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Foreword

More than two years after the start of the COVID-19 pandemic, the grocery industry continues to face disruption. While some themes shaping the sector—such as the supply chain and the growth of e-commerce—have resonated throughout this period, additional headwinds are once again testing the resilience of grocers and the food industry as a whole. Executives at North American grocery retailers have expressed some uncertainty about market conditions in 2022, pointing to lower profit margins during the pandemic, increased price sensitivity, greater competition, and rising inflation that is forcing consumers to grapple with an increased cost of living. These trends, as well as global events, are likely to only have a greater impact on consumer confidence and spending.

Moving further into 2022 and beyond, grocers will be faced with increased pressure on margins and pricing as they navigate the need to cater to broader consumer tastes and demands. Omnichannel complexity will continue to rise, with consumers seeking more seamless experiences and manageable fulfillment fees.

We recognize the significant uncertainty facing the industry. All grocery executives are grappling with a series of questions: As consumer behavior continues to evolve, how can grocers best cater to new trends such as health and wellness and value? E-commerce has become table stakes, but how can they continue to enhance the omnichannel experience while improving profitability? How much investment will they need to make in automation, and how can they harness technology to change the operating model for stores and employees? As sustainability gains traction, what is the right way to begin the journey or build on existing plans?

This report aims to answer those questions. Its contents are part of McKinsey’s broader global series The State of Grocery Retail, an annual publication covering three continents (including Asia-Pacific, the European Union, and North America, with a new article specific to Mexico). Our goal is to frame major trends and issues for CEOs seeking to stay ahead of market shifts. To offer a holistic view of industry dynamics, insights and analyses from our colleagues are complemented by surveys and interviews with grocery executives.

We wish to thank FMI for its collaboration in developing these perspectives and in supporting the engagement of CEOs from leading North American grocery and consumer packaged goods companies. We hope the report will offer new insights that can help grocers, and those in the broader food industry, remain competitive during these unprecedented times.

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Sajal Kohli
Sajal is based in Chicago and leads McKinsey’s global work in the retail and consumer-goods industries. In more than 25 years of management consulting, Sajal has counseled leading global retail and packaged-goods clients as they set growth strategies and face challenges from the changing international landscape and from domestic-market shifts caused by digitalization, consolidation, and new entrants. He has served retail and consumer-goods clients across Asia, Canada, Europe, Latin America, and North America. He serves retail clients across multiple formats, including hypermarkets, pure e-commerce players, grocers, restaurant chains, department stores, and leading consumer-goods companies across food, consumer-electronics, personal-care, beauty, and other categories. Sajal focuses on working with senior leaders and their management teams to drive growth and commercial and operations transformations across both retail and consumer-goods companies. Over the last few years, he has been spending a lot of time with organizations on the potential and implications of tech enablement, including advanced analytics, artificial intelligence, and their implications on the future of work.

Operations lead

Eric Marohn
Eric Marohn is an expert with McKinsey who has been with the company for 22 years. He is based in Chicago, IL, focusing his practice on the North American grocery market. His expertise is in merchandising, marketing, sales, formats, and consumer research, with extensive knowledge across North America. He focuses on grocery, food, and consumer trends; corporate strategy; and growth transformation in international and US-based markets.
Acknowledgments

Special thanks to Janiece Lehmann, Becca Coggins, Daniel Laeubli, and Julia Spielvogel. We would also like to thank Beatriz Rastrollo and Karin Ringvold for their work in conducting the consumer survey for the European report and laying the foundation for this one.

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

Contributors
The state of grocery in North America

The emergence of new challenges will force grocery retailers to adapt their strategies and operations. Executives should focus on five priorities in 2022.

by Bill Aull, Becca Coggins, Sajal Kohli, and Eric Marohn
Over the past two years, grocery retailers have had to reassess and adapt nearly every facet of their operations. Changes to the grocery landscape will continue, shaped by both macroeconomic factors (such as supply chain challenges and inflation) and mercurial customer preferences. To keep pace, retailers should focus on a handful of trends: the rise of the value-conscious, healthier-eating consumer; elevated consumer expectations for omnichannel; an increased emphasis on sustainability; strategic workforce planning and investment in tech and analytics; and the growing importance of ecosystems and partnerships.

Looking back on 2021
In our conversations with CEOs, “volatile” was the word used most frequently to describe 2021. Since 2019, the market has grown at an impressive 15 percent, a rise that was the product of increases to both prices and volumes. But these top-line numbers belie the roiling retail landscape beneath. Significant shifts in share of stomach, supply and labor shortages, unprecedented investments in e-commerce, and rising inflation created widespread disruption for grocers.

Acceleration of pandemic-related consumer trends
According to recent McKinsey consumer insights, the trends that took hold at the start of the pandemic have gained momentum. Total e-commerce sales have grown nearly 60 percent since the beginning of the pandemic, though penetration rates have leveled off. At the same time, consumers are making fewer trips and visiting a smaller number of stores: they are 20 percent more likely to go to just one grocery store a week. As such, consumers are increasingly seeking out one-stop shops and have expressed an interest in buying everything in one place even more frequently in 2022.

Meanwhile, the food-at-home market, which had been slowly losing share to food away from home before 2020, has surged 8.7 percent, four times its historical growth rate. The move to food at home coincides with a growing emphasis on healthier eating.

Together, these trends suggest consumer behaviors have fundamentally changed—and grocers should take notice.

A steadying but still-fragile supply chain
Disruptions to supply chains during the pandemic have increased out-of-stock rates by upward of 15 percent, compared with historical rates of 5 to 10 percent. Issues over the past two years have been attributed to a host of factors, including bottlenecks at ports, labor shortages, and huge, unanticipated spikes in consumer demand. The good news is that some of these challenges, such as overseas vessel delays and container shortages, will pass. Others—such as labor shortages and the ongoing shift toward automation—have been a long time in the making and will require a sustained commitment to resolve.

Significant shocks to the labor market
The grocery industry employs nearly three million people in the United States. Every aspect of the industry’s people model—

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1 Total grocery sales across traditional grocery, supercenters, mass market, drug stores, convenience stores, clubs, discounters, and online channels inclusive of drug spending; Kantar LLC, Copyright 2022. All rights reserved 2022.
2 Kelly Tyko, “Grocery stores still have empty shelves amid supply chain disruptions, omicron and winter storms,” USA Today, January 12, 2022.
corporate, in-store, and across every part of its operation—is experiencing an upheaval caused by a rise in absenteeism and attrition as well as by employee demands for flexible labor scheduling. The workforce participation rate plunged dramatically during the pandemic; as of August 2021, it was still 1.6 percentage points below prepandemic levels. The accelerating adoption of automation (such as the increased use of self-checkout, image technology to perform in-stock checks, and automated picking in warehouses) is also changing the workforce dynamic.

**Emergence of unprecedented inflation**

At the beginning of 2022, inflation exceeded 7 percent, fueled by historic rises in labor, freight, and commodities costs during the latter half of 2021. Today’s inflationary environment continues to stem from a blend of cyclical, structural, and global supply chain issues. The recognition of supply chain challenges among suppliers, retailers, and consumers has increased these groups’ receptiveness to higher prices—a fortunate development for retailers because no single player can absorb the full magnitude of price increases and remain profitable. In 2021, grocery retailers raised prices even while doing their best to mitigate costs. One CEO noted, “Inflation is exceeding customer income growth. If cost increases are just passed through, it will lead to lower sales and profits and a greater migration of customers to EDLP grocers. It will be critical to balance when to absorb the cost inflation versus passing some or all of it through to optimize business performance and retain customers.”

**Greatly increased capital investment**

The grocery ecosystem has begun to change dramatically as new partnerships and entrants have challenged the status quo. Grocers increased their capital

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4 Everyday low pricing.

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Exhibit 1

**Grocers significantly increased their capital spending to keep pace with a changing ecosystem.**

**Capital expenditure CAGR, † %**

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† For a collection of 16 publicly traded hypermarkets and super centers, food retailers, and general merchandise stores. Source: McKinsey analysis of annual reports from grocery retailers.
expenditures at an amount 1.3 times their historical levels thanks in part to an influx of funding (Exhibit 1). Consider that venture-capital firms raised $10 billion for grocery start-ups in the first six months of 2021 alone. As investments continue to pour in, we expect these enhanced capabilities to disrupt the food ecosystem.

What’s ahead for 2022
Grocers will face five trends that can broadly be described by changing consumer tastes and the responses necessary to keep pace with them.

1. Rise of the value-conscious, healthier-eating consumer
With continued uncertainty around the COVID-19 pandemic and grocery inflation the highest it has been in ten years, consumers have become more focused on shopping for the best value in an effort to stretch their dollars (Exhibit 2). Moreover, 90 percent of CEOs expect increasing pricing pressure from consumers to continue in 2022. When choosing where to shop in the year ahead, 45 percent of consumers indicate they plan to explore more ways to save money, a level virtually expenditures at an amount 1.3 times their historical levels thanks in part to an influx of funding (Exhibit 1). Consider that venture-capital firms raised $10 billion for grocery start-ups in the first six months of 2021 alone. As investments continue to pour in, we expect these enhanced capabilities to disrupt the food ecosystem.

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With continued uncertainty around the COVID-19 pandemic and grocery inflation the highest it has been in ten years, consumers have become more focused on shopping for the best value in an effort to stretch their dollars.
In 2022, consumers will look for ways to save money while focusing on healthier eating and nutrition.

<table>
<thead>
<tr>
<th>Grocery shopping attitudes in 2022 vs 2021, % change</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Net intent, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look for ways to save money when shopping</td>
<td>52</td>
<td>45</td>
<td>11</td>
<td>+42</td>
</tr>
<tr>
<td>Switch to less expensive products to save money</td>
<td>63</td>
<td>27</td>
<td>7</td>
<td>+17</td>
</tr>
<tr>
<td>Actively research best promotions</td>
<td>63</td>
<td>29</td>
<td>8</td>
<td>+21</td>
</tr>
<tr>
<td>Buy private-brand products instead of known brands</td>
<td>71</td>
<td>21</td>
<td>8</td>
<td>+13</td>
</tr>
<tr>
<td>Buy imported products</td>
<td>29</td>
<td>61</td>
<td>10</td>
<td>-19</td>
</tr>
<tr>
<td>Buy food from fresh bars and deli counters in stores</td>
<td>67</td>
<td>17</td>
<td>1</td>
<td>+1</td>
</tr>
<tr>
<td>Focus on healthy eating and nutrition</td>
<td>57</td>
<td>39</td>
<td>3</td>
<td>+35</td>
</tr>
<tr>
<td>Buy groceries in large stores, where I can buy everything in one place</td>
<td>70</td>
<td>26</td>
<td>22</td>
<td>+22</td>
</tr>
<tr>
<td>Buy groceries online</td>
<td>53</td>
<td>20</td>
<td>17</td>
<td>-7</td>
</tr>
<tr>
<td>Pay a higher price to get an environmentally friendly product</td>
<td>62</td>
<td>17</td>
<td>4</td>
<td>-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grocery shopping attitudes in 2021 vs 2020, % change</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Net intent, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look for ways to save money when shopping</td>
<td>53</td>
<td>45</td>
<td>14</td>
<td>+42</td>
</tr>
<tr>
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<td>63</td>
<td>29</td>
<td>8</td>
<td>+21</td>
</tr>
<tr>
<td>Actively research best promotions</td>
<td>63</td>
<td>30</td>
<td>11</td>
<td>+23</td>
</tr>
<tr>
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<td>71</td>
<td>20</td>
<td>10</td>
<td>+11</td>
</tr>
<tr>
<td>Buy imported products</td>
<td>30</td>
<td>62</td>
<td>8</td>
<td>-22</td>
</tr>
<tr>
<td>Buy food from fresh bars and deli counters in stores</td>
<td>64</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Focus on healthy eating and nutrition</td>
<td>55</td>
<td>42</td>
<td>3</td>
<td>+38</td>
</tr>
<tr>
<td>Buy groceries in large stores, where I can buy everything in one place</td>
<td>67</td>
<td>27</td>
<td>21</td>
<td>+21</td>
</tr>
<tr>
<td>Buy groceries online</td>
<td>54</td>
<td>20</td>
<td>7</td>
<td>-7</td>
</tr>
<tr>
<td>Interact with store employees at checkout vs self-checkout</td>
<td>64</td>
<td>15</td>
<td>6</td>
<td>-6</td>
</tr>
</tbody>
</table>

1 Question: Think about 2022. Are you planning to do more, less, or about the same of the following?
2 Question: Which of the following statements best describes your attitudes toward grocery shopping in 2021 as compared with 2020?
3 Net intent is calculated by subtracting the percent of respondents stating decrease from the percent of respondents stating increase.

Source: State of Grocery Consumer Survey, November 19–December 7, 2021 (n = 3,007) and January 13–25, 2021 (n = 4,691); sampled and weighted to match the US general population over 18 years old.
unchanged from the year before. In contrast, 29 percent intend to actively research the best promotions more frequently.

Consumers are balancing their emphasis on value with an interest in healthier foods. About 40 percent of consumers expect to increase their focus on healthy eating and nutrition. Consumers intend to purchase more regional and local goods (41 percent), high-protein options (34 percent), and offerings that are free from certain ingredients (33 percent), along with other naturally healthy options (Exhibit 3). This combination of saving money and eating healthier, more nutritious foods is more prevalent among millennial and Gen Z consumers, in part because they are still waiting for their finances to return to normal.

The emergence of this younger, value-conscious, and healthier eater in 2022 creates opportunities for grocers to tailor their value-priced private-label products to include healthier offerings.

2. Elevated consumer expectations for omnichannel
Online buying is here to stay. Customer preference for online and delivery orders increased by around 50 percent during the pandemic and is expected to rise further in 2022 (Exhibit 4). Consumers continue to be drawn to the convenience and relative safety of online shopping, an attraction that becomes even more appealing as delivery costs decline and promotions increase.

The main barriers to online shopping are consumer preferences for personal contact in stores and expensive delivery charges,
though consumers are less concerned about these issues today than they were in 2020 (Exhibit 5). Consumers also prefer home delivery when grocery shopping online, marking a change from the preference for click and collect in 2020.

To shift more spending to online, successful grocers will invest to create a more seamless, personalized experience. Here are four key trends to keep in mind:

Exhibit 3

Consumers expect to spend more money on food with specific attributes, such as high protein and natural ingredients.

<table>
<thead>
<tr>
<th>Spend preference by food type in 2022 vs 2021, % change</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Net intent, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional or local</td>
<td>57</td>
<td>41</td>
<td></td>
<td>+39</td>
</tr>
<tr>
<td>Naturally healthy</td>
<td>59</td>
<td>36</td>
<td></td>
<td>+31</td>
</tr>
<tr>
<td>High protein</td>
<td>62</td>
<td>34</td>
<td></td>
<td>+30</td>
</tr>
<tr>
<td>&quot;Free from&quot; artificial ingredients</td>
<td>61</td>
<td>33</td>
<td></td>
<td>+27</td>
</tr>
<tr>
<td>&quot;Free from&quot; environmentally hazardous ingredients or materials</td>
<td>62</td>
<td>32</td>
<td></td>
<td>+26</td>
</tr>
<tr>
<td>Environmentally friendly</td>
<td>63</td>
<td>31</td>
<td></td>
<td>+25</td>
</tr>
<tr>
<td>Low sugar</td>
<td>64</td>
<td>30</td>
<td></td>
<td>+24</td>
</tr>
<tr>
<td>Uses 100% recyclable packaging</td>
<td>67</td>
<td>28</td>
<td></td>
<td>+23</td>
</tr>
<tr>
<td>Low calories</td>
<td>66</td>
<td>28</td>
<td></td>
<td>+22</td>
</tr>
<tr>
<td>Animal welfare friendly</td>
<td>64</td>
<td>29</td>
<td></td>
<td>+22</td>
</tr>
<tr>
<td>Low fat</td>
<td>66</td>
<td>27</td>
<td></td>
<td>+20</td>
</tr>
<tr>
<td>Packaging-free or minimized packaging</td>
<td>68</td>
<td>26</td>
<td></td>
<td>+20</td>
</tr>
<tr>
<td>Organic</td>
<td>62</td>
<td>27</td>
<td></td>
<td>+16</td>
</tr>
<tr>
<td>Products with low-emissions footprint</td>
<td>66</td>
<td>25</td>
<td></td>
<td>+16</td>
</tr>
<tr>
<td>Dairy alternatives</td>
<td>58</td>
<td>29</td>
<td></td>
<td>+16</td>
</tr>
<tr>
<td>Gluten free</td>
<td>62</td>
<td>24</td>
<td></td>
<td>+10</td>
</tr>
<tr>
<td>Vegetarian</td>
<td>57</td>
<td>26</td>
<td></td>
<td>+9</td>
</tr>
<tr>
<td>Lactose free</td>
<td>61</td>
<td>24</td>
<td></td>
<td>+9</td>
</tr>
<tr>
<td>Meat alternatives</td>
<td>57</td>
<td>26</td>
<td></td>
<td>+9</td>
</tr>
<tr>
<td>Vegan</td>
<td>56</td>
<td>25</td>
<td></td>
<td>+6</td>
</tr>
<tr>
<td>Halal products</td>
<td>59</td>
<td>22</td>
<td></td>
<td>+3</td>
</tr>
</tbody>
</table>

1 Question: Thinking about 2022, do you expect that you will spend more, the same, or less on following types of food products as compared to 2021?
2 Net intent is calculated by subtracting the percent of respondents stating decrease from the percent of respondents stating increase.

Source: State of Grocery Consumer Survey, November 19–December 7, 2021 (n = 3,007) and January 13–25, 2021 (n = 4,691); sampled and weighted to match the US general population over 18 years old.
Customers expect a consistent value proposition across online and in-store channels. Shoppers are engaging in omnichannel across a variety of shopping missions—weekly grocery shopping and midweek top-ups, for example—and they expect similar assortments, pricing, and promotions, among other factors, across channels.

User experience on apps is becoming more important. Consumers increasingly value the ability to search for products quickly and build their baskets while shopping online. Winning grocers have responded by investing in their e-commerce capabilities and forging partnerships with tech companies (for example, Albertsons with Google) to improve user experience.

Loyalty and personalization are more important than ever. Grocers are improving their share of wallet with omnichannel shoppers by expanding their capabilities in personalized promotions and product recommendations.

Grocers are also experimenting with shopper engagement in omnichannel. For example, some are using mobile product scanning to get product information. In addition, scan-and-go commerce is changing the way shoppers interact with grocers both in stores and on apps.

Online and delivery orders increased by about 50 percent during the pandemic and are expected to rise further in 2022.

<table>
<thead>
<tr>
<th>Consumer channel change during COVID-19 outbreak, % change</th>
<th>Net intent, % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (click and collect)</td>
<td>+42</td>
</tr>
<tr>
<td>Online (scheduled delivery)</td>
<td>+42</td>
</tr>
<tr>
<td>Instant delivery</td>
<td>+41</td>
</tr>
<tr>
<td>In a physical store or food market</td>
<td>-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumer expectations for channel change in 2022, % change</th>
<th>Net intent, % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (click and collect)</td>
<td>+4</td>
</tr>
<tr>
<td>Online (scheduled delivery)</td>
<td>+5</td>
</tr>
<tr>
<td>Instant delivery</td>
<td>+2</td>
</tr>
<tr>
<td>In a physical store or food market</td>
<td>0</td>
</tr>
</tbody>
</table>

1 Question: How did your preference to shop across the following channels change during the COVID-19 outbreak?
2 Question: In the next 12 months, do you expect to shop more, less, or the same in the following channels?
3 Net intent is calculated by subtracting the percent of respondents stating decrease from the percent of respondents stating increase.

Source: State of Grocery Consumer Survey, November 19–December 7, 2021 (n = 3,007) and January 13–25, 2021 (n = 4,691); sampled and weighted to match the US general population over 18 years old.
Grocers are also starting to see the upside from omnichannel; the omnichannel shopper spends two to four times more than the in-store customer. Now the focus has shifted from protecting in-store sales to supporting business both online and in stores through omnichannel excellence.

3. Increased emphasis on sustainability
Several developments—the success of the UN Climate Change Conference (COP26) in Glasgow, the dip in emissions at the beginning of the pandemic, and the uptick in climate-related natural disasters—have made many consumers more aware of the consequences of their purchasing behaviors. This emergence of socially conscious consumers is forcing Fortune 500 companies to act.

Companies beyond those known for their environmental, social, and governance (ESG) policies—such as Ben & Jerry’s, FedEx, and LEGO—are increasingly making more decisions based on social and environmental issues compared with 2020. In our survey, grocery CEOs largely expect consumers in 2022 to place a
greater emphasis on sustainability across all dimensions (for example, packaging and supply chain) and make different choices because of it.

The industry has experienced a groundswell of interest and activity (Exhibit 6). Five years ago, Walmart was the only retailer with ESG targets based on public science; today, grocers, apparel manufacturers, quick-service restaurants, and stores of all formats are seeking assistance with their ESG strategies. For example, Kroger aims to end hunger and eliminate waste in its communities by 2025, and Albertsons has committed to making 100 percent of its Own Brands packaging recyclable, reusable, or industrially compostable by 2025. Many retailers recognize the connection between Scope 3 emissions (the result of activities from assets beyond a company’s operations, such as vendors) and a global supply chain and are, accordingly, reevaluating operations and ESG simultaneously to enhance resilience while decreasing their carbon footprint.

Exhibit 6

The emergence of socially conscious consumers is compelling Fortune 500 companies to act.

Companies are engaging with the public on environmental, social, and governance (ESG) factors at scale

Global retailers with public science-based targets, number of retailers

<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>2020</td>
</tr>
</tbody>
</table>

Source: McKinsey analysis

4. Strategic workforce planning and investment in tech and analytics

Automation and AI will affect millions of jobs in the coming years, and retail is one of the most susceptible industries: for example, 54 percent of current work activities in retail can be automated. By 2030, estimates suggest retail could capture 35 percent of this automation potential, resulting in the displacement of approximately six million full-time employees.6

Leading organizations have already made bold bets to keep pace with changing workforce requirements. Several organizations are leading the way in efforts to reskill their employees:

**Kroger** has a tuition reimbursement program that offers up to $21,000 to part- and full-time associates. More than 6,000 associates have benefited from this program.7

**Giant Food Stores** partnered with Central Penn College to offer a $1,000 scholarship for its employees to attend the college. Giant also provides $5,250 a year in tuition reimbursement to full-time associates.8

**Publix** offers varying levels of tuition reimbursement for education options that enhance an employee’s ability to perform in a current or future role, ranging from $4,400 for two-year community colleges to a total of $16,000 for four-year colleges and universities.9

**Walmart** has invested $5 billion in a range of upskilling initiatives. For example, employees can earn college credits online through the company’s Live Better U program. Tenured employees can take part in the Walmart Academy—dedicated locations near Walmart Supercenters that offer two to six weeks of training to support career advancement. In fiscal year 2021 alone, 95,000 associates were trained via the Walmart Academy. In addition, Walmart and the Walmart Foundation have invested more than $100 million in the broader “retail opportunity” ecosystem.10

**Amazon** provides free education to employees through its Career Choice program—part of the company’s $1.2 billion commitment to upskill more than 300,000 employees for in-demand fields through its AWS Grow Our Own Talent, Surge2IT, and the User Experience Design and Research Apprenticeship programs, for example.11

5. Growing importance of ecosystems and partnerships

Margin pressure for grocers will likely continue through 2022, forcing business leaders to search for growth beyond the core. Grocers have significant loyalty from their core customers and a treasure trove of customer data. They can use these advantages to build broader ecosystems that improve the overall financial profile of their business. We expect grocers to pursue three main ecosystem strategies in 2022:

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6 McKinsey Global Institute analysis.
7 “The Kroger family of companies to hire 10,000 associates,” Kroger, June 7, 2021.
8 “Giant Food Stores partners with Central Penn College,” Central Penn College, October 7, 2019.
11 “Amazon boosts upskilling opportunities for hourly employees by partnering with more than 140 universities and colleges to fully fund tuition,” Amazon, March 3, 2022.
Partner with tech companies to modernize operations and enhance capabilities.
For instance, microfulfillment center technology players such as Swisslog and Takeoff Technologies are collaborating with grocers Ahold Delhaize and H-E-B, respectively. Google and Microsoft are also forging partnerships with grocers to introduce AI in replenishment and commerce (for example, implementing online tools to enable consumers to build grocery shopping lists).

Join forces with delivery companies for cost efficiencies and e-commerce reach.
Beyond Instacart, Shipt is expanding its engagements with grocers, while DoorDash has partnerships with Smart & Final, Meijer, Fresh Thyme, and Albertsons, among others.

Create new and innovative value propositions to customers.
In Europe, Morrisons has partnered with Deliveroo to offer a ten-minute grocery delivery service called Deliveroo Hop, while Albert Heijn is expanding its "to go" format across BP retail sites. In the United States, Kroger is doubling down on prepared meals through its partnership with Kitchen United.

Ecosystems are not only for the largest grocers to pursue; midsize and regional grocers can also participate by taking a nonleading role or finding a niche to own.

Priorities for 2022
The year ahead is already full of challenges. Leading grocers will be defined by the differentiation, innovation, and defensibility of their strategies. As executives consider

Ecosystems are not only for the largest grocers to pursue; midsize and regional grocers can also participate by taking a nonleading role or finding a niche to own.
their course and priorities for 2022, they should address several questions:

1. Changing consumer habits are here to stay. How will you pivot—and continue to pivot—to cater to these evolving needs?

2. Omnichannel is table stakes. How will you continue to build your digital and advanced-analytics capabilities to achieve omnichannel excellence?

3. ESG is gaining importance, and consumers are voting with their feet. Where are you with your commitments?

4. Talent will remain under pressure. Do you have a model in place to attract and replace those leaving the industry?

5. Forward-thinking partnerships are proliferating. Are you creatively looking to push capabilities in the face of new competitors?

Grocery executives that can successfully navigate these five issues will be poised for better performance in the years ahead.
The next horizon for grocery e-commerce: Beyond the pandemic bump

Consumers will increasingly shop for groceries online in the years ahead. Retailers must make a series of strategic investments to keep pace.

This article is a collaborative effort by Vishwa Chandra, Prabh Gill, Sajal Kohli, Varun Mathur, Kumar Venkataraman, and Janice Yoshimura.
Over the past 24 months, e-commerce in the North American grocery industry has continued to mature and scale. The pandemic served as an accelerator for grocery e-commerce, with much of the sector experiencing the equivalent of more than five years of growth in just five months.¹

We recently completed extensive research that included surveys of grocery CEOs, functional and operations executives, and consumers (see sidebar, “About the research”). Our surveys confirmed that consumers will continue to favor e-commerce as one of many ways to shop. However, many grocers don’t believe they have the necessary capabilities to manage this channel. In this article, we examine the actions organizations must take to win in e-commerce.

**E-commerce takes hold**

The industry is now on the edge of the next transformation in e-commerce: grocery executives expect e-commerce penetration to more than double for their own organizations in the next three to five years, to an average of 23 percent (Exhibit 1).

---


**Exhibit 1**

**Surveyed experts expect grocery e-commerce penetration to double in the next five years.**

| Respondent organization e-commerce penetration, historical¹ and anticipated² share of total revenue, %, n = 25 |
|---|---|
| 0–2% | 0 |
| 3–5% | 8 |
| 6–10% | 8 |
| 11–15% | 4 |
| 16–20% | 8 |
| 21–25% | 4 |
| 26–30% | 4 |
| 31–35% | 0 |
| Greater than 35% | 8 |

**Expected time frame for industry e-commerce peak,⁴ number of respondents, n = 25**

<table>
<thead>
<tr>
<th>This year</th>
<th>2–3 years</th>
<th>4–5 years</th>
<th>6–10 years</th>
<th>10+ years</th>
</tr>
</thead>
</table>

---

¹ Question: What was your organization’s level of e-commerce penetration as a percentage of total sales in the last year (2021)?
² Question: What do you think the maximum e-commerce penetration rate as a percentage of total sales for your organization will be in the next 5 years?
³ Respondents self-identified as from mass markets, specialty, and small-assortment retailers reporting more than 40% e-commerce penetration today are expected to skew overly bullish given assortment in nongrocery items. These respondents potentially considered both grocery and nongrocery goods in their forecasts.
⁴ Question: When do you believe this maximum penetration rate will be achieved in the industry?
Source: Grocery Retail B2B Survey, February 2022, n = 25
Executives are even more bullish on e-commerce’s upside potential, noting that penetration could nearly triple to as high as 35 percent (nearly $600 billion versus about $150 billion at 11 percent penetration). Our research suggests continued support for e-commerce from consumers, who indicated a positive net intent to buy more groceries online (click and collect as well as delivery) in 2022 (Exhibit 2).

The main drivers of e-commerce’s growth during COVID-19 were safety and convenience, but our research found consumers also value the channel’s unique features—such as product comparisons, assortment, and personalized promotions.

About the research

To get a better sense of e-commerce trends in North American grocery, McKinsey conducted research on retailers and consumers. In January and February 2022, we surveyed 31 CEOs as well as 25 C-level executives, directors, and vice presidents. Our team augmented these results with extensive insights from surveys conducted in 2021 among consumers in the United States (4,691 respondents), Mexico (1,005), and Canada (967).

Exhibit 2

Online and delivery orders increased by about 50 percent during the COVID-19 outbreak and are expected to rise further in 2022.

<table>
<thead>
<tr>
<th>Consumer channel change during COVID-19 outbreak</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Net intent, % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (click and collect)</td>
<td>10</td>
<td>38</td>
<td>52</td>
<td>+42</td>
</tr>
<tr>
<td>Online (scheduled delivery)</td>
<td>13</td>
<td>32</td>
<td>55</td>
<td>+42</td>
</tr>
<tr>
<td>Instant delivery</td>
<td>12</td>
<td>35</td>
<td>53</td>
<td>+41</td>
</tr>
<tr>
<td>In a physical store or food market</td>
<td>29</td>
<td>56</td>
<td>15</td>
<td>−14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumer expectations for channel change in 2022</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Net intent, % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (click and collect)</td>
<td>23</td>
<td>50</td>
<td>27</td>
<td>+4</td>
</tr>
<tr>
<td>Online (scheduled delivery)</td>
<td>20</td>
<td>55</td>
<td>25</td>
<td>+5</td>
</tr>
<tr>
<td>Instant delivery</td>
<td>25</td>
<td>48</td>
<td>27</td>
<td>+2</td>
</tr>
<tr>
<td>In a physical store or food market</td>
<td>13</td>
<td>74</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

1. Question: How did your preference to shop across the following channels change during the COVID-19 outbreak?
2. Question: In the next 12 months, do you expect to shop more, less, or the same in the following channels?
3. Net intent is calculated by subtracting the percent of respondents stating decrease from the percent of respondents stating increase.

Source: State of Grocery Consumer Survey, November 19–December 7, 2021, n = 3,007, sampled and weighted to match the US general population 18+ years
In parallel, consumers increasingly prefer home delivery (a rise from 48 percent in December 2020 to 63 percent a year later, which translates to an approximately $100 billion market today) and appreciate its product and service enhancements, including speed, reliability, assortment breadth, and flexibility (Exhibit 3).

We are also seeing consumers demonstrate different preferences for how their digital orders are filled based on need and occasion, a shift that reflects continued maturity in consumers’ approach to online grocery (Exhibit 4). Their use of different options based on occasion...
Exhibit 4

Consumers are moving beyond convenience and safety, the primary drivers of online shopping during COVID-19.

Factors driving consumers to online grocery shopping, %

- It saves me time/effort going into store: 29%
- It is safer than shopping in store during COVID-19: 26%
- I can shop when it is convenient for me (e.g., 24/7): 23%
- I like that I can get products delivered: 19%
- I like the convenience of having products delivered: 18%
- It is easier to compare products: 17%
- I generally prefer to shop online: 16%
- The prices are cheaper: 13%
- It is easier to find the items I need: 13%
- Products are always in stock: 13%
- There are more offers/promotions: 12%
- The range of products is better: 12%
- I find the quality is better than elsewhere: 12%
- I can set up recurring orders/save my favorite items: 11%
- I like being able to read product reviews before I buy: 11%
- There are always new brands/products to try: 10%
- Additional features that make shopping easier: 7%
- Other: 3%

Factors that would make online grocery shopping more attractive to online shoppers, %

- Lower delivery costs: 47% (Change vs 2020: −10)
- More promotions: 42% (Change vs 2020: −6)
- Lower minimum order values: 32% (Change vs 2020: +5)
- Faster delivery: 28% (Change vs 2020: −9)
- More precise delivery windows: 20% (Change vs 2020: +2)
- Delivery also at off-peak times: 15% (Change vs 2020: +3)
- Possibility to receive grocery delivery without having to be present: 14% (Change vs 2020: +4)

1 Question: Why do you shop for groceries online?
2 Question: You will now see some factors that might make buying food online more attractive to you. Please select up to 3 most attractive factors.

(Exhibit 5) compels retailers to offer a full portfolio of e-commerce options (such as same-day delivery, two-hour delivery, instant delivery, and click and collect). As demand spreads across different trips, the result is smaller baskets.

This degree of channel shifting within the grocery sector has precedents. Over the past couple of decades, the emergence and adoption of new offerings and channels have spurred significant changes in consumer behavior. For example, the rise of mass merchants with 150,000-square-foot stores created a different in-store experience than the one offered by the traditional neighborhood store. The mass-merchant category now accounts for about 26 percent of the market. Similarly, club retailers encouraged consumers to buy in bulk, and the rapid growth of discount and value grocery, featuring a predominantly private-label offering, defied the conventional wisdom that consumers wanted only consumer-packaged-goods (CPG) brands. Each of these “new” offerings has been accompanied by changing consumer behavior.
Keeping pace with e-commerce growth

As consumers have shifted toward e-commerce, two-thirds of retailers don’t feel well prepared to meet the dual challenges of delivering on growth while achieving profitability. Our research revealed that retailers feel some trepidation. Two-thirds of respondents expect to lose some share in the shift to digital, and more than half believe it will be difficult to attract the necessary talent to support digital growth (Exhibit 6). Meanwhile, grocers are considering how to allocate capital across multiple parallel efforts, including supply chain resilience, store remodels, digitalization, and talent acquisition.

To enhance their capabilities in the short term, grocers have responded by implementing three specific strategies. First, some grocers are building partnerships with technology companies. To expand fulfillment capabilities, grocers such as Ahold Delhaize, Wakefern, and H-E-B have partnered with microfulfillment center (MFC) technology players like Dematic, Takeoff Technologies, and Swisslog. Google and Microsoft are also working with grocers to introduce...
artificial intelligence in replenishment and commerce (for example, to enable consumers to build grocery lists while shopping online).

Second, grocers continue to rely on third parties to manage costs and expand their e-commerce offerings. Instacart became a leader through its early market entry, but it has been joined by players such as Shipt and DoorDash. The latter handles fulfillment for Albertsons, alongside Instacart and Uber. Grocers are also using partnerships to provide new and innovative value propositions to customers. In Europe, for example, Morrisons has partnered with Deliveroo to make deliveries in as little as ten minutes.

Last, the shift to e-commerce is also challenging how retailers think about capabilities across the e-commerce value chain, from in-store digitalization and pricing and promotion to trade spending and media and advertising. The role of the store will continue to be significant, with grocers investing in digitalization to improve the in-store experience for consumers—for example, through self-checkout and grab and go.

**How grocers can win in e-commerce—delivering on both growth and profitability**

To excel in the next horizon of e-commerce, grocers need to develop an integrated value proposition that meets consumer needs while protecting their own profitability.

Our research found consumers are looking to save money, be healthier, build on their (rediscovered) joy of cooking, and find the best promotions more easily. For each of these needs, an evolved digital presence (both app- and web-based) can help grocers highlight their assortment, personalize their promotions, and engage consumers in a more meaningful way.

To draw more consumers to e-commerce, retailers must offer lower costs, reduce minimum order requirements, protect quality and freshness, and enhance the breadth and discoverability of their assortments.
manner—something that a purely brick-and-mortar offering cannot do. Organizations, especially retailers that have underinvested in the past, are planning to make aggressive investments in their digital capabilities to support these tasks.

However, simply redefining the value proposition will not be enough. To draw more consumers to e-commerce, retailers must offer lower costs, reduce minimum order requirements, protect quality and freshness, and enhance the breadth and discoverability of their assortments (Exhibit 7).

To deliver on the dual objective of growth and profitability, grocers need to take a range of simultaneous actions:

Engage customers meaningfully in their omnichannel journeys and invest in user experience
Omnichannel has become table stakes. After spending the past few years building this core offering, grocers are now focusing on retention efforts by forging personal relationships with customers to increase basket size through upselling and increased frequency of trips, both

Exhibit 7

Cost, quality, and merchandising authority are the keys to increasing grocery e-commerce.

Quality and freshness of food remain obstacles for consumers in online grocery shopping.

<table>
<thead>
<tr>
<th>Factors preventing consumers from buying groceries online more frequently1, %</th>
<th>Change vs 2020, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prefer personal contact in stores</td>
<td>31</td>
</tr>
<tr>
<td>The delivery charges are too expensive for me</td>
<td>25</td>
</tr>
<tr>
<td>Quality and freshness of fresh foods not sufficient</td>
<td>21</td>
</tr>
<tr>
<td>The products are too expensive for me</td>
<td>17</td>
</tr>
<tr>
<td>My desired products are not available</td>
<td>16</td>
</tr>
<tr>
<td>The minimum order values are too high for me</td>
<td>14</td>
</tr>
<tr>
<td>Difficult to find products I am looking for</td>
<td>13</td>
</tr>
<tr>
<td>The selection is not large enough</td>
<td>10</td>
</tr>
<tr>
<td>The possible delivery times are unsuitable for me</td>
<td>10</td>
</tr>
<tr>
<td>Too often I receive products that have not been ordered or that are damaged, or there are products missing on delivery</td>
<td>10</td>
</tr>
</tbody>
</table>

1 Question: What prevents you from buying groceries online more frequently? Indicate all applicable reasons.


State of Grocery North America
online and in store. Grocers are also experimenting with new ways to engage shoppers in omnichannel. For example, mobile scan–based product information and scan-and-go commerce are changing the way shoppers interact with grocers in-store and on apps. Establishing and maintaining a social connection with consumers and reaching out daily will be important for grocers hoping to move from share of stomach to share of mind. A social-first, video-rich capability will also be a must-have. E-grocer Weee, for example, which specializes in products for Asian and Hispanic shoppers, uses gamified, video-rich social media offerings to nurture a highly engaged customer base.

The convergence of value propositions across the industry is raising the bar on user experience in e-commerce. Consumers increasingly value the ability to find products quickly and build their baskets while shopping online. Grocers are responding by investing in e-commerce capabilities and forming partnerships with technology companies to improve the user experience. For example, Albertsons and Google have partnered to create in-store shoppable maps with dynamic hyperlocal features, AI-powered conversational commerce, and predictive grocery-list building.

At the same time, retailers must enhance the in-store experience through continued investments in store technology. Solutions include self-checkout, digital shelf tags, and payments innovation to improve personalization and efficiency.

All of these offerings will have the dual objective of enabling growth while increasing profitability. However, focused investments will be needed to build both the talent bench and the core technology infrastructure. Successful grocers will seek to attract the right talent to their organizations and address the legacy technology debt from the past couple of decades.

Successful grocers will seek to attract the right talent to their organizations and address the legacy technology debt from the past couple of decades.
Build a distinct—but connected—capability in e-commerce category management

Because e-commerce is set to account for a significant share of overall business, retailers are starting to be more deliberate about standing up channel-specific management capabilities and getting sharper on assortment choices (breadth and depth, online versus offline), pricing, and online-only promotions, among other factors. Grocers need to make investments in data, analytics, and IT infrastructure to get a deeper understanding of their online business performance—for example, the effectiveness of online promotions and digital shopping trends by consumer segment. They must also dedicate resources to building their organizational muscle through efforts such as upskilling merchants. These capabilities should be integrated into a broader omnichannel category management strategy, which can provide a holistic and thoughtful merchandising experience anchored in a single view of the customer.

As consumers continue the shift toward buying through mobile apps, grocers are starting to use the full suite of e-merchandising levers—such as product placement, product recommendations, personalized promotions, and digital media—to monetize their digital assets with consumer goods companies. The launch of retail media networks (such as Instacart’s new Carrot Ads platform) allows retailers to capture a greater share of marketing spending from brands beyond what they have traditionally captured. This source will be a key driver of profitability for grocers in the coming years.

Making this shift will not be easy, and our survey indicates that retailers recognize this challenge. Retailers and CPG companies have deep and complex ways of optimizing trade promotions and advertising in the brick-and-mortar channel. There are dozens of mechanisms through which CPGs and retailers invest in advertising and trade, and ROI is often hard to track and measure. Both retailers and CPGs will need to lean on digital capabilities to optimize their investments for greater impact on revenue and profitability.

Develop a portfolio of fulfillment options that are aligned to individual markets’ needs

As demand for online grocery continues to scale, grocers are going to have to revisit how and where they fulfill orders. The network of the future for grocers will encompass a mix of automated MFCs, manual dark stores, and store fulfillment. Matching the right fulfillment option to each specific location based on a market’s demand profile and service promise will be critical.

Retailers are conducting pilots with automated MFCs and manual dark stores. Many grocers are now locating MFCs close to their customers to improve speed at a lower cost. Both aggregate demand and consistency of demand are key factors in ensuring ROI. Grocers are also implementing centralized fulfillment centers to handle larger order volumes and support next-day delivery in highly concentrated geographies.

In parallel, grocers are experimenting with new last-mile models (for example, autonomous vehicles with precise delivery slots) and tech-enabled logistics optimization to lower costs while maintaining service levels.
While automation will be a key lever for retailers to increase efficiency and speed, grocers will need to make at-scale investments to build out a comprehensive network along with a focused effort to drive volume at each node. Since the benefits of automation will accrue to all participants in the industry, there is an opportunity for collaboration among grocers, technology companies, marketplaces, and CPG companies to rapidly scale these networks.

Use e-commerce as a way to innovate and harness the broader ecosystem

Grocers are approaching e-commerce as an opportunity to push the boundaries of their current offerings. Some retailers are deploying e-commerce to strengthen their current assortments (for example, to push private brands and prepared meals) and to promote new offerings (such as meal kits, partnerships with dark kitchens and local restaurants, and expansion into catering services to capture new meal occasions).

In response, grocers need to define their operating models to fully harness their own capabilities while participating in third-party ecosystems to serve customers through different missions. Retailers should also seek to engage consumers where they are spending their time; whether on social channels, on content sites (for example, Eater magazine online), or in the metaverse, grocers need to be there.

Grocers must also quickly determine which components of their end-to-end e-commerce value chain they want to fully own as a core capability and what partners can provide. The answer will vary across the value chain as retailers assess where they can compete with distinctive offerings and where they have the requisite capabilities and resources. Efficiency and speed will be critical factors in deciding whether to invest in in-house solutions or partner with a third party. The market is likely to be segmented into large retailers with the resources to develop efficient in-house capabilities and smaller companies that must rely on third parties.

Implications for other industry players

While many of these recommendations are applicable to all grocery players, the rapid growth of e-commerce has significant additional implications for various players within the broader ecosystem. Besides Amazon, players such as Cornershop by Uber and DoorDash also offer marketplaces for shoppers. Investments continue to pour into instant delivery, with multiple players including Instacart, Gopuff, Gorillas, and JOKR now testing and offering delivery in less than 30 minutes. More first-party services are also emerging: Gopuff and DashMart by DoorDash are now playing in this space with their own warehouse-based grocery-delivery models.

Digital-native third-party marketplaces have notched significant growth in the past few years. They now have an opportunity to use their technical capabilities to ensure their retail partners have access to the best digital technology and user experiences. Another priority will be improving efficiency and reducing costs to customers through the accelerated adoption of technology (such as microfulfillment), increased batching of grocery e-commerce orders on delivery milk runs, and shared resources in delivery across vehicles and drivers. Marketplaces can also unlock additional value pools (such as advertising) that used to flow to media players outside the sector—for example, by luring spending
from traditional media channels such as television ads to grocery marketplace advertising via retail media networks.

Pure-play, first-party online grocers have the opportunity to make headway by deploying different delivery models (such as a scheduled, milk-run approach), expanding their offerings to address more need states and occasions, and further distinguishing themselves from traditional competitors (for example, through subscription models). They can also differentiate their offerings by assortment authority (including breadth, depth, and brands covered) and experiment with adopting social-first, video-first offerings to engage consumers.

Despite the substantial growth of online grocery and the increased number of players, the market truly is on the verge of its next transformation. Executives should recognize that the leaders of today are not guaranteed to be winners tomorrow. Retailers that take decisive action and make strategic investments today will be well positioned to carve out a profitable position for the future.

Vishwa Chandra is a partner in McKinsey’s San Francisco office, Prabh Gill is an associate partner in the Vancouver office, Sajal Kohli is a senior partner in the Chicago office, where Kumar Venkataraman is a partner and Janice Yoshimura is a consultant; Varun Mathur is an associate partner in the Austin office.

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Tech-enabled grocery stores: Lower costs, better experience

Grocers must reimagine physical stores to keep pace with consumer preferences. Technology will be a critical enabler in this shift.

by Tyler Harris, Alexandra Kuzmanovic, and Jaya Pandangi
The past year continued to reveal the ways in which the pandemic, evolving customer preferences for grocery, and macroeconomic trends have converged to reshape the traditional role of physical stores. As grocers seek to adapt, technology can streamline store operations—from checkout and talent management to merchandising and replenishment—and provide a better in-store environment for customers, all while helping to manage costs.

Stores under pressure
In many ways, the four-wall operating model for grocery has changed only incrementally over the past several decades. However, four primary forces will challenge long-held conventional wisdom and compel grocers to adapt.

Staffing shortages and rising labor costs.
About one million roles remain open in the US retail industry, even with upgraded incentives and benefits such as year-end bonuses for in-store employees and tuition assistance.\(^1\) As fierce competition for retail store employees has pushed wages and benefit costs higher, grocers have responded by investing more in retention and upskilling efforts.

Increased stockouts. While omnichannel offerings have increased the complexity of supply chains, broader shifts in the economy have had a greater impact on operational resilience and cost structures. Logistics carriers continue to operate at reduced capacity, with a declining supply of container ships and overall capacity down by 11 percent from September 2020 to June 2021.\(^2\) These developments are further squeezing the industry’s already-tight margins. Our analysis shows that the pandemic’s impact on retailers could decrease EBITDA by 20 to 40 percent in the near term, with 15 to 20 percentage points of that decrease enduring if these supply chain shocks go unaddressed.

Fluctuating foot traffic. Lockdowns in the early phases of the pandemic resulted in a precipitous drop in foot traffic, but the grocery sector has rebounded. After vaccines became widely available to the public in spring 2021, foot traffic increased, even eclipsing prepandemic levels at times: for example, foot traffic was 7.6 percent higher in December 2021 compared with 2019.\(^3\) Superstores illustrated a similar trend in the latter half of the year, although the shopping week that included Thanksgiving and Black Friday was down 12.5 percent from 2019.

A shift from stores to e-commerce.
While all these factors are putting added pressure on the role of stores, the capstone trend is that e-commerce has increasingly lured shoppers from traditional grocery stores. The move toward convenience and safety has fueled the rise of new delivery models, blurring the strict boundaries of the traditional store’s four walls. In the next five years, we estimate that 20 to 40 percent of grocery e-commerce volume could be fulfilled from alternative locations. Losing this volume will challenge the economics of many stores. Consumers who continue to shop in store are already seeking a different experience: self-checkout adoption has increased by


almost 20 percent since the beginning of the COVID-19 pandemic, and 75 percent of respondents who have started or increased their use of self-checkout said they intend to continue.\(^4\)

**Using in-store technology to improve customer experience and reset cost structures**

In light of these challenges, 2022 will be a critical year for retailers to use technology to future-proof their physical stores. Many grocers and retailers have already experimented with tech-enabled customer experiences and store operations. The combination of increased pressure on margins and well-tested technologies means retailers have both the motivation and the opportunity to make sustained investments across a set of levers. According to our analysis, advanced tech-enabled checkout, talent management, merchandising and replenishment, and store environment maintenance can help the grocery industry create distinctive in-store experiences for customers and reduce costs by as much as 15 to 30 percent.

**Self-checkout**

Gone are the days when consumers were willing to wait in longer lines so that a cashier could weigh produce or bag groceries. Instead, customers increasingly value the safety, speed, and convenience offered by self-checkout, which can reduce friction for consumers and—crucially—free up employees for other operational tasks such as stocking and ad hoc customer assistance. When properly implemented, tech-enabled self-checkout can improve in-store productivity by 6 to 12 percent by reducing the labor hours required for operation.

Self-checkout is now table stakes for grocers, with future-facing checkout technologies such as mobile “scan and go” not far behind. Several retailers have already deployed mobile-scanning technology to help customers save time by checking out while they shop, thereby avoiding standing in line as well as unloading and reloading their carts. This real-time purchasing information also allows retailers to dynamically offer promotions and suggestions. At the same time, visual analytics, specifically AI and camera vision, can help address nagging issues such as shrinkage (loss of inventory through errors and theft) and help retailers use the analysis of visual data to improve process efficiency.

**Talent management**

The talent landscape has changed dramatically over the past two years. Retail positions were once considered highly desirable, offering flexible hours, product discounts, and other benefits. Now, other sectors offer the same—if not better—value proposition. In light of the current labor shortages, attracting workers requires far more than a “Now hiring” sign or an ad online. Employers must instead pursue a multipronged strategy: smarter and digitalized hiring, automated management to lighten the workload, and scaled efforts to train and retain employees.

These solutions can be useful at every step of the hiring journey. For instance, predictive analytics can help automate resume screening and reduce manual effort by 55 percent. When automatic screening is done well, store managers can spend more time on activities such as coaching and analysis that more

directly improve store performance. These same analytical tools allow retailers to understand which candidate personas will help them succeed and to take early action to retain them.

Once hired, employees can benefit from digital training. One major retailer has made virtual-reality (VR) training available to associates and deployed gamified digital-training sessions to all US locations to build capabilities and drive engagement and retention.

Last, in our experience, AI-powered workforce planning and scheduling can save stores more than 10 percent in labor costs. These tools use AI to predict demand based on variables outside the store, such as traffic and weather patterns, and store-specific information. Retailers can use these insights to match staffing to each store’s needs while providing workers with the desired stability in scheduling.

**Merchandising and replenishment**

Inventory management, including counting products, identifying out-of-stock SKUs, and replenishing store shelves, accounts for a significant share of the in-store workload.

Grocers have been dabbling in robotics to manage these activities for the past several years, but two recent developments have changed the game. First, technology has evolved to allow robots to start to double-hat (that is, the same robot can manage stockout checks and cleaning), which strengthens the business cases for automation and makes investments more palatable. Second, retailers no longer have the labor resources to be able to cover all activities, so they must rely on automation to complete tasks. The use of robotics for tasks that are especially difficult or labor intensive, such as price tag validation, can support sales by improving in-stock rates and pricing and monitoring planogram.
compliance. In one pilot, robots detected 14 times the addressable out-of-stock situations compared with manual scans, reducing out-of-stock facings by 20 to 30 percent.\(^5\)

**Maintenance and store environment**

To maintain more prevalent in-store technology and equipment, grocers can automate monitoring and enable predictive maintenance. These tech-enabled tools serve a dual purpose: they help to minimize the labor required to do routine maintenance checks, and they increase food safety in grocery environments by automating tasks previously open to human error. By embedding Internet of Things (IoT) sensors throughout the store’s tech and standard equipment (such as coolers and freezers), organizations can remotely detect and even predict maintenance events and then deploy remote support or shared-service teams to address an issue before it disrupts store operations.

An IoT-enabled approach reduces the time store teams spend on not only monitoring in-store tech and equipment but also troubleshooting and coordinating support. Collectively, these efforts can boost the productivity of store teams by 1.5 percent, a significant amount when launched across the whole store fleet. Further, using automatic temperature monitors that send alerts when temperatures are outside of acceptable range—for example, in freezers and at prepared food stations—increases overall food safety and minimizes time spent on manual data collection.

Investments in technology used to feel optional for grocers—an opportunity to experiment or increase the “wow factor” in stores rather than to support mission-critical operations. Today, a wide range of affordable, field-tested technologies can help retailers reduce the cost structure of their stores while delivering a better experience for both consumers and employees. Audacious investments should be the next step for the industry.

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\(^5\) “Schnuck Markets becomes world’s first grocer to deploy intelligence robots chainwide,” Schnucks, August 26, 2021.

**Tyler Harris** is an associate partner in McKinsey’s Washington, DC, office, and **Alexandra Kuzmanovic** is a consultant in the Chicago office, where **Jaya Pandrangi** is a partner.

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Achieving profitable online grocery order fulfillment

Investing in the right configuration of picking and handling as well as delivery capabilities holds the key to upending the current economics in online grocery.

This article is a collaborative effort by Vishwa Chandra, Prabhjot Gill, Joshua Reuben, Sarah Touse, and Kumar Venkataraman, representing views from McKinsey’s Retail Practice.
The explosive growth in North American online grocery presents a vexing challenge for retailers. While the need to serve this channel is obvious, achieving profitability continues to be a challenge. In the meantime, consumers have gotten used to the convenience of delivery—the faster, the better. Grocers are under rising pressure to meet these ever-increasing expectations and mitigate online grocery’s dramatic impact on order economics.

To serve online demand without significantly cutting into margins, executives must focus their investments on the two major drivers of online fulfillment cost: handling and delivery. Grocers can manage these drivers by selecting from a range of fulfillment and delivery models. The right solution varies depending on a region’s demographics and population density and is also shaped by the target customer value proposition. Organizations that navigate these options wisely will be better positioned to grow profitably.

Online is here to stay, and consumers are more demanding than ever

Online grocery penetration has grown steadily over the past several years but was greatly accelerated by COVID-19. According to a recent McKinsey consumer survey, some trends that took hold during the pandemic will likely endure and even deepen:

1. **The online channel continues to show strong growth.** Online and delivery orders rose by about 50 percent during the pandemic and are expected to increase two to five percentage points in 2022, depending on the delivery option.

2. **Consumers increasingly want delivery rather than click and collect.** For online grocery shoppers, click-and-collect offerings have been supplanted by home delivery. According to our survey, 63 percent of online grocery shoppers in December 2021 preferred home delivery.

For grocers looking to design an effective online offering to complement their traditional brick-and-mortar channels, the challenge boils down to unit economics.

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1 The following findings come from the US results of McKinsey’s 2022 State of Grocery Consumer Insights Survey.
to click and collect, up from 48 percent a year earlier. Consumers are particularly gravitating toward same-day and instant delivery. The latter increased 41 percent over the course of the pandemic and is expected to rise further in 2022, with a net two percentage points of survey respondents expecting to increase their use of instant delivery.

**Personal contact continues to decrease in importance.** Before the pandemic, 46 percent of consumers preferred personal contact in stores. The past two years have muted its importance: now just 31 percent value this type of engagement.

**Convenience trumps all.** Consumers were drawn to online shopping for its convenience and relative safety during the pandemic, and our survey suggests shoppers have embraced these benefits and aren't interested in returning to the prepandemic normal.

As these insights reinforce, even grocers that rapidly adapted their operations early in the pandemic have no time to rest; they must continue to keep pace with evolving consumer preferences.

### Online's economics problem

For grocers looking to design an effective online offering to complement their traditional brick-and-mortar channels, the challenge boils down to unit economics. A typical North American grocer achieves a positive net profit-and-loss (P&L) margin of about $4 on a traditional $100 grocery basket when the customer is walking the aisles in the store (Exhibit 1). By contrast, when the grocer has to manually pick from the store and deliver to the customer, net P&L margin becomes approximately –$13 for a $100 online grocery basket order (assuming no additional fees are collected from the customer). Today, a combination of higher pricing for online orders and fees collected from customers for the convenience of online ordering and fulfillment enables positive unit economics in some cases. However, we expect to see customer willingness to pay this “e-commerce tax” decrease as online offerings come to be seen as table stakes.

Since the ability of grocers to use fees or higher prices to drive incremental gross margin is limited, controlling fulfillment costs is paramount. The negative impact of online on unit economics is largely caused by two incremental cost drivers: picking labor and last-mile delivery costs. On a $100 online grocery basket, manual-picking labor costs and associated overheads would typically amount to about $8, with the cost of last-mile delivery to the customer amounting to another $8. Clearly, the incremental costs of fulfilling online grocery orders far outweigh the razor-thin margins on a traditional grocery basket, causing online fulfillment to fare poorly on unit economics. The economics get worse when customers require near-immediate fulfillment; grocers will struggle to optimize the use of labor and delivery fleets to meet this faster fulfillment timeline.

### Achieving profitable fulfillment

Grocers have been experimenting over the years with various strategies to reduce picking and delivery costs. They must now double down on investments that will help offset the higher costs of rising online penetration and be strategic about where they make these investments across their networks. Retailers should not keep waiting for a better solution or attempt a
Exhibit 1

Costs for home delivery can have a significant adverse effect on margins.

Unit economics for a retailer on a $100 basket with home delivery, $

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>Unit Economic Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basket size at store price</td>
<td>$100.0</td>
</tr>
<tr>
<td>COGS¹</td>
<td>$-70.0</td>
</tr>
<tr>
<td>Shrink</td>
<td>$-2.1</td>
</tr>
<tr>
<td>Gross margin</td>
<td>$27.9</td>
</tr>
<tr>
<td>Store labor expense</td>
<td>$-12.1</td>
</tr>
<tr>
<td>Other SG&amp;A²</td>
<td>$-11.4</td>
</tr>
<tr>
<td>Net P&amp;L³ before order pick and pack</td>
<td>$4.4</td>
</tr>
<tr>
<td>Direct labor cost for picking⁴</td>
<td>$-7.8</td>
</tr>
<tr>
<td>Overheads for picking (eg, supervisors)⁵</td>
<td>$-0.5</td>
</tr>
<tr>
<td>Cost of delivery and last mile⁶</td>
<td>$-8.0</td>
</tr>
<tr>
<td>Swipe fee for e-commerce transaction⁷</td>
<td>$-1.0</td>
</tr>
<tr>
<td>Basket margin</td>
<td>$-12.9</td>
</tr>
</tbody>
</table>

¹ Cost of goods sold.
² "Other SG&A" includes a 7.5% occupancy expense, a 1.0% advertising and promotions expense, and a 2.9% logistics expense.
³ Profit and loss.
⁴ Assumes 80 items picked per labor hour (ie, 2.2 orders per labor hour) and $17 of direct labor cost per hour.
⁵ Assumes $30 of indirect labor cost per hour across 8 hours per day, 2 shifts, and spread across 890 e-commerce orders per day.
⁶ Assumes an 8% delivery cost.
⁷ Assumes a 1% swipe fee.

Source: McKinsey analysis

One-size-fits-all approach. Instead, they must be prepared to adapt based on market dynamics.

Grocers that may be inclined to wait for further technology evolution to save them will be disappointed. Over the past few years, several retailers have been experimenting with different models that can meet rising demand. Many grocers have yet to fully commit to one model, instead waiting to see what others do or expecting a new technology to emerge that will reduce costs. Those options are unlikely to materialize anytime soon. Still, profitable online order fulfillment is achievable. Grocers need to start making strategic long-term investments that are aligned with their online value propositions or partner with third-party logistics providers that have made such investments.
Some retailers are already gaining a first-mover advantage. For instance, Walmart has begun to invest heavily in store microfulfillment centers (MFCs) across its network. This approach involves setting aside roughly 15,000 square feet in the back room of the store for automation. With the MFC solution, retailers can pick at more than five times the typical manual picking speed of approximately 60 to 70 units per hour (UPH) assuming no augmentation by technology. The MFC also halves the typical pick-and-pack cost per order relative to baseline manual picking while enabling faster picking and delivery (for example, a two-hour pickup), levels that are difficult to achieve at scale using manual picking.

Retailers can apply the following lenses to the different fulfillment options in order to optimize picking and last-mile delivery costs:

**Picking costs**
Picking costs typically represent the greatest aggregate cost for online fulfillment. The average grocery basket contains about 30 items. Assuming a pick speed of 60 UPH, the 30 minutes spent picking a single order translates to about $8 to $10 an hour. This total includes the labor costs associated with picking as well as order consolidation, staging, customer contact, and handover.

Grocers can take advantage of a range of picking options with different degrees of centralization, capacity, and automation. Grocers need to build a portfolio of fulfillment options by geography, with the mix varying by the density of current and projected demand and their fundamental online value proposition (for example, cost or speed of delivery). Even within a geography, grocers need to build the capabilities to support multispeed delivery, since customers increasingly prefer delivery (particularly instant) over click and collect but have different fulfillment speed preferences (especially if they do not pay for delivery). Each fulfillment option offers different features (Exhibit 2):

**In-store picking.** With little investment, grocers can stand up a manual in-store picking operation. This option, which can handle 800 to 1,000 orders per week, comes with higher operating costs (due to the highly manual nature of the activity) and is best suited for low-volume areas.

**Warehouse in store.** Retailers can create a dedicated area within or attached to the store where pickers can aggregate popular items for delivery. This low-capacity option requires a medium level of operating costs and can handle 1,000 to 1,300 orders per week at a UPH of 80 to 100. This option works well for moderate-density suburban areas.

**Robotic MFC.** These MFCs require up-front investments in technology to replace manual pickers with robots, which lowers operating costs and increases capacity (up to 4,000 orders per week with a UPH of 400 to 500). Typically located close to consumers, robotic MFCs enable delivery in two hours or less. This option is best suited for high-volume, high-density urban areas.

**Dark store.** These stand-alone facilities offer an optimized layout to support manual picking for e-commerce orders. After an up-front investment, dark stores can handle 2,400 to 3,000 orders per week. They are ideal for moderate-volume areas.

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2 These are typical MFC and manual picking speeds and are not specific to Walmart.
3 This figure assumes US grocery wages, on average, and will likely be different in other countries.
To understand how these options could be applied, consider a California-based grocer with a statewide presence. This grocer might choose to invest in two MFCs each in Los Angeles and San Francisco to handle a combined 16,000 orders a week. Alternatively, it could set up one central fulfillment center (CFC) outside each of these cities to serve customers within a 100-mile radius. Fresno would not have the order density to justify an MFC, so the grocer could choose between a CFC to serve that city and the surrounding areas or a traditional grocery store with manual in-store picking combined with a dark store.

**Delivery costs**
As more customers shift their preference from click and collect to delivery, the last
A variety of models have emerged in last-mile delivery, enabled by growth in the gig economy.

<table>
<thead>
<tr>
<th>Last-mile delivery model</th>
<th>Description</th>
<th>Delivery time</th>
<th>Nonperishable</th>
<th>Perishable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company delivery</td>
<td>Owned delivery vans with capacity for 200+ parcels (eg, trucks similar to FedEx or UPS or Amazon sprinter vans) Can deliver nonperishable or perishable (eg, refrigerated trucks to allow scale in delivery or short trips that can be delivered in &quot;freshness&quot; windows for perishable goods)</td>
<td>Same day</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Contracted parcel delivery service partner</td>
<td>Van or truck delivery service that mirrors the company delivery model but outsources to independent entrepreneurs who run branded vans or trucks (eg, Amazon &quot;DSP 2.0&quot;)</td>
<td>Same day</td>
<td>✓</td>
<td>/</td>
</tr>
<tr>
<td>In-house gig network</td>
<td>Retailer-owned gig platforms that hire independent contractors to deliver products from stores to customers' homes Retailer has direct control of guest experience Marketplace vs retailer-specific models both exist</td>
<td>&lt;2 hours</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Traditional gig network</td>
<td>Delivery-as-a-service platforms that offer white-glove gig delivery for retailers and restaurants</td>
<td>&lt;2 hours</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Traditional parcel</td>
<td>Large package-delivery companies (national or regional) that have a fleet of on-staff drivers (UPS) or contract operators (FedEx), which work well for deliveries with fixed service-level agreements (eg, arrive by a certain time)</td>
<td>Next day</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Sources include labor and fleet costs (for retailers that have built their own delivery capabilities) or a share of revenue paid to a third-party provider (such as Instacart) for picking and delivery. The total cost of delivery can vary significantly by region, population density, and order perishability.

A variety of models have emerged in last-mile delivery, enabled by growth in the gig economy (Exhibit 3). Grocers should
assess each transport model based on its value proposition. The fundamental trade-off is between speed and cost of delivery. For example, to enable delivery in two hours or less, grocers can tap into the gig economy or use a third-party provider such as Instacart. Both of these options are typically more expensive. A less-expensive model could be to develop an owned fleet. However, the economics work only with an order density that can support high fleet utilization. In most geographies, grocers must wait until enough orders come in to limit the cost per order, which can significantly increase delivery times.

Grocers must have a clear idea of what their customers value. If they care about quick delivery, are they willing to pay for it? If so, grocers should use the gig economy and third-party providers. If customers care more about costs and wouldn’t switch grocers for faster delivery (for example, same day versus two hours), grocers should consider building their own fleet—but only in regions with the requisite order density to make this option cheaper than tapping into the gig economy or third-party providers.

Grocers can choose from a number of paths to achieve better online order economics across large parts of their network. The rapid evolution of available technology over the past few years has helped to clarify the best options to support picking and delivery. To make the right bets, grocers should take the following steps:

- Evaluate their customer promise and value proposition, and consider what customers really care about.
- Assess how well their fulfillment strategy fits with the customer value proposition.
- Look at the big picture to consider whether they have the right technology in the right places.
- Make the aggressive investments required or partner with established third-party logistics providers.
- Set EBIT and margin targets and monitor these metrics to track improvement.

Grocers that design a portfolio of options tailored to each geography’s order density and customer preferences can chart their own path to online profitability.

Vishwa Chandra is a partner in McKinsey’s San Francisco office, Prabh Gill is an associate partner in the Vancouver office, Joshua Reuben is a consultant in the Toronto office, Sarah Touse is a partner in the Boston office, and Kumar Venkataraman is a partner in the Chicago office.

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Growing beyond groceries: The ecosystem expansion

Grocers are in a unique position to expand beyond their core retail offerings. It can be challenging to build an ecosystem—but the rewards could be worth it.

This article is a collaborative effort by Steven Begley, Jenny Hu, Jonatan Janmark, Nicholas Landry, and Tom Youldon, representing views from McKinsey’s Retail Practice.
There are few locations more central to our lives than grocery stores. Whether we grab items daily or stock up weekly, we visit them so regularly that no other retail business has nearly as many consumer touchpoints or generates as much user data. And with their vast store networks, supply chains, and last-mile setups—along with the trusted relationships they have with consumers—grocery retailers have an enviable platform to build on to expand beyond their core business.

For many decades, grocers have been actively leveraging their store networks, frequent transactions, and brand strength to grow beyond food into areas including nonfood retail (such as hypermarkets), pharmacy retail, financial services, and more. Yet today, the opportunity to grow beyond these core services is greater than ever. Through digitalization, expanding the grocery business into other domains has become much more scalable because the industry is no longer tied to physical stores.

The most ambitious version of leveraging this platform is to build an ecosystem (see sidebar, “What is an ecosystem?”). Digital-first retailers such as Amazon and Alibaba have led the way, building what many consider the most successful ecosystems in the world. Leading traditional grocers such as Walmart, Loblaws, and Ahold Delhaize have followed, moving in the ecosystem direction. Still, many grocery retailers have yet to take full advantage of today’s digital technology. These grocers could unlock opportunities for both additional revenue streams and higher valuations by thinking through whether their unique assets—their customers and traffic, brand, physical assets, and so on—can provide attractive growth opportunities beyond the core.

How leading grocers are building ecosystems
The pattern is clear: grocers venturing beyond grocery generate higher returns for shareholders. In fact, the world’s top eight

What is an ecosystem?

An ecosystem is an interconnected set of products and services through which customers can fulfill a variety of needs in one integrated experience. In grocery, that could include being able to buy not only food but also alcohol, pharmaceuticals, and home goods. It could mean being able to bank at the grocery store or use its distribution network to receive at-home meal-kit deliveries. At the core of everything, though, is the customer connection, which creates additional value for all stakeholders. A successful ecosystem typically builds on several pillars:

- frequent usage and engagement with stakeholders beyond pure commerce
- a network of services provided through expansive partnerships
- strong network effects that compound value for customers and participants—the larger the ecosystem, the more value to each participant
- rich, data-enabled experiences
retailers by revenue market share, five of which are grocers (Amazon, Costco, Kroger, Schwarz Group’s Lidl, and Walmart), are all experimenting with such expansions. Our analysis finds publicly traded grocers pursuing some form of ecosystem strategy have been rewarded with higher enterprise values (EV) relative to the broader grocery sector. We have identified about 15 grocers with some ecosystem activity that have an average EV to EBITDA multiple of 15.3, compared with an overall average multiple of 10.7 for the grocery companies in our data set. Even if some expansion activities may dilute earnings margins in the short term, they can still drive value for shareholders as a business is repositioned toward investors.

In essence, the value creation from ecosystem activities is delivered in three ways:

- driving more revenue in the core grocery business in stores and online thanks to increased loyalty (from the value of participating in the ecosystem) and a boost in adding new customers (from the large set of touchpoints in the ecosystem)
- adding new revenue pools, including by monetizing loyalty data, creating new media platforms, tapping into categories adjacent to groceries, and delivering new fee-based services
- market repositioning from traditional grocery to a technology- and data-enabled platform with many potential growth vectors, increasing the valuation multiple

Consider the US-based grocer Walmart. It has a vast, integrated, compounding ecosystem intended to engage and deepen its share of wallet beyond retail for its 150 million weekly customers. Walmart provides healthcare services through a network of primary health clinics, offers in-store lab testing in partnership with Quest Diagnostics, and works with insurer Humana to sell Medicare drug plans. In financial services, it provides prepaid cards in partnership with Green Dot, money-transfer services through MoneyGram, and tax services through Jackson Hewitt. Its Walmart+ membership program includes benefits such as free shipping and cheaper prescriptions, while Walmart Marketplace competes with Amazon and is growing rapidly through its expanding network of third-party sellers.

Similarly, Netherlands-based Ahold Delhaize has built an ecosystem that includes different business models in food, such as food service through FreshDirect and partnerships in Europe, e-commerce full-basket delivery, and a variety of store formats, including supermarkets and convenience. Ahold Delhaize has also scaled bol.com, its nonfood marketplace, and is making steps in media monetization and personalization across its food and nonfood propositions, leveraging its consumer data and insights.

**Two primary ways to grow: B2C and B2B**

There are two major routes for ecosystem expansion: entering new business-to-consumer (B2C) verticals and touchpoints, or externalizing and monetizing internal capabilities and offering them as business-

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1 The ability to extend services into pharmacy and healthcare is dependent on national regulations.
to-business (B2B) services (Amazon’s AWS arguably being the most famous example).

**Broadening into B2C markets**
When we examined the 24 largest global grocers to see the most prevalent B2C expansions, we found (unsurprisingly) that all of them had ventured into online grocery. In addition, the vast majority had built loyalty programs, expanded into retail categories beyond grocery, and offered financial services (exhibit).

Next on the list after these common (and fairly traditional) expansion verticals comes a rapidly growing expansion play: marketplaces. In essence, marketplace platforms facilitate retail by allowing third-party sellers that own inventory to sell to consumers through the marketplace interface. This has proved to be a tremendously successful business model that has shaped some of the most valuable companies in the world, notably Amazon and Alibaba. The (not so) secret sauce behind the success of the marketplace model is anchored in the ability to offer an expansive range at the best prices without the associated inventory risk and capital requirements.

While early marketplace activity was driven by online-only players and nonfood retailers, grocers are increasingly exploring the model. This enables retailers to broaden their food offerings

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**Exhibit**

**Global grocers are making significant ecosystem plays.**

<table>
<thead>
<tr>
<th>Strategic paths</th>
<th>United States</th>
<th>Europe</th>
<th>Asia</th>
<th>Total # of retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B2C extension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-grocery</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Loyalty programs</td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Other B2C services¹</td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Financial solutions</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Other retail categories</td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Marketplace</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Restaurants and food services</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Entertainment</td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>B2B internalization and marketing</strong></th>
<th>United States</th>
<th>Europe</th>
<th>Asia</th>
<th>Total # of retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insights, digital services, and media</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Real estate and energy</td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Active investments</td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Logistics services</td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Waste management and recycling</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Verticalization and manufacturing</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

¹ Services offered outside traditional grocery retailing (travel, picture services, pharmacy, laundry, flower shop, etc).

Source: McKinsey analysis
(for example, with local or niche ethnic brands) and to quickly expand into more nonfood offerings. For example, Kroger announced an expansion of its Kroger Ship program to add 50,000 items to its offerings, including natural and organic food, international food, specialty items, houseware, and toys. The move was intended to increase convenience to the customer and to offer an augmented one-stop-shop experience to compete against more diverse retail marketplaces such as Amazon and Walmart.

The marketplace model carries risks, such as the difficulty of vetting product assortments and of providing a consistent customer experience. But the benefits of a well-developed marketplace can be immense in terms of better serving customers, expanding online traffic, and gaining additional data and insights on customers, as well as through the financial benefits from seller commissions and monetizable services to the seller community.

**Deepening within B2B services**

For B2B services, the most common areas of expansion were insights, digital services and media, real estate and energy, logistics, and active investments. One of the most extreme examples within grocery is Ocado. What started as an online grocery business in the United Kingdom evolved into a B2B technology business with customers such as Groupe Casino in France, ICA in Sweden, Kroger in the United States, and Sobeys in Canada.

The current blockbuster use case for expanding into B2B services is retail media networks. Grocery retailers have historically been good at monetizing their substantial exposure to consumers—either in-store or through leaflets and magazines—by selling space to consumer-packaged-goods companies. Retail media networks (RMNs) are the digital equivalent of this. When done well, they can unlock approximately 2 to 4 percent of online sales in positive EBIT contribution.

Grocers are in a unique position to build RMNs: the high shopping frequency they enjoy provides ample advertising opportunities across assets such as websites, apps, and email; the vast amount of data enables accurate personalization; and the fact that advertisements appear when consumers are in a shopping mode enables very high—and, importantly, measurable—conversion. To capture this opportunity, grocers are increasingly developing in-house teams that engage directly with their brands on marketing opportunities and effectively operate as advertising agencies.

While North American grocers such as Walmart and Kroger were early adopters of this approach, we’re seeing European players such as Tesco and Sainsbury’s take meaningful steps into this area. To date, it’s mainly large retailers with the technology requirements and new capabilities that are set to pursue the retail media network opportunity. But we expect that smaller and regional players

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will increasingly be able to use plug-and-play solutions and that third parties will provide the same services to vendors and monetize accordingly.

**The keys to growing beyond retail**

We see several grocery retailers expanding beyond the core and building ecosystems that generate additional value for stakeholders. But pursuing an ecosystem strategy does not necessarily lead to success; the reality is that many more companies have experimented with ecosystem strategies than have succeeded in using them to create substantial value.

Based on what we’ve learned from examples of both success and failure, the fundamentals for success are clear (and similar to other endeavors): ambitious senior leadership with willingness to pursue big bets and accept risk, a vision and strategy with rigorous prioritization, and an organizational model that fosters the right collaborations and agility. Once these fundamentals are in place, it comes down to execution. Key actions will then include the following:

- Cultivate a relevant portfolio of partners. This portfolio must include capabilities along the whole partnership life cycle, from aligning strategically to scanning partners, structuring deals, onboarding them, and eventually managing partner relationships. Engaging not only with large companies but also with start-ups is important to build a thriving partner portfolio.

- Develop technology capabilities that ensure scalability, security, and responsiveness to customer needs—with business use cases guiding data and technology efforts.

- Implement relevant principles for capital allocation (for example, a dedicated fund to support rapid growth), undertake continuous performance measurement and evaluation, and ensure timely stakeholder communication.

The benefits of a well-developed marketplace can be immense in terms of better serving customers, expanding online traffic, and gaining additional data and insights on customers.
The world’s largest grocery retailers are making moves, but that doesn’t mean midsize or regional grocers can’t develop ecosystems. First, it’s not necessary to take a leading role. Grocers can partner with others that have the capital or capabilities to orchestrate a robust ecosystem approach while still reaping the benefits that come with stickier, more cost-effective customers. Second, grocers can find a niche to own. Is there a segment of customers that can be uniquely served? For instance, regional and smaller banks target specific segments—such as newcomers to a country—with tailored services to meet their needs. Similarly, pet ownership and care have emerged as powerful niche ecosystems within the consumer-packaged-goods sector. What we’re saying is that grocers don’t need to seek to replicate the Walmart playbook—there may be sizable, underserved groups to service and own.

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Grocers’ sustainability opportunity in transforming the food system

Now is the time for grocers to develop strategic sustainability transition plans focused on value creation and think more broadly about the role they can play in encouraging change across the full value chain.

This article is a collaborative effort by Sebastian Gatzer, Steve Hoffman, Nikola Jakic, Bartosz Jesse, Bill Mutell, and Daniel Roos, representing views from McKinsey’s Retail Practice.
Increasingly severe global weather events and the urgent tone of the 2021 UN Climate Change Conference (COP26) have made it crystal clear: now is the time to truly prioritize sustainability. And while climate may be top of mind, it can no longer be separated from other concerns about how we live and make supporting economies more sustainable. To address these problems, it is crucial to consider the food system, which accounts for 34 percent of global greenhouse-gas (GHG) emissions.

It’s not simple to reform a system relied on by more than 500 million farmers, workers, and employees around the world that also plays a critical role in people’s health. Yet pressure from stakeholders has never been stronger: consumers are demanding sustainable products and services, investors are shifting to sustainable investments, regulators are implementing new and tighter sustainability regulations, and pressure from nongovernmental organizations (NGOs) is increasing.

We believe grocers are in a unique position to be a driving force in this much-needed sustainability transformation. They’re ubiquitous—even the smallest town has a grocer. They’re integral to local and national economies, often being the largest private employer in an area. They have the power to both influence consumer choices and collaborate with farmers, suppliers, and even other grocers. And, finally, they can benefit from the transition, because sustainability can go hand in hand with value creation. In fact, our analyses show that while sustainability presents potential risks, it also offers opportunities for grocers’ top lines, margins, and costs—adding up to around 25 to 30 percent for a typical North American grocer.

Making sustainability a strategic imperative
Many food retailers have already kick-started their sustainability efforts with portfolios of initiatives that typically span decarbonization, packaging, assortment, and social sustainability. A recent survey of sustainability leaders from North American and European grocers suggests two-thirds of grocers have quantified their starting point (baseline) and defined concrete actions to address sustainability topics, and 50 percent have defined concrete targets. Yet only half the respondents were confident they could achieve their sustainability targets.

We believe grocers are in a unique position to be a driving force in this much-needed sustainability transformation.
The problem? Grocers associate sustainability with significant costs and have not solved the challenge of creating value through “commercialization” of green activities, which has slowed progress. They are simultaneously juggling other critical strategic transitions, such as digitalization. And it is difficult to set up much-needed upstream collaboration with farmers and suppliers.

We believe grocers need to make sustainability an integral part of their businesses with a strategic perspective based on value creation and tailored to their circumstances. We have identified three areas of focus that will help grocers succeed:

1. the five key sustainability themes for holistic impact
2. levers grocers can use to capture efficiency, growth, and margin improvement opportunities while managing potential downsides
3. an operating model enabling grocers to successfully manage the sustainability transformation

1. Focusing on the five sustainability topics that matter

While looking at the food system’s sustainability from an environmental, social, and governance (ESG) perspective is a good start, grocers can go further. We sought to create a framework for grocers to provide insights about the most important dimensions. Our research into stakeholder requirements and external costs of the food system suggests grocers focus on five explicit dimensions: health, the environment, the economy, animal welfare, and livelihoods (HE2AL). Within this framework, we further identified 15 topics that should matter most to grocers (Exhibit 1).

Retailers should focus on all HE2AL dimensions and look at the full value chain to maximize value creation and sustainability impact. Looking at the full value chain is important because many value creation opportunities and much of the sustainability impact come from interactions with suppliers and customers.
Grocers can help mitigate the external costs to society from food through 15 sustainability levers.

Exhibit 1

For every dollar spent on food, an estimated 0.8–2.1 dollars of external costs are caused.

<table>
<thead>
<tr>
<th>Cost to society per $ spent on food, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
</tr>
<tr>
<td>Environment</td>
</tr>
<tr>
<td>Economy</td>
</tr>
<tr>
<td>Animal welfare</td>
</tr>
<tr>
<td>Livelihoods</td>
</tr>
<tr>
<td>Cross-cutting</td>
</tr>
<tr>
<td>~0.005 - 0.40</td>
</tr>
<tr>
<td>0.40 - 1.10</td>
</tr>
<tr>
<td>0.30 - 0.90</td>
</tr>
<tr>
<td>0.05 - 0.15</td>
</tr>
<tr>
<td>~0.005 - 0.10</td>
</tr>
<tr>
<td>0.05 - 0.10</td>
</tr>
<tr>
<td>0.80 - 2.10</td>
</tr>
</tbody>
</table>

Sustainability levers for retailers

**Health**
1. Enable healthy lives through healthier assortment (incl private labels)
2. Ensure food safety

**Economy**
3. Decarbonize own operations and value chain
4. Achieve plastic waste and packaging circularity
5. Eliminate or reduce food waste
6. Reduce biodiversity impact, incl deforestation
7. Increase resource efficiency (eg, water)
8. Secure food access and affordability
9. Increase supply chain resilience

**Livelihoods**
10. Strengthen animal welfare
11. Protect human rights
12. Ensure fair pay
13. Create product transparency and traceability
14. Champion standards, certifications, and sustainable policies
15. Market sustainability activities

Source: Food and Land Use Coalition; Perotti; Rockefeller Foundation; Sustainable Food Trust
Let’s take decarbonization as an example. While the food system accounts for more than a third of global GHG emissions, only about 4 percent of grocers’ direct contribution is from grocers’ own operations (Scope 1 emissions) and from purchased electricity and heat (Scope 2 emissions). Most emissions are generated along the value chain (Scope 3), with about 80 percent stemming from land use, agricultural production, food processing, and packaging (Exhibit 2).

This means grocers need to focus on two elements. First and foremost, they should work on their own footprints and optimize their own operations. This can be a significant—and expensive—investment of time and resources, requiring anything from making thousands of stores energy efficient to sourcing green energy and reshaping cooling technologies and logistics. But it holds the potential for grocers to both make a sizable contribution to sustainability and create value.

Exhibit 2

Food systems account for more than a third of global greenhouse-gas emissions.

The global food system is a key contributor to global greenhouse-gas (GHG) emissions, accounting for 34% of emissions.

While grocers directly contribute only 4% of food-related GHG emissions, they are uniquely positioned to influence and support the decarbonization of suppliers and farmers upstream and enable sustainable consumption choices of consumers downstream.

Stakeholder with direct influence

Note: Global top-down perspective; figures may not sum to 100%, because of rounding.
¹ Consumer packaged goods.
² CO2 equivalent.
Source: Crippa et al., “Food systems are responsible for a third of global anthropogenic GHG emissions,” Nature Food, March 8, 2021, Volume 2
Second, grocers should take a holistic view of GHG emissions created along the entire value chain, reviewing how their assortment and sourcing choices and policies contribute to them. Reducing Scope 3 emissions while creating value can include actions such as introducing transparency requirements for all products, changing product assortment (for example, introducing lower-emissions alternatives), adjusting specifications (such as specifications on shape or size that can cause farmers to waste “nonfitting” produce), supporting farmers who want to develop emissions-reducing agricultural production, or improving supply chain financing based on the GHG footprint of the supplier. Tackling Scope 3 emissions can be quite complex, because grocers need to collaborate with their partners in the value chain. However, given the large share of total emissions and grocers’ central position in the value chain, this step is required to decarbonize the food system.

Along the five HE²AL dimensions, grocers should identify opportunities to fundamentally—and credibly—differentiate themselves and create competitive advantages, allowing them to maximize sustainability impact and value creation. This does not imply grocers need to be sustainability leaders across all 15 topics, but they should make conscious choices about where they want to lead, where they want to benefit from resource productivity gains, and where they just want to comply with regulations. The following five factors can help grocers prioritize their efforts:

- the company’s starting point (baseline)
- the position of competitors
- stakeholder expectations, especially those of (future) consumers and regulators
- the company’s “appetite to do good,” reflecting its purpose
- the overall resulting potential for value creation, including upsides and downsides

Grocers can generate significant value from a well-positioned sustainability transformation.
These opportunities then need to be translated into concrete targets that can be communicated internally and externally.

**2. Creating value from the sustainability transformation**
Grocers can generate significant value from a well-positioned sustainability transformation. The value generated can come from five types of value creation levers, which can be further grouped into reducing downside risks and seizing the opportunities sustainability offers. (Exhibit 3).

**Managing risks**
A strong sustainability strategy reduces several downside risks companies might otherwise face, meaning it can provide an important source of value. Companies with a low ESG rating will face increasingly higher costs of capital as capital is moved to sustainable companies. By improving their ESG ratings, grocers can ensure access to capital at better rates. Several NGOs are also lobbying regulators to extend the carbon tax to food, increasing the cost of these products. By proactively working across the supply chain to reduce

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**Exhibit 3**

**Sustainability value-creation levers can drive economic profit.**

*Illustrative economic profit, modeled with top-down assumptions, baseline = 100*

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Source: McKinsey analysis
GHG emissions, grocers can avoid these additional costs. In addition, as consumers increasingly patronize more sustainable companies, there is a risk of losing market share to sustainability leaders. By offering a wider range of healthy and sustainable options and by decarbonizing their own operations and the value chain, for example, grocers can gain market share. Although there is still considerable uncertainty around how sustainability will play out, there’s a clear business case for acting to mitigate downsides.

**Capturing opportunities**

Sustainability strategies can do more than mitigate risk and reduce downsides; they can also give grocers a competitive edge and allow them to take advantage of new opportunities. We outline some potential strategies for grocers below.

**Portfolio strategy:** Grocers can begin reorienting portfolios toward sustainability at the level of their broader ecosystems. They can rigorously allocate capital—for example, by investing in sustainable parts of the business, managing unsustainable parts through cash flow, or scaling down and divesting—and think about organic and inorganic moves. There are many attractive sustainability value pools beyond grocery, often with significantly higher growth and margin potential. Grocers can evaluate their potential to extend beyond their core business, whether by focusing on adjacent segments that strengthen the core business (such as Walmart’s expansion into Walmart Health, which was launched in 2019 and now offers low-cost, doctor-staffed healthcare services in four US states\(^1\)) or by leveraging consumer data as an ecosystem backbone to provide highly valuable services.

**Sustainable business building:** Disruptive sustainable innovators are emerging in the food system, from vertical farming (such as AeroFarms and Infarm) to protein alternatives (Planted or Beyond Meat) to packaging circularity (TerraCycle’s Loop). Yet established grocers typically struggle to build new sustainable businesses successfully. While they face real challenges, such as brand credibility and incubating agile new ventures within larger corporate structures, established grocers are also held back by a lack of ambition and an unwillingness to disrupt themselves before someone else does. These are missed opportunities. Established grocers have significant advantages that should make them the natural owners of sustainable-business building.

\(^1\) “Introducing Walmart Health,” Walmart Health.
Market share and margin gain: Consumer companies are increasingly gaining market share and margins by differentiating through sustainability. The three principal levers are branding and marketing, sustainable value propositions and differentiation, and green pricing—especially as sustainability premiums begin to materialize. For example, sustainability leaders disproportionately allocate shelf space and resources to sustainable products, which are outgrowing conventional products by a factor of seven. California-based grocer Raley’s, for example, seeks to further propel competitive differentiation by promoting shelf guides to help shoppers navigate sustainable products.

Sustainable operations and supply: More sustainable operations can be value accretive and significant drivers of better performance. Often, we find up to 50 percent of operational levers can be net present value—positive (NPV-positive) or NPV-neutral and can improve financial performance through cost reductions. Grocers should therefore approach sustainability investments as they approach other investments: by prioritizing the most economically efficient options. Grocers can use marginal abatement cost curves to prioritize NPV-positive or NPV-neutral levers (Exhibit 4). Such cost curves show the cost of each investment and rank them by their return on capital.

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3 “Shelf Guide: Find your healthy,” Raley’s.
3. Setting up the sustainability transformation for success

Maximizing sustainability impact and value creation requires a holistic transformation approach with the right operating model. Like any business transformation, sustainability is hard to do because it requires a substantial number of changes to the business and to cross-functional collaboration. As mentioned above, only half of retailers that set a sustainability target are confident they will reach these targets.

Exemplary marginal abatement cost curve (MACC) for grocery retailers
Levers to abate CO₂-equivalent (CO₂e) emissions, 2030 view

Carbon-abatement cost curves can support decisions about the sequence of implementation.

Exhibit 4

Every box is one CO₂ reduction lever. The chart shows the cost of this lever and the CO₂ reduction potential.

Note: Additional potential from Scope 3 downstream levers not included.
¹ Net present value.
Source: McKinsey Decarbonization Lever Library; McKinsey GreenGauge; McKinsey analysis
When they have the right focus, key elements of the operating model can improve the overall sustainability of an organization.

1. **Role of leaders**
The CEO and board of directors establish sustainability as business priority, set the ambition, and sponsor and model the sustainability agenda. The chief strategy officer is the orchestrator across functions and business units (BUs).

2. **Activity scope**
Centrally led activities embed sustainability in the core of the business (e.g., sustainability strategy, reporting). Initiative-based activities across the HE²AL dimensions must be business-led.

3. **Teams**
BUs have ownership of initiative delivery and collaborate with a dedicated central sustainability team, which leads and coordinates activities across the organization.

4. **Governance**
Executive committees and steering committees enable C-level alignment and oversight.

5. **Performance management**
Sustainability ambition and targets are set and translated into specific KPIs per initiative.

   **Internal incentives**—specifically variable compensation—are tied to sustainability performance.

   **Data collection and reporting** must be established as key enablers, with a focus on product traceability and transparency.

6. **Linkages and collaboration**
   Central team ensures rigor and discipline, with BU leaders taking business ownership from the start.

   **Cross-functional and cross-BU teams, governance, and processes** enable and steer delivery.

7. **Capabilities**
   Key sustainability skills and knowledge on environmental science, climate change, and specific domain knowledge across HE²AL dimensions are considered foundational.

   Core enabling skills are required: strong leadership, ability to influence, effective communication, and data collection, integration, and analysis.

8. **Culture**
   A proactive and holistic view is shared across the organization, with sustainability serving as an integral part of company vision and strategy, as modeled by board of directors, CEO, and executives.
Sustainability efforts should therefore be anchored by the CEO and board, who should model a green culture. They should be supported by a central team led by a chief sustainability officer who reports to the CEO and acts as the main orchestrator and know-how provider across the organization. Business units should take the lead in developing and executing specific sustainability initiatives, with sustainability embedded in performance management as a measure of progress that can ensure accountability both internally and externally. Moreover, grocers should invest in data collection and reporting across the value chain to be able to manage upstream and downstream impact (Exhibit 5).

The food system requires fast, systemic change to become sustainable. Grocers can be a driving force and create significant additional value, but this is a multiyear challenge requiring leadership and focus throughout the organization, as well as investments. We recommend three steps leaders should take now:

- Assess your sustainability baseline and define your sustainability ambition with concrete impact targets (such as financial, carbon abatement, waste diversion, and supplier engagement). These should be based on your starting point, your purpose and internal “appetite to do good,” the behavior of competitors, your stakeholders’ expectations, and, last, the resulting potential for value creation.

- Implement a well-defined and prioritized set of sustainability initiatives that maximize your sustainability impact across the HE²AL dimensions and generate value for your business across all five types of value creation levers. Think strategically about how to involve suppliers, differentiate through sustainable own brands, and invest in transparency.

- Adapt your operating model to anchor sustainability in the day-to-day business decisions most relevant to your articulated ambition across the value chain. This enables consumers to make sustainable choices, optimizes your operations, and allows you to collaborate with farmers, suppliers, and peers.

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Crisis or opportunity? How grocers can win the talent war

Grocery retailers can't find the people they want for the jobs they need. In a competitive labor market, evolving the talent model can provide an advantage.

by Rahul Mathew, Beatriz Rastrollo, Patrick Simon, and Raphaël Speich
Anyone searching for the front line in the war for talent should consider the grocery sector. Grocery retailers employ more than 8.5 million people in the United States and European Union, yet they face two critical problems: high demand for new skills and roles that are difficult to cover amid a shortage of available talent, and high attrition rates for existing employees. It’s a labor spiral that presents a huge challenge but also an enormous opportunity to create value—if grocers evolve their talent models to the new reality.

Some of the factors behind the tight labor market are well documented: pressure for wage increases amid inflation; talent shortages; increased competition; the rise of absenteeism and attrition in the wake of COVID-19; and the need for more flexible labor scheduling. Yet the grocery sector also faces longer-term challenges on three fronts:

- **Its value model is shifting.** The way value is created in grocery retail is being transformed by analytics, the rise of digital (notably e-commerce and new propositions such as instant delivery), demand for sustainability (requiring higher collaboration with suppliers and skills related to new products), partnerships and ecosystem collaboration, and other dynamics. It’s forcing employees to learn new skills as roles evolve and pushing companies to adapt their operating model.

- **Automation opportunity is high compared with other industries.** Research suggests one third of grocery retail tasks could be automated over the next eight years. Yet very few jobs can be fully automated, meaning the challenge is not about eliminating jobs but about determining how much they will change—and how workers can change with them. As some tasks become increasingly automated, workers will need to adapt, taking on additional—often more rewarding—tasks, such as increased interaction with customers, while acquiring new skill sets.

- **Cost pressures are increasing.** A need for greater efficiency and productivity is being driven by lower market growth, inflation, pressure to increase wages, the rise of competition, and (even higher) attrition rates.

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The pandemic has dramatically accelerated these trends, leaving grocery retailers with little choice but to transform their people model. The upside? The sector can not only address these challenges but also drive sustainable competitive advantage with talent.

How the grocery workforce is changing

These trends have upended the grocery retail industry. Companies are being forced to reimagine and redesign grocery roles as physical and manual tasks have declined in importance and the need for technological and social skills, adaptability, and the ability to master various tasks continues to rise (Exhibit 1).

These skills are central to how grocery workers’ responsibilities are changing, and how companies equip and empower employees will determine their success in attracting and retaining talent:

• New and changing roles. Entirely new roles are being created as the grocery sector evolves, expands into adjacent business areas, and introduces technology and automation. About 280,000 jobs were created in retail trade in the United States between February 2020 and March of this year. For example, the acceleration of online sales and instant delivery brings with it a need for in-store logisticians and last-mile delivery

Exhibit 1

Social and technological skills are becoming more important in retail.

<table>
<thead>
<tr>
<th>Sample skills</th>
<th>Sample retail activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>General equipment operations</td>
<td>Restock shelves</td>
</tr>
<tr>
<td>Basic data input</td>
<td>Scan items at checkout</td>
</tr>
<tr>
<td>Basic data processing</td>
<td>Take phone orders</td>
</tr>
<tr>
<td>Creativity</td>
<td>Keep sales record</td>
</tr>
<tr>
<td>Leadership</td>
<td>Interpret performance dashboards</td>
</tr>
<tr>
<td>Empathy</td>
<td>Create custom staff scheduling</td>
</tr>
<tr>
<td>Programming</td>
<td>Serve customers</td>
</tr>
<tr>
<td></td>
<td>Coach personnel</td>
</tr>
<tr>
<td></td>
<td>Consolidate customer info on a tablet</td>
</tr>
<tr>
<td></td>
<td>Complete e-learning trainings</td>
</tr>
</tbody>
</table>

¹ Western Europe includes Austria, Belgium, Denmark, Finland, France, Greece, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, and United Kingdom.

Source: McKinsey Global Institute
workers. At the same time, some roles are growing or evolving, requiring different skills from those required in the past. In the areas of commercial, digital, and logistics, there’s an increased demand for more advanced technical and analytics skills in certain roles, such as pricing, digital marketing, and planning. Cashiers, long believed to be a talent pool with declining demand due to increased adoption of self-checkout, are required to have more social-emotional skills to bring a human touch to customer service and be more tech savvy to take on new tasks like online order fulfillment. In addition, physical work will still be very relevant.

- **Workforce retention.** Attrition in grocery retail globally jumped to about 60 percent in 2020 from 40 percent the previous year, according to the Food Industry Association—despite an increase in average wages and benefits for full-time employees. While the industry has spent upwards of $15 billion to keep workers, it’s clear that transactional pay is not sufficient; workers are looking for deeper relational elements and are placing significant emphasis on feeling valued by managers and organizations, schedule flexibility, and greater potential for career advancement.

- **A war for attracting talent.** All industries are seeking new roles and skills, sparking a tight labor market that is challenging for grocery retailers already battling margin pressure. The sector has responded with significant salary increases—Lidl, for example, announced it was allocating more than €20 million for pay raises in the United Kingdom as part of its investment strategy on talent attraction and retention, while Mercadona announced a 5 percent salary increase for its workforce. In the United States, some 300,000 employees left wholesale trade industries between February and September last year. While this presents a challenge for grocery retailers, it also validates the experience and training of the sector’s people. Other sectors often value the skills of grocery workers, including customer service, people management, and social-emotional intelligence.

**What grocery retailers can do**

Against this backdrop of short- and long-term challenges spanning the industry, it’s no wonder that about 40 percent of grocery CEOs today identify people as a priority topic, compared with around 25 percent last year. We said earlier that grocery retailers have no choice but to transform their approach to talent, and we’ve identified six strategic moves they can take to navigate the transition to a new people model:

- **Reduce short-term attrition by addressing the employee experience.** There’s a disconnect between the factors employees regard as important and those employers think are important (Exhibit 2). If the past 18 months have taught us anything, it’s that employees are craving investment in the human aspects of work. Better pay, benefits, and perks have become table
Factors important to employees versus what employers think is important

Employers seem to overlook relational elements that are key factors in why employees are leaving, such as lack of belonging or feeling valued at work.

Exhibit 2

Employers do not fully understand why employees are leaving.

Note: Standardized scores are reported for both employee and employer perspectives. Employees were asked to respond to the following question: “To what extent did the following factors impact your decision to leave your last job?” (Possible responses: “not at all,” “slightly,” “moderately,” “very much,” “extremely.”) Employers were asked to respond to the following question: “Why do you think employees are choosing to leave your organization now? (Select all that apply.)

¹ Includes interactions with clients, customers, patients, and students.

Source: “Great Attrition” or “Great Attraction”? The choice is yours,” McKinsey, September 2021
stakes. What employees are really seeking is to feel valued by their organizations and to have social and interpersonal connections with colleagues and managers. To achieve this, onboarding and ongoing motivation for in-store personnel are critical. Leaders should take note: you can’t fix what you don’t understand, and truly investing in the relational elements that ensure employees feel valued and belong at work is the key to arresting the slide.

- **Anticipate future talent demand and invest accordingly.** The nature of all grocery roles is shifting, due not only to elements within the control of companies—such as the degree of automation—but also to changes largely beyond their control, such as consumer behavior. For example, few grocers would have anticipated such rapid growth in e-commerce channels, and most are still trying to understand how to attract and retain talent with this experience. It’s critical to invest early in quantifying and planning for talent needs over a three- to five-year time horizon because it’s easier to be proactive and adjust if needed than to be reactive and always play catch-up. For example, one of the largest retailers in the United States anticipated growing demand from customers for COVID-19 healthcare needs. Instead of focusing on growing its on-premises services—which would have been difficult because of high demand for healthcare workers during the peak of the pandemic—the retailer experimented with virtual-provider visits and accelerated the hiring of remote healthcare professionals in work-from-home roles.

- **Differentiate your investments in attracting and retaining core digital talent.** Grocers able to attract and retain digital talent such as data engineers, data scientists, and full-stack developers have realized that the needs and expectations of digital talent are unique and specific. Organizations that win in this space focus on anticipating digital talent needs, linking compensation and benefits to the value that digital roles bring to the organization, developing communities of practice with effective technology talent functions, and investing in digital-specific career paths to highlight growth opportunities.

For example, one retailer in the United States created a differentiated employee value proposition for digital roles. The digital-employee value proposition was focused on three pillars: a renewed company culture (“a great company” that fosters agile ways of working and develops digital communities), digital-specific learning and career development (“great opportunities” built on the foundations of an exciting and future-oriented technology stack), and tailored incentives (“great benefits,” including nonfinancial benefits such as participating in external digital events and forums and flexible location rules).
- **Reskilling and upskilling as a key value creation lever.** There are different levers to manage the transition to the future workforce, including talent acquisition, redeployment, and partnerships. Organizations today are increasingly investing in upskilling and reskilling talent, given that it can be about 20 to 30 percent more cost-effective in the long term compared with layoffs and hiring (and also strengthens employee engagement and overall productivity). For example, one Southern European grocery retailer conducted a strategic workforce transition effort to ensure availability of resources and skills to deliver on its business priorities. It created an at-scale reskilling program (around 50 percent of its total workforce required upskilling, rising to around 60 percent in functions such as commercial or in-store), complementing it with a talent acquisition initiative for key areas such as logistics. Successful reskilling and upskilling programs include the following:

1. a well-defined long-term strategic workforce plan anchored on the business strategy that outlines the demand for existing and new roles and skills
2. investment in redesigning the roles for the future, in understanding how automation and other trends will affect each position’s key activities, and in aiming to reduce time spent on non-value-added tasks
3. focused capability building for talent in low-demand, high-supply roles to transition employees to high-demand, low-supply roles
4. mechanisms to deploy talent and support the professional development of talent over the long term
5. partnerships with external skilling organizations to significantly accelerate these efforts and provide more scale and cost efficiencies

For example, Walmart invested $4 billion in a reskilling program over four years, with frontline hires required to start with a certificate program in basic retail and emotional skills. In addition, tenured employees can take part in Walmart Academy and the "dollar per day" which allows associates to earn college degrees in retail management. There has also been a shift in the past few years from hourly wage roles to more full-time roles in Walmart’s retail stores, improving work-life balance for associates, building more team-based ways of working in stores, and providing opportunities for better mentorship. These moves are intended to signal to the labor market that Walmart cares about growing and developing its workforce, making it a “career building destination.”
• **‘Acqui-hiring’ to accelerate the time to impact.** Partnering with or acquiring companies with key capabilities is one of the fastest ways to accelerate talent acquisition at scale, although it has certain risks that need to be managed, including cultural integration. Building on the success of Walmart’s acquisition of Jet.com in 2016, which helped accelerate Walmart’s 25 percent share of US online grocery sales, retailers have made a number of other acqui-hiring investments in the United States to expand their omnichannel competitiveness.

• **Make people a strategic priority for the C-suite.** When talent management becomes a strategic priority that affects value creation and the long-term sustainability of business models, it’s no longer just an HR responsibility. It should be a priority for the C-suite, with input from leadership at the very top.

Companies have increasingly focused on people since the outset of the pandemic, and grocery retailers are no exception. Yet, as an essential industry, the sector is under particular scrutiny. Transforming the people model is challenging but necessary—and getting it right can deliver sustainable competitive advantage.

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The state of grocery retail in Mexico

The COVID-19 pandemic drastically changed shopper behavior, forcing Mexican grocers to change their online commerce game. Can they create a lasting competitive advantage?

by José Ricardo Cota and Ricardo Sanromán
The COVID-19 pandemic changed the behavior of consumers in Mexico as it did in other markets around the world. Limited access and mobility restrictions throughout 2021 and into 2022 prompted consumers to test and adopt digital channels while reinforcing the importance of grocery retail as a primary source of basic food, beverages, and personal- and home-care supplies for households across the country.

Today, with coronavirus variants still preventing a full return to past shopping behavior, Mexican grocery retailers are racing to build lasting e-commerce solutions and capabilities. In 2021, the gross merchandise value of modern trade (hypermarkets, supermarkets, and convenience stores) was estimated at more than $20 billion, with online sales claiming a growing share. Pure-play digital grocery companies have emerged, incumbents are strengthening efforts to become true omnichannel players, and last-mile solutions are transforming customer expectations of delivery times for staple grocery and convenience items.

Even traditional retailers such as mom-and-pop stores are changing. These smaller, nonorganized retail players are using their key consumer product–supplier capabilities to build or adopt e-commerce solutions, blurring the lines of who does what in the industry. This shift has also opened the door to digital-native retail players that have already disrupted other markets globally.

Given the continued evolution of the grocery landscape, Mexican grocers must invest to understand the new industry baseline, the consumer shifts observed over the past two years, and the behaviors and preferences that will last once the pandemic recedes. Here, we look at the factors shaping Mexican grocery retail and what players can do to respond to these underlying trends.

What will shape Mexican grocery in 2022 and beyond
In 2020 and early 2021, the COVID-19 pandemic limited access to grocery stores and hurt the pocketbooks of shoppers, many of whom found themselves out of work. The second half of 2021 saw some financial recovery and a gradual easing of restrictions on access to physical shopping channels. Today, grocery shopping continues to evolve, reshaping consumer expectations and grocery retailer value propositions. Our research suggests the Mexican grocery landscape will be shaped by five factors in 2022 and beyond:

**Grocery shopping continues to evolve, reshaping consumer expectations and grocery retailer value propositions.**
Affordability
Affordability will continue to be the priority for shoppers. While consumer spending fell sharply in Mexico in 2020 but stabilized in 2021—and Mexicans are relatively optimistic about a post-COVID-19 economic recovery—about 78 percent of all consumers still feel some economic pressure. This sentiment is especially prevalent among low- and middle-income shoppers, with almost 60 percent of low-income consumers saying they are having a hard time making ends meet or are in crisis.¹

And while the number of consumers who said they were trying to find ways to save money dropped from 71 percent in 2020 to 59 percent in 2021, shoppers across different social and economic classes continue to pursue multiple strategies to save money. Notably, 20 percent of consumers changing their shopping behavior are trading down to private-label products, especially in categories such as household cleaning supplies, pasta, hair care, and dairy (Exhibit 1).²

Physical stores in an omnichannel world
Brick-and-mortar stores will regain their importance—but as part of a new omnichannel reality. Consumers were drawn to the convenience and relative safety of online grocery shopping during the pandemic, but about 29 percent of shoppers still prefer personal contact in stores. Other reasons physical stores will retain appeal are high delivery costs and lack of trust in the quality of products received when ordering online.

¹ McKinsey 2022 Global Sentiment Survey.
² Ibid.

Notably, 20 percent of consumers changing their shopping behavior are trading down to private-label products, especially in categories such as household cleaning supplies, pasta, hair care, and dairy.
Among consumers who changed their shopping behavior in 2021, 20 percent traded down and only 8 percent traded up.

Exhibit 1

Among consumers who changed their shopping behavior in 2021, 20 percent traded down and only 8 percent traded up.

Annual trade-off behavior in a standard shopping basket,¹
% of respondents

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade down</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3x</td>
<td>15</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td><strong>Trade up</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Annual Mexican household income tiers,
% of respondents who traded up or down for 2019–21

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td><strong>Middle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>19</td>
<td>13</td>
</tr>
</tbody>
</table>

¹ Among consumers who changed their buying behavior. Question: Please indicate how your buying behavior has changed in a standard shopping basket for the items shown in the past 12 months (since Sept 2019). Possible mutually exclusive answers: "Switching to less expensive brands"; "Buying the same brand as I bought 12 months ago, but at stores with lower prices"; "Buying only when on sale or with coupon"; "Buying less frequently of lower quantity of the same brand"; "Switching to more expensive/premium brands"; "Have made some other change in how I buy these products"; "Have not made changes in how I buy these products." Base for trade-off behavior is consumers who have changed their behavior.

Source: McKinsey 2020–22 Global Sentiment Surveys
The growth of online shopping

Even as a segment of consumers remain resistant to online shopping, e-commerce will continue to grow, especially in instant-delivery offerings. The number of Mexican consumers who shopped online on a weekly basis increased by 7 percent in 2021 compared with pre-pandemic levels of 2020, with weekly visits to grocery stores decreasing by 6 percent.\(^3\)

And the number of shoppers who bought groceries only by delivery increased by 15 percent during COVID-19.\(^4\) In addition, online shoppers have a strong preference for home delivery (80 percent) over click and collect (29 percent).\(^5\)

Online sales of consumer electronics and books increased strongly compared to pre-pandemic levels, and a wide range of consumer products saw sales shift to e-commerce channels because of the pandemic—even though overall demand was flat (Exhibit 2).

The rise of discounters

Discounters are gaining attention as they fine-tune their value propositions. In particular, hard-discount stores are gaining in popularity, with consumers’ purchase intent growing by double digits compared with pre-pandemic levels.\(^6\)

Hard discounters are well positioned to

Exhibit 2

In Mexico, online has accelerated as a sales channel for consumer electronics and books.

Stated purchase behavior by category,
% of respondents, 2021

<table>
<thead>
<tr>
<th>New online customers vs pre-COVID-19</th>
<th>(\text{% of respondents, 2021})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CPG(^1) shopping basket</td>
<td>18</td>
</tr>
<tr>
<td>Select discretionary and nondiscretionary categories</td>
<td>16</td>
</tr>
<tr>
<td>Percent who buy online today most of the time or always</td>
<td>18</td>
</tr>
</tbody>
</table>

\(^1\) Consumer packaged goods.
\(^2\) Over the counter.
\(^3\) Online growth reflects the increase in consumers buying online most of the time or always now vs pre-COVID-19.
capitalize on consumers’ strong interest in more affordable products and increasing openness to buying private-label goods. And small regional chains are building a positive perception of hard discounters by enhancing the customer value proposition.

**Healthier eating habits**
Healthier eating habits, local-first purchasing, and environmental consciousness will continue gaining relevance in the Mexican marketplace. Consumers expect to spend more money on food that is naturally healthy (such as organic foods, those free of synthetics or additives, and products that are minimally processed). More than 50 percent of consumers say buying locally sourced products is important—the greatest change in buying habits—which is up from 7 percent from prepandemic levels.7 And 65 percent of consumers are willing to pay more for healthier, more nutritious products, with particular interest in nutritionally enriched and low-sugar or sugar-free products.

**Key considerations for 2022 and beyond**
The continuing global pandemic and a high inflation rate are having a big impact on Mexico’s grocery sector today. Online, retailers remain busier than ever, meeting the challenge of fulfilling orders and updating inventory with agility. In physical stores, retailers face shrinking customer traffic and strong online competition on convenience and price.

As Mexican consumers prepare for a postpandemic world, we anticipate the winners and losers in grocery will be determined by more than sheer physical scale and foot traffic. The players will also be defined by competitive differentiation, innovation, and defensibility in six main areas:

**Better pricing and more value**
Given current inflationary conditions, customers will keep looking to save money, making value a primary motivator in decisions about where to shop. This behavior will underpin how grocers respond, with pricing and promotional effectiveness differentiators to direct traffic to stores and online. Building pricing and promotional capabilities, including harnessing their vast amount of customer-generated data, will give grocers the ability to achieve profitable growth while providing value to customers.

Grocers should also rethink the role of private brands in their product portfolios. Expanding the selection of private-label brands could offer customers products equal in quality to branded goods but at lower prices. This move could attract customers seeking to trade down.

**Credibly competing in omnichannel**
Building an omnichannel experience will become essential, and we see lines blurring even further between different channels of the retail value chain. Retailers will continue testing, learning, and refining models that solidify customer relationships and increase lifetime customer value. New ways of engaging customers in the digital and physical space and ensuring a seamless experience across channels will become the norm. Retailers able to quickly redefine how they interact with customers will win their loyalty and an increased share of wallet.

Grocers will need to rapidly scale their nascent e-commerce capabilities to meet growing consumer expectations of factors

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such as website usability, transparency into in-stock products, and better-picked fresh produce, all while grocers work to improve their operating capabilities to ensure profitability. An efficient supply chain, including last-mile delivery capabilities, will be essential for players trying to win in this space.

**Personalized shopping experience**
In addition to a winning omnichannel value proposition, grocers will need to rapidly build personalization capabilities to capture and retain the growing digital customer base. Ensuring a personalized experience that seeks to maximize customer engagement may be a key differentiator in the market. Success requires grocers to work in agile ways, where commercial, operations, and support functions join to delight the customer and solve for issues across the most relevant customer journeys.

**Faster and leaner operating models**
Fully embedding new digital and e-commerce capabilities with traditional retail operations will require grocers to reconfigure their organizations, processes, talent, and technology to support new and changing priorities. For example, adopting agile ways of working enables grocers to rapidly respond to customer needs while reallocating internal resources to areas creating the most value. The traditional retail organization will no longer be an option for players hoping to thrive in this new marketplace.

A leaner organization that frees up resources for top priorities will be critical, as will automation and digitalization approaches that ensure the availability of products at the point of sale. This capability will allow for more accurate commercial decisions based on data, context, and consumer behavior. The use of the Internet of Things and devices such as radio frequency identification (RFID) for product tracking will remain important tools, providing decision makers with real-time data to inform commercial and operational strategies.

A leaner organization that frees up resources for top priorities will be critical, as will automation and digitalization approaches that ensure the availability of products at the point of sale.
Business models beyond the core
The race to build ecosystems around the conventional retail value chain will intensify, with players from multiple sectors jumping in. Payment and logistics solutions will lead the pack, quickly becoming the norm and dictating expectations across physical and online channels. Grocers that build a powerful ecosystem will facilitate the expansion of products and services to engage and retain consumers while driving new revenue streams.

Attracting and retaining talent
The battle for talent will intensify in Mexico, particularly the competition for employees who can build digital capabilities for traditional grocer operations. Other sectors, including banking and fintech, are also rapidly building digital capabilities and will draw from the same talent pool. Developers, designers, and product owners, among others, are all in demand. Digital winners will need to attract and retain this top talent. A redefined employee value proposition—including compensation; career plans; work space and flexibility; and diversity, equity, and inclusion policies—will be differentiators for players upgrading their talent bench.

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Pushing granular decisions through analytics

The potential effect of advanced analytics on grocery retail is great, but retailers will need to seize the opportunity.

This article is a collaborative effort by Gokmen Ciger, Andreas Ess, Jake Hart, Holger Hürtgen, and Maura Goldrick, representing views from McKinsey’s Retail Practice.
Abstract

Every facet of grocery retail is becoming more personalized, a trend that is jeopardizing established operating models rooted in a one-to-many mass approach. Advanced analytics has the potential to transform grocery operations, but many retailers struggle to harness these capabilities to improve performance. Out of at least a hundred documented use cases, just a small number generate a significant impact. In our discussions with grocery executives, two emerging use cases—personalized promotions and store-specific SKU selection—reinforce the value at stake and could enable grocery retailers to truly differentiate themselves in the market.

Introduction

Grocery seems to be in an ideal position to harness analytics: it boasts high purchase frequency, rich customer data, and a focus on efficiency. Yet with at least 100 documented analytics use cases in grocery, retailers can have difficulty determining which pockets of innovation matter most. In our experience with leading grocers, just a fraction of use cases represent most of the value (Exhibit 1). In this article, we examine two of the highest-potential use cases: personalized promotions and store-specific SKU selection. For both, we will examine how to unlock the full value through four elements: strategic fit, data and analytics, execution, and continuous evolution.

Exhibit 1

Across more than 100 use cases, ten opportunities account for just over 80 percent of the value at stake.

Value of analytics by domain, % of total EBIT impact from analytics

<table>
<thead>
<tr>
<th>Category</th>
<th>Use cases that make up 80% of value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category management</td>
<td>Pricing (KVI identification, clustering, and price recommendation)</td>
</tr>
<tr>
<td>Supply chain management</td>
<td>Store-specific SKU selection</td>
</tr>
<tr>
<td>Store operations</td>
<td>Macrospace allocation (especially small formats)</td>
</tr>
<tr>
<td>Marketing</td>
<td>Vendor negotiation support</td>
</tr>
<tr>
<td>Support functions</td>
<td>Mass promotions optimization</td>
</tr>
<tr>
<td></td>
<td>Demand and replenishment planning</td>
</tr>
<tr>
<td></td>
<td>(shrink avoidance, OOS)</td>
</tr>
<tr>
<td></td>
<td>Warehouse digital twin</td>
</tr>
<tr>
<td></td>
<td>Store labor scheduling</td>
</tr>
<tr>
<td></td>
<td>Store cockpit—automated identification of improvement levers</td>
</tr>
<tr>
<td></td>
<td>Personalized promotions and offerings</td>
</tr>
</tbody>
</table>

¹ Key value items.
² Out of stock.
Source: McKinsey analysis
Personalized promotions
Leading grocers recognized long ago the need to reevaluate the true incremental impact of mass promotions. Analytics now enables complex views of mass promotions, controlling for stock-up, cannibalization, and even the halo effect that promotions have on other products. When taking these factors into account, even the best grocers can expect 10 to 15 percent of promotions to dilute sales and margins.

Personalized promotions have become more relevant and higher priority. Retailers can operate these at scale because technology has evolved, and customer touchpoints for data collection and communication (especially through e-grocery and loyalty apps) have increased in recent years. When done right, promotions can provide a substantial benefit of 4 to 8 percent sales increase and 2 to 3 percent net income and EBIT uplift.

Consumers, especially younger segments, have started to accept and even expect personalized discounts based on their shopping habits. Recognizing this trend, many grocers now offer simple personalization—either through segmented promotions (selected campaigns targeted to segments with similar preferences) or by matching predefined offers with the customers who have the highest propensity to buy. These efforts typically increase sales by less than 1 percent.

To achieve the next level, grocers should take a true “customer lifetime value” approach, in which customers are notified of the right offer at the right time, with the right message, and through the right channel.

Strategic fit
Personalized promotions can increase customer lifetime value by tailoring campaigns that shift customer behaviors. For example, some campaigns are geared to win customers back, others encourage more top-up sales, and others aim to increase store visit frequency. Optimizing discounts alone will not be sufficient. Instead, best-in-class players choose the best timing, the most appropriate channel, and even the most appealing communication to increase the likelihood of changing customer behavior over time. Recurring interactions generate more data, which grocery retailers can use to design increasingly relevant promotions that generate long-term customer lifetime value and loyalty.

In addition, collaboration and negotiations with consumer-packaged-goods (CPG) partners will be critical—not only to maintain overall funding levels (which requires careful tracking of granular promotion redemptions) but also to increase overall effectiveness. When done well, collaboration results in a mutually beneficial arrangement for CPGs and grocers.

Data and analytics
To support high-quality mass promotions, grocers needed a robust data lake (containing data on offers, transactions, and products), an analytics environment, and executional tools. For personalized promotions, these elements need to be combined with permitted data from customer-relationship-management (CRM) and loyalty systems, including customer purchase behavior, app interactions, and profile information. Supporting mass
promotions also requires navigating compliance issues around the use of personally identifiable information (PII) data: depending on the geography, consumers need to be presented with an explicit opt-in feature. Our research has revealed that consumers are becoming increasingly intentional about the types of data they share and with whom. The way companies handle consumer data and privacy can become a point of differentiation and even a source of competitive business advantage.

Next to data, assessing the impact of personalized promotions on customer lifetime value calls for a wider set of models. For example, there will be two models to increase store visit frequency: one model pinpoints the potential for increasing a customer’s frequency, while the other recommends the best product to drive that customer to a store. Yet another model could help in selecting the right channel or message.

**Execution**

To properly execute personalized promotions and gain better access to cheap channels, retailers will need to augment their analytics capabilities with appropriate technologies and a suitable operating model.

**Channels:** To reach digitally adept customers, grocers will need to use a wider variety of distribution channels, including point-of-sale coupons, loyalty apps, email, and SMS messages, along with third-party apps such as Instacart. Retailers can launch separate initiatives (for example, gamification) to increase reach, particularly in cheaper channels. Connecting with digital-averse customers could require collaboration with direct-marketing agencies for a more tailored set of mail offers. To finance these investments, grocers could scale back spending on traditional circulars and other mass-promotion items over time.

**Technology:** To run thousands of individual campaigns, grocers need to implement an appropriate marketing-technology stack and potentially make changes to the underlying infrastructure—for example, allowing traditional point-of-sale (POS) systems to print individual coupons.

**Operating model:** Personalized promotions create a level of complexity that strains the management capabilities of traditional merchants. To be successful, retailers must encourage collaboration among marketing, category managers, analytics, and sometimes representatives of vendors. They should also establish dedicated centers of excellence (CoEs)—for example, to design and target offers. Grocers might also need to reevaluate the decision-making process around promotions (for example, CoEs could assume decision rights for specific campaigns while category managers maintain decision rights on the overall budget).

**Continuous evolution**

One shortcoming of mass promotions is the inability to conduct anything beyond high-level experiments. By adopting personalized promotions, grocers can massively increase the robustness of tests (using A/B tests on specific customer holdouts or multi-armed bandit experiments).

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testing across customer segments). This approach can be used to improve statistical models, eliminate unprofitable promotion types, and create a test-and-learn mentality throughout the commercial functions of the grocer.

**Store-specific SKU selection**
Consumers increasingly favor stores that are nearby, a trend that spawned many small-format stores in recent years. In turn, the limited store size has made store-specific assortments a higher priority and more relevant for small-format retailers. With advances in data and analytics, retailers can now provide consumers with an assortment tailored to their unique needs. The result could be sales gains of 2 to 4 percent, presenting grocers with another substantial EBIT opportunity.

Recognizing this, many grocers take an approach based on optimizing assortment modules by store cluster (that is, one assortment module for all stores in a cluster) mostly based on price tiers (premium versus entry) and store size. However, the many dimensions of local customer preferences cannot be addressed by simple clusters.

There are three steps to achieve store-specific assortment: space allocation, SKU selection, and planogramming (Exhibit 2). Today, many grocers have already customized space allocation to local customer demand, but only a few players have achieved automated store-specific SKU selection and planograms to date. For example, in 2020, German grocer REWE announced the implementation of automated, optimized planograms to support localized assortment at the store level. Similarly, Zabka, a Polish convenience-store chain, perfected store-specific assortment for the chain’s 8,000 existing stores and all stores in development. For each address in the country, Zabka can identify the right store-specific SKU selection for the

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2 This variation on traditional A/B testing uses machine learning to allocate traffic to offers that are performing well and away from lower-performing options.

**Exhibit 2**

**Store-specific assortment requires sophistication for all elements.**

<table>
<thead>
<tr>
<th>Levels of sophistication</th>
<th>Most common model in Europe</th>
<th>Planogramming</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Space allocation</strong></td>
<td><strong>SKU selection</strong></td>
<td><strong>Planogramming</strong></td>
</tr>
<tr>
<td>Store-specific, based on space elasticities</td>
<td>Store-specific on consumer need-state level (e.g., a small module for large organic tomatoes)</td>
<td>Automated store-specific planograms (e.g., adjusted number of facings)</td>
</tr>
<tr>
<td>Store-specific, based on sales</td>
<td>With granular, automated clusters per category (e.g., small value assortment for tomatoes, tourist chocolate)</td>
<td>Based on store clusters (size or customer profile)</td>
</tr>
<tr>
<td>Based on clusters (size or customer profile)</td>
<td>Based on store clusters (size or customer profile, such as a small city store)</td>
<td>One planogram for all stores in a cluster</td>
</tr>
</tbody>
</table>
nearest location and—at extremely high confidence levels—how much sales and margin it would drive. This has allowed Zabka to grow substantially over the past few years.

In the future, we expect many players to adopt such approaches to tailor store-level assortment to unique community tastes.

**Strategic fit**
A major risk when localizing assortment is introducing additional complexity without a clear benefit. Grocers should aim to develop targeted, specific visions for how localization will generate value for their business—especially when there’s a high share of small-format stores.

For many brands, localization involves changes to distribution, so grocers need to ensure their terms with CPG companies are flexible enough to allow for regular assortment changes on the local level. Many players already have a combination of general terms and existing flexibility to accommodate store differences and varied planogram sizes.

**Data and analytics**
Entirely localized assortment down to the store level requires more complex models; these have been conceptually and technically defined but not yet tested at scale. Grocery retailers need a wider set of algorithms to develop sophistication across the three elements.

For space allocation, a combination of category elasticities given targets (sales or margin) and a set of business rules (such as available space and refrigeration) helps to automatically find the optimal shelf space per store and category. Store-specific SKU selection requires an understanding of customer needs, which can be gained through customer decision trees. After defining the full assortment per customer need, retailers can calculate sales potential and rank SKUs per store. Similarly, planogramming can be automated to select the best number of facings and order on the shelf.

**Execution**
To offer an automated SKU selection per store, grocery retailers will need to enhance operating-model and technological capabilities.

*Operating model:* The complexity of store-specific SKU selection can outstrip the ability of a typical merchant or category manager to manage it effectively. Currently, category managers have clear visibility for how to optimize assortment modules per store cluster. However, in a store-specific SKU selection, category managers lose sight of local demands, which limits their steering capability. Organizations will need to adapt the way analytics CoEs and category managers work together, moving from actual selection to setting guidelines.

*Technology:* Grocers should also pursue planogram localization, which requires them to manage a larger number of designs and versions. This will require enhancement of enterprise-resource-planning (ERP) systems and new planogram software solutions.

*Store-level execution:* Once a retailer settles on an assortment and creates a planogram, individual stores will need to be given directions to design the planograms in their stores. In a tight labor market, care must be taken to send modular instructions to in-store employees.
Continuous evolution
One of the most challenging aspects of localizing assortment is accurately measuring the impact. Moving to full store-specific localization will require retailers to embrace more advanced statistical techniques for gauging impact rather than relying solely on one-off tests or same-store sales comparisons. Even at the store level, A/B testing is crucial to learn and continuously improve. There are challenges to conducting these tests—including operational difficulty in setting up test-and-control stores and the additional need for statistical variability to measure results with fairly small samples—but the results are worth it.

Advanced analytics is perhaps the largest emerging source of net value creation for grocers; when done right, it can generate benefits of up to one percentage point of EBIT for the next three to five years. While there are more than 100 use cases for advanced analytics, just ten of them account for 80 percent of the value at stake. As technology has evolved over the years, the next wave of use cases will be personalized promotions and store-specific SKU selection, and each can bring more than 5 percent uplift in sales.

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