McKinsey & Company

Disruption and uncertainty: The state of grocery 2021

China

November 2021

Thanks to Leff for providing editorial and design services for this report.

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Contents

Foreword

The grocery market in China is the most intriguing in the world: it is huge (second only to the United States), it leads the pack in online commerce, and it's growing rapidly. It is also a source of inspiration and awe when it comes to digital and online-to-offline (commerce).

For the past two decades, the center of gravity for retail innovation has been shifting East, with China leading the pack. Its grocery market has been disrupted at a speed and frequency that have left traditional players struggling to keep up. After digital giants led the way in retail innovation, with mixed success to date, community group buying emerged last year to disrupt the fresh value chain (although the model has yet to prove its scalability and sustainability).

China is not only an incredibly competitive market but also unique in its consumer demographics (middle and upper-middle class) and geographies (city tiers and clusters), the segments in which tech-based entrants will do battle with traditional retail. It is also highly unproductive (lowest sales per square meter in the world), severely fragmented, and primarily regional. These factors have created huge challenges for Chinese grocery retailers in delivering economic profit and higher margins.

Retailers have taken different paths in recent years to address these challenges: some have sold and exited, others have invested heavily in technology, and a few have redoubled their focus on core retail capabilities.

This last group of retailers has found success in elevating their performance. Their strategy? They brought back the mantra of "Retail is detail" and took a holistic view of the business. Actions included restructuring their networks, reinvigorating their value propositions, embedding analytics and data in their commercial and operations approaches, instilling rigor and discipline through transformation offices that manage the business for performance, and selectively forging partnerships (for example, with data providers).

Will China become a more attractive market, or will the ongoing battles for traffic among retailers continue to challenge the profitability of some business models? The jury is still out.

One thing is certain: retailers must continue to keep pace with the competitive landscape and the changing preferences of the Chinese consumer. Retailers will then need to pursue a business-model transformation, which includes integrated omnichannel operations, format innovation, an increase in private brands, supply-chain automation, and asset-light operations. This path will also require a level of industry consolidation, aided by digital platforms that enable collaboration and partnerships.

We strongly believe grocery retailers in China will find a path to profitable growth in the long run. However, the road to a sustainable model will continue to be turbulent. A return to focusing on retail fundamentals is a short-term imperative. For many retailers today, this priority means deploying a control tower to free up cash, rejuvenating their value proposition (including fresh), restructuring and refocusing their networks, building data-driven commercial capabilities, and revisiting their logistics setups.

This report offers a glimpse of the current state of grocery retail in China and highlights the factors that will shape the competitive landscape in the years to come.

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The battle for monthly active users in China

In one of the most competitive grocery markets in the world, valuations that reward increases in monthly active users are at odds with short-term profit growth.

This article is a collaborative effort by Cherry Chen, Claire Gu, Dymfke Kuijpers, Joanna Mak, and Alex Sawaya, representing views from McKinsey's Retail Practice.

China is unlike any other grocery market. Its consumers are digital crusaders, spoiled by seamless online ecosystems that deliver goods to their doorsteps at lightning speed. Products that used to be available only to city dwellers can now be found in countryside towns. Food-delivery services that started off as a way for time-pressed office workers to gulp down a quick bowl of noodles now are pioneering fresh-food innovations.

And yet, despite all of these groundbreaking advances, the vast size of China and the decentralized agricultural market that's largely still composed of individual farmers make meeting the demands of a diverse consumer base challenging. Fierce competition among retailers also means that consumers aren't overtly loyal, preferring to find the next coupon or discount that will get them a similar product, particularly if it means receiving it a day early.

Within this context, Chinese retailers have struggled to turn short- to medium-term profits. Valuations in China tend to focus on monthly active users (MAUs); such focus renders national offline players—which have less than 5 percent of market share—nearly moot. Even larger supermarkets struggle with relatively low sales, even after our analysis corrects for purchasing power and leases. China's distinctive geographic realities, the behaviors of its consumers, and shifts in players in the marketplace combine to create a challenging environment, the details of which we will explore in below.

China's distinctive geographic realities, the behaviors of its consumers, and shifts in players in the marketplace combine to create a challenging environment.

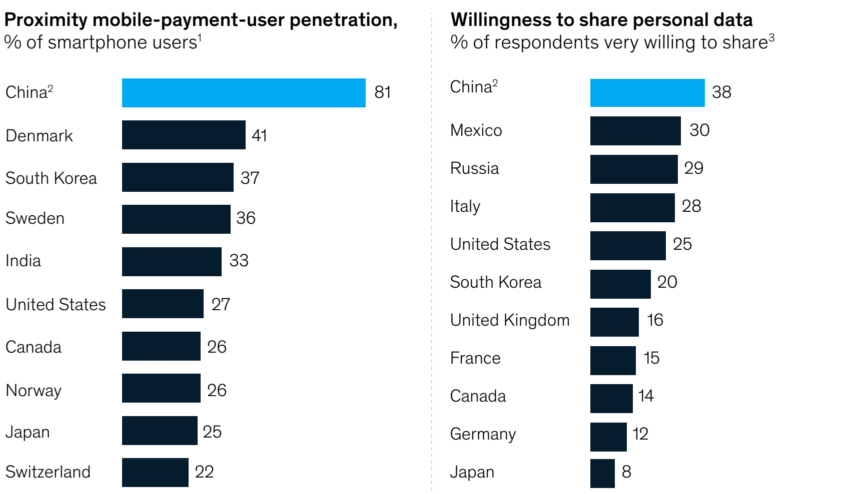
China's rapid urbanization and digital transformation has created a unique context for retailers

Over the past few decades, China has undergone rapid urbanization as individuals leave their rural homes for better jobs and bigger aspirations. By 2020, China's urbanization rate reached 60 percent, with 10 percent of the country's population—136 million people—clustering in China's 10 largest cities, creating a huge consumer market with increasingly diverse needs.

At the same time, China's digital revolution has reached everyone with a mobile phone, accelerating e-commerce development. China had 989 million internet users by the end of 2020, 99.7 percent of whom are mobile users and 34.0 percent of whom are digital natives. The ubiquity of digital technology means Chinese consumers broadly embrace it and are more willing to share personal data than consumers in other countries (Exhibit 1). In our survey, a higher percentage (38 percent) of Chinese respondents expressed a willingness to share personal data, compared to 25 percent of US users and 8 percent of Japanese users. Part of the willingness to do so may be because many Chinese consumers have grown up with this technology and are accustomed to providing personal data in exchange

Exhibit 1

Chinese consumers adopt digital technology more broadly and are more willing to share personal data for benefits than users in other countries.



[1]Ages 14+; mobile-phone users who have made at least one proximity-mobile-payment transaction in the last six months; includes point-of-sale transactions made by using mobile devices as a payment method; excludes transactions made via tablet.
[2]Excludes Hong Kong.
[3]Respondents answering 6 or 7 on a 7-point scale to the question "Would you share personal data (financial, driving records, etc) for benefits (eg, lower cost, personalization, etc)?"
Source: Andreessen Horowitz; eMarketer

for services that make their lives easier. That willingness particularly extends to digital payments, an area in which Chinese consumers are most ahead of those in other countries. Indeed, 81 percent of China's smartphone users are mobile-payment users, compared to 27 percent of US users and 25 percent of Japanese users.

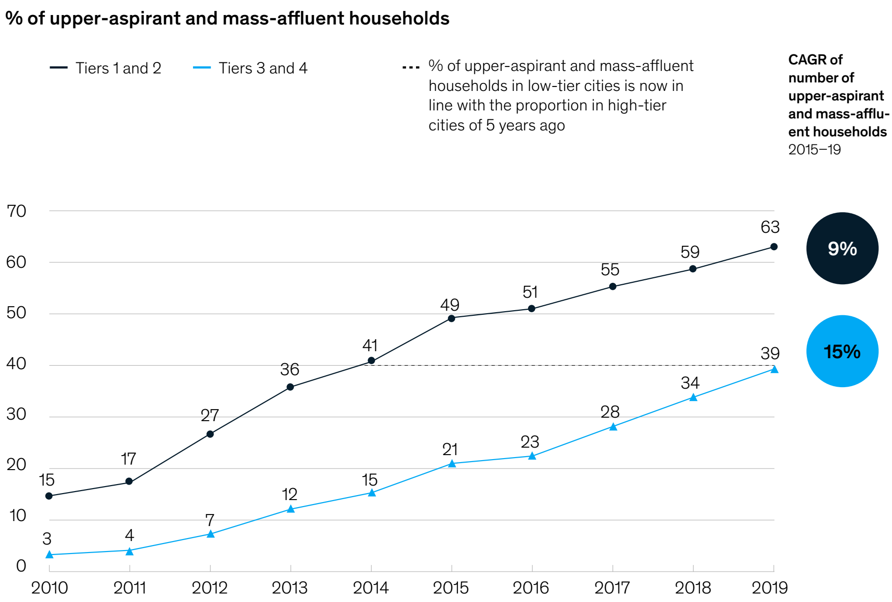
The rise of young, free spenders in lower-profile cities

In recent years we have watched the number of middle- and upper-middle-class consumers in smaller, lower-profile tier-three and -four cities[1] increase. From 2010 to 2018, the number of households with annual disposable income of 140,000 renminbi to 300,000 renminbi ($22,000 to $46,000) in tier-three and -four cities rose by a 38 percent CAGR, compared to 23 percent growth in tier-one and tier-two cities. These relatively affluent households (what we call "upper aspirant" and "mass affluent" classes) account for more than 34 percent of the population in tier-three and -four cities, or nearly the same proportion found in large-tier cities five years ago (Exhibit 2).

[1] Tier-three and -four cities refer to Chinese country level cities with GDP under 50 billion renminbi ($7.74 billion).

Exhibit 2

Well-to-do consumers have increased significantly in lower-tier cities.

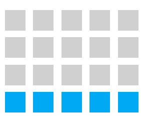


Source: McKinsey Global Institute

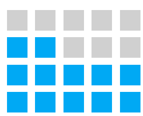
Furthermore, a rising cadre of consumers, who we call Young Free Spenders (a segment from McKinsey's China consumer report 2020), represent a seismic shift from past generations in terms of how they view savings and spending. These individuals are today's consumer growth engine, making up 25 percent of the population but representing 60 percent of the total spending growth in China. Young Free Spenders are digital natives under the age of 35 who reside predominantly in tier-two, -three, or -four cities, where living costs are lower than tier-one cities. These individuals are flush with disposable cash from white-collar jobs and aren't particularly concerned about saving for the future. Not yet tethered by family obligations, they are optimistic about their futures and have little hesitation about spending money on things such as a new tech device, experiential travel, or high-end skin care. They have a lot more time on their hands than their counterparts in larger metropolises because they spend much less time commuting, so they have ample opportunities to dine out, follow the latest trends, and buy products that enhance their lifestyle and social status. Young Free Spenders also believe that expensive products are generally better than cheaper ones. Together, these ways of thinking afford them considerable spending power (Exhibit 3).

Exhibit 3

Young Free Spenders constitute 25 percent of the population but 60 percent of total spending growth.



~25%
of total population



~60%
of total spending growth[1]

Age
Young (18–34):
46% vs **37%**[2]

Income
Middle-to-high (MHI[3] >20,000):
27% vs **24%**[2]

Gender
Female:
56% vs **51%**[2]

Marital status
Single:
29% vs **24%**[2]

City distribution
Lower-tier cities:
25% in tier 2, 3 and 4 cities vs
16% in tier 1 cities

Life attitude
"I buy what I want, like luxury bags, the new season of skincare and color cosmetics… and I won't save up to prepare for the future"

Shopping attitude
"I am willing to spend more on trying new things, especially on leisure and entertainment…"

Product attitude
"I always believe that expensive products are generally better than cheaper ones"
"I don't mind paying more for the brands I love; I frequently visit luxury-branded stores for new arrivals"

[1]Use income as proxy for spending and stated spending change (2018 vs 2017) to calculate relative contribution to spending growth.
[2]All differences are compared with total average.
[3]MHI: Monthly Household Income (RMB).
Source: McKinsey China Consumer Survey

With online retail playing a pivotal role, the highly frequent and inelastic category of grocery retail has become an important gateway for customer traffic.

The increased spending of this group in lower-tier cities has been fueled, in part, by e-commerce platforms such as Pinduoduo, which has helped expand the availability of branded products in lower-tier cities. Consumers can now purchase products from more than a thousand brands on these platforms, and Young Free Spenders account for anywhere from 10 to 30 percent of a category's sales on these sites.

Why MAUs matter

Because Chinese consumers already are comfortable with purchasing goods online, it's no surprise that online grocery retail has been growing more than 30 percent annually in recent years. Before COVID-19, online penetration reached 20 percent of the market, and the pandemic has further accelerated online grocery-retail spending. More than half of customers purchased consumer packaged goods and one-third of consumers bought fresh food online in the past three months. Much of that growth came from tier-three and -four cities and was driven by logistics expansion of online players including Alibaba's TMall and Hema, JD.com, and Xingsheng. In addition, the line between online and offline retailers is blurring as China's internet giants experiment with offline stores, and traditional brick-and-mortar operators set up mobile apps, contributing to even further online penetration.

With online retail playing a pivotal role, the highly frequent and inelastic category of grocery retail has become an important gateway for customer traffic—and therefore a battlefield for winning monthly active users. According to our survey, 80 percent of consumers shop for fresh groceries at least once a week, and approximately 60 percent shop nonfresh categories at least once a week. These numbers mean that grocery retailers have at least one interaction with most of their customers every week, offering a large window of opportunity for cross-selling products and services. These frequent touchpoints translate into valuable data and analytics for creating consumer profiles, and the increasing cost to acquire customers (400 to 1500 renminbi—$62 to $232—per customer for e-commerce) in other business categories has pushed retailers to use grocery as a cheaper hook for gaining new buyers.

While some of China's more established food-delivery apps—Meituan and Eleme—still split the lion's share of MAUs, up-and-coming competitors are fighting for larger shares. Pinduoduo, for example, launched a click-and-collect retail service called Duo Duo Grocery that unveiled 1 billion renminbi ($155 million) in promotions to customers. Dingdong Grocery, an emerging online retailer, deployed a sales team on the ground that earns commissions for recruiting new customers. The key to win the battle may not simply be price but also the ability to understand target customers and win them at the right moments. Properly targeting customers requires a deep understanding of who customers are, what they want, and how to seize the moments that matter.

A struggle for consolidation

Despite grand ambitions for players to increase MAUs, the grocery-retail market in China remains highly fragmented. The decentralized marketplace starts in the fields, where agricultural production in China is still dominated by smallholder farmers, which makes efficient bulk-sourcing difficult. Indeed, the average area of cultivated land per farmer in the United States is 280,000 square meters, compared to only 5,000 square meters in China as of 2016, according to the Ministry of Agriculture. Only 1.8 percent of agricultural producers in China are large-scale ones with more than 33,000 square meters.

In addition to difficulty in bulk sourcing, the end-to-end supply chain infrastructure for grocery, including the first mile and the last mile, is still underdeveloped in rural areas. Rural communities in China only recently gained full access to deliveries from e-commerce companies thanks to newly built infrastructure. Current delivery windows of three to four days and the lack of cold-chain logistics infrastructure don't meet the requirements for delivering groceries in a safe and timely manner. Moreover, the low population density in rural areas and limited purchasing power can hardly justify the massive investment required.

These complicating factors of different demands for city dwellers and rural consumers means no one single strategy can win it all. Retailers are finding that fresh start-ups and omnichannel stores are booming in tier-one and -two cities, while community group-buy players are quickly overtaking smaller towns and vast rural areas. MissFresh, for example, is an emerging grocery-delivery start-up that has focused on 16 high-income cities for the last six years, establishing more than 1,500 microfulfillment centers to deliver groceries within 30 minutes of receiving a customer's order. On the opposite side of the spectrum, Xingsheng Youxuan, the largest community group-buy player, set up a network of pickup points, covering 6,500 prefectural towns and 42,000 rural districts, with a monthly gross merchandise value (GMV) reaching 4 billion renminbi ($619 million) , as of end 2020. But it has yet to establish a significant presence in Beijing or Shanghai.

The need for diverging approaches to grocery is required since the path to turning sustainable profits is uncertain. Fresh start-ups and omnichannel stores are still loss leaders, despite their impressive top-line expansion. On the other hand, community omnichannel stores and local group buys are making thin profits but remain wary of growing nationwide. Therefore, there is not yet one single player who has achieved national scale. Even beyond the diversity of consumers, the highly fragmented upstream market and lack of an end-to-end supply chain infrastructure that includes direct sourcing and last-mile delivery present real challenges to scaling.

In the next few chapters, we will highlight key insights from both the supply and demand sides in China's landscape and share our perspectives on how to win in this omnichannel age.

Retailers are finding that fresh start-ups and omnichannel stores are booming in tier-one and -two cities, while community group-buy players are quickly overtaking smaller towns and vast rural areas.

Cherry Chen and **Claire Gu** are both consultants in McKinsey's Shanghai office; **Dymfke Kuijpers** is a senior partner in the Singapore office; and **Joanna Mak** is an associate partner in the Hong Kong office, where **Alex Sawaya** is a senior partner.

Reaching the Chinese consumer in a world where food is everywhere

Understanding four types of Chinese consumers can help traditional retailers strategize on how to win them over.

This article is a collaborative effort by Cherry Chen, Claire Gu, Dymfke Kuijpers, Joanna Mak, and Alex Sawaya, representing views from McKinsey's Retail Practice.

Understanding and serving the grocery needs of 1.4 billion people is no simple task. Gone are the days when offline players could pick a good store location, merchandise solid products, manage relationships with suppliers to fill the shelves, and—voila!—consumers would walk in the doors and buy.

That dynamic changed when internet platforms came into the picture, driven by a consumer-centric DNA that was an about-face from historic supplier-centric and product-centric philosophies. To help retailers understand consumer behavior in the omnichannel age, we break down our analysis of four primary types of consumers and provide actions retailers in China can take to vary their approaches to meet the growing demands of these consumers (exhibit).

The Golden Family (金领家庭)

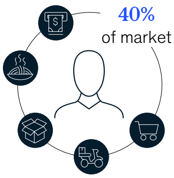
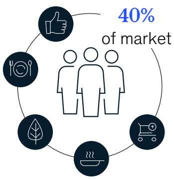
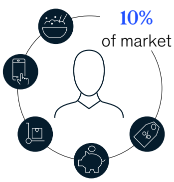
The Golden Family consumer segment is by far the biggest in China, representing 40 percent of the total market. These consumers are upper-income and middle-income parents, nearly two-thirds of whom are 35 to 54 years old and about 70 percent of whom live in tier-one and tier-two cities. They are willing to pay a premium for quality, experience, and service when shopping for groceries.

These consumers pride themselves on cooking healthy and delicious dinners for their kids, taking weekend family trips to shopping malls, and replenishing bathroom supplies with premium personal-care products. Therefore, they have a high demand for quality, fresh groceries and usually buy from online grocery retailers and premium supermarkets. They have increased their purchasing frequency and average spending since mid-2020: 80 percent of them shop for fresh groceries at least once a week and spend an average of 320 renminbi (about $50) per shopping trip. Some of these changes reflect fewer trips to wet markets affected by the pandemic; by the end of 2020, Golden Families had decreased average

Gone are the days when offline players could pick a good store location, merchandise solid products, manage relationships with suppliers to fill the shelves, and—voila!—consumers would walk in the doors and buy.

Exhibit

China has four primary categories of consumers, each with their own spending habits.

	Major age group	Mainly lives in	
Moonlighters (月光族)  40% of market	18–24	Tier 2 cities	• Spend up salary; limited savings • Price and time sensitive • 69% can trade good price for delayed delivery; more likely to use Paotui service • 13% shop fresh grocery via community group buy for attractive price • Rarely cook, surviving on deliveries or instant noodles
Golden Families (金领家庭)  40% of market	35–54	Tier 1 and 2 cities	• Willing to pay a premium for quality, experience, and service when shopping for grocery • 59% will purchase premium grocery products • 47% cook regularly to sustain a healthy diet for kids and themselves • Fine dining restaurants to enjoy quality meals • Increased both shopping frequency and spending online after onset of pandemic
Super Savers (精打細算)  10% of market	45–65	Tier 3 and 4 cities	• Cares most about price and convenience • Planned purchase: 48% stock up groceries on Double 11 holiday • Shop at wet markets and cook easy meals on a daily basis; 63% believe cooking can save money • Browse value deals on Pinduoduo and convenience stores after work every day
996 Professionals (奋斗人)  10% of market	18–34	Tier 1 cities	• Driven by quality and detail • 65% examine expiry date; 55% care about product composition for fresh grocery • 70% look for brand, 66% about composition for nonfresh grocery • Shop at offline supermarkets and convenience stores as a way to relax from work • Mainly dine in restaurant or rely on deliveries • Tend to order from fresh startups and omnichannel shops

frequency to wet markets by 29 percent and average spending at wet markets by 21 percent.

Knowing these habits, retailers should elevate their assortment to premium levels and provide pleasant shopping experiences to capitalize on the behavior of Golden Families.

Moonlighters (月光族)

Moonlighters make up close to 40 percent of the market and primarily consist of urban workers in tier-two cities. They mainly range in age from 18 to 24 and spend most of their salary each month, leaving little extra money to save.

The moments that matter for this group are often last-minute: when they suddenly run out of soap, tissue paper, or instant noodles, they rush to the grocery store to pick them up. This behavior often translates into piecemeal shopping habits: Moonlighters visit stores two to three times per week but spend less than 100 renminbi (about $15) per purchase—often because they're low on finances, which is why staples in their shopping repertoire include instant noodles and fried eggs. Because of these habits, they're both price and time sensitive when shopping for groceries, and they often use community group buy for fresh products.

To that end, Moonlighters rarely cook, and when they do, they use a limited number of ingredients. They are more likely to use instant online-to-offline delivery (such as Paotui) for nonfresh groceries and therefore don't buy as many fresh groceries. Indeed, 60 percent of them shop once a week at most and spend only an average of 180 renminbi (about $28)—40 percent less than Golden Families. In addition, about 13 percent of Moonlighters buy fresh groceries through community group buy because pricing is attractive; last year, more than one-third of Moonlighters increased both their purchase frequency and spending through community group buy. And because price is a large factor, 69 percent of Moonlighters say they accept delayed deliveries if it means a better price—11 percent higher than the average consumer.

Given these factors, retailers can capitalize on Moonlighters' habits by offering personalized promotions, providing a convenience-driven assortment—such as ready-to-eat or ready-to-cook food—and offering community group-buy service.

The 996 Professionals (奋斗人)

The 996 group—which stands for working from 9 a.m. to 9 p.m., six days a week—are largely white-collar professionals who work relentlessly and earn relatively high wages. Seventy percent of this group is female and resides in tier-one cities, and 60 percent of 996 Professionals are 18 to 34 years old. About 80 percent of 996 Professionals make more than 18,000 renminbi a month (about $2,800), which means quality, assortment, and services are their driving factors when they shop for groceries.

Because work plays such a pivotal role in their lives, 996 Professionals thrive on moments that allow them to unwind: taking a hot shower with luxurious personal-care products after work, inviting friends over for a home-cooked meal on the weekend, or treating themselves to healthy snacks during work breaks. They embody a healthy living standard that emphasizes safe, high-quality food. They care about brands of groceries, expiration dates, origin of products, and ingredient labeling more than other consumer groups and therefore often purchase premium grocery products. Because time is a factor during the week, these consumers often eat out at restaurants or order delivery from fresh start-ups and omnichannel shops and save their cooking for the weekends. As a result, about 60 percent of 996 Professionals shop for fresh groceries once a week at most, but 80 percent of them spend more than 200 renminbi (about $31) per trip.

When shopping for nonfresh items, 996 Professionals tend to spend money on premium products, with 78 percent of them spending more than 100 renminbi (about $16) per purchase. On average, only 64 percent of all consumers spend this much per purchase. Curiously, a much higher percentage of 996 Professionals—70 percent, compared to 56 percent of average consumers—like to shop at brick-and-mortar stores, perhaps as a way to relax from work.

By paying attention to detail and quality and recognizing that this group has little time to spare, retailers who can provide premium products and make shopping for those products easy and fun will win over this consumer segment.

Super Savers (精打细算)

Super Savers account for 10 percent of the market. These consumers are usually middle-aged shoppers who live in tier-three and tier-four cities and who are under financial stress to save and stock up on nonfresh supplies when stores offer big promotions. In between those large shopping trips, Super Savers often buy food at wet markets for daily cooking, and all shopping decisions stem from the desire to find the best price and most convenient route. Fifty-five percent of Super Savers are 45 to 65 years old and have middle to lower incomes.

For Super Savers, there's nothing better than browsing value deals on Pinduoduo or scouring convenience stores for price cuts. They love to budget and are always looking for ways to cut costs. Bargaining for fresh food in wet markets is a highlight of their day. They care a lot about value for money and net weight information but pay little attention to brand.

Because their cooking philosophy stems from a savings principle, Super Savers have scattered demand for fresh items. They often cook easy meals to save money and will decide what's for dinner based on fluctuating prices and offers at wet markets. Indeed, 63 percent of Super Savers say they cook to save money because dining out is expensive, compared to 50 percent of overall consumers.

Super Savers' habits also mean these consumers form shopping lists based on offers and promotions pushed by retailers. During the 11.11 shopping extravaganza spearheaded by internet platforms, for example, Super Savers will purchase a whole year's worth of supplies to stock their pantries.

Knowing this profile, retailers can target Super Savers with bulk-order discounts or subscription plans at attractive prices to lock in volume and build loyalty.

Traditional offline grocers can win the hearts of consumers and stay in the game by understanding these four consumer segments and tailoring an approach to each group. Offline net margins of 2 to 3 percent have not previously allowed offline players to invest in marketing to differentiate their offerings. Now, as grocers move toward omnichannel and face headwinds from internet platforms, they can keep up with the competition by understanding that knowing consumers is just as important as—if not more important than—managing suppliers and product merchandising.

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CHAPTER 3

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O2O innovations—The next digital disruption or a fad?

Several categories of companies are vying to not just gain market share but also implement sustainable, profitable online-to-offline business models.

by Celia Chen, Dymfke Kuijpers, Alex Sawaya, and Zheng Sun

Over the past few years, online-to-offline (O2O) offerings have been a hotbed of innovation for grocery retail in China. The convergence of different players, business models, and technological advancements has fueled the rapid growth of e-commerce, and the COVID-19 pandemic further accelerated consumer shifts to online channels. It's still unclear whether O2O represents the next wave of digital disruption or is only a passing fad. A closer look at the dominant business models and leading players sheds light on the shifting competitive landscape.

O2O set to double market share by 2022

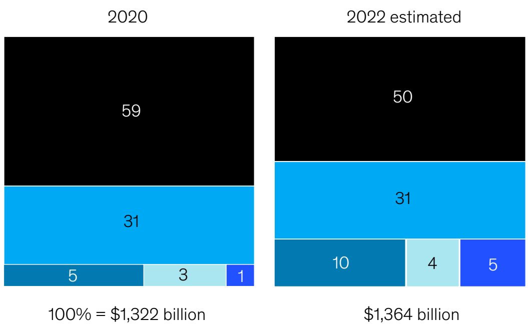
The immediate impact of O2O business models is reflected in the changing composition of the grocery-retail market. O2O is projected to rise from about 10 percent of the market in 2019 to 20 to 25 percent by the end of 2022 (exhibit). Four categories of companies are fueling this growth:

E-commerce players are pursuing several models, including megawarehouse to home and point-to-point intercity delivery (for example,

Exhibit

With online penetration set to double to more than 20 by 2022, channel landscape is evolving into five subchannel archetypes.

China grocery-retail market by business-model archetype, %



Key trends

E-commerce[1]
Continual growth supported by new online trends (eg, social commerce) with new vertical players entering

Express delivery[2]
Fast-growing; comprises third-party marketplaces that enable small and medium retailers to acquire online traffic and deliver the products, as well as internet pure players with better experience but low-efficiency models

Community group buy
Fast-growing, with internet giants dominating and several regional players emerging

Omnichannel MT
Big formats: Market remains fragmented; players aggressively transformed themselves to omnichannel model by providing store-based express-delivery business

Small formats: specialized in different verticals and occasions (eg, CVS, fruit store, meat store, etc)

Offline GT

Note: Figures may not sum to 100%, because of rounding.
[1]JD and Tmall make up 70 percent of the grocery e-commerce market, to which we applied 50–60% CAGR, which is adjusted down from their ambitious goals announced publicly.
[2]Includes only third-party platforms and pure players, not including the omnichannel retailer express delivery.
Source: Euromonitor, McKinsey analysis

JD Supermarket, Pinduoduo, and Tmall Supermarket, as well as livestreaming e-commerce such as TikTok). These companies primarily offer fast-moving consumer goods (FMCG) and support, as well as same-day and next-day delivery.

Express-delivery players are pioneering approaches such as dark warehouse to home, store to home, and third-party marketplaces. Offerings feature fresh and FMCG products delivered in 30 to 60 minutes.

Community group buy is a model that encompasses preplanning for purchasing and next-day pickup, with goods distributed by the community. It replaces traditional multilevel distributors, features attractively priced consumer goods (mainly fresh food), and offers commissions to community leaders.

Omnichannel retailers have faced severe traffic challenges since the onset of the pandemic and have therefore aggressively transformed themselves to provide store-based express delivery.

Express-delivery models and community group buy encompass approaches that vary in scope and profitability. However, their early successes in capturing market share (if not profits) have led large digital players to pursue as a new growth driver for DAU.

Express-delivery model

Over the past three years, the express-delivery model has been expanding at a fast clip, fueled by convenience-driven consumer behaviors. This model has three main types of players: omnichannel retailers (30 percent of gross merchandise value in the category), third-party marketplaces (50 percent), and pure-play internet attackers (20 percent).

Omnichannel retailers

Companies are implementing omnichannel strategies from two different starting points. Offline

Over the past three years, the express-delivery model has been expanding at a fast clip, fueled by convenience-driven consumer behaviors.

retailers are fighting a two-front battle of declining traffic and falling prices, a potentially lethal combination. To better protect their market share, traditional offline-only retailers have been investing in online grocery offerings with distinct value propositions, including fast delivery, a wide range of products, and a perception of high quality. Retailers such as RT-Mart, Wumart, and Yonghui have transformed their online presence to gain a larger share of wallet with their customers. The online penetration of these supermarkets exceeded 10 percent in 2020. In addition, tech giant Alibaba launched Hema Fresh, which had powerful omnichannel capabilities as part of its business model.

Omnichannel grocers have several unique advantages—lower customer acquisition costs by building in-store traffic, lower storage and delivery costs by capitalizing on existing space, and more efficient supply chains through better inventory and shrinkage control—that enable them to compete with the most cost-efficient models. Traditional offline retailers can use an omnichannel strategy to become more profitable: when the market competition becomes more consolidated, they can charge fulfillment fees. We expect sales within supermarkets to continue to shift online, making the omnichannel transformation a must-win battle for retailers.

Third-party marketplaces

E-commerce players and local food-service providers are harnessing their online infrastructure and last-mile capabilities to build online grocery marketplaces. This arrangement can be particularly attractive to smaller grocery retailers and large supermarkets in lower-density cities, which have limited resources for developing their own digital and online capabilities. In turn, e-commerce players can benefit by increasing stickiness and customer value across their ecosystem.

To date, the marketplace model hasn't proved profitable. The commission fee that e-commerce players charge often doesn't cover last-mile expenses. Despite this early challenge, the long-term goal is to create opportunities for players to sell other, more profitable services within their ecosystem, which could draw the attention of capital markets.

We expect this model will grow significantly in lower-tier cities, where traditional small grocers are more likely to participate in a platform strategy.

Pure-play internet attackers

Pure-play internet attackers, which achieved rapid growth through aggressive dark-warehouse expansion, provide quality fresh products and ultrafast fulfillment (for example, 30-minute delivery windows) to improve consumer experience and drive traffic. This strategy has been successful so far, with attackers achieving a CAGR of 50 percent in the past three years.

To date, pure-play internet attackers are providing a better consumer experience and have developed advanced digital-marketing capabilities in mid- and high-tier cities, which have the necessary order volume and customer density to support on-demand delivery. However,

Community group buy cuts through multiple layers of distribution, resulting in prices that are significantly lower than in traditional channels.

these companies often lack physical infrastructure (such as stores, supply chains, and cold-chain capabilities), and the resulting higher spoilage, warehouse and delivery costs, and marketing expenses create a significant obstacle to profitability.

Therefore, we expect this business model will incrementally lose market share in the coming years.

Community group buy

In the second half of 2020, community group buy experienced rapid growth due to several attributes—it is asset light, has a low cost to serve, and can scale quickly. Internet giants such as DiDi, Meituan, and Pinduoduo have been the segment's most aggressive players over the past several months. They have been joined by private incumbents, including Alibaba-backed Shihuituan and Tencent-backed Xingsheng Youxuan , which have contributed to the fiercely competitive landscape.

Community group buy cuts through multiple layers of distribution, resulting in prices that are significantly lower than in traditional channels. The model uses preorders to lock in demand while reducing inventory and waste as well as mismatches in supply and demand. In addition, the model benefits from lower costs for customer acquisition—just 5 to 10 renminbi (75 cents to $1.50) per user—and for fulfillment by letting consumers pick up the products from community leaders, mostly mom-and-pop stores.

Despite initial successes, the model still has a few structural issues that need to be worked out, such as an irrational pricing war funded by funds and internet giants, inconsistent product quality, low loyalty of community leaders, and conflicted interests with branded FMCG suppliers.

We expect several trends to shape the landscape. First, the government's antitrust policy rationalized the market, and leading players are moving toward investing more in core upstream supply-chain capabilities, especially fresh. Second, tech giants such as Alibaba and JD have already started to merge their community group-buy businesses with their existing e-B2B businesses, which has enabled these new entities to provide fresh and packaged products to smaller, offline grocery retailers and mom-and-pop stores. Last, community group-buy businesses are poised to begin expanding into tier-three and -four cities.

Ecosystem players

The attractiveness of O2O has also led major ecosystem players to get involved. Alibaba continues to expand its presence in e-grocery retail through Hema, RT-Mart, and its offerings on Tmall, which include fresh goods. Ele.me handles last-mile delivery. Similarly, JD.com started as an e-commerce player but added e-grocery and logistics services. Its JD Supermarket is expected to reach 800 billion renminbi in gross merchandise value by 2023. Its JD Daojia has collaborated with more than 100,000 merchants to offer one-hour delivery in nearly 1,400 cities and towns. Both Alibaba and JD.com have established a significant presence that encompasses all three business models. Meanwhile, Meituan has concentrated on express delivery and community group buy.

This is an exciting time for the O2O category: we expect continued growth, with O2O reaching 20 to 25 percent in next 18 months. Various formats, such as express delivery and community group buy, will continue to be fast-growing, and traditional retailers have embarked on omnichannel transformations. Internet players have also aggressively joined the fray.

The fierce competition for market share and experimentation with new business models will contribute to low profitability for the near term. However, the value at stake and evolving market dynamics will combine to fuel innovation in the years ahead. On top of the exciting innovations on the go-to-market side of O2O, all players are also shifting their strategic focus to build core procurement and supply-chain capabilities, including sourcing, processing, assortment, and logistics for different channels and occasions. They are also investing heavily in digital capabilities to improve operation efficiency. These enhancements will serve companies well regardless of which models gain prominence.

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CHAPTER 4

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The unprecedented acceleration of market trends in China grocery

Technology and changing customer preferences are reshaping the grocery-retail landscape. Executives must be prepared to adapt and invest accordingly.

by Johnny Ho, Dymfke Kuijpers, Yixin Ma, and Alex Sawaya

In light of intense competition from internet giants, China grocery retailers have realized that they need to leapfrog from rudimentary experienced-based ways of working into more sophisticated systems of operation. To do this, they are harnessing advanced analytics, exploring food service and new occasions to do business, focusing on consumers' interest in health and wellness categories, automating the supply chain, and transforming their digital storefronts. In this chapter, we'll dive into these trends and examine how traditional retailers can best position themselves to capitalize on them.

Advanced analytics can fuel growth

Advanced analytics, including artificial intelligence, offers a big opportunity for the retail industry. In a recent study, McKinsey Global Institute estimated the potential annual value of AI for the retail industry at $400 billion to $800 billion globally.

For grocery retail specifically, we see the potential for an incremental increase in earnings before interest and taxes (EBIT) of up to two percentage points if all use cases are implemented and value is fully captured. Most of this value is generated by commercial use cases concerning assortment, pricing, promotions, and personalization (Exhibit 1). These are also some of the most mature use cases for which analytical approaches have begun to converge across the industry and for which standard analytics solutions are available.

During the past five years, grocery retailers have moved beyond experimenting with advanced analytics and have started to pursue these use cases in a systematic way. The majority of grocery retailers in mature markets are now embracing advanced analytics and are investing in capturing its value.

While grocery retailers have made these investments, we have not yet seen the potential value captured and

The majority of grocery retailers in mature markets are now embracing advanced analytics and are investing in capturing its value.

Exhibit 1

Most value is driven by commercial use cases that support actual business decisions.

Shopping behavior since COVID-19 has started,[1] % of respondents in North America

Typical impact (contains overlaps)[1]

Percentage points of EBIT: <0.1 0.1–0.25 0.25–0.5 >0.5

Existing pilots and tests In use in a few companies Becomes standard

Enabler use case–no decision

Domain	Classic use cases (selection)		Innovative use cases (selection)
Category management	Macro space allocation Macro space order SKU listing or delisting Assortment localization *Store clustering* Planogram (position, facings)	Pricing (KVI[2] identification, price recommendation) Online or dynamic pricing Markdown optimization Promo (historic effectiveness, forecast, optimization)	NLP[3] on customer reviews to support for (de)listing decisions Automated product comparison (NLP) Automated product tagging (NLP, computer vision)
Marketing	Personalized promotions E-commerce personalized content[4] *Forecasting (category, market)*	Marketing mix optimization (MROI) E-commerce improved product search[4] *Customer journey analytics*	Facial recognition for personalization
Purchasing	Vendor negotiation support	Indirect optimization (AI-based spend cube)	
Supply chain and operations	Store labor scheduling Store network (expansion, pruning, performance) Energy optimization in store Order forecast and optimization (including shrink or out-of-shelf)	Warehouse labor scheduling Warehouse "digital twin" Logistics network optimization Route optimization, including CO_2 simulation	NLP for customer service Seamless checkout (eg, Amazon Go) Inventory and shelf monitoring In-store tracking End-to-end product tracking
Others (eg, support)	People analytics (eg, hiring, chum) Data ecosystems Retail media Report optimization Analytics self-serve	Credit scoring Fraud detection Back-office process automation Automated budgeting	Sentiment analysis for customer service

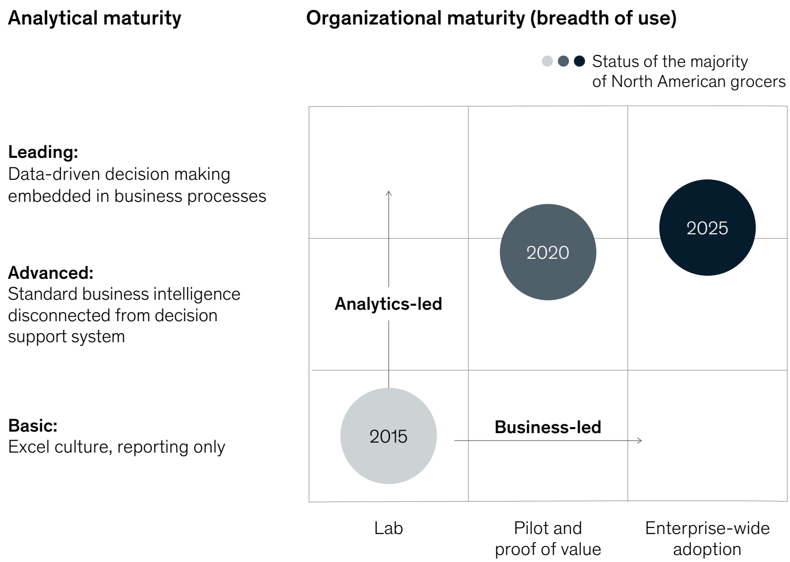
[1]Impact partially overlapping—up to 2 percentage points in total realistic.
[2]Key value item.
[3]Natural language processing.
[4]On e-commerce revenues.
Source: McKinsey analysis

reflected in the profit and loss (P&L). To determine what distinguishes analytics leaders from the pack, we assessed grocery retailers along two dimensions: analytical and organizational maturity (Exhibit 2).

We found that capturing the value of advanced analytics depends more on a retailer's organizational maturity than on its analytical maturity. In fact, retailers can achieve results only if organizational maturity is in place, which is still the exception rather than the rule.

Exhibit 2

Most companies can ramp up their analytics capacity, but many struggle to produce analytics.



Analytics-led
- Build a small team of data scientists
- Assign a strong sponsor
- Identify and leverage quick wins to prove potential
- Systematize learning from data

Business-led
- Roll out analayatics products across the business
- Create new processes based on insights
- Embed organizational change
- Strong representation at board level (eg, through a chief analytics officer)

Source: McKinsey analysis

Many grocers have made great progress on analytical maturity. Leaders in analytics have tackled the majority of fundamental use cases, such as pricing, mass promotion, and assortment optimization. Now they have increasingly turned their focus to pursuing new use cases along the value chain and improving existing use cases—for example, by using more granular, real-time data. These efforts are often driven by a strong analytics unit, but the level of adoption across a business varies.

The best analytics solution does not help if it is not used and understood by the respective decision makers, such as category managers.

In many cases, organizational maturity is the main barrier to going beyond partial adoption and realizing the full potential of analytics. It encompasses both the process of technically embedding and continually improving use cases, as well as the process of enacting constant change management regarding the users of the analytical insights. These twin efforts foster an understanding of analytics, ensure it is embedded in daily processes, and provide a measure of its impact against new key performance indicators (KPIs).

Our analysis of winners—both digital natives and traditional grocers—highlighted several strategies that have helped them excel, to be discussed in the next chapter.

The emergence of food service and new occasions to do business

In an effort to bring customers into brick-and-mortar stores, grocery retailers have looked for ways to innovate food service. Many have tried serving ready-to-eat food inside supermarkets or offering soy milk and steamed bread in convenience stores during breakfast hours.

For example, Hema has successfully reinvented the "grocery plus food service" model. It adopted the "high-end ingredients with high perceived value" consumer value proposition, with much cheaper prices than high-end restaurants for the same ingredients and cuisine. Also, a dedicated food and beverage innovation team in Hema's headquarters allows them to maintain an innovative menu based on consumer insights. In addition, the emphasis on food service enables Hema to share fresh inventory, thereby reducing shrinkage. This has improved consumers' in-store experience and increased consumer traffic, especially among high-spending power segments.

In another example, a leading convenience store chain has captured incremental growth by implementing new occasion-specific initiatives. It has broken down consumer orders into several shopping occasions (such as breakfast, lunch, dinner, emergency, and snack). Executives analyzed key commercial metrics to understand the potential of each occasion and prioritized the store archetypes in which it would be best to launch pilot programs. Then, for each occasion and store archetype, the chain designed a set of initiatives: occasion-specific bundles, promotions, displays, point-of-sale materials, and services (for example, fast breakfast pickup). The initial results from the pilot included a 2 percent increase in gross profit at each store. Combining all the occasion-specific approach initiatives could generate more than 15 percent of gross profits.

Grocery retailers that can offer innovative menu concepts and create synergies between fresh grocery operations and fast-food options can attract consumers with healthy, fresh, and fast products. The convenience factor of food service is particularly appealing to Chinese consumers in the Super Saver category, who prioritize price and scan convenience stores after work each day for value shopping. Similarly, offering food and groceries in one place appeals to Moonlighters, who are time-sensitive and therefore attracted by affordable, grab-and-go options.

Health and wellness

In recent years, consumers have placed a priority on health and wellness. Our McKinsey China 2019 Consumer Survey, which included 5,400 respondents across 44 cities, showed that 72 percent of respondents want to pursue a healthy lifestyle, which includes actions such as checking ingredient labels (60 percent of consumers in large cities do so) and increasing monthly spending on vitamins and supplements (48 percent of respondents overall have done so). Spending on items such as fresh milk, bottled water, and sports apparel all increased by 5 percent or more compared with the previous year, while spending on categories such as spirits, chocolate, and instant noodles decreased by 5 percent or more.

But the push for eating healthier isn't limited to tier one cities. Across the board, consumers' attitudes toward healthy food have increased, with tier four cities showing the largest change. In our most recent survey, 66 percent of respondents cared more about healthy food than about other factors, compared to 46 percent in 2017. What's different, though, is where consumers are spending their money. In high-tier cities, shoppers invest in quality and convenience, whereas consumers in lower-tier cities are focused on buying better basics. Understanding this segmentation can help retailers stock and promote food and goods that have broader appeal.

In addition, health and wellness have recently taken on a larger importance among Chinese consumers compared with consumers in other countries. Twenty-eight percent of Chinese consumers say they prioritize their wellness "a lot more" now as compared to six months ago; just 9 percent of consumers globally felt the same. Similarly, 50 percent of Chinese consumers say their overall level of wellness has dramatically improved as compared to six months ago, whereas only 10 percent of consumers globally agreed with that statement.

With this insight, retailers can boost consumer confidence by shifting some of their practices. Already, Chinese consumers have indicated that the top two key buying factors for them are safety and quality of ingredients, as opposed to price or brand. To capitalize on these preferences, retailers can source directly from farms for better quality management, improve supply-chain traceability via technologies that show clear expiration dates and ingredient lists, and designate health and wellness zones in planograms to drive traffic into stores.

Automation in the supply chain

While automation has been a part of retail supply chains globally for decades, its prevalence has recently increased significantly. Consider that the size of the global warehouse-automation market has grown by 10 percent in recent years—a more than twofold jump as compared to the five years previous. This trajectory appears set to continue, with the market expected to double by

For e-grocery in China, where 30-minute delivery within three kilometers is the norm, companies are exploring microfulfillment centers.

2026. In addition, about 55 percent of retail, manufacturing, and logistics professionals globally say they are currently investigating warehouse automation.

Having more technology options, combined with the enhanced ability to tailor solutions, has multiple implications for retailers. It lowers the investment required to enter the space, making the case for automation even more attractive when considering rising labor rates and labor shortages. In addition, the enhanced ability to tailor automated solutions to specific business requirements, such as omnichannel and microfulfillment, has increased capabilities and performance, lowered operational costs even further, and provided higher flexibility and scalability than traditional automation systems and manual operations.

Global brick-and-mortar grocery players have started to automate their packaged food, nonfood, and fresh warehouses. For warehouses with large throughput-capacity requirements, several alternative technologies can be used and combined to handle medium to large orders with a high share of pallet and case picking. However, multishuttle and automated tote- and case-picking systems, as well as automated guided vehicles, especially for pallet picking, are often the solution of choice.

For e-grocery in China, where 30-minute delivery within three kilometers is the norm, companies are exploring microfulfillment centers. The requirements for e-grocery warehouses are typically a medium-size SKU portfolio, small orders with a high share of single-unit picks, and high-speed capabilities. Because of these requirements and the high spatial density of most warehouses, the preferred solutions for this type of automated microfulfillment center in the United States are often cube storage and multishuttle systems. Albertsons' automated microfulfillment centers, for example, use Takeoff Technologies, which says its product can achieve around 800 item picks per hour. Another example is the REWE e-food distribution center, which is equipped with KNAPP shuttle technology. The facility has

17,000 square meters and 20,000 SKUs, so automation significantly enhances performance. While picking in microfulfillment centers in China is still primarily done manually, the underlying technology is powered by sophisticated picking algorithms to enhance efficiency.

As these use cases demonstrate, leading players follow a segmented warehouse and automation design tailored to the needs of individual channels, categories, and order profiles, rather than a one-size-fits-all approach. For each of the segments, choosing the right automation technology to provide the required flexibility for a large spread of order profiles, fulfillment speeds, and scalability can make a huge difference.

In addition to automation in warehousing, in the past few years, several grocers globally have started to use analytics to automate their planning flows. The trend is capitalizing on the investment in and momentum of the retail analytics market, which is expected to grow more than 20 percent annually for the next five years, with a number of enterprise-resource-planning providers (such as SAP and Oracle) and technology players (such as RELEX Solutions, Blue Yonder, E2open, and o9) developing new offerings. Typical benefits of automated planning flows include lower levels of shrinkage, fewer days' worth of inventory in stock, and greater service levels.

Beyond automation in warehousing and planning, the market has seen a proliferation of other supply-chain solutions, such as workforce- and transport-optimization solutions.

In the workforce-optimization space, promising technologies use advanced analytics to plan and adjust for fluctuations in traffic and workload. These solutions aim to lower store and warehouse operating costs and to increase visibility of future workload requirements, a capability that often improves the labor experience. Variations of this technology have been applied successfully in stores and warehouses, with some players reducing costs by up to 15 percent.

On the transportation analytics side, beyond the optimization of truck fill rates, grocery retailers have shown a rising interest in dynamic routing solutions. The most advanced solutions optimize trucking routes in real time based on traffic conditions and disruptions, such as road accidents. Typical benefits of this technology include fresher products, timelier deliveries, and lower internal costs, as well as reduced emissions. Routing solutions can also be coupled with sensor-based technologies to monitor transport conditions, which are particularly helpful in detecting issues with the quality of cold-chain transport that could damage or lower the shelf life of products. Adoption of these systems has started, though there is no clear breakthrough yet.

While the acceleration of automation is encouraging, the real takeaway for grocers is the recent uptick in the adoption of warehouse-automation solutions. This technology represents a clear opportunity for the sector. Although in the past the business case for a high degree of automation did not work or the technology did not offer enough flexibility, its time may have come.

Tech-enabled store automation

The next wave of grocery retail, in the form of the tech-enabled automated store, will be defined by personalized experience and lean operations enabled by technology. While many tech start-ups have been experimenting with such stores in China, they have yet to scale the technology. Reasons for this include a lack of impact-driven use cases and prioritization, insufficient computing power to process large amounts of data, and the cost of technology. However, with rapid reduction in technology costs and an increase in computing power, these start-ups should be able to shift gears and take a retailer mindset to prioritize high-impact use cases.

Key benefits of a digital store include dynamic assortment, personalized merchandising, a strong supply chain, lean and efficient store operations, and an innovative omnichannel platform. The digital store can bring the real-time customer journey to life by significantly augmenting existing retail data with enhanced in-store data. With these insights, grocery retailers can reduce costs and significantly boost revenues across the full range of operations (Exhibit 3).

In assortment and space planning, for instance, data mining shows that pick-and-stop (when a consumer picks up and then replaces an item without purchasing it) is highly correlated with purchase, demonstrating the potential of using customer preferences as a proxy. Grocery retailers can use more granular data to inform delisting and listing decisions and support more targeted merchandising solutions based on greater transparency in the conversion funnel. Real-time data can also allow stores to monitor on-shelf availability and automatically trigger replenishment to avoid out-of-stock products.

Retailers can draw on store data to personalize each interaction. For example, before a visit, a grocer can notify a customer via text message of sales items at nearby locations. When the customer enters the store and

Real-time data can also allow stores to monitor on-shelf availability and automatically trigger replenishment to avoid out-of-stock products.

Exhibit 3

Store automation drives cost reduction and can enhance existing use cases through granular, real-time in-store data.

Details follow

	Assortment and space planning	Pricing and promotions	Supply chain and warehousing	Store operations	Online services
Revenue uplift	Story layout design and optimization	Pricing and promotion optimization		Augmented reality for in-store navigation	Scanning offline and buying online
	Assortment and space optimization (planogram, etc)	Personalized promotions			Omnichannel membership system management
Cost reduction	Digital display (eg, digital signage, magical mirror)		Sales forecasting and automated replenishment	Automated checkout or no checkout	
				Robbery prevention	
	Real-time performance tracking, root cause analysis, and recommendations (eg, real-time shelf availability notifications)				

Source: McKinsey analysis

sensors detect their smartphone, the store can send a personalized ringtone to welcome them back. Comparative shopping can also be taken to the next level: if the customer looks at four different brands, the store can track time spent in a certain aisle and reach out with tailored offers. After the visit, the store can send reminders to entice customers to return at regular intervals.

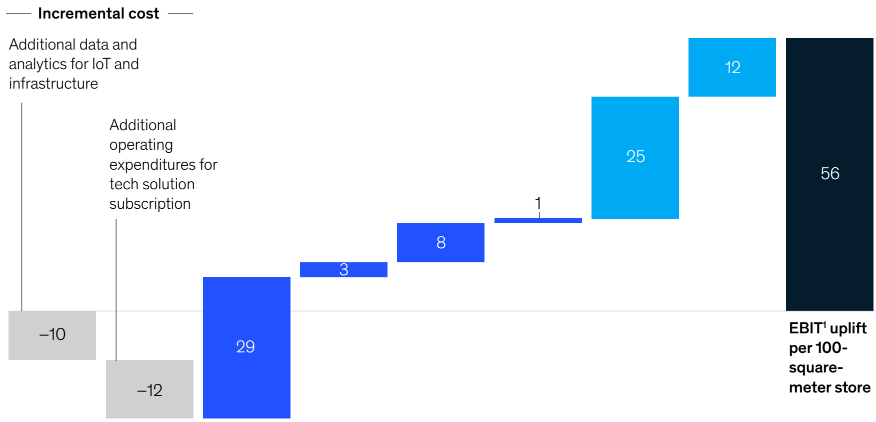
When applied across all cost and revenue drivers, digital store technology can increase EBIT by 3 to 8 percent (Exhibit 4). The largest opportunities are labor-cost reductions thanks to cashier-less checkouts, as well as revenue increases from sales forecasting and auto-replenishment, store layout and planogram optimization, and enhanced pricing and promotions.

Exhibit 4

By implementing automation in stores, companies can increase earnings before interest and taxes significantly.

Example: 100-square-meter convenience store in target state, $ thousands

Revenue-uplift use cases | Cost-reduction use cases



Incremental benefit	Labor cost reduction	Cost savings from operational improvements	Gross margin improvements	COGS[2] reduction from theft prevention	Incremental revenue from increased selling space	Incremental revenue from commercial levers
Selected mobility data specification use cases	Automated checkout or no checkout	Digital display (eg, digital signage, magical mirror) Real-time shelf availability notification	Sales forecasting and automated replenishment	Robbery prevention	Store layout design and optimization Shelf and space optimization (eg, planogram)	Range selection and optimization Pricing and promo optimization Personalized promo AR[4] for in-store navigation

15.5% revenue uplift

1 p.p.[3] COGS reduction

30% labor-cost reduction

5+ p.p. EBIT

[1]Earnings before interest and taxes.
[2]COGS is cost of goods sold.
[3]Percentage point.
[4]AR is augmented reality.
Source: McKinsey analysis

Collectively, these five trends have the potential to reshape the grocery retail landscape in China. Winners will invest in the capabilities and technology needed to improve their offerings for customers.

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The authors wish to thank Steven Begley, Vishwa Chandra, Cherry Chen, Andreas Ess, Prabh Gill, Holger Hürtgen, Jonatan Janmark, Bill Mutell, Gereon Sommer, and Björn Timelin for their contributions to this article.

CHAPTER 5

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Seven growth imperatives for China's grocery retailers

As the business landscape, affected by the COVID-19 pandemic, continues to evolve, grocers will need new strategies and capabilities to sustain growth.

by Dymfke Kuijpers, Alex Sawaya, Jacob Wang, and Chenan Xia

During the upheaval caused by the COVID-19 pandemic, grocery retailers had to respond quickly to shifting consumer preferences, adopt new business models, and prioritize worker and public safety. Although executives may be tempted to ride the wave of increased consumer spending as the pandemic eventually abates, the coming years will be marked by an accelerated rate of change. To compete, grocery retailers must build on the capabilities they have developed over the past 18 months.

We have identified seven imperatives for growth. All seven are interconnected and mutually reinforcing, with technology serving as both foundation and connective tissue. As grocery retail continues to evolve, companies that embrace these imperatives can set themselves up for sustained growth.

1

Build omnichannel services

To address the diversified needs of customers across different markets as well as intensified competition from internet giants, retailers must launch e-grocery businesses and embrace omnichannel strategies that include in-store, delivery, and self-pick capabilities. Grocers have two choices: develop these capabilities in-house or harness third-party marketplaces. Either option will require retailers to transform offline stores from purchase locations to multifunctional facilities that can also accommodate customer experience and last-mile logistics services.

Although e-grocery is currently unprofitable for many grocers, omnichannel retailers can use online offerings to strengthen customer relationships through loyalty programs, different assortments, and dynamic pricing for different occasions. These moves can increase customer stickiness and lifetime value; leading players such as Wumart and Yonghui have already demonstrated that omnichannel users have a higher lifetime value than pure offline users. In addition, data monetization is a way to make online grocery profitable—an area where traditional retailers can learn with pride from the platform players.

Online models such as e-commerce, express delivery, and community group buying have begun to proliferate.[1] Despite these innovative offerings, we expect the market will revert to more rational dynamics over the next several years. When consumers demonstrate a willingness to pay for convenience, the profitability of omnichannel retailers will rise. In addition, data monetization is a way to make online grocery profitable—an area where traditional retailers can learn with pride from the platform players.

[1] For more on these models, see chapter 3, "O2O innovations: The next digital disruption or a fad?"

2

Invest in technology

Most grocery retailers in China have traditionally viewed technology as a cost center. More recently, executives have begun to see technology instead as a critical enabler of business strategy and operations. But early adopters have encountered multiple challenges as they attempted to unlock the full power of technology. Lessons from their experiences can help grocery retailers as they seek to enhance their capabilities in this area.

Create a clear, holistic IT and digital strategy

Retailers crave quick wins, so they tend to try multiple strategies at once. But dispersed IT investment usually leads to half measures, resulting in subpar results that reinforce the view that IT is a cost center while failing to adequately enable the business. Most grocery players still treat investments in IT as an upgrade rather than a top strategic priority. Primarily driven by IT, upgrades often aren't part of the CEO's agenda. Leading Chinese grocers have taken a different approach, creating a separate technology subsidiary to boost technological advancements that support business growth and differentiation. Some retailers have even created a new business model to provide technology services to other grocers.

Invest wisely in digitization, IT infrastructure, and data analytics

Customer-acquisition tools, such as those to support community group buying and viral marketing, are booming. However, retailers must invest in enabling technologies such as data analytics to support targeted marketing and better assortment; a digital operational system to improve efficiency; and an intelligent inventory, logistics, and delivery management model to ensure service levels. Without these upgrades, retailers are likely to experience low customer retention (for example, well below 15 percent for a 12-month period) and high operational costs (for example, a marketing ROI below 2 percent).

For example, most retailers are burdened with inaccurate inventory. Without easy-to-use tools to facilitate regular inventory checks or a fully digitized system to record sales and replenishment actions, maintaining accurate inventory is difficult. In addition, traditional grocery players often have immature strategies for customer tagging and segmentation, which impedes transparency on product and brand preferences, browsing behavior, and other consumer characteristics. What's more, most traditional grocery players still do manual dispatching. Internet players such as Hema are using smart order grouping and dispatching systems to achieve nearly double the number of orders per trip.

Close the talent gap in priority areas

Grocers are at a disadvantage when it comes to attracting qualified tech candidates. The typical IT salary at a grocery retailer (8,000 to 10,000 renminbi—$1,200 to $1,550) is much lower than that at internet companies (15,000 to 20,000 renminbi—$2,300 to $3,100). Some leading retailers, such as RT Mart and Yonghui, have tried to match the entry-level IT salaries that digital companies pay, but raising IT salaries compared with other functions can create friction and ultimately reduce retention rates.

In such cases, many grocery retailers have turned to external developers. Using third parties is often necessary, but retailers must have enough competence to challenge and steer the external workforce. Areas with the potential to produce a true competitive advantage should be fully owned internally.

For grocery retailers to lead in technology, they must also change their approach and mindset to maintain flexibility. Based on the experience of leading players, grocery retailers should follow several principles:

— Ensure that the CEO and chief technology officer colead the transformation of IT.

— Establish clear standards for prioritizing IT use cases—for example, gross-merchandise-value (GMV) contribution, strategic importance, and required IT resources.

— Fix the basics to unlock the power of omnichannel; for example, standardize supply-chain processes and data.

— Create a clear technology and product road map to guide resource planning.

— Consider forming a separate special IT workforce and implementing different incentives to boost IT when building new online businesses.

Now is the time to change and make the best use of technology in grocery—not by specifying which technologies will be used when but by ensuring that the company is transforming. The objective is to build the organizational muscle to master existing and emerging technologies.

3

Save to invest

“Save to invest” remains the most powerful weapon at the disposal of grocery retails—one that unfortunately lost its cachet in an era of increased focus on digital disruption. Successful retailers relentlessly examine their profit-and-loss (P&L) statements to explore ways to remove costs and reinvest in their customers through price, experience, service, and more.

In fact, a save-to-invest program can identify potential areas for spending reductions, thereby freeing up funds for redistribution to higher-value efforts. Grocery retailers should undertake a comprehensive examination of all facets of their operations: stores (including front-end departments), commercial functions (for example, promotions and sourcing), and the business center (such as supply chain, benefits, and payments). In our experience, a properly executed save-to-invest program can fuel strategic growth initiatives.

One global top-ten grocer was facing increased competition from discounters, consolidation, sluggish growth, and a shift in channels. Its objectives were to identify more than €1 billion in savings and implement a business model that could capture savings on a continual basis. As a first step, it conducted top-down benchmarking of each P&L area and estimated the potential impact. The grocer then worked with business leaders to build a bottom-up plan to capture savings. For example, the business captured approximately three percentage points in commercial margin from improved conditions with suppliers, optimized promotional funding and deployment, and assortment optimization. It also achieved a 10 percent reduction in operating costs by focusing on the costs of not for resale, center store operations, logistics, and other areas. The organization's efforts included supporting execution and capability building as well as implementing new ways of working across its operations. In just 12 months, the program met its targets for savings, and its teams continued to identify and capture new waves of opportunities to reduce costs.

4

Adopt agile practices

A recurring lesson from the successive waves of the pandemic is that grocers need to respond quickly to changing conditions and customer preferences. McKinsey research across industries has found that organizations with embedded enterprise-wide agility performed better than their peers: in light of the pandemic, they were able to launch COVID-19-specific services about twice as fast as organizations with a low degree of agile maturity.[2]

A recent McKinsey survey of more than 2,000 organizations globally found that close to 50 percent of retail organizations are undertaking or have recently completed an agile transformation, quickly catching up with leading industries such as financial services and telecom.[3] The implementation approach and the speed in which grocery retailers can embrace agile vary by type of company, maturity of the organization, and market conditions. For example, many of the incumbent retailers are struggling to make the transition at speed, while local Chinese players were born to be agile: they take a fast, iterative approach to innovation and have established clear decision-making processes. That said, our research also shows that incumbent organizations that successfully transition to agile develop similar maturity and speed to those of their "born agile" counterparts.

For grocers to harness the full potential of agility, they must embrace meaningful change along the several core tenets of organizational and operating

[2] Christopher Handscomb, Deepak Mahadevan, Euvin Naidoo, Lars Schor, Marcus Sieberer, and Suraj Srinivasan, "An operating model for the next normal: Lessons from agile organizations in the crisis," June 25, 2020, McKinsey.com.
[3] Wouter Aghina, Christopher Handscomb, Olli Salo, and Shail Thaker, "The impact of agility: How to shape your organization to compete," May 25, 2021, McKinsey.com.

model design. A clear strategy and purpose narrow the focus to just a few priorities at any time. Workers are organized around priority outcomes, with minimal middle management and support functions. Process, people, and technology must work together in a coordinated fashion. From a process standpoint, priorities are frequently updated, and the allocation of targets and resources and the management of key performance indicators (KPIs) occur simultaneously. Retailers must also shift their HR approach to prioritize people development, culture, and communications to support agile. Last, IT should focus on removing friction in delivery while drawing on analytics, internal support functions, and external partnerships.

Grocery retailers should implement the following actions to translate agile into value:

— Ensure that top executives model conviction, commitment, and the right behaviors and mindsets.

— Be intentional and go after value, making agile the clear means to achieve measurable objectives.

— Take a holistic approach to organizational structure that goes beyond agile teams and simple changes to boxes and lines.

— Maintain a high speed of transition, identifying certain business units to pilot agile and quickly prove value while simultaneously working to "make agile real" for the rest of the organization.

— Focus on people and building new capabilities, especially agile coaches, to support agile ways of working.

— Bring well-calibrated and tested assets—such as capability-building programs, communication assets, and organizational structure archetypes delivered in previous transformations—to accelerate and improve the transition while reducing risk.

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Embrace analytics to grow

Given the intense competition from internet giants in China, all grocers must master advanced analytics to remain relevant. Standardized software is already available for many important use cases—such as assortment, price, and mass promotions—and can enable smaller retailers or those with lower analytics maturity to achieve first results quickly. More experimental use cases, such as localization of assortment or personalization of promotions, are the next frontier for analytically mature retailers. To succeed, grocers must invest in not only technical solutions but also organizational capabilities, which will require a significant change-management effort led by top executives. Organizational maturity will be a critical element for grocery retailers seeking to unlock the full potential of analytics.

Focus on strategic use cases instead of on data

Vast quantities of data do not generate value by themselves. Grocery retailers extract value from data through use cases—business decisions based on data-driven insights. Transparency on the value of a use case and a clear road map for realizing that value are therefore critical.

Grocers should create a portfolio of use cases derived from strategic priorities with clear business objectives and reallocate resources to those with the highest potential. They should also group the defined use cases into larger units or domains (such as store operations or merchandising). This step accelerates change in a given business domain because almost all decisions become more data driven and, when managed well, interconnected.

Create agile, interdisciplinary product teams

One of the most crucial factors in extracting value from analytics insights is fixing communication barriers between business and technology. Many business teams don't fully understand how technology and data-science teams can support them—and vice versa. As a result, business teams don't ask the right questions, while technology and data-science teams try to answer questions that do not exist. Traditional grocers have particular difficulty in promoting greater visibility and understanding between tech and business.

Winners create agile, interdisciplinary product teams that are led by the business team and include employees from analytics, business, and IT. Team members collaborate closely to achieve defined business goals (for example, improving the delisting decision in assortment). In this approach, business is closely involved in the identification of use cases and in designing the solution for the use case—by offering the product owner as a full-time team member or part-time adviser. The business team must be involved in clearly defining the use case's objectives and specifications, as well as in ensuring that the business adopts process changes, understands analytics, and relentlessly measures the use cases on its P&L. The result is a scalable product that ensures P&L impact and, above all, scalability.

Invest in large-scale change management to ensure use-case adoption

Many use cases require that employees take a different approach to decision making or work in a different way. Deploying a use case thus often requires adjustments to processes, roles and responsibilities, and incentives, as well as the acquisition of new capabilities. Merely giving employees access to a new tool and explaining it in a training session is often not enough.

For example, if an organization implements automated pricing on the basis of analytics, this change will have profound implications for pricing or category managers. While in the past these managers might have focused on making tactical adjustments to prices, they now might be responsible for setting strategic guidelines and providing input to the analytics team on how to further improve the pricing logic.

Even small changes require companies to take actions such as embedding analytics insights deeply into existing processes and workflows, investing heavily in developing the required capabilities, and understanding users. Executives often underestimate the effort required to put these pieces into place.

Develop a fit-for-purpose analytics platform to scale and maintain multiple use cases

Providing access to data and insights across the business helps drive adoption and promote organizational maturity. Retailers must build a dedicated analytics platform to achieve this goal.

Moving from legacy IT systems to a fully modernized, big-data IT stack requires significant time and cost. But a complete transition may not be necessary—legacy systems can coexist with cloud-based data infrastructure. The most crucial components are data collection, an analytics platform with a data lab that supports quick experimentation, and a factory environment that can scale, run, and monitor use cases continuously. Grocers can then integrate analytics into back-end and front-end systems incrementally, one use case at a time. Over time, retailers can boost their organizational maturity by giving the entire enterprise visibility into an advanced analytics platform, the data layer itself, and a visualization and results layer.

Decide whether to buy an existing solution or develop one in-house

Grocers do not need to reinvent the wheel to achieve business impact. But the choice between buying a proven off-the-shelf solution and investing the resources to develop one can be surprisingly difficult. Many organizations lack expertise in certain use cases, and they must also navigate complex requirements from technical and business perspectives.

In our experience, a successful strategy takes a staged, differentiated approach: For use cases that have become commodities and can be addressed with widely available base versions (for example, forecasting and assortment), external vendors and tools might be the cheapest and least risky option. For use cases that can generate a competitive advantage or are still in an early stage (such as personalized promotions), a bespoke solution might have more impact. Another option is to retain vendors to start or accelerate use cases and then take the solution in-house.

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Drive fresh for monthly active users

Fresh food has a high basket penetration and is a big driver of traffic and loyalty. It also has a pronounced halo effect: if shoppers are satisfied with a retailer's fresh offerings, their perception of its other departments improves as well, resulting in more customer traffic and higher overall sales. If modern retailers take a customer-centric approach to product quality, emphasize their unique features, and seamlessly integrate their physical stores with digital capabilities, they will be well positioned to win in fresh food.

For Chinese shoppers, product quality is the biggest factor in their decisions about where to shop for fresh food. Quality is also the primary factor that determines whether they would recommend a retailer's fresh-food department to other people. But not all fresh products are equal in consumers' eyes: our survey of more than 4,900 Chinese consumers in 29 cities brought to light the items that disproportionately influence their quality perception. We call these products key quality items. If a retailer improves the quality of just these few items in its stores, it can boost customer satisfaction significantly.

For example, a leading grocer has embarked on a transformation of its end-to-end value chain to improve its fresh department. Through consumer surveys and store visits, it identified key gaps compared with competitors as well as the underlying quality perception drivers. Based on these factors, the grocer further mapped the break points along the fresh value chain (from the farm to store) to dig into the root causes. Thanks to this approach, the grocer has developed an integrated plan with specific actionable initiatives to improve the quality of key items that consumers care about.

Fresh-food retailing will only become more competitive. To stem further market-share losses, hypermarkets and supermarkets must find ways to deliver what the Chinese fresh-food consumer increasingly wants: high-quality products, broad assortments, and a convenient O2O experience. And, given the pace of change in China's retail landscape, there's no time to lose.

7

Develop private label

Private brands present a huge opportunity in China compared with other markets. Although this segment is still in the early stages, growth has increased in recent years: in 2020, the year-on-year growth rate for private-label goods exceeded 20 percent versus low single-digit growth for FMCG overall. While the potential for private label is significant, its current penetration rate is still limited. In 2019, private brands accounted for less than 5 percent of sales for 75 percent of grocery retailers; they made up more than 20 percent of sales at approximately 5 percent of grocers. Private brands have been held back by a combination of a fragmented retailer landscape, lower retailer brand loyalty, and the failure of early attempts to launch this product segment, which consumers perceived as cheap and low quality.

Retailers can learn to cater to the dynamic and demanding consumer need in China by following global best practices.

Understand how customers compare prices for private labels and fresh

Customers compare prices not only between the national brands but also between similar items. For retailers, the challenge is finding out which specific items customers are considering. Our research shows customers usually compare items they perceive to be of similar quality. Interestingly, many grocers overestimate their product quality and match their private-label goods to the higher-quality products of competitors. Grocers must therefore understand which products are of a similar perceived quality, not necessarily a similar specification. Some grocers have established units with the sole task of creating product price matches that are based on consumer research and identifying quality gaps that need to be addressed.

Improve the quality and breadth of the opening-price-point private label
While shelf prices are the foundation for value-for-money perception, other levers are needed to achieve the full potential of that perception. For instance, the quality and breadth of the opening-price-point assortment are nearly as important as pricing.

To be competitive with the opening price point in many markets today, it takes more than a 1,000 quality products and attractive packaging. In many categories, this means the quality of the opening price point for private label becomes very comparable to, or the same as, the quality of products within the mid-tier price range. Some players have therefore started to use main brands within the mid-tier price range to compete at the opening-price-point level. Separately, in light of the pandemic and economic crisis, some retailers have also returned to products in the entry price tier to cater to increased price sensitivity from consumers.

Together, these imperatives may feel like a tremendous undertaking on top of keeping up with customer preferences and fending off competitors. But retailers that make progress on all of the imperatives—or even just one or two of them—will be better able to execute their overarching business strategy.

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The authors wish to thank Celia Chen, Ivy Feng, and Zheng Sun for their contributions to this article.

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October 2021
McKinsey.com