



# Illuminating the path

BUILDING RESILIENT AND EFFICIENT  
SUPPLY CHAINS IN THE CONSUMER  
PRODUCTS AND RETAIL INDUSTRY

**#GetTheFutureYouWant**

Capgemini   
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# Executive Summary

Supply chains need to change to meet today's challenges. This was the view of over 80% of the 300 consumer products and retail (CPR) organizations we surveyed during our research. Organizations are currently re-examining supply chain strategy to increase both resilience and efficiency.

## **DIVERSIFICATION OF SUPPLIER BASE IS A STRONG TREND.**

Almost 79% of organizations we surveyed told us they are actively diversifying their supplier base. They are no longer willing to keep all their eggs in one basket.

## **"NEARSHORING" AND "FRIEND-SHORING" ARE ON THE INCREASE.**

Offshore procurement is expected to decline by 7% in dollar value over the next two years as nearshoring grows in popularity. Currently, 83% of the organizations we surveyed are actively investing in friend-shoring (the trade practice where supply chain networks are focused on countries regarded as political and economic allies). North America is leading this trend, as stronger trade ties emerge between the US, Canada, and Mexico in line with the US–Mexico–Canada

Agreement (USMCA). The US is also beginning to talk about friend-shoring with countries such as India.

## **COST EFFICIENCIES MATTER AGAIN.**

As well as boosting resilience through strategic sourcing, organizations are looking into cost efficiencies again. Cost optimization was the priority pre-pandemic but took a back seat as competing priorities emerged in 2020. It is back on the agenda in response to today's turbulent macro-economic conditions and consequent market and supply chain volatility. As economic recovery begins, organizations are prioritizing both volume and value growth in two ways: new customer acquisition and increasing realization per consumer.

## **TECHNOLOGY AND DATA ARE PROVIDING NEW SOLUTIONS.**

Similarly, although digitalization was not a top consideration for the past couple of years, our research shows that almost all organizations appreciate the role technology and data can play in supply chain transformation. Around half of those surveyed have already deployed automation and cloud initiatives as well as digitalization of core systems. They are

# Executive Summary

also leveraging data from ecosystem partners for informed decision-making.

## **HOLIDAY SEASON PREPAREDNESS IS VITAL.**

We have looked into the preparedness of organizations for the upcoming 2023 holiday season. CPR organizations anticipate stockouts or product shortages (42%), late deliveries that are caused by import delays (38%), and also labor shortages (35%) during the season. The problem is more acute for the retail industry, with nearly one in two retail organizations anticipating stockouts.

## **SUSTAINABILITY IS INCREASINGLY IMPORTANT.**

However, there remains a lot of ground to cover to ensure supply chain sustainability. In 2023, industry's investment in supply chain sustainability as a percentage of organization's revenue has slightly decreased when compared to 2020, and fewer than half have deployed large-scale sustainability initiatives across the value chain.

## **THE WAY FORWARD.**

The goal of profitable growth can be achieved by balancing cost efficiencies with the need to increase resilience and drive sustainability.

- Organizations are using data and analytics to enhance supply chain processes by improving planning, fulfillment, and customer experiences. This can be further aided by increased collaboration, both within and outside the organization.
- Simultaneously, organizations should focus on decreasing non-core products and processes through portfolio optimization and automation.
- Sourcing should continue to be a strategic priority to boost resilience as well as sustainability.
- Additionally, while initiatives such as developing end-to-end traceability can help in monitoring and controlling scope 3 emissions, organizations must also reduce scope 2 emissions through the use of renewable energy and recycling.
- Finally, organizations can focus on inventory optimization. This is achieved through demand-sensing and data-sharing, localized supply networks (particularly for the holiday season), and alternative fulfillment options, such as micro-fulfillment centers.





# Who should read this report and why?

## WHO?

This report is written for leaders across supply chain functions including strategy, planning functions, logistics, sourcing, procurement, S&OP, and corresponding IT functions and business partners. Its insights will also be of interest to supply chain executives and business leaders from general management, strategy, product, manufacturing, and sustainability.

## WHY?

The report covers key supply chain issues in the CPR industry globally. We examine current priorities for supply chain executives and provide actionable

recommendations for creating resilient, responsive, efficient, and sustainable supply chains.

This report is based on:

- in-depth interviews with industry executives and
- the findings of a comprehensive industry survey of 300 senior executives from leading CPG firms and retailers globally.

All the organizations surveyed have annual revenues over \$1 billion. More than 80% of surveyed executives are from supply chain functions, the rest from general management.

See the Research Methodology at the end of the report for more details on the organizations surveyed.



# Introduction

Global inflation is forecasted to be 5.8% in 2024, lower than the 8.7% in 2022 but still higher than the past decade. Higher inflation means consumers have to spend more to purchase the same product or service. For instance, in 2022, US consumers are estimated to have spent an additional \$1.1 trillion because of increased prices (\$468 million on goods and the rest on services<sup>1</sup>).

While the US saw an improvement in inflation over the course of 2022, European inflation rates continued to rise.<sup>2</sup> Europe also saw a spike in energy rates following Russia's invasion of Ukraine. Post-COVID, the US economy has had the strongest recovery.<sup>3</sup>

The global economy may be recovering, but supply chain executives have a range of issues to deal with, including geopolitical tensions further exacerbated by the Israel–Palestine conflict, a lack of end-to-end visibility, stricter regulations on carbon emissions, and legislation such as the German Supply Chain Due Diligence Act.

CPR companies have to deal with last-mile delivery challenges, quick commerce aspirations, ensuring seamless omnichannel capabilities and loss of sales due to out-of-stock or out-of-shelf issues. These challenges come into sharp

focus during the holiday season, and consumer research has highlighted that 84% of consumers globally are preparing to spend less or the same as in previous years – or nothing – on holiday gatherings and celebrations in 2023.<sup>4</sup>

In this context, we conducted an online survey of 300 organizations in the CPR industry in August and September 2023. We also conducted in-depth interviews with senior industry executives. This research report focuses on the following themes:

- 01 The diversification and regionalization of supply chains**
- 02 Why cost efficiencies once again matter**
- 03 The renewed role of digitalization to realize cost and revenue objectives**
- 04 How sustainability is playing out in the supply chain**
- 05 Recommendations: How to balance the drive for cost efficiency with supply chain resilience and sustainability**

An aerial, long-exposure photograph of a winding road at night. The road is illuminated by light trails from vehicles, creating vibrant streaks of yellow, orange, and red. The road curves through a dark, forested mountain landscape. The overall mood is dramatic and futuristic.

01

# THE DIVERSIFICATION AND REGIONALIZATION OF SUPPLY CHAINS



The COVID-19 pandemic disrupted supply chains like never before. In response, organizations shifted from “just in time” to “just in case” strategies, leading to a massive increase in inventory stocks and the money tied up in them. Organizations holding 30–45 days of additional stock became the norm. Illustrating this phenomenon:

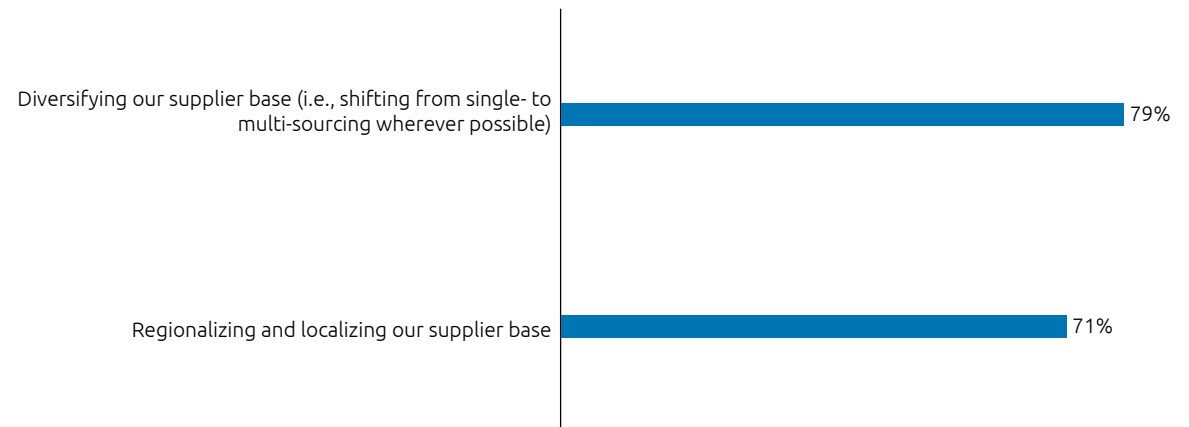
- Avneet Singh Marwah, CEO, Super Plastronics Pvt. Ltd (SPPL), a brand licensee of Thomson, Kodak, Blaupunkt, Westinghouse, and White-Westinghouse in India, says: *“Although we are mostly covered in coming months, we are increasing our minimum stock level 1.5 times to be ready for supply chain challenges.”*<sup>5</sup>
- Richard Galanti, CFO and EVP for US retailer Costco Wholesale (during the May 2023 earnings call), states: *“If you had asked me six months ago, year-over-year inventories were up 26%, as were our competitors and everybody else.”*<sup>6</sup>

However, this is not viable in the long run, and organizations began exploring other strategic changes to their supply chain network to insulate them against global risks as well as help them thrive in the longer term. Initiatives around diversification and regionalization of the production and supplier base have since gained significant momentum. As shown in Figure 1, almost 8 out of 10 CPR organizations today are investing in shifting from single to multi-sourcing, while 7 in 10 organizations are regionalizing and localizing their supplier base.

### FIGURE 1.

Almost eight out of ten organizations today are investing in diversifying their supplier base

#### % OF ORGANIZATIONS WHO SAID, "WE ARE ACTIVELY INVESTING IN..."



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.





This means organizations need to spend considerable efforts to identify new locations and suppliers, in addition to making some sacrifices on the upfront cost advantages of offshoring.

## Why the move to more local sourcing and production?

Globalized supply chains are at risk from geopolitical tensions, overreliance on certain countries for electronic components, fluctuating freight rates, and port congestions. Diversifying and regionalizing supply chains offers the following benefits:

- **Resilience:** Nearshoring and friend-shoring provide a cushion against the impact of global events. Logistical disruptions like the 2021 Suez Canal obstruction or supply disruptions like those arising from the COVID-19 pandemic can be more easily managed via nearshored supply chains.
- **Agility:** Nearshoring production and supply enables an agile response to changing customer demand and reduces time to market.
- **Cost efficiency:** Upfront costs of supplier base redesign and relocation may be higher, but the overall costs associated with offshoring (including transportation, risk management, opportunity cost of lost sales, trips made by executives) mean that nearshoring and friend-shoring could be financially beneficial in the long run. Nearshoring can also reduce the need for working capital by reducing in-transit inventory. During the holiday season in recent years, many retailers like Ikea and Walmart went to great lengths to combat supply issues – even hiring private cargo ships.<sup>7</sup> With nearshoring, such extreme measures would not be needed.
- **Sustainability:** Reduced transportation directly impacts an organization's carbon footprint while also allowing for greater scrutiny of suppliers and ensuring ethical manufacturing practices and working conditions are followed. Organizations can benefit from more frequent physical interactions, resulting in greater trust and collaboration, better project management, and increased oversight.

## Nearshoring and domestic sourcing are expected to increase

As offshoring woes continue, nearshoring and domestic sourcing are picking up as organizations try to strike a balance between reducing costs and building resilience. Our research shows that, by 2025, procurement (by value) from offshore locations is expected to drop by 7%, while nearshoring is expected to increase by 4% and domestic sourcing by 3% (see Figure 2).

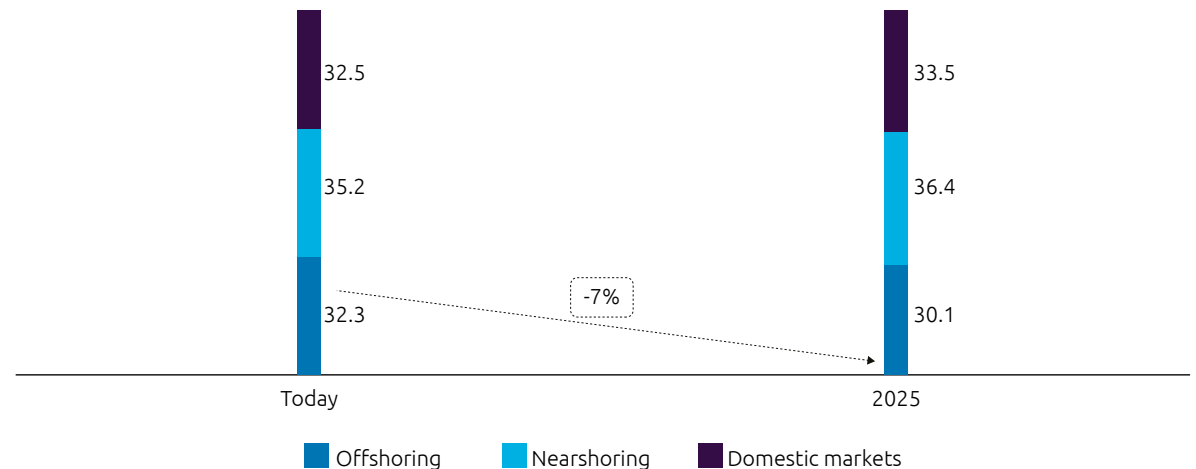
# 7%

Expected decline in global offshore procurement over the next two years, by value

**FIGURE 2.**

Procurement from offshore locations is likely to fall by 7% in the next two years

### DISTRIBUTION OF PROCUREMENT, IN TERMS OF DOLLAR VALUE



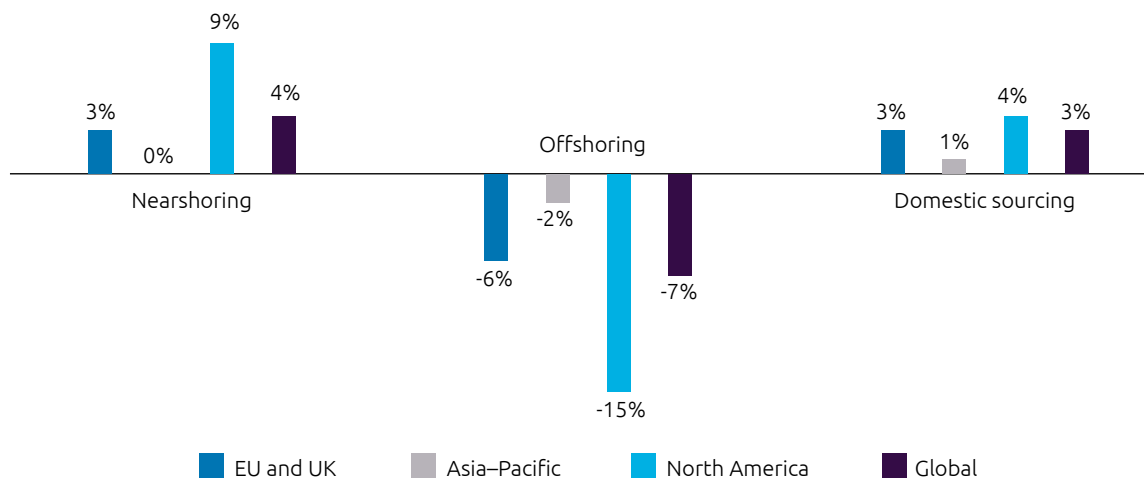
Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=256 organizations.

North America is leading the nearshoring trend, with a predicted 9% increase in nearshore procurement by dollar value (see Figure 3).

### FIGURE 3.

North America is expected to reduce offshoring by 15% while increasing nearshoring by 9%

#### EXPECTED % CHANGE IN PROCUREMENT LOCATION (BY DOLLAR VALUE), 2025 COMPARED TO 2023



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=256 organizations.

## Why is North America leading the nearshoring trend?

In addition to geopolitical tensions, other reasons for which North American organizations specifically find nearshoring attractive include the following:

- USMCA agreement:** Nearshoring perfectly aligns with the collective spirit fostered by the USMCA agreement, effective from July 2020. The agreement aims to create balanced reciprocal trade in the region. The new rules of origin and origin procedures increase incentives to source goods and materials within the US and North America.<sup>8</sup>
- Mexico as an easy and attractive nearshoring location:** Mexico's proximity to the US mitigates logistics and supply chain risks. Mexico also offers advantages such as an availability of skilled labor and attractive government programs like the Mexican Manufacturing, Maquila and Export Services Industry (IMMEX) Program,<sup>9</sup> which make import of goods used in an industrial process or service extremely cost effective. Further, USMCA allows US organizations to produce goods in Mexico and export them duty-free to the US. US goods imports from Mexico totaled \$454.8 billion in 2022, up 18.9% (\$72.2 billion) from 2021, and 64 percent from 2012.<sup>10</sup>



- Strained relationships with traditional partners like China:** Discord between China and US has been growing on various fronts, including trade tariffs, technology, human rights issues, and China's ongoing business cooperation with Russia.<sup>11</sup> Further, the pandemic exposed the vulnerability of overreliance on one location. As a result, trade between China and US has been significantly impacted. In 2023, Mexico and Canada supplanted China as the top US trading partners.<sup>12</sup>
- Logistics disruptions:** Logistics disruptions, for climate change and other reasons, have resulted in bottlenecks for the North American supply chain. These increase transportation costs, impacting the bottom line, increasing end-product prices, and raising overall inflation. According to the IMF, a doubling of shipping costs causes inflation to increase by 0.7 percentage points.<sup>13</sup> While freight costs have fallen from an unprecedented high at the beginning of 2022,<sup>14</sup> maritime issues remain. The Panama Canal, the route for 40% of US container traffic,<sup>15</sup> has been in the news for its falling water levels and resulting traffic delays. As of September 2023, the Panama Canal Authority reduced the maximum number of ships passing through the canal from 36–38 to 31 per day.<sup>16</sup> This severely impacts the movement of goods to and out of US and other Asian countries such as China, Japan, and South Korea.



## What is “friend-shoring”?

“Friend-shoring” is a growing trade practice where supply chain networks are focused on countries regarded as political and economic allies. Our research shows that 83% of organizations are actively investing in friend-shoring.<sup>17</sup>

With growing geopolitical instability, many countries, including the US, are considering shifting supplier base to allies as a means of mitigating risks to the supply chain. Ahead of the 2023 G20 Summit, US Secretary of the Treasury Janet Yellen stated: *“De-risking and friend-shoring are important priorities for the United States, and it is something that we are promoting here in India.”*<sup>18</sup> Organizations such as Apple

and Google have, likewise, started shifting a portion of their production from China to India.

Friend-shoring is not limited to the US. The European Union's recent Economic Security Strategy promotes greater trade collaboration with allies from NATO and the G7, and mentions cooperation with the “broadest possible range of partners.”<sup>19</sup> European countries, especially the Western Balkans, are potential friend-shore candidates, given their three-fold benefits of proximity, amity, and cost effectiveness. The Stabilization and Association Agreements (SAAs) in place with these countries support free trade links. Other possible EU friend-shore supply chain locations include the ASEAN countries.<sup>20</sup> The EU has free trade agreements with Singapore and Vietnam, and is in discussions with others, including the Philippines, Indonesia, and Thailand.<sup>21</sup>



02

## WHY COST EFFICIENCIES ARE BACK ON THE AGENDA

# 82%

Organizations believing supply chains will need to change significantly to meet the challenges they face.

The CPR industry, like many others, has faced unprecedented challenges in recent years, including raw material supply problems, high freight costs, and changing consumer demands and behavior. Organizations struggled to address the uncertainty in their supply chains and thus focused on ensuring continuity. Building resilience trumped cost optimization, and many organizations witnessed a fall in margins over this period due to declining sales volumes and rising input and labor costs – or both.

There are signs of recovery in 2023. Consumer confidence is picking up, commodity and freight costs are coming down, and inflation is slowing. However, the economy is still a cause for concern. As per the June 2023 World Economic Forum report, over 85% of chief risk officers expect some level of continued volatility in economic and financial conditions within and across major economies. Inflation too, though slowing, is unlikely to go below pre-pandemic levels, at least not in 2024. As the CEO of Walmart states: *“Inflation and higher prices are kind of with us. We’ll see disinflation, but not all the way back to deflation ... certainly not in the short term.”*<sup>22</sup>

Amid this state of cautious optimism, organizations are focusing on the following key priorities to address margin pressures:

- gearing up to profitably address the recovery in consumer demand
- preparing to deal with supply chain uncertainties and challenges, albeit in a cost-efficient way

Our research shows that 82% of CPR organizations believe supply chains will need to change significantly to meet the challenges they face. There is renewed focus on shaping consumer demand and building cost efficiency in the supply chain through better planning, process improvement, and automation.



## Macro-economic uncertainty and supply chain volatility increased costs and reduced margins

Macro-economic conditions have impacted sales and costs as follows:

- **Impact on sales:** Most countries recorded high inflation in 2023<sup>23</sup> and many governments tightened fiscal measures, putting pressure on consumers and organizations alike. While consumers saw a decline in spending power,<sup>24</sup> many organizations, especially consumer packaged goods (CPG) companies, passed on the rise in input costs to consumers.<sup>25</sup> There were instances where retailers and CPG companies were at loggerheads over pricing, with retailers refusing to carry the stock of higher-priced items in some instances.<sup>26</sup> Overall, organizations had to face muted demand, which impacted sales volumes for many.<sup>27</sup>
- **Impact on costs:** Macro-economic conditions had a direct bearing on supply chain costs. Already dealing with increased costs for raw materials, energy, logistics, and

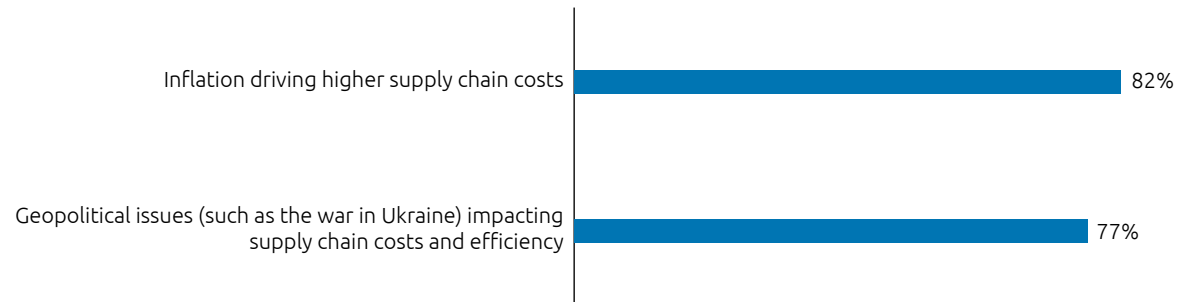
labor, organizations also incurred significant expenses in attempting to future-proof supply networks in the face of uncertainty. For example, they invested in increasing safety stocks of raw materials and finished goods, boosting production, making alternate logistics

arrangements, ramping up e-commerce, and diversifying the supplier base. As a result, supply chain costs rose as margins came down. In fact, as shown in Figure 4, around 8 in 10 respondents believe that inflation and geopolitical issues are impacting the costs and efficiency of their supply chains.

**FIGURE 4.**

A vast majority believe that inflation and geopolitical issues are impacting supply chain costs and efficiency

### PERCENTAGE OF RESPONDENTS AGREEING THAT THE FOLLOWING IS A CHALLENGE TO THEIR ORGANIZATION



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

The growth in commerce put further pressure on already strained supply chains. We found that 7 out of 10 respondents believe increases in e-commerce led to increased supply chain costs, causing significant pressure on margins. With almost 20% of global retail sales now coming from e-commerce,<sup>28</sup> this channel's profitability cannot be ignored. In fact, Walmart CEO John David Rainey acknowledged in the August 2023 earnings call that one of Walmart's strategic priorities is to improve digital margins with an eye on e-commerce profitability.<sup>29</sup>

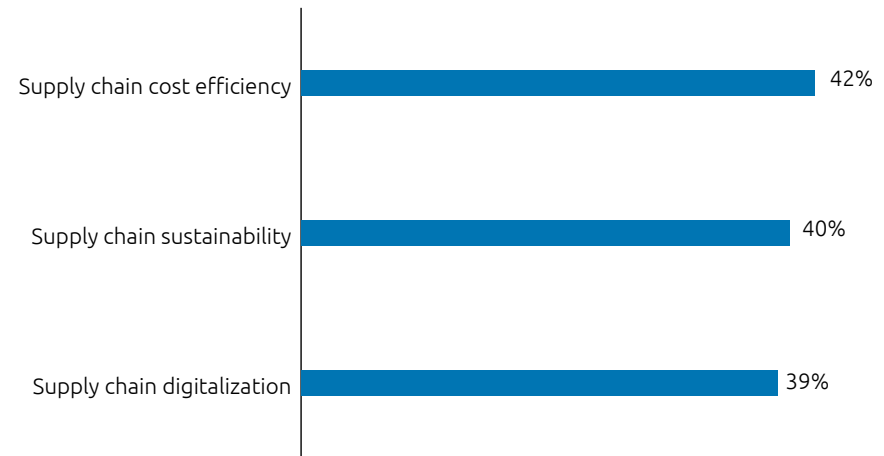
## Supply chains are renewing their focus on cost optimization

As per our research, cost efficiency is becoming a top priority again, alongside building resilience. As shown in Figure 5, 42% of the organizations we surveyed stated that they will increase focus on improving supply chain cost efficiency in the next 12–18 months.

**FIGURE 5.**

Cost efficiency is highest on the agenda for the next 1 to 1.5 years

### WHICH OF THE FOLLOWING SUPPLY CHAIN AREAS ARE YOU LIKELY TO INCREASE FOCUS ON IN THE NEXT 12–18 MONTHS?



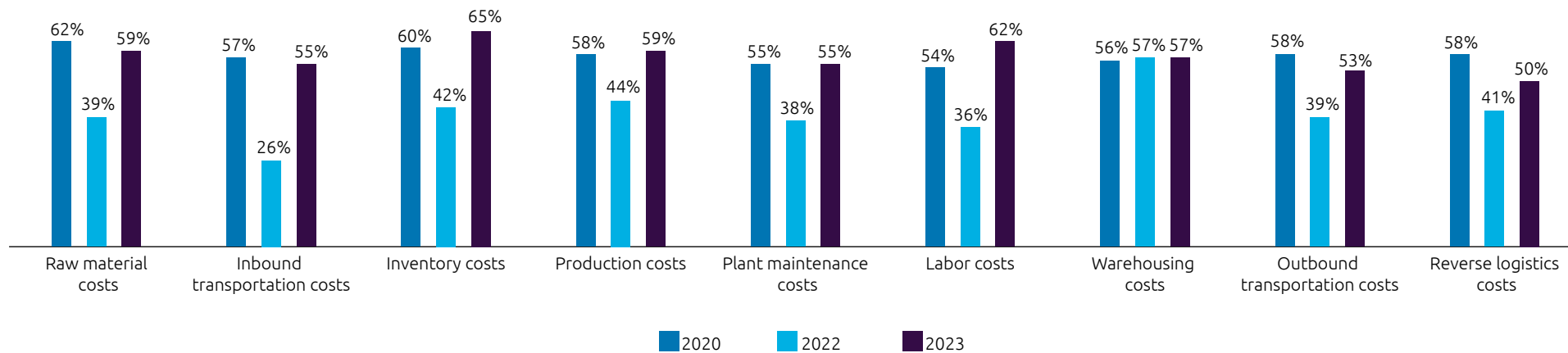
Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

However, when we look at the previous years, as shown in the figure 6 below, the extent to which organizations have optimized their supply chain costs has reduced in the past couple of years.

### FIGURE 6.

Focus on cost optimization has again increased in 2023 across categories

#### % OF ORGANIZATIONS THAT HAVE OPTIMIZED THE FOLLOWING SUPPLY CHAIN COSTS



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations; Supply chain resilience survey, August–September 2020, N=400 CPR organizations; Intelligent supply chain survey, August–September 2022, N=531 CPR organizations.



## Cost optimization strategies

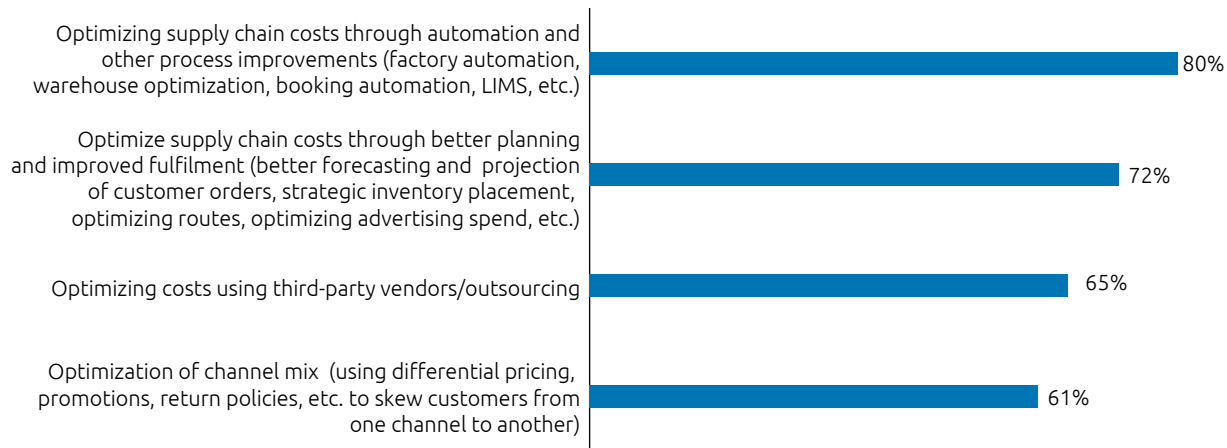
Organizations are once again taking steps to optimize costs across the supply chain. These include automation, process improvement, better fulfilment, and improved forecasting and planning to improve fulfilment and reduce the associated costs. For example:

- Target has set up local consolidation centers that pull inventory from local stores and pack them on-site, reducing the number of orders that ship in separate boxes and grouping deliveries by area.<sup>30</sup>
- Levi's has developed an AI/machine learning-based solution that enables adaptive pricing and chooses the fulfilment option that both satisfies the customer and is margin-friendly to Levi's.<sup>31</sup>
- Colgate Palmolive has moved from preventive to predictive maintenance, using advanced analytics to improve output, reduce downtime, and reduce maintenance, repair, and operations spending.<sup>32</sup> It is also using alternative materials and reformulating where possible.<sup>33</sup>
- Procter and Gamble (P&G) Health is improving its margins through portfolio premiumization and optimization of expenses.<sup>34</sup> P&G also reported savings of \$180 million from more efficient sourcing and routing of materials, and another \$100 million savings in shipping costs by optimizing packing loads for trucks.<sup>35</sup> It is also using SKU rationalization to drive top-line and bottom-line savings.<sup>36</sup>



**FIGURE 7.**

Organizations are turning to process improvements and automation to cut costs

**% OF ORGANIZATIONS WHO HAVE IMPLEMENTED THESE STRATEGIES**

Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

## Top-line growth and demand management to improve margins

As economic recovery begins, organizations are prioritizing both volume and value growth in two ways:

- new customer acquisition
- increasing realization per consumer

As per our research (see Figure 8), while 73% of organizations chase top-line growth through new customer recruitment, a similar proportion (77%) is focusing on shaping consumer behavior through strategies such as increasing consumption per capita or “upscaling” existing customers to higher-priced options. Optimizing product mix and increasing pricing are also key means of driving top-line growth.

Most organizations use a mix of revenue management techniques. To illustrate:

- ITC, an Indian FMCG major, uses a social listening engine to capture consumer issues and wants and is using this data to introduce new products.<sup>37</sup>
- Another Indian FMCG organization, Hindustan Unilever Limited (HUL), is using machine learning to optimize levers such as pricing, distributor commission, and media spend.<sup>38</sup>

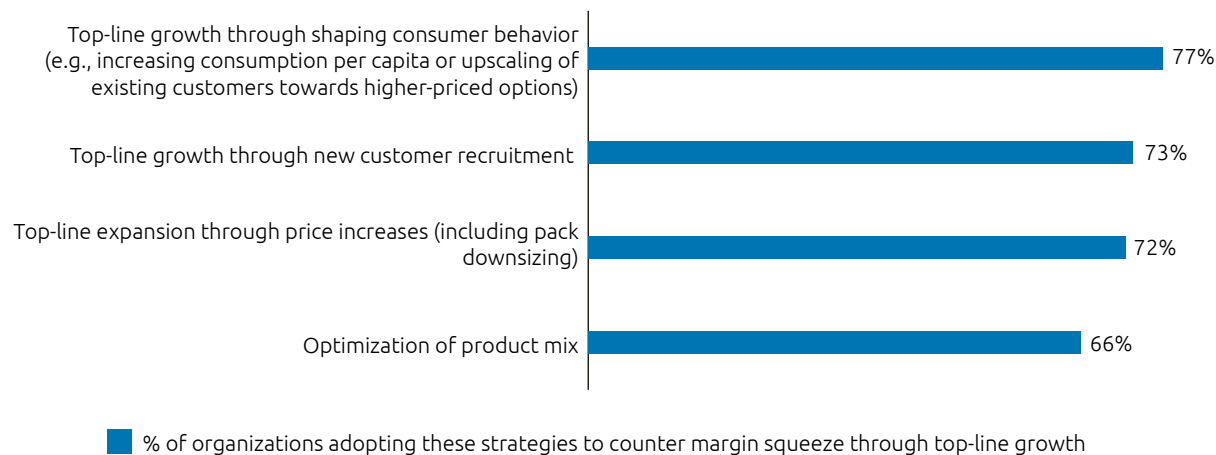
# 83%

Organizations actively investing in friend-shoring.

## FIGURE 8.

Organizations are focusing on new customer recruitment and improving realization per customer to strengthen their top-line

### STRATEGIES BEING IMPLEMENTED BY ORGANIZATIONS TO IMPROVE THEIR TOP-LINE INCLUDE



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

# 03

## THE RENEWED ROLE OF DIGITALIZATION TO REALIZE COST AND REVENUE OBJECTIVES

Digitalizing the supply chain involves planning and operations, procurement, warehousing and logistics, ensuring an end-to-end visibility through technologies such as automation, predictive and prescriptive analytics, digital twins, and augmented/virtual reality.

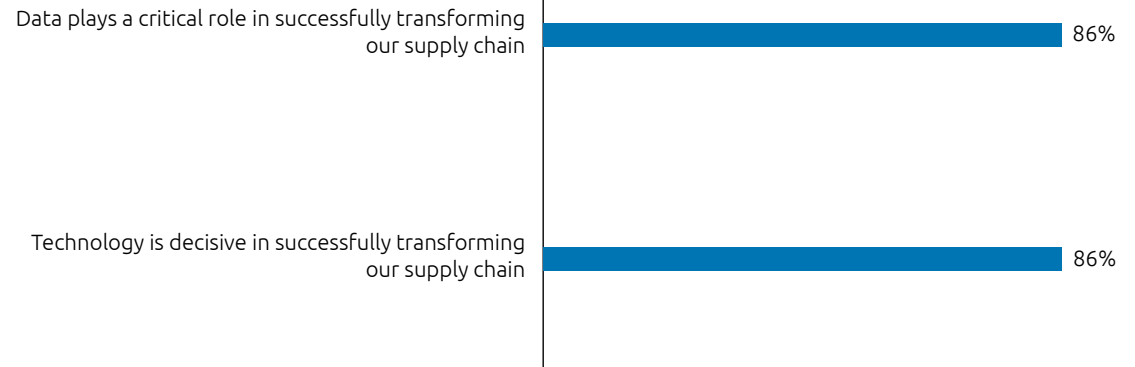
Organizations have been investing in supply chain digitalization for a number of years and understand its value (see Figure 9).

# 66%

Organizations focusing on optimizing their product mix to improve their top-line.

## FIGURE 9.

Nearly nine in ten agree that technology and data are critical for supply chain transformation



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.



## Why the renewed focus on digitalization?

Organizations cite increasing revenues, improving efficiencies, as well as customer experience and saving costs among the drivers for investment in supply chain digitalization.

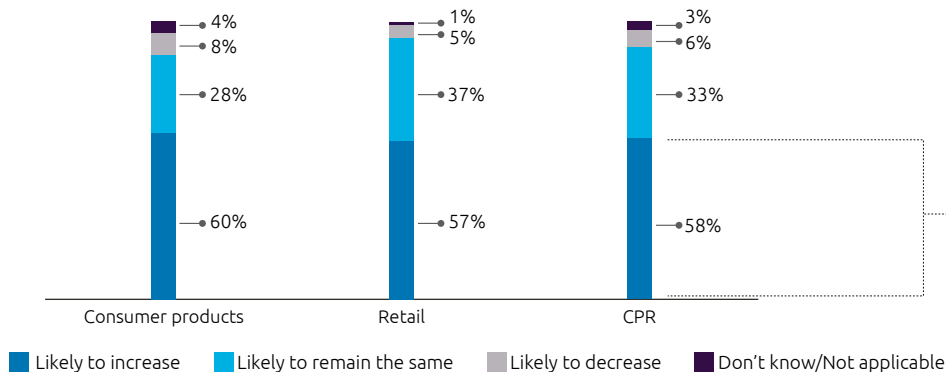
Although organizations continue to deal with various macro-economic pressures, they recognize the need to

further transform supply chains. As Figure 10 shows, 58% of organizations plan to increase supply chain investments in the next 12–18 months. VP of strategic sourcing at a US-based food company elaborates: *“Our focus on innovation and digitalization pretty much halted during the pandemic. But now, innovation has come back into the pipeline.”*

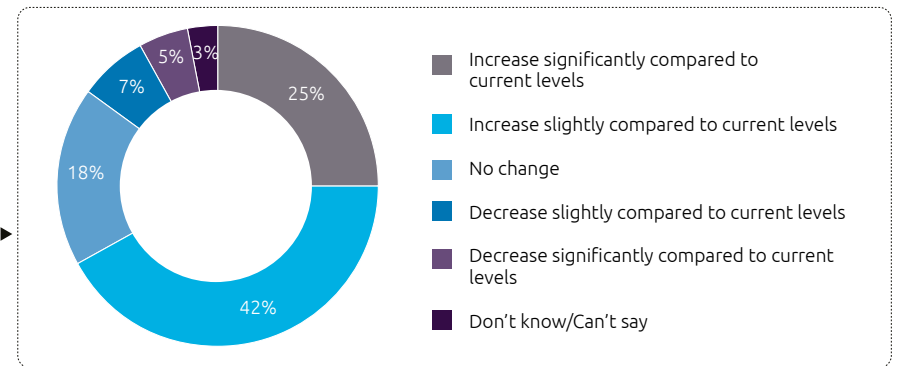
**FIGURE 10.**

58% of organizations are likely to increase their investments in supply chain in the next 12–18 months

### IN THE NEXT 12–18 MONTHS, IS YOUR ORGANIZATION PLANNING TO INCREASE/DECREASE INVESTMENTS IN SUPPLY CHAIN?



### FOCUS ON SUPPLY CHAIN DIGITALIZATION IN THE NEXT 12–18 MONTHS




Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

# 58%

Organizations planning to increase supply chain investments in the next 12–18 months.

Of the 58% of organizations planning to increase investments, 25% plan to increase their focus on supply chain digitalization significantly while another 42% plan to increase it slightly (refer to Figure 10). Clearly, digitalization is once again a priority. Michael R. Smith, EVP & CFO of McCormick & Company, an American company specializing in spices, explains: *“For the supply chain investments we have made to support growth ... we continue to make the investments we had planned, as well as new ones to support increased demand, despite the industry-wide supply chain disruptions over the past 3 years.”*<sup>39</sup>

*“For the supply chain investments we have made to support growth...we continue to make the investments we had planned, as well as new ones to support increased demand, despite the industry-wide supply chain disruptions over the past 3 years.”*<sup>39</sup>

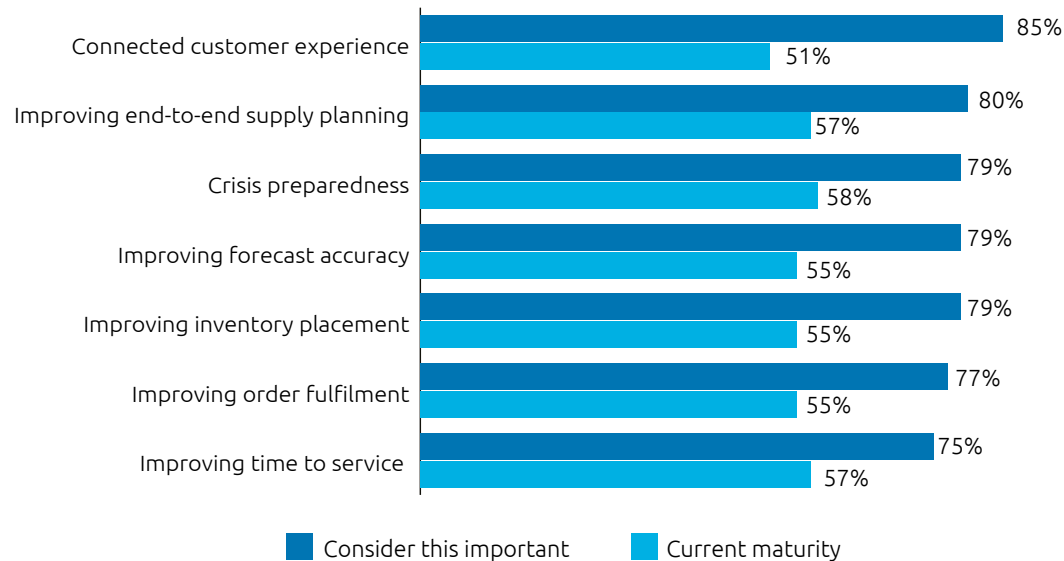
**MICHAEL R. SMITH**  
EVP & CFO  
McCormick & Company

Figure 11 shows organizations' assessment of their maturity in various areas needed for strengthening agility and resilience and the relative importance they accord each of these areas. While most organizations agree on the importance of all these areas, almost half of them do not yet consider themselves mature in them. Digitalization helps organizations in plugging these gaps and in meeting their business objectives.



**FIGURE 11.**

Organizations lag in many areas required for supply chain agility and resilience



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

## Why digitalization has taken a back seat since 2020 – and what now?

The pandemic brought new and pressing challenges for supply chain executives and digitalization became a lower priority. Our research shows that, post-pandemic, there has not been a huge increase in adoption of digital technologies across the value chain.

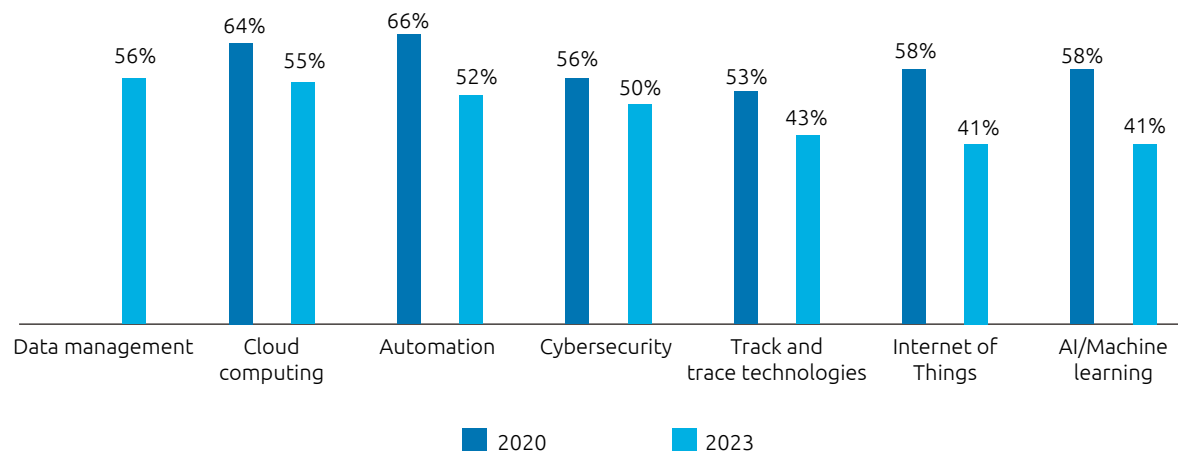
# 39%

Organizations likely to increase focus on supply chain digitalization in the next 12–18 months.

**FIGURE 12.**

The level of adoption of technology initiatives has remained stagnant or even reduced compared to three years ago

### LEVEL OF ADOPTION – DEPLOYED AND SCALED INITIATIVES



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations; Supply chain resilience survey, August–September 2020, N=400 CPR organizations. In 2020 research, the adoption rate of data management was not asked.



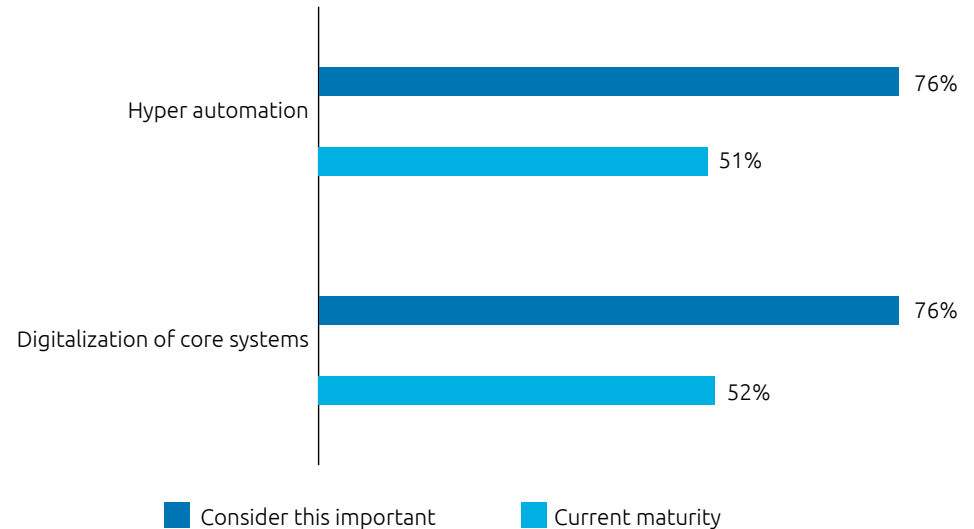
## Automation and core system digitalization are priorities – but there is a long way to go

From Figure 12, it is clear that, today, organizations are prioritizing data management, cloud computing, and automation to realize cost savings and drive revenues. To illustrate:

- Freshippo, a grocery chain within the Alibaba Group, has launched a fully automated supply chain center in Shanghai.<sup>40</sup>
- Yum! Brands, the restaurant business that owns KFC, Pizza Hut, and Taco Bell, has focused on strengthening data management and supplier engagement capabilities to gain insights needed to reduce emissions and drive progress on human rights, food safety, and other supply chain issues.<sup>41</sup>

**FIGURE 13.**

Only one in two organizations have fully leveraged automation and core system digitalization



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations

Further automation and digitalization of core systems is considered important by three in four organizations. But, around half of the organizations surveyed have not automated or fully digitalized their core systems (refer to Figure 13). SVP of global supply chain at an American sportswear and footwear retailer explains: *“Having one ERP system across the enterprise – from merchandizing to point of sales to financial systems – is a big priority for us. Supply chain transportation management is a continued priority.”*

## Organizations are getting better at leveraging data from their ecosystems

Data and analytics continue to play a role in improving supply chain decision-making. For example, in 2020:

- 64% of the organizations surveyed obtained data from their suppliers compared to 72% today;
- 50% obtained data from distribution partners, compared to the 75% today;
- 52% leveraged customer data (such as demographic information), compared to 75% today.



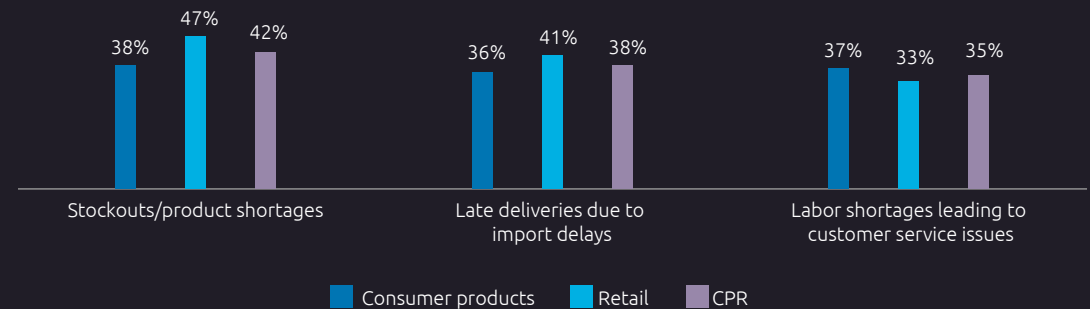
## ALMOST ONE IN TWO RETAIL ORGANIZATIONS ANTICIPATE STOCKOUTS DURING THE 2023 HOLIDAY SEASON

Organizations start preparing for the holiday season (Thanksgiving, Black Friday and Cyber Monday, Christmas, Good Friday and Easter, Diwali, the Chinese New Year, and others) months in advance. US consumers spent a record \$9.12 billion online on Black Friday in 2022 (2.3% up on 2021). Cyber Monday sales in 2022 rose 5.8% from 2021 to \$11.3 billion, making it the biggest US online shopping day in history.<sup>42</sup> The growth in these numbers could be partly attributed to higher inflation in the US in 2022. Despite the ample amount of preparations, organizations expect some challenges in the upcoming holiday season.

**FIGURE 14.**

Stockouts/product shortages, late deliveries due to import delays and labor shortages leading to customer service issues are the top issues expected in 2023 holiday season

### TOP THREE ISSUES ORGANIZATIONS EXPECT TO ENCOUNTER DURING HOLIDAY SHOPPING DAYS



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

### Two out of five organizations expect to encounter stockouts/product shortages during the holiday season

Retail (47%) and consumer product organizations (38%) expect stockouts/product shortages in the 2023 holiday season (see Figure 14). Our consumer research showed that more than one-third of consumers are also “highly concerned” about the availability of products such as groceries and food.<sup>43</sup>

While organizations employ a number of demand-forecasting and demand-planning tools, seasonal stockouts and product shortages could still occur. Stockouts or poor substitutions could lead to loss of consumer trust, particularly in industries such as groceries. Disappointed customers are less likely to return in the future, meaning further revenue loss for the organization.

### Almost 40% of organizations expect late deliveries due to import delays

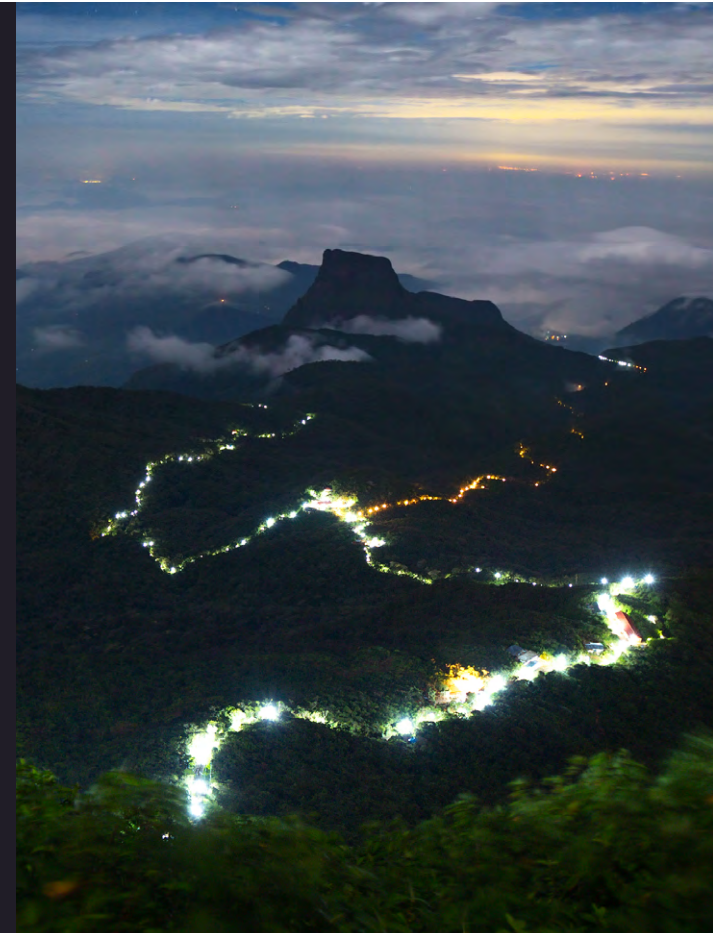
One reason for this, at least for US organizations, is the fact that hundreds of ships are stranded in the Panama Canal due to

drought conditions in Panama. The canal carries 40% of US container traffic. As of September 2023, over 200 vessels were stranded on either side of the canal – a loss of \$200,000 per day per ship.<sup>44</sup> This added cost will affect the margins of consumer product organizations and retailers.

### One in three organizations expect a labor shortage in the 2023 holiday season

Increased labor costs are another reason for higher inflation worldwide.<sup>45</sup> To combat this, retailers plan to offer increased salaries, signing bonuses, health insurance, and other benefits to attract seasonal workers.<sup>46</sup> Amazon plans to hire 250,000 new employees for its warehouses and fulfillment network for the 2023 holiday season, compared to around 150,000 in 2021 and 2022.<sup>47</sup>

According to the US Chamber of Commerce, in 2022 more than 50 million workers quit their jobs in the US, many of them in search of an improved work–life balance, more flexible working, increased compensation, and a strong company culture. This follows the 47.8 million who quit jobs in 2021.<sup>48</sup>







04

## HOW SUSTAINABILITY IS PLAYING OUT IN THE SUPPLY CHAIN

Today's supply chains are vast, reflecting the complex journey from raw material to end consumer. This means that, not only are organizations creating their own emissions, but they also have large scope 3 emissions.

Supply chain emissions typically comprise approximately 92% of an organization's total greenhouse gas (GHG) emissions.<sup>49</sup> In addition to carbon emissions, supply chain operations also lead in consumption of water and other resources.

There is growing regulation around sustainability, including Germany's 2023 Supply Chain Due Diligence Act, which obligates organizations with 3,000 or more employees to take "appropriate measures" to respect human rights and the environment within their supply chains, "with the goal to prevent or minimize risks related to human rights or the environment or end the violation of duties related to human rights or the environment."<sup>50</sup> Consumers also increasingly prefer sustainable products.<sup>51</sup> As a result of these factors, organizations appreciate the importance of sustainable operations.

## Organizations are making conscious efforts towards sustainability

Of the organizations surveyed, 75% said they are making conscious efforts to be more sustainable. However, our research shows that average investments in supply chain sustainability as a percentage of revenue have slightly decreased when compared to 2020. Assuming organizations were spending x% of their revenue on supply chain sustainability in 2020, today they were only spending 0.98x. This investment can be seen in sustainable product design and in ethical sourcing and packaging, manufacturing, and logistics.

Recent initiatives include the following:

- L'Oréal has built a database that measures products' carbon footprint from raw materials to packaging, covering 14 impact factors.<sup>52</sup>

- Ferrero, the chocolate and confectionary company, has used 100% sustainable, RSPO-certified as segregated palm oil in all its products since January 2015.<sup>53</sup>
- Walmart has set sustainability goals, such as sourcing 100% renewable energy and supporting sustainable agriculture.<sup>54</sup>

# 75%

Organizations that say they are making conscious efforts to be more sustainable.

## Ethical and responsible sourcing, transportation, and manufacturing are viewed as increasingly important

Of the organizations surveyed in 2023, 86% realize that ethical and responsible sourcing, transportation, and manufacturing are key for gaining a competitive advantage, compared to 69% in 2020 (see Figure 15). It can be difficult to accurately measure scope 3 emissions, but organizations are taking steps to control emissions in their supply network. More organizations are sourcing raw materials/finished goods through ethical and responsible means compared to three years ago.

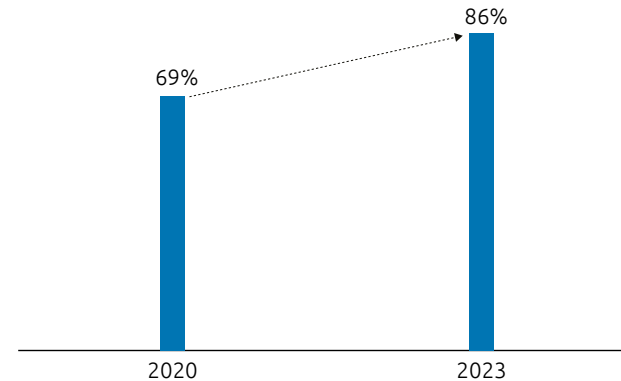
# 2026

The year when European Union's Carbon Border Adjustment Mechanism regulation will move to full implementation.

**FIGURE 15.**

In 2023, more organizations realize the importance of ethical and responsible sourcing, transportation, and manufacturing than in 2020

### ETHICAL AND RESPONSIBLE SOURCING, TRANSPORTATION, AND MANUFACTURING IS KEY FOR COMPETITIVE ADVANTAGE



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations; Supply chain resilience survey, August–September 2020, N=400 CPR organizations.

Europe's increased focus on sustainable procurement could be partially attributed to the implementation of the Carbon Border Adjustment Mechanism (CBAM). The EU implemented CBAM in a "transition phase" in 2023 and plans to move to full implementation in 2026. Organizations that source raw materials/finished goods from countries or regions where emissions standards do not match those of the EU must now pay an adjusted price, which includes a carbon tax.

- H&M Group is sourcing raw materials more responsibly, prioritizing efforts on the issue of forced labor and child labor, the health and safety of workers and communities, reducing pollution, and the excessive use of water.<sup>55</sup>
- In 2018, Adidas became one of the first companies to source 100% of its cotton more sustainably, minimizing its impact on water availability. The company also established traceability in its leather supply chain.<sup>56</sup>



# 81%

Organizations that believe customers are willing to pay more for sustainable products, thereby, revealing a perception gap.

## Organizations believe customers are willing to pay more for sustainable products, but there is a perception gap

In our survey, 81% of organizations said they believe most customers would be willing to pay extra for sustainable products. However, our research on consumer behavior reveals the actual figure to be 41%.<sup>57</sup> This perception gap means organizations need to be clear about pricing strategies and need to identify the cohort of consumers willing to pay the premium. If they retain a standard pricing strategy, they could lose market share to regular (non-sustainable) products or to competitors offering sustainable products at a zero or marginal price difference.

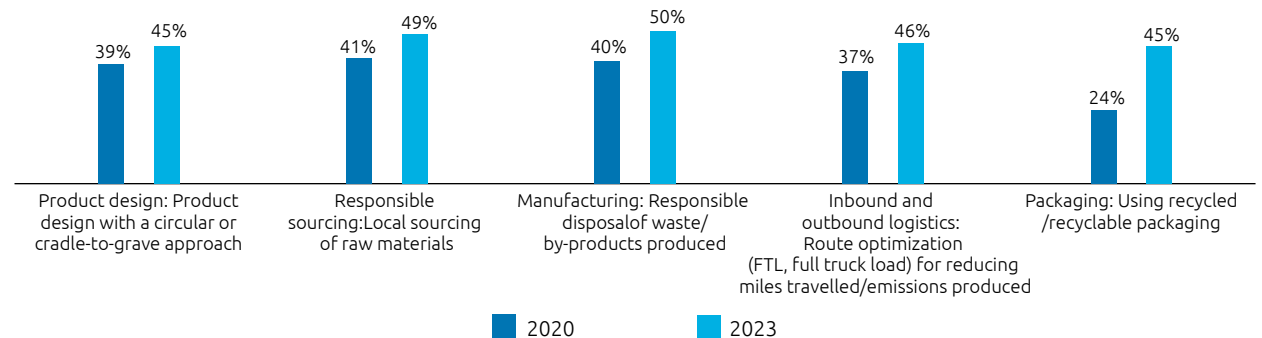
## Supply chain sustainability initiatives are growing, but large-scale deployment is slow

Our research looked at the adoption of a number of sustainability initiatives. We found that, while more organizations have deployed and scaled supply chain sustainability initiatives in 2023 compared to 2020 (see Figure 16), less than half have deployed them at scale.

**FIGURE 16.**

Less than half have deployed large-scale sustainability initiatives across the value chain

### ADOPTION OF SUPPLY CHAIN SUSTAINABILITY INITIATIVES IN THE FOLLOWING AREAS – USE CASES DEPLOYED AND SCALED



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations; Supply chain resilience survey, August–September 2020, N=400 CPR organizations.



## Product design: A circular or cradle-to-cradle approach

Sustainable product design focuses on materials and components that can be repurposed or recycled so old products' materials are reused, saving resources and energy. A circular economy approach is urgently needed in product design as currently only 10% of the resources consumed across the world get recycled. Use of resources tripled between 1970 and 2017 and is set to double again by 2050.<sup>58</sup> To illustrate:

- Adidas aims to make 9 out of 10 products sustainable by 2025 as part of a move towards a circular economy. In 2021, Adidas used 91% recycled polyester in its products. The target for 2024 is 100%.<sup>59</sup>
- Zara's April 2023 collection featured lyocell garments made with 50% poly-cotton waste fiber and polyester garments where 43% of the fiber was derived from textile waste.<sup>60</sup>

## Sourcing: Local sourcing of raw materials

Local sourcing of raw materials has increased post-pandemic due to global supply chain disruptions. Organizations have started prioritizing domestic sourcing or nearshoring of raw materials. This reduces transportation, saves on logistics costs, and allows them to be more agile. To illustrate:

- Nestlé, in Nigeria, has increased local sourcing of raw materials such as starch and turmeric and is planning to expand local sourcing of raw materials in the Ivory Coast, Cameroon, and Senegal.<sup>61</sup>

## Manufacturing: Responsible disposal of waste produced

Responsible disposal methods, such as recycling, reusing, safely disposing hazardous materials, could help in conserving resources and reducing pollution. Responsible disposal also helps in regulatory compliance. In Italy, for instance, unauthorized discharge of industrial water could result in criminal sanctions including imprisonment or a fine.<sup>62</sup> Many organizations today have set up zero-waste commitments – including targets for zero waste in direct operations and zero waste to landfill in their supply chains.





## Logistics: Route optimization (full truck load or FTL) for reducing miles travelled/emissions produced

Transportation accounts for 20% of global CO<sub>2</sub> emissions and is the second-largest carbon-polluting sector.<sup>63</sup> To reduce carbon emissions, organizations have started using route optimization algorithms, which use AI and machine learning to reduce travel time and costs and ensure the maximum productivity of workers and vehicles. To illustrate:

- Performance Food Group (PFG) has implemented a route-optimization technique for product distribution. This helps them minimize travel miles, time, fuel usage, and carbon emissions.<sup>64</sup>
- Ikea has committed to reducing its carbon emissions by 70% on average for land and ocean transportation and to reduce greenhouse gas emissions by 80% for overall logistics by increasing the number of goods per shipment.<sup>65</sup>

- Delivery experience is a critical factor for organizations, particularly grocery and food retailers. Robotics could be a way to address the last-mile delivery challenge. Chick-fil-A, for example, is piloting the use of delivery robots in a few states in the US.<sup>66</sup>

## Packaging: Using recycled/recyclable packaging

Recycled/recyclable packaging generally requires less energy and saves resources compared to producing the same material from scratch. Recycling aluminum cans and bottles, for example, reduces energy use by 95% compared to manufacturing from raw materials.<sup>67</sup> To illustrate:

- Kellogg's packaging is currently 76% recyclable globally, with plans to increase this to 100% by 2025.<sup>68</sup>
- Ikea aims to use completely plastic-free consumer packaging from 2028 to become a fully "circular" company. It has also started to use the waste from its own production in some packages.<sup>69</sup>





## Organizations are working to ensure suppliers' sustainability

To reduce scope 3 emissions, organizations are turning to suppliers to ensure their compliance with sustainability requirements and encourage ethical sourcing. Many organizations expect their suppliers to disclose data on greenhouse gas emissions and environmental risks.

### Almost eight in ten organizations have a supplier code of conduct

A supplier code of conduct ensures that an organization's suppliers follow safe labor practices and environmental policies with respect to carbon emissions. The code refers to a set of standards and guidelines on both ethical and business practices that help companies establish a framework for ethical and sustainable practices in their value chains. Of the

organizations in our research, 79% said they only work with suppliers that adhere to their code of conduct. To illustrate:

- Lifestyle brand Guess is working with suppliers to reduce scope 3 emissions by 30% by 2030 and increase the proportion of environment-friendly raw materials in their design portfolio to 75% by 2025.<sup>70</sup>

### Organizations regularly conduct audits of suppliers' sustainability practices

Three in four (74%) of the organizations we surveyed conduct regular audits of their suppliers to ensure compliance on sustainability. To illustrate:

- A Senior Director of Supply Chain at a Canadian retailer noted: *"Our company has a compliance team in Southeast Asia to ensure that our suppliers are compliant with sustainability practices of labor rights, child labor, pollution emitting norms, etc."*

*Getting data is one of the most challenging elements that we have. We can get usually the off-trade data quite easily. But in a lot of countries, except the US and the UK, it's really difficult to get online data. And so we have been creating new programs to actually create and get that data from different players."*<sup>90</sup>

#### ALEXANDRE RICARD

CEO  
Pernod Ricard



# 05

## RECOMMENDATIONS: HOW TO BALANCE THE DRIVE FOR COST EFFICIENCY WITH SUPPLY CHAIN RESILIENCE AND SUSTAINABILITY

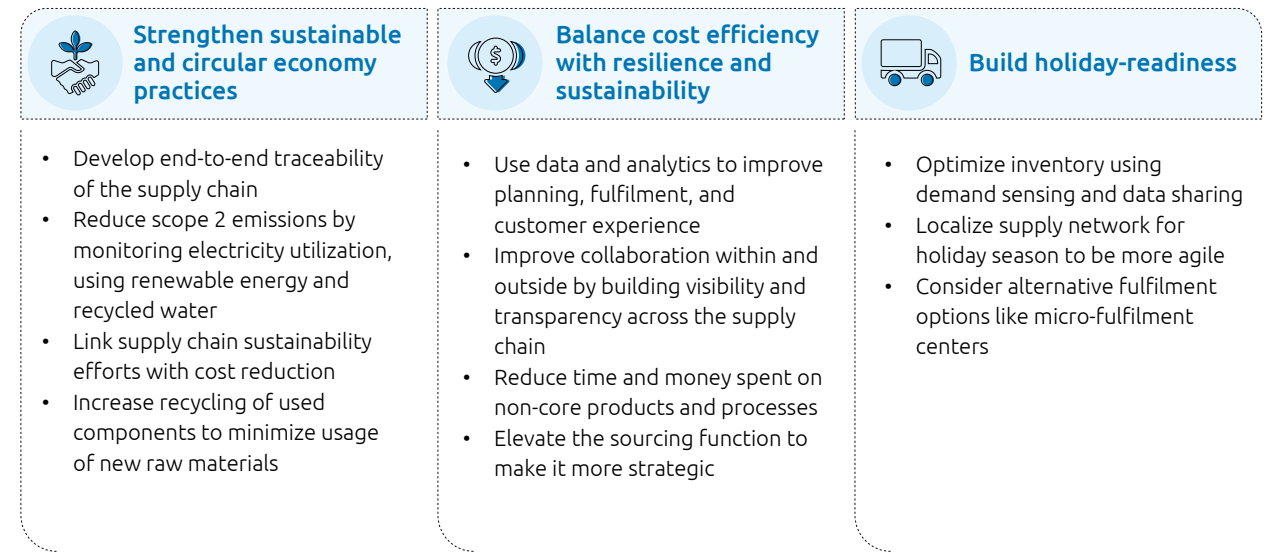
The challenge is real. Organizations need to refocus on supply chain cost efficiencies now that the pandemic is behind us, while also ensuring resilience and sustainability, to drive profitable growth. With e-commerce continuing to gain share and order fulfillment times increasingly becoming shorter, organizations need to be increasingly agile, which helps them be more resilient. Based on our survey, the in-depth interviews we conducted with supply chain executives, and our experience, we make recommendations in three key areas, as shown in Figure 17, for CPR organizations to consider.

# 74%

Organizations conducting regular audits of their suppliers to ensure compliance on sustainability

## FIGURE 17.

Key recommendations for building a resilient, sustainable and efficient supply chain and for holiday preparedness



Source: Capgemini Research Institute analysis.

## Balance cost efficiency with resilience and sustainability

### Use data and analytics to improve planning, fulfilment, and customer experience

From designing the right distribution and supplier network to finding the optimal fulfillment solution for a specific order, data and analytics can enable organizations to intelligently meet conflicting supply chain objectives in an agile manner. To illustrate, data and analytics can help in:

- designing a distribution network that supports both e-commerce and physical commerce efficiently
- recommending the most profitable product mix for a selection of channels, locations, and consumer personas
- optimizing routes and logistics to ensure lower costs, lower emissions, and timely delivery
- planning optimal safety stock to manage costs and changing customer demands
- supporting production decisions, such as resource allocation

- ensuring efficient fulfilment that meets customer expectations while staying within acceptable cost limits

Organizations can leverage data and analytics for demand-sensing, forecasting, S&OP and S&OE planning, PoS execution, consumer experience design, and so on. To illustrate:

- P&G boosted sales and revenue by improving product visibility and accessibility using AI. The AI tools analyze customer behavior and store layout to determine the most effective product placement.<sup>71</sup>
- A leading beverage company uses AI to analyze customer data and improve marketing campaigns. Its Supply Chain Director explained: *“We want to build a completely integrated and connected supply chain across stakeholders so that we can accurately respond to consumer demand with agility and flexibility. Technology and data analytics has a key role to play. In fact, we are experimenting with scenario planning simulations and predictive ordering and replenishment with the ultimate goal to implement autonomous planning using advanced data analytics over time.”*
- ITC, an Indian FMCG major, uses data to micro-target consumers based on a zip-code analysis of online sales data. A product that is selling well online in a particular zip code shows up in the salesperson’s app as a suggested order for stores in that zip code.<sup>72</sup>

### Improve collaboration within and outside by building visibility and transparency across the supply chain

Almost 8 out of 10 organizations are investing in improving collaboration with upstream and downstream partners, as well as being more connected internally, to enable the seamless flow of data for collaborative decision-making. Increasing visibility and transparency not only allows organizations to pivot quickly but it also helps improve sustainability. To illustrate:

- A Senior Director of Supply Chain at a lifestyle company says: *“We really want to have a better understanding and greater visibility of our vendors, suppliers, and business functions and any related risks that would impact our business.”*
- A Director of Logistics at a seafood company told us: *“Building both upstream and downstream collaboration is a push that we are investing in. We have seen that having deeper relationships and long-term agreements with suppliers works much better than spot-buying or transactional buying. Downstream too, real-time visibility has been a priority, whether temperature monitoring our assets or tracking ETAs of trucks and containers. This enables us to provide better customer service and be more proactive.”*



- VP of Supply Chain at an Indian retailer says: *“We collaborate with leading FMCG suppliers to improve efficiency and sales. For instance, we support suppliers with market intelligence and product pricing and offer suggestions based on our AI tool. We also plan to have shared online platforms with suppliers in the future.”*

## Reduce time and money spent on non-core products and processes

This can take many forms, from cutting down on non-core processes or activities through automation to cutting non-core or non-value-adding products and reducing SKUs through portfolio mix optimization. To illustrate:

- VP of Supply Chain at an Indian retailer shared: *“We are investing in technology and automation, and plan to have fully automated warehouses. The benefits will include cost savings and productivity gains, and also act as a safeguard against labor shortages.”*
- Supermarket chain Lidl’s new regional distribution center in the UK uses automation to deliver more than 9,400 pallets per day across 150 stores – three times the typical number.<sup>73</sup>





- Jumbo Supermarket, the leading Dutch food retailer, has an automated 40,000-square-meter warehouse facility to supply all stores in the Netherlands and Belgium. The warehouse is capable of handling 850,000 fresh food pick units daily and 2.6 million dry goods cases weekly, leading to shorter response times, higher throughput, and greater flexibility.<sup>74</sup>
- The German grocery leader, REWE, which operates more than 3,700 stores in Germany, is experimenting with fully automated cashier-less stores, the first of which opened in Munich in late 2022.<sup>75</sup>

Removing non-core brands is another way of improving margins. For example:

- Coca-Cola's CEO James Quincey elaborated: *"At the outset of the pandemic, our goal was to ruthlessly prioritize core brands and SKUs. Learnings from the last several months and the insights from our already accelerated SKU rationalization have convinced us to go even deeper by streamlining brands."*<sup>76</sup>
- A beauty care company also cut down its product portfolio to reinvest where it makes more sense. Its head of supply chain explained: *"We have launched a big global program to reduce the size of the portfolio by 30–35% in terms of SKUs."*

*"At the outset of the pandemic, our goal was to ruthlessly prioritize core brands and SKUs. Learnings from the last several months and the insights from our already accelerated SKU rationalization have convinced us to go even deeper by streamlining brands."*<sup>76</sup>

#### JAMES QUINCEY

CEO  
Coca-Cola

## Elevate the sourcing function to make it more strategic

Sourcing is both a challenge and a strategic opportunity, as became evident during the pandemic. Strategic sourcing, be it diversifying the supplier base, nearshoring, friend-shoring, or building partnerships, is a key enabler to building resilience and agility, improving the sustainability quotient, meeting cost pressures, as well as redesigning/reformulating products. To illustrate:

- In its September 2023 nine-months' earnings report, H&M attributed higher share nearshoring as one of the reasons it is well placed for a continued improvement in its stock situation.<sup>77</sup>
- On their sourcing strategy, Aditi Thapar, Supply Chain Manager at CKE Restaurants, said: *"We are trying to identify at least two suppliers closer to the demand centers in Europe instead of being single-sourced from one country. We are also encouraging our franchises to come together to build strong supplier partnerships to support our growth in the region. This will also enable us to have better negotiating power with our supplier partners. We also allow for recipes to be reformulated to use easily-available and cost-effective ingredients in the region, while ensuring the brand standards are met."*

- A Supply Chain Director at a leading beverage company noted: *"To reduce the impact of rising costs and margin squeeze, we have taken steps on sourcing, like better supplier negotiations, assessing risks and remapping suppliers, assigning back-up suppliers, using a mix of long-term agreements and dynamic pricing, and deploying tools and technologies for better visibility and collaboration with suppliers."*

Investments in supply chain sustainability as a percentage of revenue have decreased slightly, when compared to 2020.

## Strengthen sustainable and circular economy practices

### Develop end-to-end traceability of the supply chain

End-to-end traceability of the supply chain helps organizations fully understand where their products come from, how they are produced, and how finished goods can reach stores or consumers. It also helps organizations improve agility, sustainability, product safety, and regulatory compliance.

Organizations can use traceability data to track the movement of goods in real time. Real-time monitoring can identify bottlenecks and help optimize transport routes. In the event of contamination or safety issues, organizations could identify key individual ingredients or components and recall products accordingly. It can help organizations identify fake products in their supply chain, and consumers too can check the provenance of a product. For example:



- Ralph Lauren Corporation recently announced the launch of digital product identities for tens of millions of products, starting with their Polo brand. These identities reassure consumers of authenticity.<sup>78</sup>

### Reduce scope 2 emissions by monitoring electricity utilization and using renewable energy and recycled water

Scope 2 represents one of the largest sources of GHG emissions globally.<sup>79</sup> Organizations can reduce scope 2 emissions by installing LED lights and using building automation systems and energy-efficient heating, air conditioning, and ventilation systems. Building automation systems use weather data, energy costs, operational requirements, and regulatory requirements to detect pattern usage in office buildings. To illustrate:

- US homeware business Home Depot reduced its scope 1 and scope 2 carbon emissions by over 127,000 metric tons in 2020 by investing in green energy and driving efficiencies. The business pledged to reduce their carbon emissions by 40% by 2030 and 50% by 2035.<sup>80</sup>

Organizations should also look at adding/renewing insulation in buildings to prevent loss of energy. Auditing buildings is a useful first step. Auditors use thermal imaging tools to identify areas that are leaking energy.

Organizations are also installing solar panels at their offices to produce renewable energy on-site and reduce scope 2 emissions. Some utility companies offer solar, hydro, and wind power through Power Purchase Agreements. In Europe, 180 PPA deals have been signed in 2022, with a total contracted capacity of 15.5 GW.<sup>81</sup>

### Link supply chain sustainability efforts with cost reduction

Focusing on sustainability need not involve higher costs. For example, sustainability efforts reduce costs by:

- reducing/reusing/recycling waste
- conserving energy or increasing energy efficiency
- conserving water or monitoring water usage

- promoting employee well-being to reduce employee attrition rates
- using green manufacturing to reduce release of harmful waste
- using QR codes to reduce the need for paper
- adopting circular economy models to reduce the expense of procuring new raw materials

Organizations can use recycled products as raw materials or move to green manufacturing to reduce the release of toxic by-products during production, which will reduce costs incurred in the disposal of harmful waste materials. To illustrate:

- Nike manufactures its shoes using recyclable materials. A pair of Nike Flyknit shoes is produced using six recycled plastic bottles.<sup>82</sup>

### Increase recycling of used components to minimize usage of raw materials

Electronic waste (e-waste) is expected to reach 44.4 million metric tons over the next five years, but contains valuable materials that could be recycled/reused.

The EU's Circular Economy Action Plan adopted in March 2020 aims to decouple economic growth from resource use and keep resource use within the planetary boundaries. The plan targets product design, promotes circular economy processes in manufacturing, and encourages sustainable consumption.<sup>84</sup>

Sustainable recycling of products or components will help address the shortage of raw materials and minimize the energy consumed in obtaining new raw materials from natural resources. To illustrate:

- Dell Technologies has a Tech Refresh & Recycle Program for customers to recycle an ageing system. Of the equipment returned, 26% goes towards manufacturing refurbishment. The company has set a 2030 social impact "moonshot" goal to reuse or recycle an equivalent product for every product sold.<sup>85</sup>



## Build holiday-readiness

Seasonality is important in the CPR industry. While the economy is recovering, the consumer packaged goods (CPG) inflation rate remains over three times as high as in 2021,<sup>86</sup> and in 2023, 84% of consumers reportedly plan to spend the same as or less than in 2022 (or nothing) on holidays and special occasions.<sup>87</sup> This means CPR organizations can expect huge variations in demand during the holiday season.

### Optimize inventory using demand-sensing and data-sharing

Demand spikes are always expected during the holiday season, but the levels of spikes to come are unclear, which makes planning difficult. Understocking causes loss of revenue, but overstocking could lead to tied-up capital, additional storage costs, and higher wastage.

Demand forecasting and demand-sensing tools can help organizations improve holiday season planning. Demand-sensing models not only use such common inputs as past

*“We are trying to identify at least two suppliers closer to the demand centers in Europe instead of being single-sourced from one country. We are also encouraging our franchises to come together to build strong supplier partnerships to support our growth in the region. This will also enable us to have better negotiating power with our supplier partners. We also allow for recipes to be reformulated to use easily-available and cost-effective ingredients in the region, while ensuring the brand standards are met.”*

#### ADITI THAPAR

Supply Chain Manager  
CKE Restaurants

transactions, shipment in-transit, open orders, and daily consumption data; they also include less-common inputs, such as weather patterns, social sentiment, and other syndicated data. Demand sensing can improve forecast accuracy by 15–40%<sup>88</sup>

These models can further benefit from data-sharing between CPR organizations. To illustrate:

- Sportswear brands Nike and Foot Locker are working towards “an integrated marketplace, which will involve market planning, loyalty and data-sharing, and expansion of drop-ship.”<sup>89</sup>
- Alexandre Ricard, CEO of Pernod Ricard, a French premium spirits company, explained: *“Getting data is one of the most challenging elements that we have. We can get usually the off-trade data quite easily. But in a lot of countries, except the US and the UK, it’s really difficult to get online data. And so we have been creating new programs to actually create and get that data from different players.”*<sup>90</sup>

## Localize the supply network for the holiday season to be more agile

As we have seen, there is growing focus on nearshoring and domestic sourcing. If organizations have to adjust their forecasts, it is easier to adapt with local supply networks. These supply chains can be particularly helpful for the holiday season as they can offer:

- reduced lead times
- lower transportation costs
- better collaboration
- faster response times

Local supply chains have other benefits, including lower import tariffs and reduced carbon emissions from transportation. To illustrate:

- Wesfarmers, an Australian conglomerate, is focusing on continued development of their domestic supply chain capabilities to mitigate wider supply chain disruption.<sup>91</sup>
- Helena Helmersson, CEO of H&M, highlighted: *“We see a shift in sourcing, and we’re developing more*

*nearshoring. The biggest part is in Europe and in Asia, but we’re also looking into possibilities in Latin America.”*<sup>92</sup>

## Consider alternative fulfilment options like micro-fulfilment centers (MFCs)

MFCs are small-scale, automated warehouses designed to fulfil online orders quickly. They tend to be located closer to consumers. MFCs allow faster deliveries and lower operating costs. They also reduce the overall time taken to gather and pack an order, improving productivity.<sup>93</sup>

The pandemic caused a spike in e-commerce growth (e-commerce accounted for 7.2% of the total grocery sales worldwide in 2021, 150% higher than in 2019).<sup>94</sup> As e-commerce continues to grow, it is important for CPR organizations to deliver their products quickly. This is particularly true for the grocery segment. To illustrate:

- Companies such as US chains Albertsons, Walmart, and Kroger are opening micro-fulfilment centers.
- Through its MFCs, the Kroger supermarket chain was able to support delivery services in as little as 30 minutes from ordering in some parts of Florida.<sup>95</sup>

# Conclusion

On the demand side, CPR organizations have been navigating volatile demand volumes, changing consumer preferences, and a surge in online commerce over the past couple of years.

On the supply side, supply chain executives have faced geopolitical tensions, raw material shortages, logistics issues, and labor and energy price increases, amongst other challenges.

Consequently, managing volatile consumer demand, while bringing the focus back to cost efficiencies, has been the key priority of supply chain executives. They also continue to work on building resilience, in particular by focusing on nearshoring and domestic sourcing to increase stability in supply networks.

In order to thrive in the face of current and future challenges, supply chains need to focus on:

- strategic sourcing and right-shoring to manage the risks arising out of cross-border trade and to provide opportunities for cost savings in the long run
- improved demand-forecasting and sales and operations planning to build efficiency and agility

- product and portfolio optimization towards a mix that provides the strongest potential to increase both revenue and margins
- process improvement and automation, especially in manufacturing and warehousing
- increasing transparency in the supply chain to both support sustainability and foster enhanced collaboration with supply chain partners
- implementing circular economy practices, such as recycling, to promote sustainability and
- accelerating the journey towards data-driven supply chains

One of the most important pillars of this transformation is digitalization and advanced analytics. Technologies like the Internet of Things (IoT), AI, and machine learning not only optimize sourcing, manufacturing, and distribution, but also allow for better and real-time demand-sensing, forecasting, planning, and fulfilment, thereby meeting customer needs as well as helping the bottom line. Data and analytics are thus creating new opportunities for CPR organizations to transform the supply chain in new ways.

# Research methodology

Our research aims to understand how retail and consumer product companies will be navigating the future, and to provide insights on building resilient and efficient supply chains amidst a plethora of macroeconomic challenges and volatile customer demand.

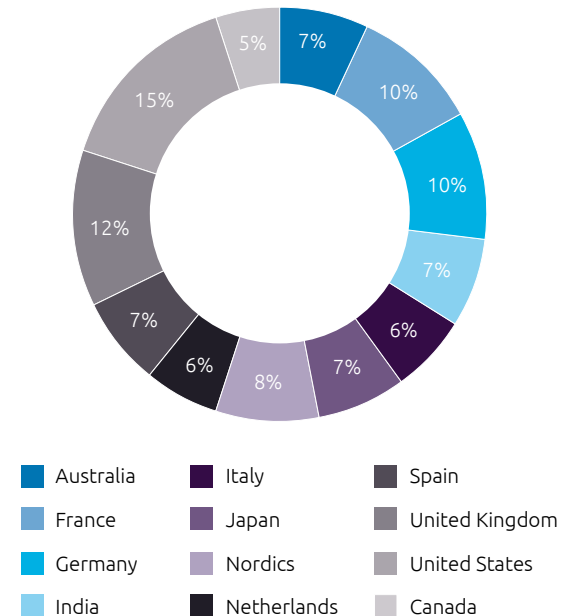
To achieve this objective, we conducted an executive survey, described below, and a series of 15 in-depth interviews with senior industry executives from the CPR industry.

The study findings reflect the views of the people who responded to our online questionnaire or participated in our in-depth interviews and are aimed at providing directional guidance. Please contact a Capgemini expert to understand specific implications.

## Executive survey

During August and September 2023, we surveyed senior executives (general manager or director level and above) from across 150 consumer product organizations and 150 retailers globally. These organizations have annual revenues of more than \$1 billion. The distribution of organizations is as follows:

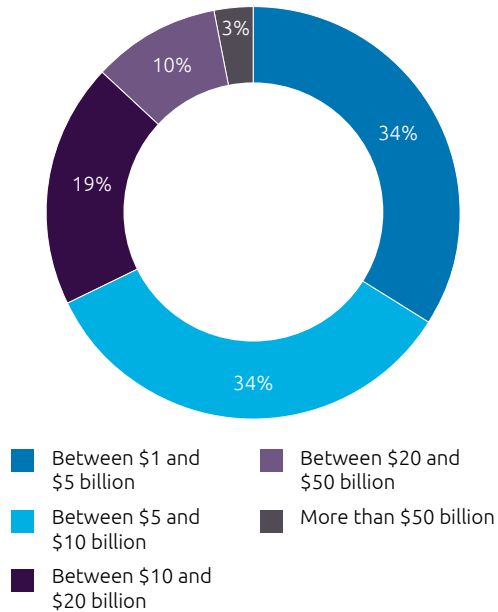
## ORGANIZATIONS BY HEADQUARTERS



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

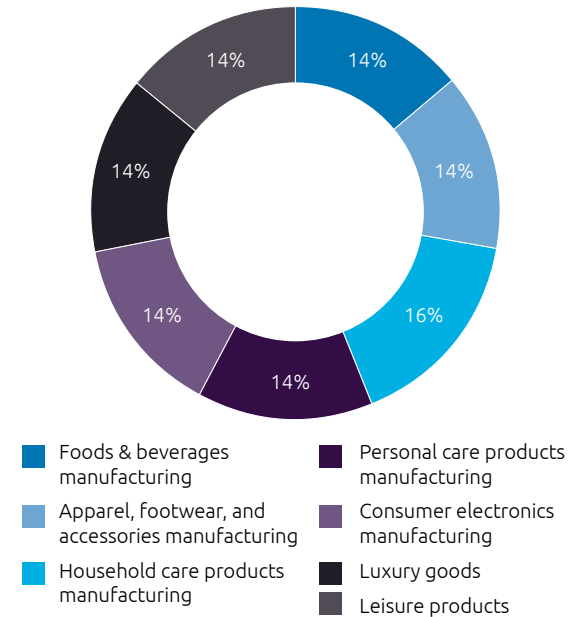


## ANNUAL REVENUE OF ORGANIZATIONS (IN USD)



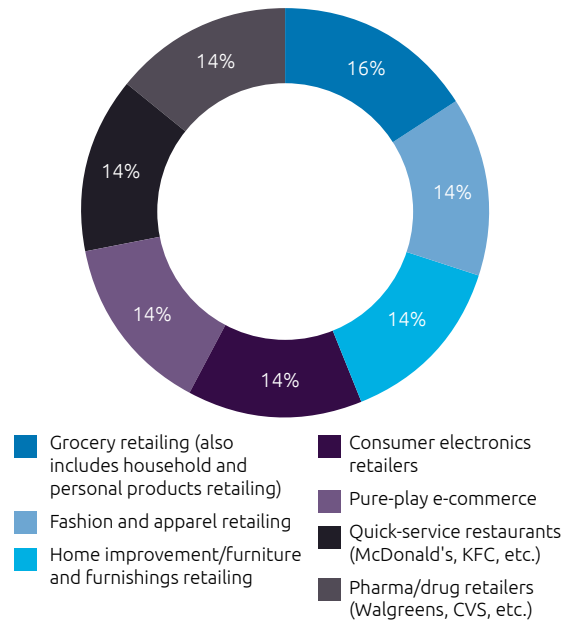
Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

## SUB-INDUSTRIES IN CONSUMER GOODS SECTOR



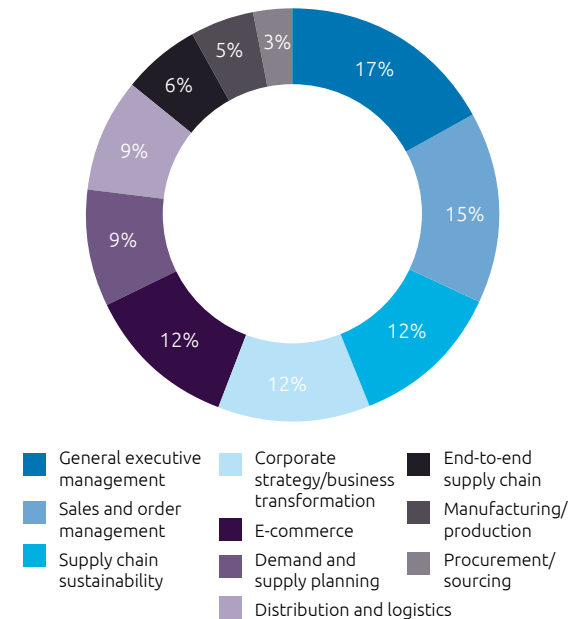
Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=150 consumer product organizations.

## SUB-INDUSTRIES IN RETAIL SECTOR



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=150 retail organizations.

## RESPONDENTS BY FUNCTION



Source: Capgemini Research Institute, Supply chain in CPR survey, August–September 2023, N=300 organizations.

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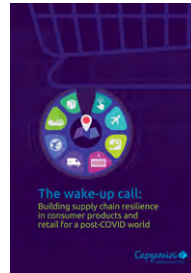
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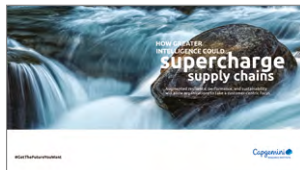
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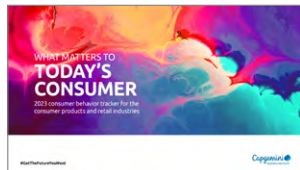
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