day Holiday. (Exhibit 1)

Exhibit 1

China offline consumption is still impacted after the out break

China offline avg. consumption by day and week, 100% = avg. daily consumption in Dec 2019



¹On March 8th, 21 provinces of China announced to lower the epidemic response level, which involves over 70% population of the country. Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201–20200510

Some channels have fared better than others

Daily Consumption, 100% = avg. in Dec 2019



- Hyper/super market shows spike during crisis along with CVS, due to more people cook at home, yet no sign of a lasting uplift as it comes back to normal level when the recovery starts
- above their historic levels due to long lasting impact of COVID-19 (e.g., compared to SARS)
- Food stores & restaurant are still not fully recovered due to long lasting impact of COVID-19
- Apparel & Department Store were hit hard and recover slowly. Offline spending on apparel is devastating with 90% decline during virus peak

Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201 - 20200510

Despite the partial rebound, there were significant variations, amid continuing pressure on discretionary categories. Supermarkets, convenience stores, and drugstores saw a spike in activity during the crisis, as consumers stocked up on essentials and cooked at home. However, after the peak there was a divergence (Exhibit 2). Supermarket volumes fell, while convenience stores and drugstores continued to see positive momentum, driven by demand for medicines and a desire among many people to shop near their homes. Discretionary categories, such as food service outlets, apparel stores, and department stores were hit hard during the crisis and their recovery has been slow.

A notable trend across categories during the outbreak was increased basket sizes in nondiscretionary categories, reflecting consumer aversion to shopping trips and willingness to spend more per visit to reduce travel frequency. Convenience store basket sizes rose 124 percent during the crisis, and remained 22 percent higher as the crisis abated. Discretionary categories, such as department and apparel stores, on the other hand, saw smaller basket sizes (Exhibit 3). Department store basket sizes were 54 percent smaller during the crisis, and have recovered only slightly in recent weeks, to a level that is around 21 percent smaller than before the crisis. Again, this may be a reflection of people's reluctance to spend too long in crowded environments.

Traffic fell and baskets expanded

	Traffic # transaction			Basket Size in Value Avg. value per transaction			
100% = avg. in Dec 2019	During vs pre	After-1 st mon vs pre	After-2 nd mon vs pre	During vs pre	After-1 st mon vs pre	After-2 nd mon vs pre	
Hypermarket/supermarket	-31	-23	-20	70	29	26	
Convenience store	-49	-27	-12	124	49	22	
Drugstores/parapharmacies	S	0 -6	-19	16	20	60	
Food specialized retailer	-68	-38	-17	28	10	0	
Foodservice	-78	-47	-33	47	36	15	
Beauty specialized retailer	-76	-39	-8	38	9	10	
Apparel specialized retailer	-88	-46	-26	-21	-23	-19	
B Department store	-56	-35	-11	-54	-33	-21	

- A Consumers drastically reduce the number of shopping trips but increase their baskets significantly, resulting in sales growth in supermarket and CVS
- B While ~95% of apparel stores and department store have re-opened, traffic still ~20% below pre-COVID levels

Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201-20200510

Absolute traffic levels fell dramatically in all categories except drug stores during the crisis (31 percent lower for supermarkets and 88 percent lower for apparel outlets), and continued to be lighter than normal after the peak. Some 95 percent of apparel stores have reopened, but footfall in discretionary categories is still 20 percent below pre-COVID-19 levels. In non-discretionary categories it is around 20-30 percent lower.

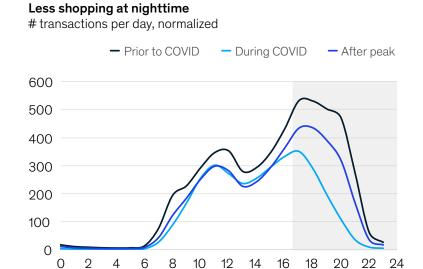
The impact of the crisis on shopping habits was revealed through the times of day at which people ventured out (Exhibit 4). In normal times, weekend and evenings are peak shopping times in China—weekend traffic is generally 30% higher than weekday traffic and evening traffic is 50% higher than day traffic. The traffic curves were much flatter

during the height of the outbreak, with weekend traffic just 10% higher than weekday traffic and evening peak hours about 15% higher than daytime peaks. Again, the pace of recovery has been slow, with shopping patterns continuing to echo those at the height of the crisis. Daily transaction volumes have recovered by around 50% from the trough.

Tier 1 cities such as Beijing, Shanghai, and Shenzhen are the busiest in China, and these normally-crowded environments have been slower to recover than lower-tier cities. Most channels have continued to see spending 20 percent lower than that before the crisis. Cities at the epicenter of the outbreak (in Hubei province) have also seen sluggish recoveries. There has, however, been some variation across channels (Exhibit 5).

Weekend and evening shopping fell significantly and have not fully recovered

Comparably less shopping on weekend #transactions per day, normalized Weekday Weekend Prior 4.7 6.2 to COVID During 3.1 3.4 **COVID** After 3.9 4.7 peak



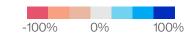
Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201-20200510

Exhibit 5

The epicenter has recovered more slowly than elsewhere

Based on observation of selected cities

After vs Pre avg. daily consumption in selected cities 0% = baseline, avg. in Dec 2019



	Wuhan	Hubei— other cities	Tier 1 cities: BJ, SH, SZ, CQ	Provincial capital cities ¹	Other cities ¹
Hypermarket/supermarket	-4%	4%	-7%	7%	1%
CVS	-24%	-6%	21%	12%	17%
Drugstores/para pharmacies	N/A	N/A	-38%	56%	94%
Food specialized retailer	-29%	-13%	-29%	-2%	-4%
Foodservice	N/A	-15%	-20%	7%	-33%
Beauty specialized retailer	-57%	-11%	-16%	-2%	1%
Apparel	N/A	-40%	-43%	-45%	-35%
Department store	N/A	-42%	-34%	-13%	-27%

Epicenter recovers much slower than other cities due to long impact of COVID-19

Tier-1 cities are relatively slow on recovery compared with other cities, as re-open rate is already 90+%

Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201-20200510

2. Channel shift to online, offline convenience, and drugstores

A trend that emerged from the crisis is the accelerating growth of the online channel, which benefited from the lockdown, store closures, and the continued reluctance of consumers to engage in-person with sales and service staff (Exhibit 6). In the grocery category, there was a spike in online shopping during the peak, with consumers spending more time and money online. Some 74% of consumers bought additional groceries online at the peak and 21% spent more. Chinese consumers were ahead of consumers in

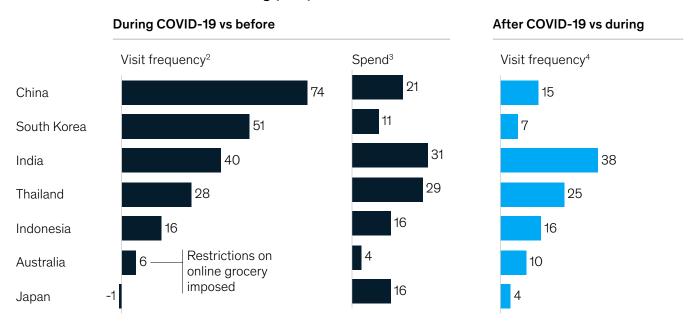
other countries in respect of frequency of online shopping, including South Korea (51% increased frequency) and India (40%.) In recent weeks, online activity in China has moderated, but visits are still running at 15% above pre-crisis levels.

Another emerging dynamic is that convenience stores have performed well in the wake of the outbreak (as they did at the peak), with tier 1 cities seeing the biggest uplifts (Exhibit 7). CVS daily consumption in tier 1 cities has run at around 21% above pre-crisis levels (as at December 2019). Again, this is likely the result of continuing caution in respect of travelling and mixing in large groups.

Exhibit 6

An acceleration in online grocery shopping

Online grocery channel net reported behavior during COVID-19 vs before; net intent for after COVID-19 vs during (now)¹



Net behavior is calculated by subtracting the % of shoppers in the channel stating they have decreased visit frequency or spending in the channel from the % stating they increased frequency or spending.

Source: COVID-19 mobile survey, 3/21-3/25/2020 N = 5,013, sampled and balanced to match general population (except India, with higher focus on consuming class)

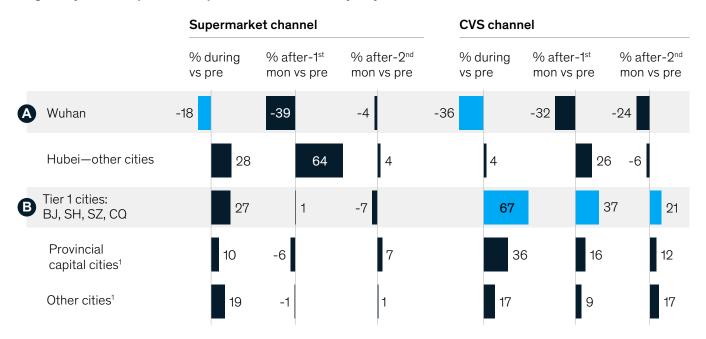
²Q: Among the below grocery shopping channels, which ones do you visit more/less frequently during the COVID-19 outbreak compared to before?

³Q: Which store types have you increased/ decreased your spending per month during the COVID-19 outbreak compared to before?

⁴Q: Within the below store types, which ones do you think you will visit more / less frequently after the COVID-19 outbreak stabilizes?

Consumers in tier 1 cities spent more in CVS during and after the crisis

Based on observation of selected cities¹ Avg. daily consumption in supermarkets vs CVS by city¹, %



- A Epic center recovery is heavily impacted by store opening schedule:
 - Wuhan supermarket and CVS spending went up at the beginning the outbreak and eventually to a reduction due to lock-down duration and supply issues
 - Also the substantial drop in supermarket and CVS after peak might suggest a shift to online

B Consumer in Tier 1 city shows stronger preference on CVS during and after peak

Cover selected cities: Beijing, Shanghai, Chongqing, Guangdong, Zhejiang, Jiangsu, Shanxi, Shandong, Jilin, Fujian, Sichuan, Jiangxi and Hubei. Source: MIYA payment engine, McKinsey analysis

3. Health and fitness is here to stay

COVID-19 has emphasized the importance of staying fit and healthy, and changing attitudes are reflected in shopping behaviors that have persisted in recent weeks. Demand for dairy, vegetables, and eggs was 25-50 percent higher during the initial recovery phase than it was before the crisis. Supermarket and convenience store data shows

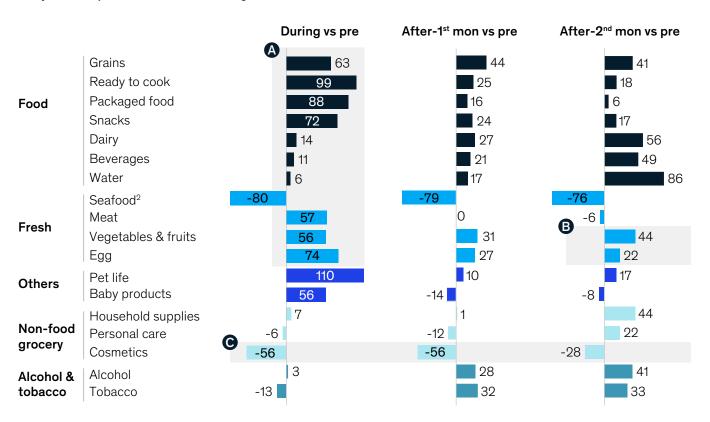
that, aside from fresh food, popular items during and after the peak of the crisis included grains, ready-to-cook meals, packaged food, and snacks.

As people began to spend less time at home, demand for these has softened of late but is still running above pre-crisis levels. There was a reduction in demand for personal care products and cosmetics in January and February, and these categories are only recovering slowly (Exhibit 8).

People stocked up on essentials and bought more fresh

Based on grocery basket analysis, data from supermarket and CVS

Daily consumption in value¹, 100%=avg. Dec 2019



Consumption shift in short term with increase on necessity; non-essential consumption picks up recovery speed later

- A Food first during crisis: people stock up 60-80% more food and fresh, to prepare for staying at home during lock down, but not substantial
- Healthy trends in dairy, veggie fruit and egg as these categories went up during the outbreak and still keep 30%-40% higher after the peak
- Cosmetics has experienced a shift to on-line during and after the peak

As shoppers have gravitated toward local stores, they have expanded the range of items they buy, adding more grains and fresh foods to their baskets (Exhibit 9). If the trend continues, suppliers in these categories may need to plan for a less

centralized distribution model, in which individual CVS stores are likely to offer a variety of products while carrying fewer brands in any single product category.

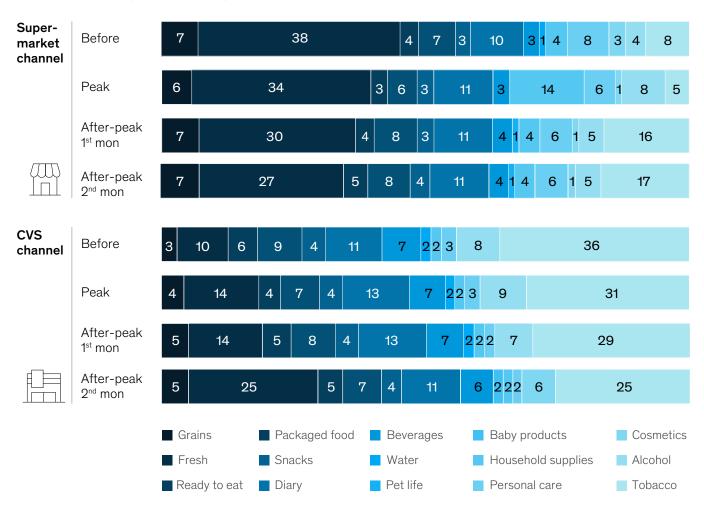
¹Based on grocery basket analysis, data from supermarket and CVS.

²Due to the limitation of fresh seafood supply—from fishing to delivery—the seafood are still over 70% down vs before. Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201–20200510

Increased demand for grains and fresh food at CVS

Category % in Supermarket and CVS

100%=Total consumption in the time period



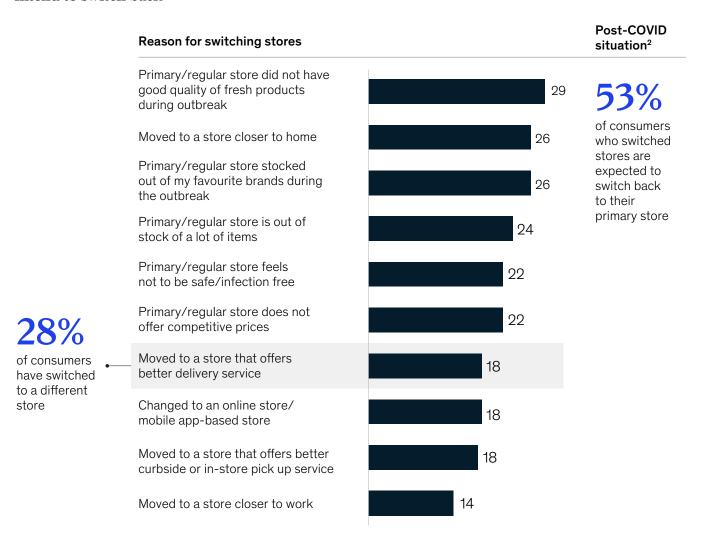
Source: MIYA payment data engine, McKinsey China retail POS analysis 20191201-20200510

4. Shock to loyalty offline, partly offset by online engagement

Given the physical constraints of the crisis, Chinese customers have been more willing to try new stores and new brands. After the peak, around 14% do not plan to revert to their pre-crisis store choices and about 6% do not plan to return to their previous brands (Exhibits 10 and 11). To engage with these

dynamics, hard-hit categories such as apparel have ramped up their digital activities. One premium fashion retailer, for example, invested in online channels such as Tmall, e-commerce platfort, and social media. Its offline sales fell by about 50% in March, but its online sales grew by 60%. A large grocery retailer saw a 300% spike in demand for its home delivery service and has launched a major effort to triple its online business in 2020.

More than a quarter of shoppers have shifted away from their primary stores, of which 47% do not intend to switch back

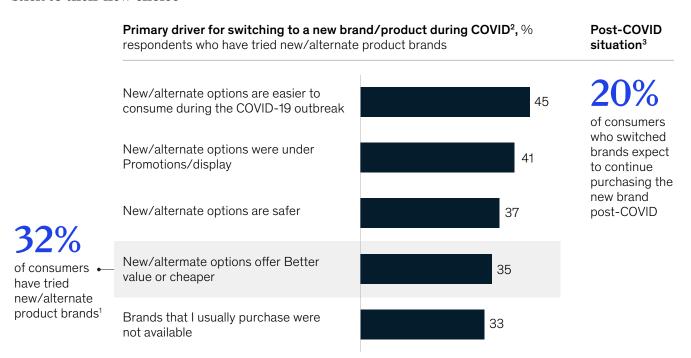


Source: McKinsey & Company COVID-19 mobile survey 3/21-3/23/2020 N = 611 Sampled and balanced to match China's general population 18-65 years-old

In aggregate, the data shows that COVID-19 has had a profound and persistent impact on the nation's shopping habits. The implications for brands in China, and other countries that may follow China's path to recovery, can be summarized under four strategic pillars:

1. Continue to protect customers and employees. COVID-19 is likely to have a lingering effect on consumer attitudes and sentiment. Assuming the virus is not eliminated in the near future, companies should redesign their protocols and operating models to reflect the new reality. This, for example, would including setting out exactly what should happen if a person catches the virus.

A third have switched brands based on convenience and promo/display, of which 20% intend to stick to their new choice



¹ Q: Have you tried new/alternate product brands during the current COVID outbreak that you do not usually purchase?

- 2. Drive triple digital transformation. Digital has been one of the few real beneficiaries of the crisis. We see three ways in which companies can respond:
 - Manage your business in real time and digitally. The POS data has shown that the outbreak has had a significant impact on geographies, channels, and categories. Businesses now operate at a very different cadence, with decision-making required at much higher levels of granularity and shorter intervals to reflect increased uncertainty. This requires a digital-first approach and agile organizational capabilities. Many companies set up war rooms during the crisis, but had very limited access to information. In future,
- it will be critical to have a real-time view on inventory and a strategy for deployment across regions. Data and analytics will be important tools.
- Don't just sell online; engage your customers digitally end-to-end. Chinese consumers increasingly demand an omnichannel experience, meaning they want more than to be sold to online. One premium apparel retailer has deployed a range of solutions, including enabling sales reps to use WeChat groups to reach out to VIP customers with individualized products (supported by a CRM system), launching social media shows with with Key Opinion Leaders (KOLs), and ramping up content marketing. The

² Q: Why did you switch from the brands you usually purchase to new/ alternate options? (N = 196, Percent of responses from consumers who have tried new new/alternate product brands)

³ Q: After COVID, do you in general plan to switch back to the product brands you usually purchased before? (N = 196, Percent of responses from consumers who have tried new new/alternate product brands)

Source: McKinsey & Company COVID-19 mobile survey 3/21-3/23/2020 N = 611 Sampled and balanced to match China's general population 18-65 years-old

- bottom line is that companies must engage the entire organization to prepare for an omnichannel world. This requires a digital network architecture, backed by a dedicated operational set up, KPIs, and objectives and key results (OKR) frameworks that can help the organization define goals and track outcomes.
- Transform your business model. To increase operating efficiency and effectiveness, companies should aim to incorporate technology across the business. Before COVID-19, retailers were already deploying digital use cases, including seamless check out, pricing, promotions, assortment optimization, and robotic process automation in the back office. However, few retailers managed to scale across the value chain, typically because of factors including a lack of top-down ownership and ambition, insufficient capabilities, siloed ways-ofworking, outsourced IT functions, and legacy systems. COVID-19 has shown the need to transform the business model to be more tech-enabled, which will both help the company operate under the constraints of pandemics and meet customer safety needs. The business case is there: tech can improve sales efficiency by 2-5% and, depending on starting position, drive sales and make or break market share during a crisis. Retailers need to pursue a triple transformation of people (new capabilities and ways of working), technology (modularizing core tech and deploying software-as-a-service across the value chain) and business (delivering value for the customer).
- 3. Align with consumer trends: healthy, local, and delivering value. The data shows that the trend toward healthier lifestyles accelerated during the COVID-19 outbreak. People also shopped local, both in terms of location and products. For companies with strong cash positions, there is an opportunity to respond, leveraging M&A and hiring to expand into adjacencies such as food services, or acquiring smaller brands that may be struggling.
- 4. Transform your supply chain to be agile and resilient. Supply chains attracted a lot of attention during COVID-19 and we expect they will continue to sit high on executive agendas. During a crisis, it can be dangerous to have a large amount of working capital locked up in inventory and facing potential write-off (or sale at a deep discount). The acceleration of omnichannel also creates a real challenge for many consumer packaged goods brands and retailers, because of the prohibitive cost: growth in online does not imply growth in profits. Companies should use the coming period to transform their supply chains, accelerating decision making to become more efficient, agile, and resilient.

As executives consider their options, these strategies may help them support resilience and lay the foundations for the 'next normal' in the months ahead. Retailers and consumer brands have been challenged in recent months, but those that can act decisively on all four fronts are likely to emerge ahead of their peers once the crisis is over.

Xin Huang is a partner in McKinsey & Company's Hong Kong office, where **Sha Sha** is a senior partner; **Dymfke Kuijpers** is a senior partner in the Singapore office; **Lavonda Li** is a consultant in the Shanghai office, where **Chenan Xia** is a partner.