

MARKET RESEARCH REPORT

The Dynamic Grocery Market



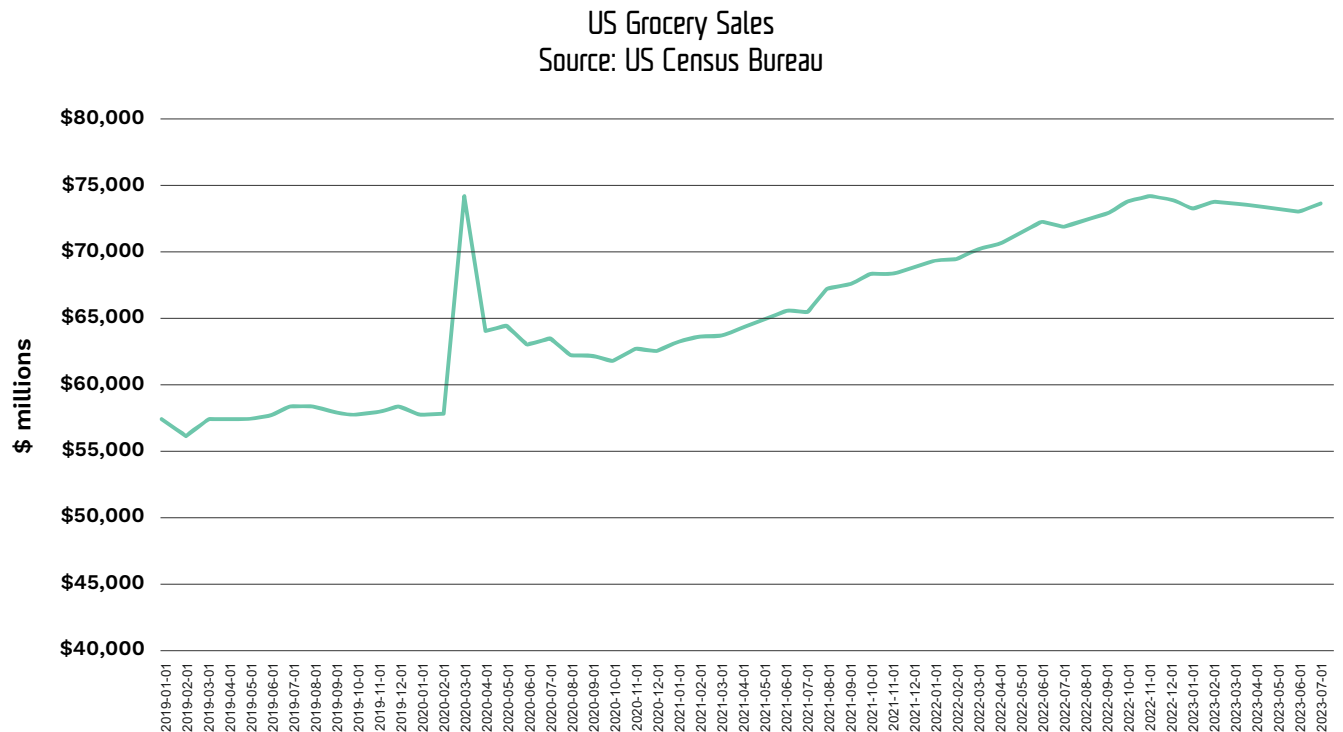
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The grocery market is continuously evolving as the traditional grocer competes against more and different types of retailers, changing consumer preferences and technology investments for efficiency improvements.

Coresight, a retail and technology research firm, estimates total US grocery retail sales to increase 5.6% to \$1.5 trillion this year, down from a 9.2% increase to \$1.42 trillion in 2022. Easing inflationary pressures on food and beverage prices is part of the lower rise in expected sales this year and is expected to continue this year.

Indeed, according to the US Census Bureau, grocery stores' retail sales are up 3.5% year-to-date through July.





[Mass merchandisers] offer a comprehensive product selection—including grocery, clothing, electronics, and home offerings—creating one-stop shops that appeal to consumers who want to save time and money by consolidating their shopping trips. ”

- Coresight

While the overall growth rate remains strong, the traditional grocer’s sales share declined from 69.7% in 2017 to 66.6% in 2022. Grocery share rose from 18.4% to 19% for mass merchants and from 3.1% to 3.4% for dollar/discount stores, Coresight reported. In addition, warehouse clubs’ grocery percentage increased from 8.7% to 10.9% during the same period.

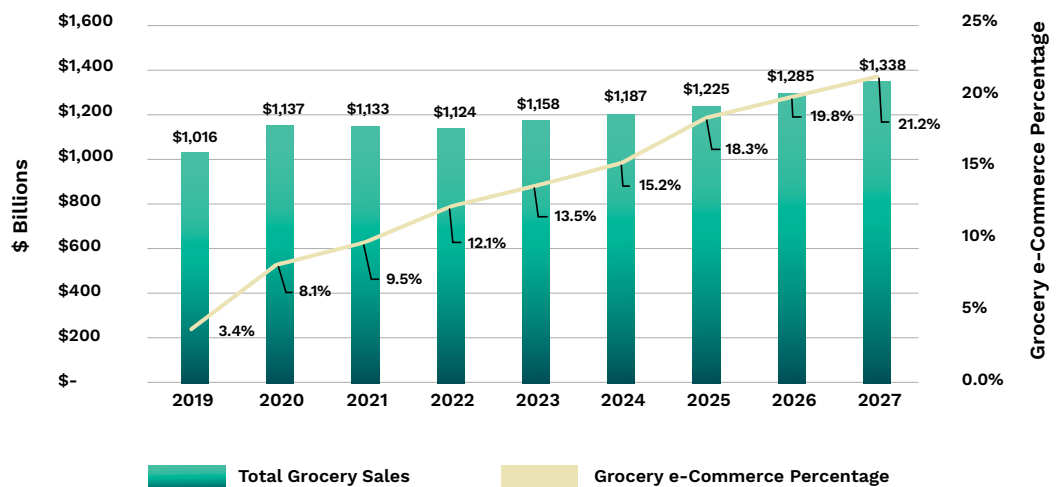
Several factors are contributing to this shift, according to Coresight. “Mass merchandisers and warehouse clubs typically offer goods at lower prices than conventional supermarkets, making them more attractive to value-oriented shoppers. Additionally, they offer a comprehensive product selection—including grocery, clothing, electronics, and home offerings—creating one-stop shops that appeal to consumers who want to save time and money by consolidating their shopping trips.” [2]

Shifts to Online

Because of the low barriers to entry within the grocery market, new competitors will likely continue to emerge and disrupt the grocery market. Kroger, the largest of the traditional grocers, notes three major trends transforming the market: e-commerce, cooking at home, and prepared foods to go. “If we do not appropriately or accurately anticipate customer preferences or fail to quickly adapt to these changing preferences, or if trends shift more quickly to food away from home, our sales and profitability could be adversely affected,” according to Kroger’s 2022 annual report[3].

Indeed, **the ways customers shop for food are evolving**. Customers used to shop once a week. Today, consumers are managing their groceries with a mix of in-person and online shopping. Consumers are also spending approximately half of their food budgets at restaurants.

Grocery Market Size
Source: Incisiv



[2] Coresight

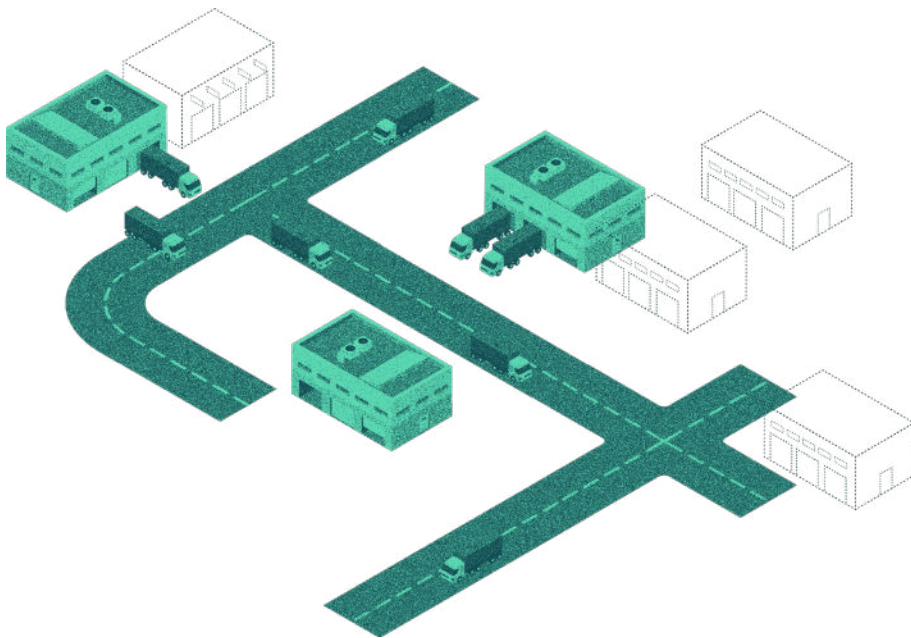
[3] Kroger 2022 Annual Report

[4] Grocery Market Size Chart, Incisiv

Walmart, the largest grocery retailer, announced in 2022 that it would build four highly automated fulfillment centers (FCs) that can provide 75% of the US population with the next - or two-day shipping of various goods, including groceries.

The grocery market has been slower to move online compared to other consumer categories. In 2022, only 12% of US grocery shopping occurred online, compared to 66% of consumer electronics, 38% of apparel, 23% of consumer food service, and 20% of home goods, according to research analytics firm Incisiv.

Furthermore, Incisiv found that over the past three years, grocery spending shifted from offline to online at an accelerated pace. Online grocery penetration took ten years to triple from 1% of total grocery sales in 2009 to 3% in 2019 and just three years to quadruple to 12% in 2022.



Importance of Fast and Accurate Fulfillment

The average grocer carries over 31,000 products in a single store location across various categories. Typically, grocery inventories turn over quickly. As such, inventory forecasting, SKU rationalization, and evaluating which products to sell or discontinue are critical to maximizing sales and profitability.

The rise of convenience as a priority, combined with delivery options, means geography matters less, undercutting the traditional advantage of store location. As a result, distribution centers will be the focus point for investments by grocers. As noted by Kroger in its annual report, “We must anticipate and meet these evolving customer preferences and continue to implement technology, software, and processes to be able to conveniently and cost-effectively fulfill customer orders.”

According to a study featured in MIT^[5] Sloan Management Review and led by researchers at The University of Porto in Portugal and of Chicago Booth School of Business, online grocery shoppers are:

- Willing to wait 10.8 hours longer for a delivery if the delivery window is one hour shorter.
- Willing to wait an additional 7.5 hours longer if the delivery can be received on a preferred day of the week.

Recommendations from the study include analyzing customer-specific time-slot selection data to understand preferences, and utilizing predictive analytics to understand what delivery

85% of retailers were experimenting with new technologies to improve the customer experience in 2022, up from 73% in 2021. New technologies included improving customer service, gaining efficiencies that help relieve margin pressure, addressing labor woes, and providing e-commerce.

attributes drive loyalty and repeat purchases. “I strongly encourage retailers to rethink their operations to optimize not only on speed but also the most appropriate combination of speed, precision, and flexibility, said Nicole DeHoratius, adjunct professor of operations management at the University of Chicago Booth School of Business.

In 2018, Kroger and fulfillment technology firm Ocado announced a collaboration to establish a delivery network combining artificial intelligence (AI), advanced robotics, and automation. The delivery network relies on highly automated fulfillment centers. Kroger currently operates customer fulfillment centers in Monroe, OH; Groveland, FL; Forest Park, GA (Atlanta) and Dallas, TX; and Pleasant Prairie, WI, with additional customer fulfillment centers slated for California, Frederick, MD, Phoenix, AZ,

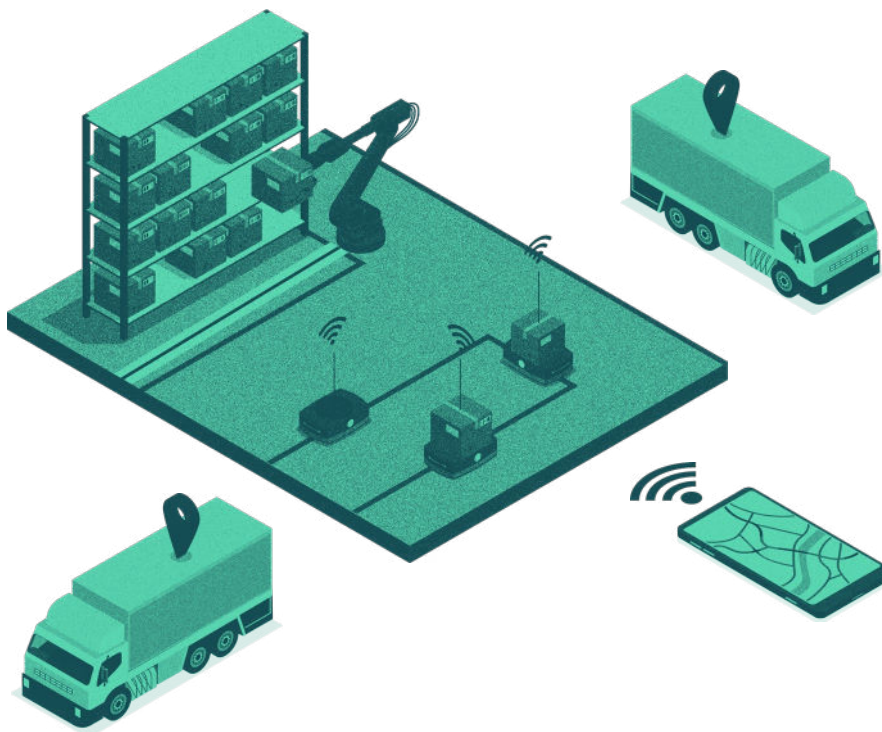
Romulus, MI (Detroit), Cleveland, OH, Charlotte, NC as well as South Florida and the Northeast.

Indeed, Walmart, the largest grocery retailer, announced in 2022 that it would build four highly automated fulfillment centers (FCs) that can provide 75% of the US population with the next - or two-day shipping of various goods, including groceries. Combined with its traditional fulfillment centers, Walmart will reach 95% of the US population with next- or two-day shipping, and by including its stores, the retailer can offer same-day delivery to 80% of the US population.

Technology Investments

“We are working closely with our technology and supply chain teams to understand ways we can add days of freshness to our products. From optimizing delivery routes to simplifying associate tasks, we want to ensure our customers can buy food at its peak of freshness and trust those items will remain fresh in their homes,” according to Kroger’s 2022 annual report.

In 2022, food retailers spent an average of \$13 billion on technology investments, according to the Food Industry Association (FMI)^[6]. “Across the food supply chain, we are taking the lessons learned over the past few years to change the way we invest in our employees, innovate to future-proof our businesses, and, most importantly, adapt our operations to better engage with and serve shoppers,” said FMI President and CEO Leslie Sarasin.



[5] MIT Study

[6] FMI

According to a Deloitte survey, seven in 10 grocery retail executives said they would likely shift food supplies from global to more local. More regional manufacturing can enable grocers to access faster supply chains with fresher food produced on demand, limiting food miles, waste, and resources.

According to the report, 85% of retailers were experimenting with new technologies to improve the customer experience in 2022, up from 73% in 2021. New technologies included improving customer service, gaining efficiencies that help relieve margin pressure, addressing labor woes, and providing e-commerce.

In addition, while 21% of retailers used technology services for food service ordering and delivery in 2022, 26% said they plan to do so in 2023, per the report.

An earlier study from Incisiv found additional technology areas where grocery and general merchandise retailers plan to ramp up deployments by 2025, including artificial intelligence (AI) apps to improve operations, real-time inventory management and curbside sensors for pickup/delivery, and mobile inventory receiving and tracking apps.

Speed Matters

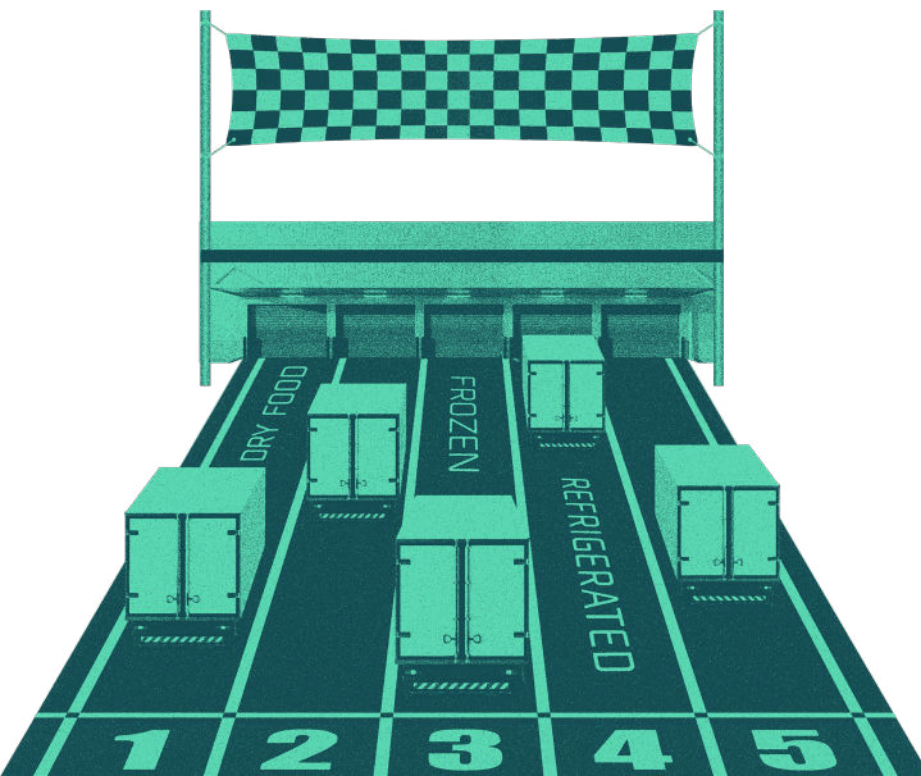
Speed matters in the grocery market, whether last-mile delivery or pickup, fulfillment or inventory replenishment.

Amazon, which is also a major grocery retailer and owner of specialty grocer Whole Foods, regionalized its US fulfillment network. As a result, Amazon touches delivered packages 20% less and travels 19% fewer miles to make a delivery. It now fulfills 76% of orders from the region around the customer. Amazon CEO Andy Jassy said during the company's earnings call in August that same-day warehouses are Amazon's most cost-effective fulfillment vehicles. He added that their integration with nearby fulfillment centers enables the company to deliver "several million" SKUs via same-day or one-day delivery.

While Amazon's regionalized supply chain network strategy spans its entire product offering, the grocery market specifically is still a focus area that Amazon continues to focus on. "We aspire to serve more of our customers' grocery needs than we do today," Jassy said in his 2022 annual letter to shareholders published earlier this year.

"To do so, we need a broader physical store footprint given that most grocery shopping still happens in physical venues... Grocery is a big growth opportunity for Amazon," Jassy wrote.

Similar to Amazon, regionalization is becoming a theme across a number of grocers. According to a Deloitte survey, seven in 10 grocery retail executives said they would likely shift food supplies from global to more local. More regional manufacturing can enable grocers to access faster supply chains with fresher





The grocery market is complex. There are high volumes that often include diverse commodities – frozen, refrigerated, dry, and bulk – and lead times are short so planning is critical.”

*- Greg Braun,
CRO at C3 Solutions*

food produced on demand, limiting food miles, waste, and resources.

Target is also extending its supply chain network closer to its customers by adding sortation and last-mile delivery facilities for faster delivery of its products, including grocery items.

“Through our sortation centers and Target last-mile delivery capabilities, we’re able to move faster and with more precision—while controlling costs and expanding our network capacity—for years to come,”

said Gretchen McCarthy, Target’s chief global supply chain and logistics officer said early this year in the company’s announcement that it would open at least six more sortation centers across the US by the end of 2026, adding to its network of nine centers.

But, for fulfillment and last-mile delivery strategies to succeed, one must have [a system that schedules and manages the inbound inventories](#) into and out of distribution centers and other facilities according to C3’s Chief Revenue Officer, Greg Braun. “The grocery market is complex. There are high volumes that often include diverse commodities – frozen, refrigerated, dry, and bulk – and lead times are short so planning is critical.”

No one size fits all according to Braun. “But a key benefit of C3’s offering is that it offers a tailored solution by creating a work plan based on a client’s requirements.”

Typically, there are high volumes of diverse commodity types such as frozen, refrigerated, dry, bulk, and boxes of goods that must be scheduled

for delivery to distribution centers. Scheduling helps reduce congestion and ensures enough workers are on hand to unload trucks.

Such a system should [also be able to manage the yard](#), including visibility into where a trailer is located, whether or not if it is parked in the right place, and the types of trailers. In addition, it could reduce congestion in the yard and turn drivers around quicker.

About C3 Solutions

C3’s unique products allow customers to maximize the usage of their trailers, dock doors, dedicated yard staff and physical yard space. Since its founding in 2000, C3 has gained the confidence of clients around the world and across many industries including retail, grocery, distribution, manufacturing and parcel post.

C3 Reservations Its web-based [dock scheduling system](#) – streamlines the scheduling process by improving dock productivity, expanding visibility on scheduled appointments and measuring vendor compliance.

C3 Yard Its web-based [yard management system](#) (YMS) – empowers yard managers by providing visibility on yard assets, optimizing the flow of trailers from gate to gate and automating yard driver task assignment.

The Current Grocery Market in Numbers

Total US grocery retail sales to increase estimate in 2023:

5.6% to \$1.5 trillion this 2023

down from an increase of

9.2% to \$1.42 trillion in 2022.

Easing inflationary pressures on food and beverage prices is part of the lower rise in expected sales this year and is expected to continue this year.

Online grocery penetration took ten years to triple.

Total grocery sales in:

1% in 2009

3% in 2019

12% in 2022.

Traditional grocer's sales share

↓ **69.7%** in 2017
66.6% in 2022

Grocery share for mass merchants

↑ **18.4%** in 2017
19% in 2022

Grocery share for dollar/discount stores

↑ **3.1%** in 2017
3.4% in 2022

Grocery share for warehouse clubs

↑ **8.7%** in 2017
10.9% in 2022

In 2022, food retailers spent an average of

\$13 billion

on technology investments,

according to the Food Industry Association (FMI).

21%

26%

of retailers used technology services for food service ordering and delivery in 2022

said they plan to do so in 2023

85%

of retailers were experimenting with new technologies to improve the customer experience in 2022.

↑
up from
73% in 2021

Market Research Report: The Dynamic Grocery

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